TEST REPORT

Applicant:	Seeed Technology Co., Ltd
Address:	9F, Building G3, TCL International E city, Shuguang Community, Xili street, Nanshan, Shenzhen, Guangdong Province, P.R.C
Equipment Type:	LoRa-E5
Model Name:	LoRa-E5-HF
Brand Name:	Seeed Studio
FCC ID:	Z4T-LORA-E5
Test Standard:	47 CFR Part 15 Subpart C (refer to section 3.1)
Sample Arrival Date:	Jan. 06, 2026
Test Date:	Jan. 12, 2026 - Mar. 09, 2026
Date of Issue:	Mar. 27, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Alex Zheng

Checked by: Ye Hongji

Approved by: Tolan Tu

(Testing Director)

Revision History

Version	Issue Date	Revisions
Rev. 01	Mar. 27, 2026	Initial Issue

TABLE OF CONTENTS

1 GENERAL INFORMATION 4

1.1 Test Laboratory 4

1.2 Test Location 4

2 PRODUCT INFORMATION 5

2.1 Applicant Information 5

2.2 Manufacturer Information 5

2.3 General Description for Equipment under Test (EUT) 5

2.4 Technical Information 6

3 SUMMARY OF TEST RESULTS 7

3.1 Test Standards 7

3.2 Test Verdict 7

4 GENERAL TEST CONFIGURATIONS 8

4.1 Test Environments 8

4.2 Test Equipment List 8

4.3 Measurement Uncertainty 8

4.4 Description of Test Setup 9

4.5 Measurement Results Explanation Example 12

5 TEST ITEMS 13

5.1 Antenna Requirements 13

5.2 Output Power 14

5.3 Occupied Bandwidth 16

5.4 Conducted Spurious Emission 17

5.5 Band Edge (Authorized-band band-edge) 19

5.6 Conducted Emission 21

5.7 Radiated Spurious Emission 22
5.8 Band Edge (Restricted-band band-edge)..... 24
5.9 Power Spectral density (PSD)..... 25
ANNEX A TEST RESULT 26
A.1 Output Power 26
A.2 Occupied Bandwidth 26
A.3 Conducted Spurious Emissions 26
A.4 Band Edge (Authorized-band band-edge)..... 26
A.5 Conducted Emissions..... 26
A.6 Radiated Spurious Emission 27
A.7 Band Edge (Restricted-band band-edge)..... 64
A.8 Power Spectral Density (PSD) 74
ANNEX B TEST SETUP PHOTOS 75
ANNEX C EUT EXTERNAL PHOTOS 75
ANNEX D EUT INTERNAL PHOTOS 75

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☑ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Seeed Technology Co., Ltd
Address	9F, Building G3, TCL International E city, Shuguang Community, Xili street, Nanshan, Shenzhen, Guangdong Province, P.R.C

2.2 Manufacturer Information

Manufacturer	Seeed Technology Co., Ltd.
Address	F5, Building 8, Shiling Industrial Park, Xinwei, Number32, Tongsha Road Xili Town, Nanshan District, Shenzhen, China. P.R.C

2.3 General Description for Equipment under Test (EUT)

EUT Name	LoRa-E5
Model Name Under Test	LoRa-E5-HF
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	LoRa

The requirement for the following technical information of the EUT was tested in this report:

Modulation Technology		DTS
Modulation Type		LoRa
Product Type		☒ Mobile ☐ Portable ☐ Fix Location
Frequency Range		The frequency range used is 903.0 MHz-914.2 MHz. The frequency block is 902 MHz - 928 MHz.
Number of Channel		8
Tested Channel		0 (903.0 MHz), 3 (907.8 MHz), 7 (914.2 MHz)
Antenna Type		Dipole Antenna
		Spring Antenna
Antenna Gain	Dipole Antenna 2	2.14 dBi
	Spring Antenna 1	-0.38 dBi
	Spring Antenna 2	1.79 dBi
Antenna System (MIMO Smart Antenna)		N/A

All channel was listed on the following table:

Channel Number	Freq. (MHz)	Channel Number	Freq. (MHz)	Channel Number	Freq. (MHz)	Channel Number	Freq. (MHz)
0	**903.0**	2	906.2	4	909.4	6	912.6
1	904.6	**3**	**907.8**	5	911.0	**7**	**914.2**

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Intentional radiators of radio frequency equipment
2	KDB Publication 558074 D01v05r02	GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES
3	ANSI C63.10-2020	American National Standard for Procedures for Compliance Testing of Unlicensed Wireless Devices

3.2 Test Verdict

No.	Description	FCC Part No.	Channel	Verdict
1	Antenna Requirement	15.203	--	--Note1
2	Output Power	15.247(b)	ANNEX A.1	--Note2
3	Occupied Bandwidth	15.247(a)	ANNEX A.2	--Note2
4	Conducted Spurious Emission	15.247(d)	ANNEX A.3	--Note2
5	Band Edge(Authorized-band band-edge)	15.247(d)	ANNEX A.4	--Note2
6	Conducted Emission	15.207	ANNEX A.5	--Note2
7	Radiated Spurious Emission	15.209 15.247(d)	ANNEX A.6	PassNote2
8	Band Edge(Restricted-band band-edge)	15.209 15.247(d)	ANNEX A.7	PassNote2
9	Power spectral density (PSD)	15.247(e)	ANNEX A.8	--Note2

Note [1]: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note [2]: Compared with the EUT of test report BL-SZ2080378-601, the EUT of this report shows different things as below:

1. Add antennas: Dipole Antenna 2, Spring Antenna 1 and Spring Antenna 2.
2. Updated the applicant information, manufacturer information, brand name, software version and hardware version.
3. Updated standard ANSI C63.10-2013 to standard ANSI C63.10-2020.

Other hardware circuit and software are the same as EUT referred to in test report BL-SZ2080378-601. Therefore, in addition to the above differences, Updated the testing methods in Chapter 5, just Radiated Spurious Emission & Band Edge(Restricted-band band-edge) were retested in this report, others test data and EUT information are derived from the report BL-SZ2080378-601 published by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	39% to 49%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+20.7℃ to +25.1℃
Working Voltage of the EUT	NV (Normal Voltage)	3.3 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY56060127	2025.12.25	2026.12.24
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	01414	2023.11.03	2026.11.02
Test Antenna-Horn	SCHWARZBECK	3117	00108482	2025.10.19	2028.10.18
Anechoic Chamber	EMC Electronic Co, Ltd	9m*6m*6m	/	2024.11.25	2027.08.25

4.3 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

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

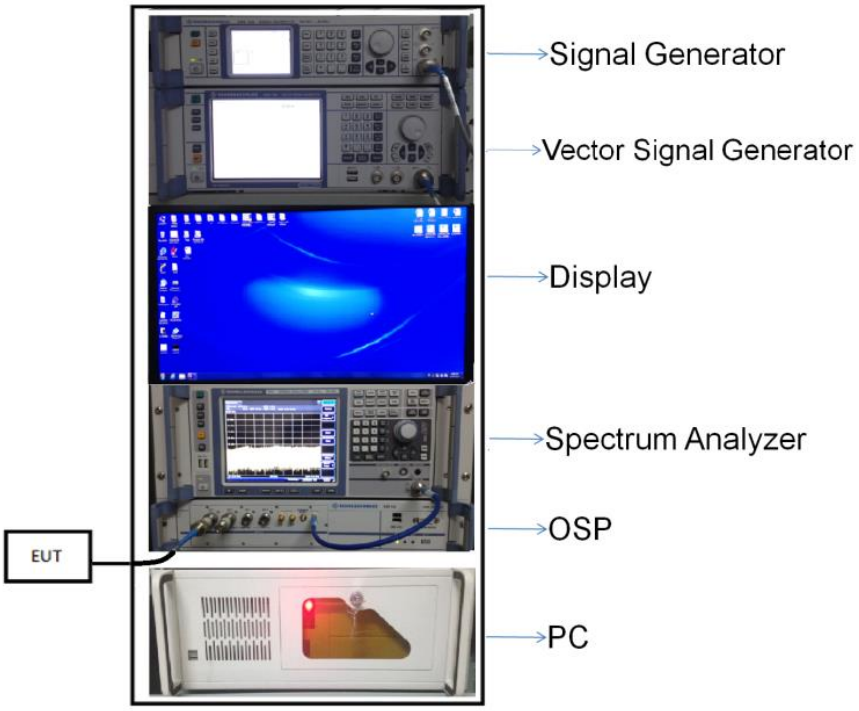
Parameters	Uncertainty
Occupied Channel Bandwidth	2.8%
RF output power, conducted	1.28 dB
Power Spectral Density, conducted	1.30 dB
Unwanted Emissions, conducted	1.84 dB
All emissions, radiated	5.36 dB
Temperature	0.8°C
Humidity	4%

4.4 Description of Test Setup

4.4.1 For Antenna Port Test

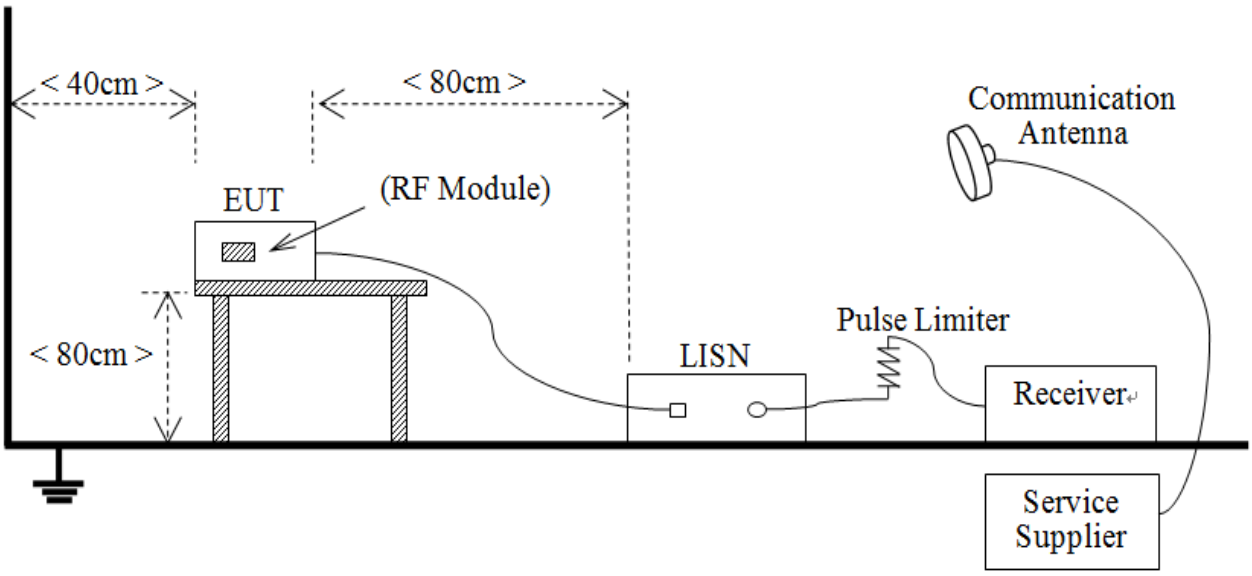
Conducted value (dBm) = Measurement value (dBm) + cable loss (dB)

For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:
Conducted value (dBm) = 10 dBm + 0.5 dB = 10.5 dBm



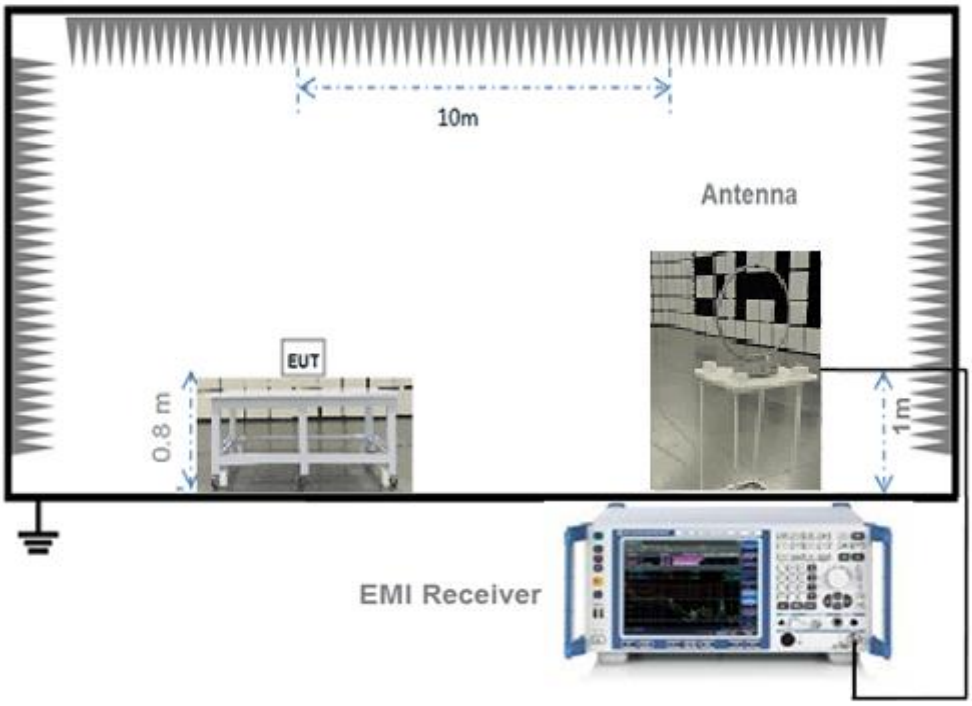
(Diagram 1)

4.4.2 For AC Power Supply Port Test



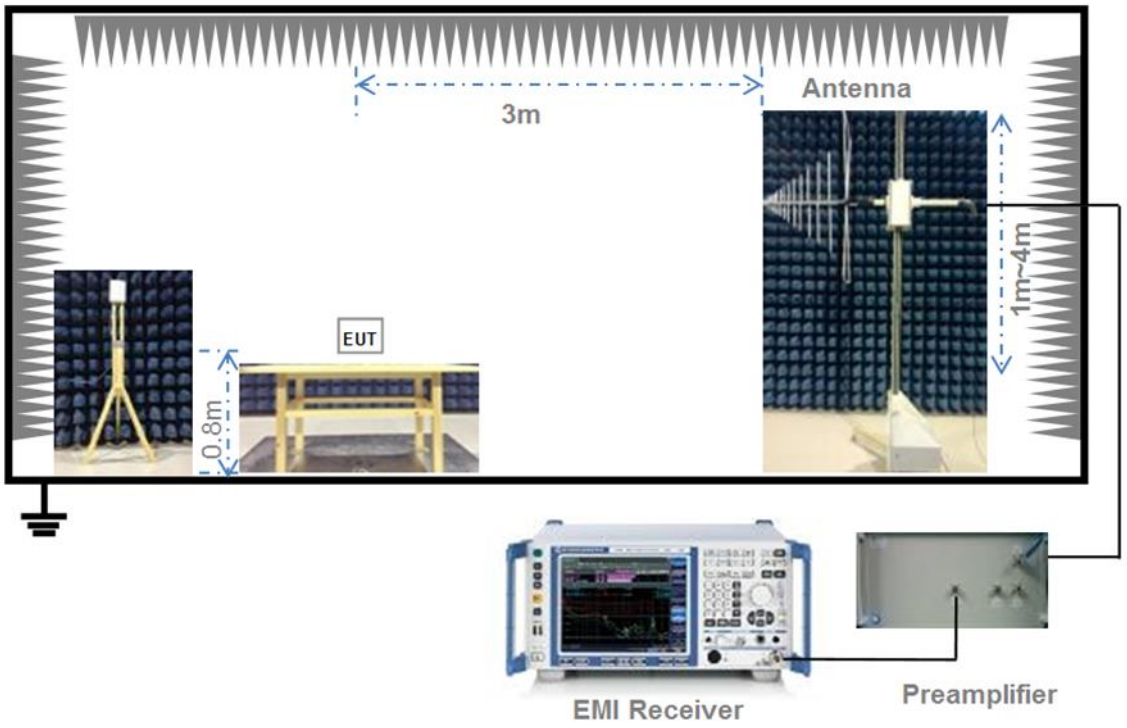
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



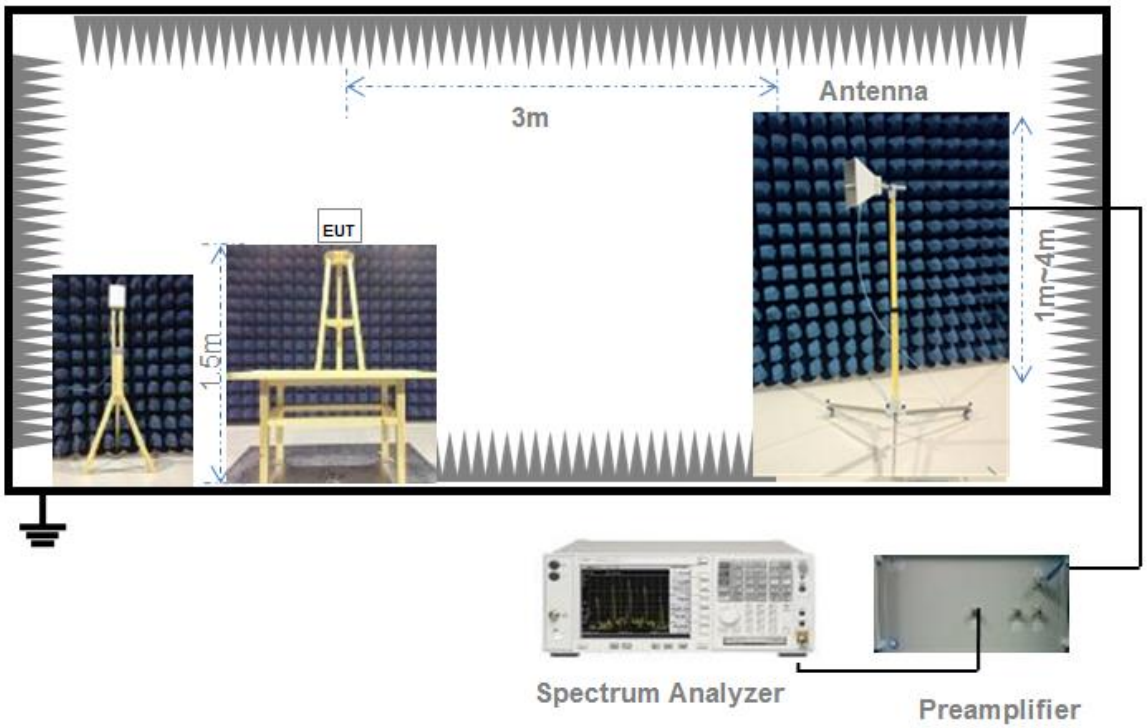
(Diagram 3)

4.4.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.4.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

4.5 Measurement Results Explanation Example

4.5.1 For conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.

4.5.2 For radiated band edges and spurious emission test:

E = EIRP – 20log D + 104.8

where:

E = electric field strength in dBμV/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

EIRP= Measure Conducted output power Value (dBm) + Maximum transmit antenna gain (dBi) + the appropriate maximum ground reflection factor (dB)

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Relevant Standards

FCC §15.203 & 15.247(b);
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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. 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 FCC rule.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is embedded in the product.	An embedded-in antenna design is used.

Reference Documents	Item
Photo	Please refer to the EUT Photo documents.

5.1.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

5.2 Output Power

5.2.1 Test Limit

FCC § 15.247(b)

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements.

5.2.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

a) Maximum peak conducted output power

This procedure shall be used when the measurement instrument has available a resolution bandwidth that is greater than the DTS bandwidth.

Set the RBW ≥ DTS bandwidth.

Set VBW ≥ 3 x RBW.

Set span ≥ 3 x RBW

Sweep time = auto couple.

Detector = peak.

Trace mode = max hold.

Allow trace to fully stabilize.

Use peak marker function to determine the peak amplitude level.

b) Measurements of duty cycle

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal.

Set the center frequency of the instrument to the center frequency of the transmission.

Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value.

Set VBW ≥ RBW. Set detector = peak or average.

The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T ≤ 16.7 microseconds.)

5.2.4 Test Result

Please refer to ANNEX A.1.

5.3 Occupied Bandwidth

5.3.1 Limit

FCC §15.247(a)

Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW. The 6 dB bandwidth must be greater than 500 kHz.

5.3.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

Use the following spectrum analyzer settings:

Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.

Set the video bandwidth (VBW) $\geqslant$ 3 RBW.

Detector = Peak.

Trace mode = max hold.

Sweep = auto couple.

Allow the trace to stabilize.

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.3.4 Test Result

Please refer to ANNEX A.2.

5.4 Conducted Spurious Emission

5.4.1 Limit

FCC §15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.4.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

The DTS rules specify that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions:

a) If the maximum peak conducted output power procedure was used to demonstrate compliance as described in 9.1, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

b) If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

c) In either case, attenuation to levels below the 15.209 general radiated emissions limits is not required.

The following procedures shall be used to demonstrate compliance to these limits. Note that these procedures can be used in either an antenna-port conducted or radiated test set-up. Radiated tests must conform to the test site requirements and utilize maximization procedures defined herein.

Reference level measurement:

Establish a reference level by using the following procedure:

Set instrument center frequency to DTS channel center frequency.

Set the span to ≥ 1.5 times the DTS bandwidth.

Set the RBW = 100 kHz.

Set the VBW ≥ 3 x RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum PSD level.

Emission level measurement:

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

Set the RBW = 100 kHz.

Set the VBW ≥ 3 x RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in 11.1 a) or 11.1 b). Report the three highest emissions relative to the limit.

5.4.4 Test Result

Please refer to ANNEX A.3.

5.5 Band Edge (Authorized-band band-edge)

5.5.1 Limit

FCC §15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.5.2 Test Setup

See section 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

The following procedures may be used to determine the peak or average field strength or power of an unwanted emission that is within 2 MHz of the authorized band edge. If a peak detector is utilized, use the procedure described in 13.2.1. Use the procedure described in 13.2.2 when using an average detector and the EUT can be configured to transmit continuously (i.e., duty cycle ≥ 98%). Use the procedure described in 13.2.3 when using an average detector and the EUT cannot be configured to transmit continuously but the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent). Use the procedure described in 13.2.4 when using an average detector for those cases where the EUT cannot be configured to transmit continuously and the duty cycle is not constant (duty cycle variations equal or exceed 2 percent).

When using a peak detector to measure unwanted emissions at or near the band edge (within 2 MHz of the authorized band), the following integration procedure can be used.

Set instrument center frequency to the frequency of the emission to be measured (must be within 2 MHz of the authorized band edge).

Set span to 2 MHz

RBW = 100 kHz.

VBW ≥ 3 x RBW.

Detector = peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweep to continue until the trace stabilizes (required measurement time may increase for low duty cycle applications)

Compute the power by integrating the spectrum over 1 MHz using the analyzer's band power measurement function with band limits set equal to the emission frequency (femission) ± 0.5 MHz. If the instrument does not have a band power function, then sum the amplitude levels (in power units) at 100 kHz intervals extending across the 1 MHz spectrum defined by femission ± 0.5 MHz.

5.5.4 Test Result

Please refer to ANNEX A.4.

5.6 Conducted Emission

5.6.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.6.2 Test Setup

See section 4.4.2 for test setup description for the AC power supply port. The photo of test setup please refer to ANNEX B.

5.6.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.
Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

5.6.4 Test Result

Please refer to ANNEX A.5.

5.7 Radiated Spurious Emission

5.7.1 Limit

FCC §15.209&15.247(d)

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note:

1. Field Strength (dBμV/m) = 20*log[Field Strength (μV/m)].
2. In the emission tables above, the tighter limit applies at the band edges.
3. For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
4. For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

5.7.2 Test Setup

See section 4.4.3 to 4.4.5 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.7.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

5.7.4 Test Result

Please refer to ANNEX A.6.

5.8 Band Edge (Restricted-band band-edge)

5.8.1 Limit

FCC §15.209&15.247(d)

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

5.8.2 Test Setup

See section 4.4.3 to 4.4.5 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.8.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

For transmitters operating above 1 GHz repeat the measurement with an average detector.

5.8.4 Test Result

Please refer to ANNEX A.7.

5.9 Power Spectral density (PSD)

5.9.1 Limit

FCC §15.247(e)

The same method of determining the conducted output power shall be used to determine the power spectral density. If a peak output power is measured, then a peak power spectral density measurement is required. If an average output power is measured, then an average power spectral density measurement should be used.

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of Section 5.4(4), (i.e. the power spectral density shall be determined using the same method as is used to determine the conducted output power).

5.9.2 Test Setup

See section 4.4.1 (Diagram 1) for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.9.3 Test Procedure

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.

Set the VBW ≥ 3 RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.9.4 Test Result

Please refer to ANNEX A.8.

ANNEX A TEST RESULT

A.1 Output Power

Note: The Output Power please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.1 Output Power.**

A.2 Occupied Bandwidth

Note: The Occupied Bandwidth please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.2 Occupied Bandwidth.**

A.3 Conducted Spurious Emissions

Note: The Conducted Spurious Emissions please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.3 Conducted Spurious Emissions.**

A.4 Band Edge (Authorized-band band-edge)

Note: The Band Edge (Authorized-band band-edge) please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.4 Band Edge (Authorized-band band-edge).**

A.5 Conducted Emissions

Note: The Conducted Emissions please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.5 Conducted Emissions.**

A.6 Radiated Spurious Emission

Note [1]: The symbol of “--” in the table which means not application.

Note [2]: For the test data above 1 GHz, according the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note [3]: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note [4]: Results (dBuV/m) = Original reading level of Spectrum Analyzer (dBuV/m) + Factor (dB)

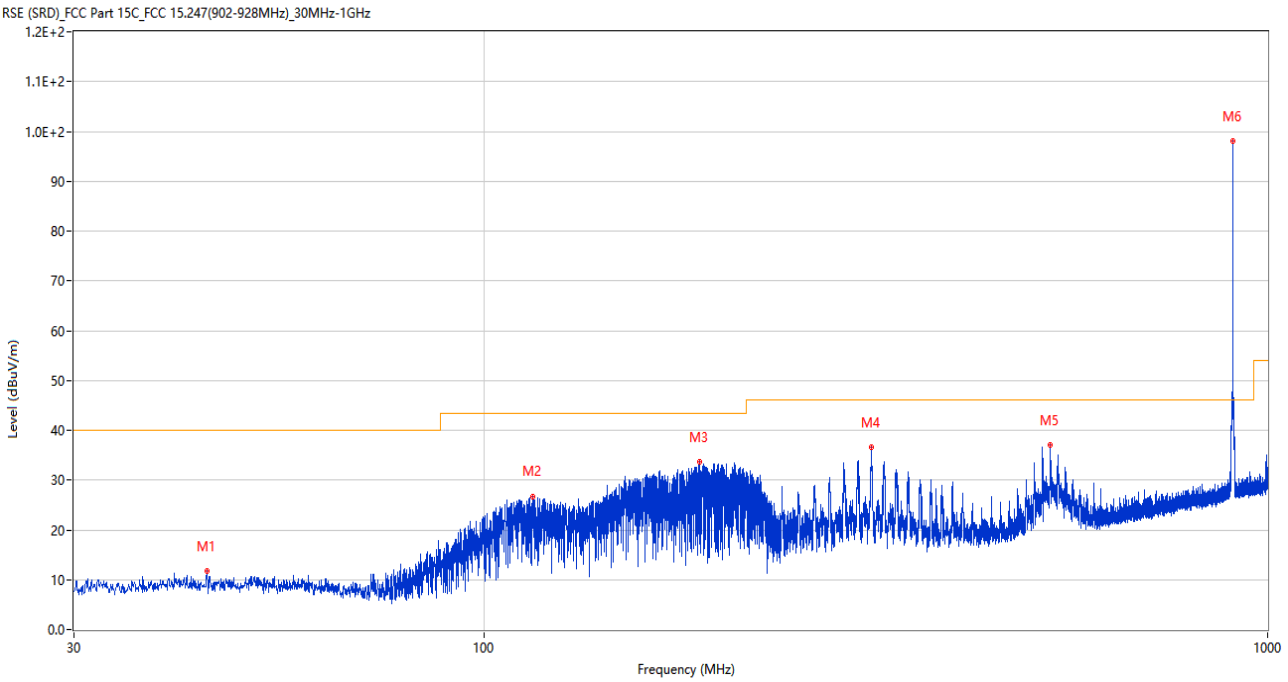
Note [5]: The marked spikes near 900 MHz with circle should be ignored because they are Fundamental signal.

Note [6]: The Radiated Spurious Emission please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.6 Radiated Spurious Emission.** just Radiated Spurious Emission (Dipole Antenna 2 & Spring Antenna) were tested in this report.

Test Data and Plots

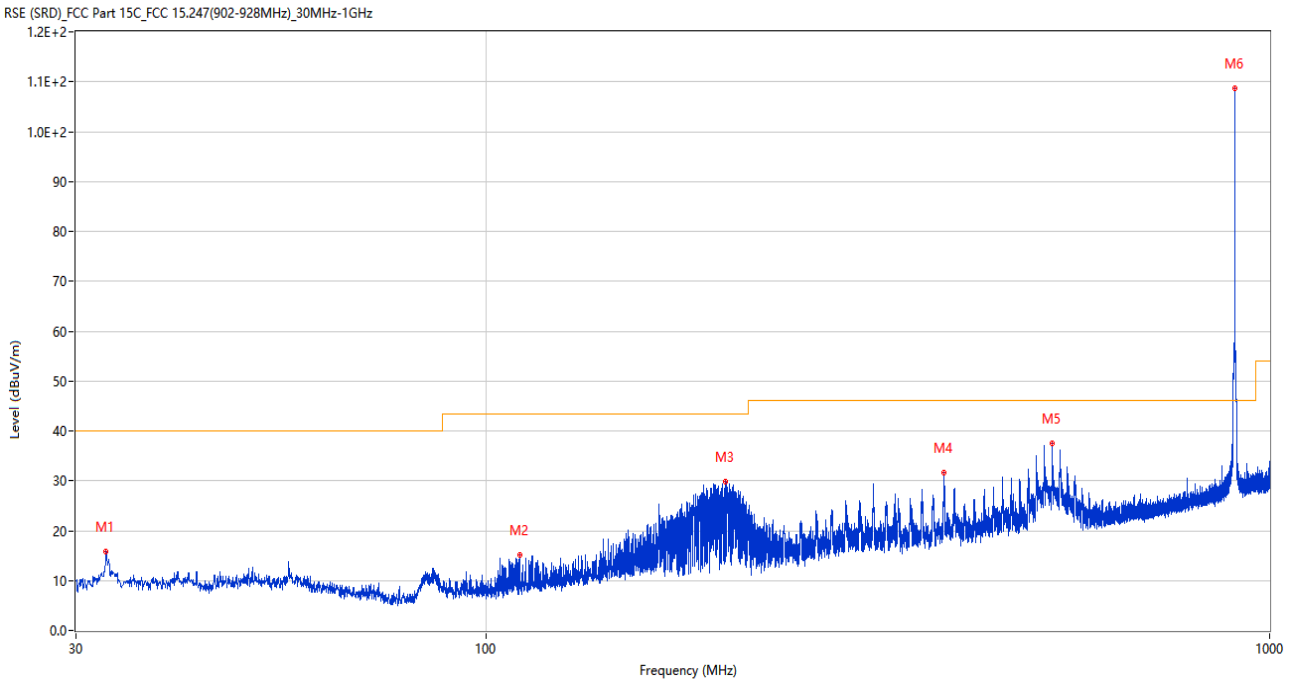
Dipole Antenna 2

LOW CHANNEL, 30 MHz to 1 GHz, ANT H



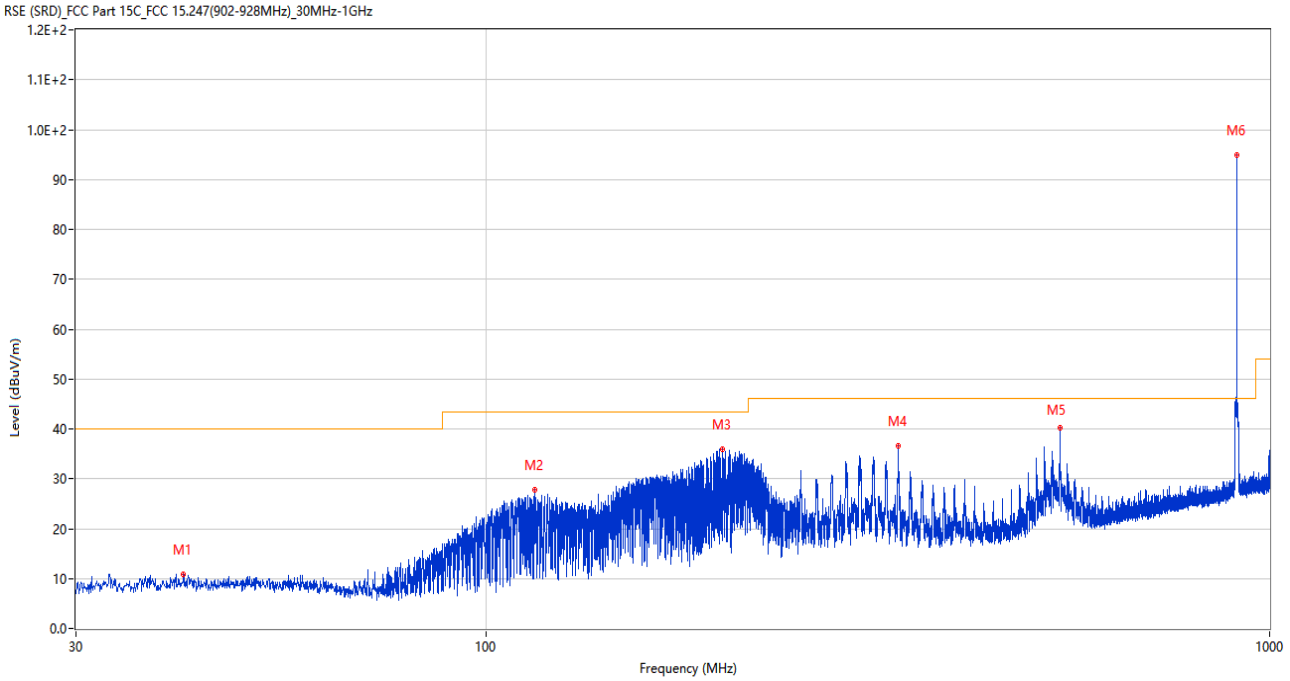
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	44.307	11.70	40.0	28.30	Peak	2.00	150	Horizontal	Pass
2	115.506	26.78	43.5	16.72	Peak	73.00	150	Horizontal	Pass
3	188.304	33.56	43.5	9.94	Peak	223.00	150	Horizontal	Pass
4	311.930	36.50	46.0	9.50	Peak	107.00	150	Horizontal	Pass
5	528.046	37.03	46.0	8.97	Peak	181.00	150	Horizontal	Pass
6	903.018	98.01	46.0	-52.01	Peak	19.00	150	Horizontal	N/A

LOW CHANNEL, 30 MHz to 1 GHz, ANT V



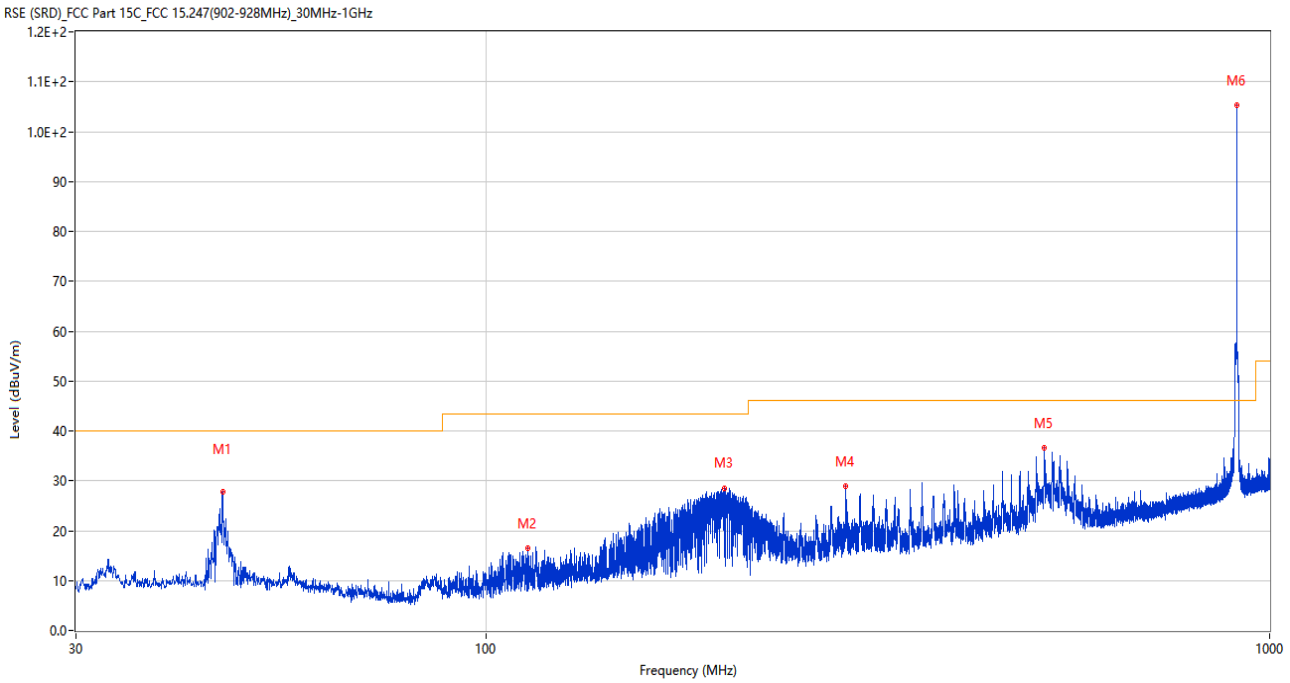
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	32.764	15.86	40.0	24.14	Peak	236.00	150	Vertical	Pass
2	110.607	15.14	43.5	28.36	Peak	359.00	150	Vertical	Pass
3	202.126	29.81	43.5	13.69	Peak	171.00	150	Vertical	Pass
4	384.098	31.55	46.0	14.45	Peak	150.00	150	Vertical	Pass
5	527.950	37.60	46.0	8.40	Peak	134.00	150	Vertical	Pass
6	903.021	108.78	46.0	-62.78	Peak	81.00	150	Vertical	N/A

MIDDLE CHANNEL, 30 MHz to 1 GHz, ANT H



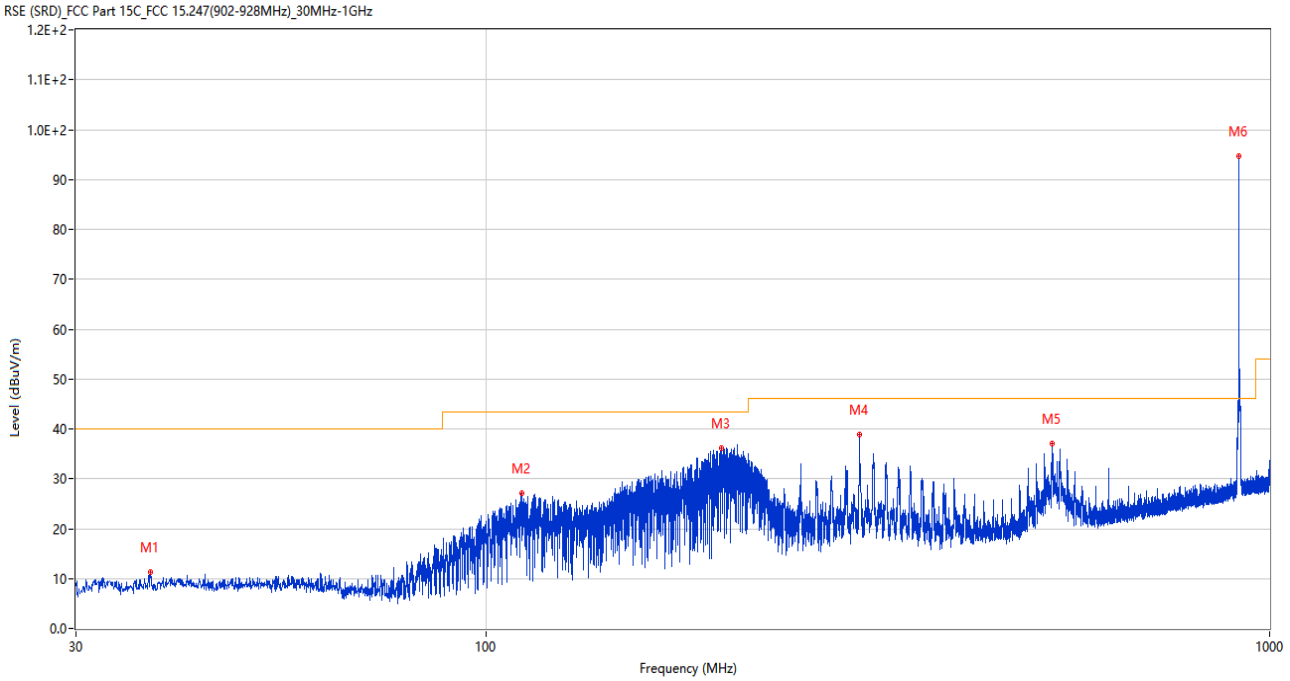
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	41.155	10.84	40.0	29.16	Peak	263.00	150	Horizontal	Pass
2	115.506	27.71	43.5	15.79	Peak	50.00	150	Horizontal	Pass
3	200.186	36.02	43.5	7.48	Peak	248.00	150	Horizontal	Pass
4	335.938	36.69	46.0	9.31	Peak	99.00	150	Horizontal	Pass
5	539.687	40.17	46.0	5.83	Peak	327.00	150	Horizontal	Pass
6	907.607	95.86	46.0	-51.86	Peak	19.00	150	Horizontal	N/A

MIDDLE CHANNEL, 30 MHz to 1 GHz, ANT V



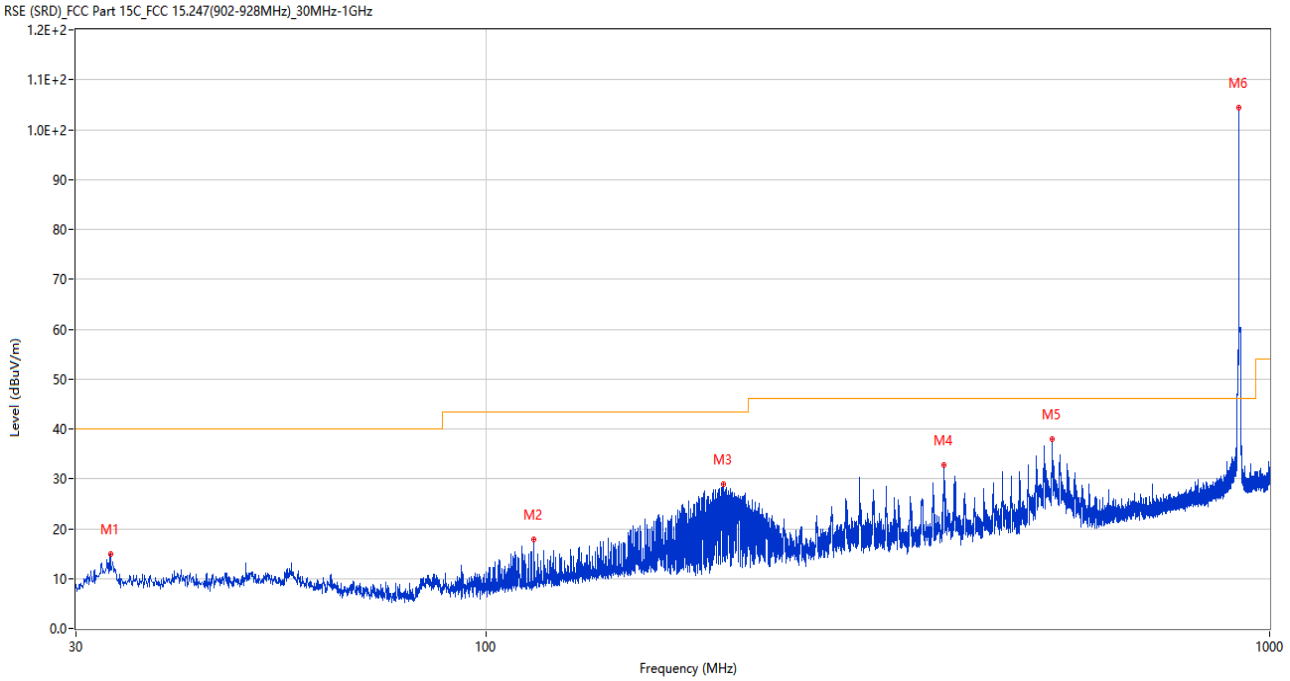
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	46.151	27.77	40.0	12.23	Peak	152.00	150	Vertical	Pass
2	113.274	16.39	43.5	27.11	Peak	341.00	150	Vertical	Pass
3	201.544	28.56	43.5	14.94	Peak	137.00	150	Vertical	Pass
4	288.069	28.97	46.0	17.03	Peak	31.00	150	Vertical	Pass
5	516.018	36.51	46.0	9.49	Peak	122.00	150	Vertical	Pass
6	907.656	105.20	46.0	-59.20	Peak	80.00	150	Vertical	N/A

HIGH CHANNEL, 30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	37.372	11.20	40.0	28.80	Peak	67.00	150	Horizontal	Pass
2	111.044	27.09	43.5	16.41	Peak	39.00	150	Horizontal	Pass
3	199.750	36.20	43.5	7.30	Peak	219.00	150	Horizontal	Pass
4	299.563	38.80	46.0	7.20	Peak	70.00	150	Horizontal	Pass
5	528.046	37.06	46.0	8.94	Peak	178.00	150	Horizontal	Pass
6	914.204	95.60	46.0	-49.60	Peak	171.00	150	Horizontal	N/A

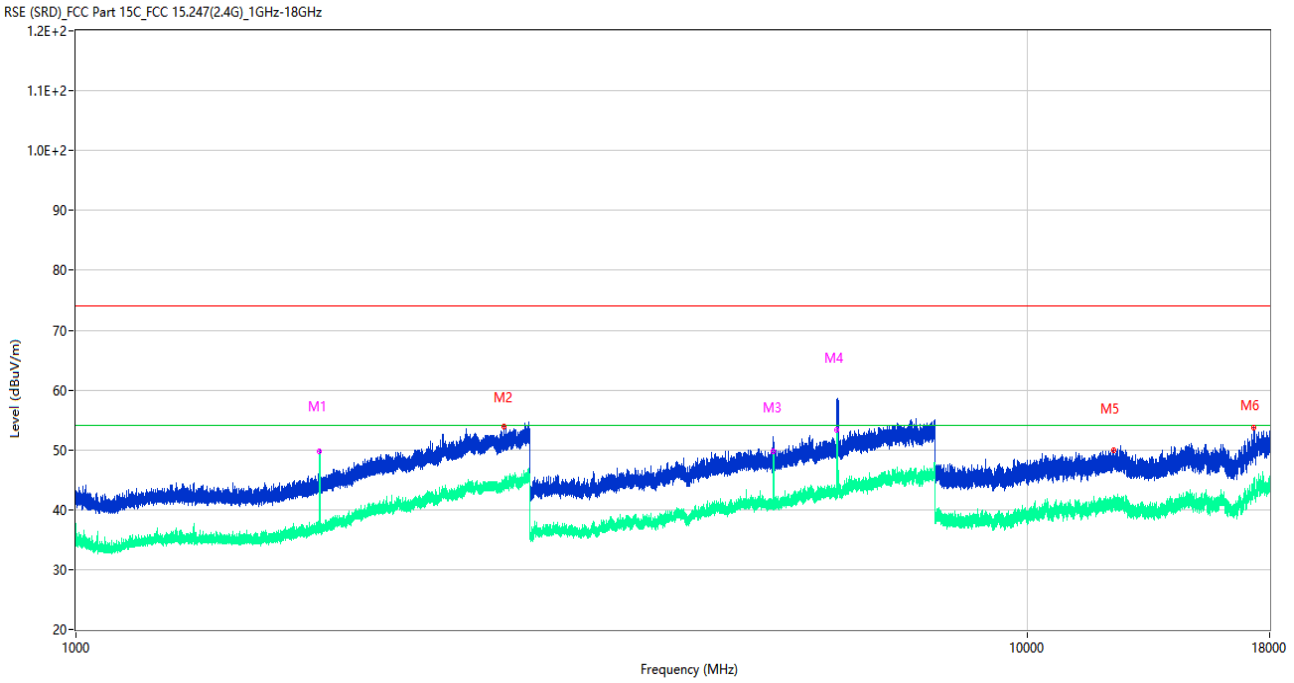
HIGH CHANNEL, 30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	33.201	14.84	40.0	25.16	Peak	239.00	150	Vertical	Pass
2	115.215	17.86	43.5	25.64	Peak	336.00	150	Vertical	Pass
3	200.865	28.92	43.5	14.58	Peak	151.00	150	Vertical	Pass
4	384.583	32.76	46.0	13.24	Peak	360.00	150	Vertical	Pass
5	528.143	37.92	46.0	8.08	Peak	140.00	150	Vertical	Pass
6	914.252	104.39	46.0	-58.39	Peak	81.00	150	Vertical	N/A

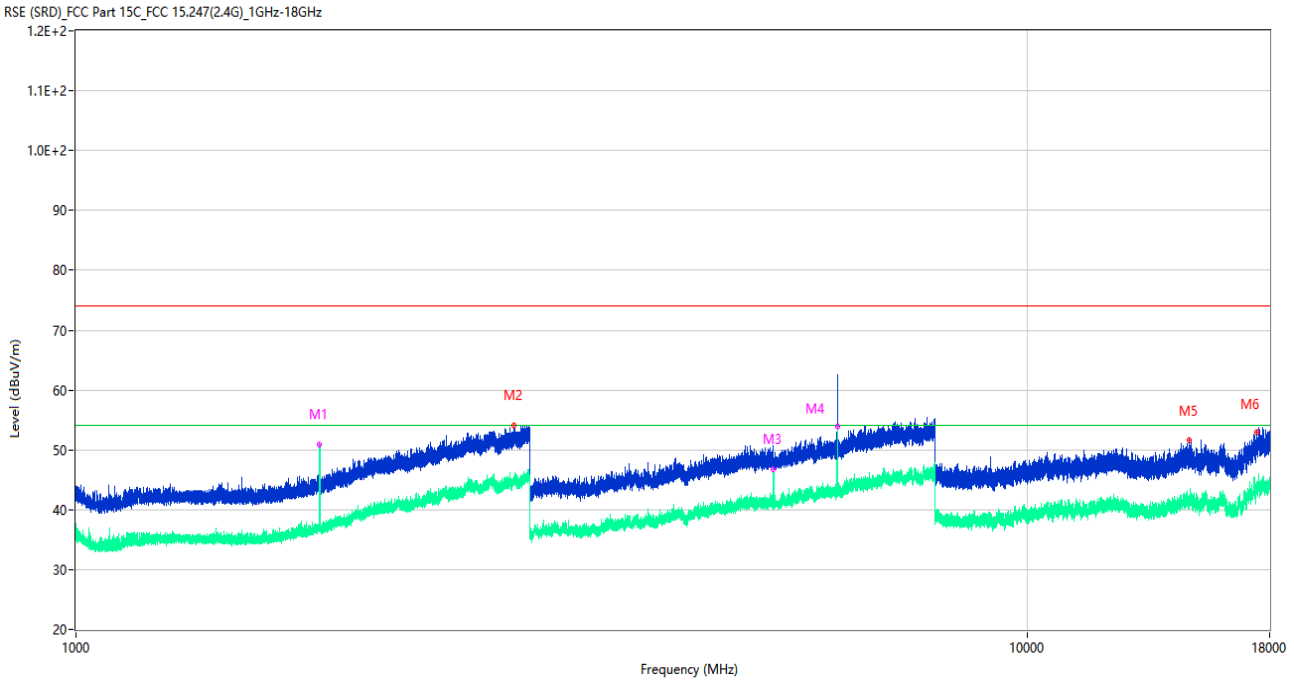
Note: The spurious from 18GHz-25GHz is noise only, do not show on the report.

LOW CHANNEL 1 GHz to 18 GHz, ANT H



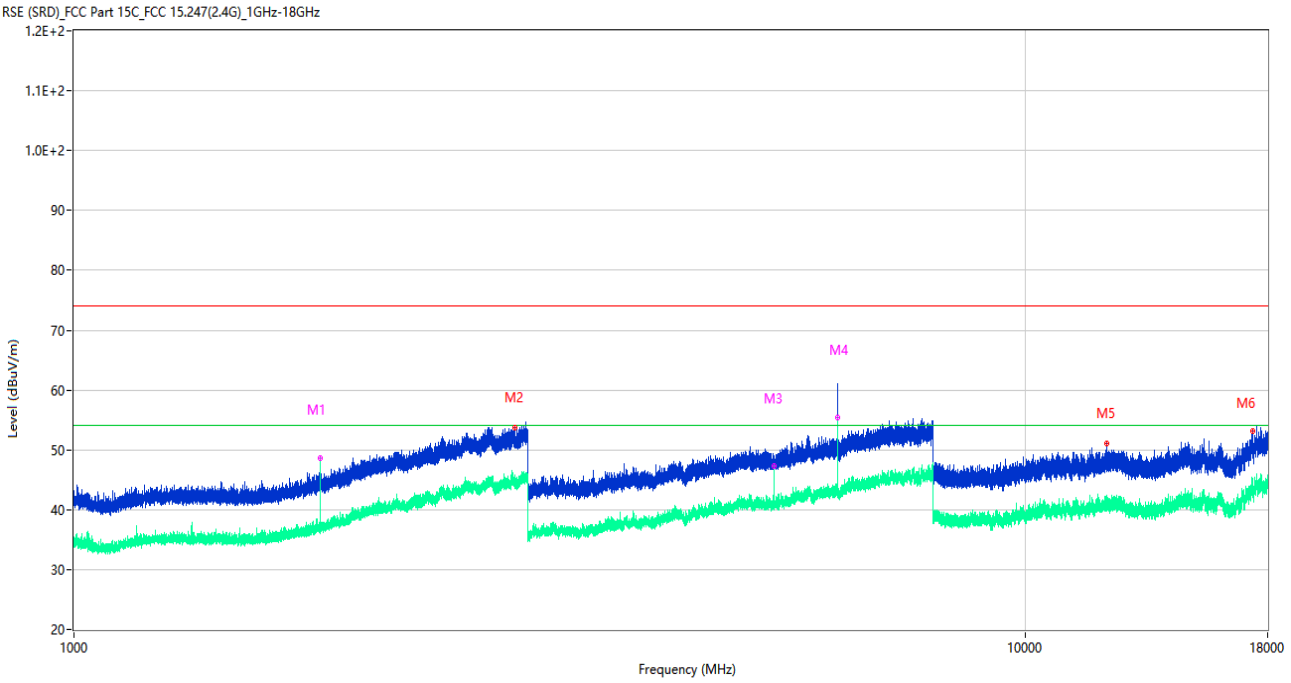
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1804.300	51.03	74.0	22.97	Peak	97.00	200	Horizontal	Pass
1**	1804.300	49.67	54.0	4.33	AV	97.00	200	Horizontal	Pass
2	2817.500	53.86	74.0	20.14	Peak	287.00	300	Horizontal	Pass
2**	2817.500	43.93	54.0	10.07	AV	287.00	300	Horizontal	Pass
3	5415.250	52.28	74.0	16.72	Peak	28.00	200	Horizontal	Pass
3**	5415.250	49.76	54.0	4.24	AV	28.00	200	Horizontal	Pass
4	6315.750	58.90	74.0	15.10	Peak	28.00	300	Horizontal	Pass
4**	6315.750	53.36	--	--	AV	28.00	300	Horizontal	N/A
5	12326.062	49.87	74.0	24.13	Peak	348.00	100	Horizontal	Pass
5**	12326.062	41.57	54.0	12.43	AV	348.00	100	Horizontal	Pass
6	17330.887	53.73	74.0	20.27	Peak	10.00	100	Horizontal	Pass
6**	17330.887	44.16	54.0	9.84	AV	10.00	100	Horizontal	Pass

LOW CHANNEL 1 GHz to 18 GHz, ANT V



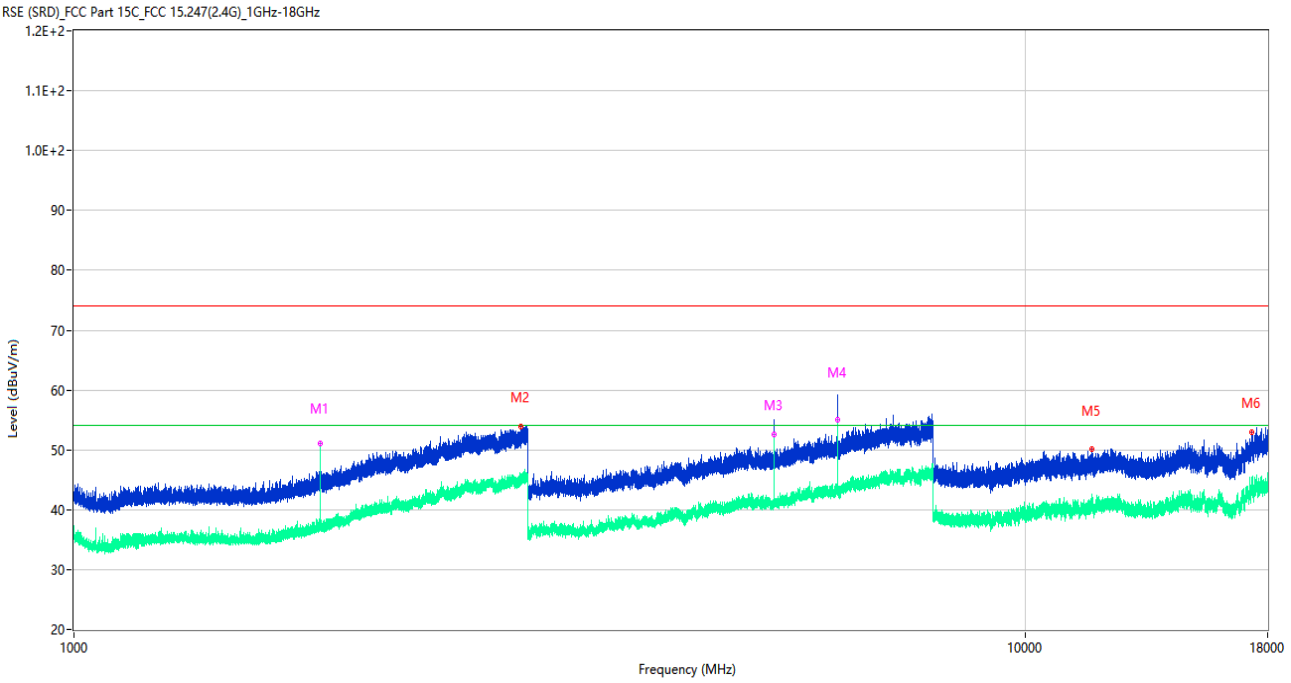
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1804.300	51.96	74.0	22.04	Peak	114.00	200	Vertical	Pass
1**	1804.300	51.11	54.0	2.89	AV	114.00	200	Vertical	Pass
2	2888.300	54.10	74.0	19.90	Peak	39.00	100	Vertical	Pass
2**	2888.300	44.18	54.0	9.82	AV	39.00	100	Vertical	Pass
3	5413.500	46.97	74.0	27.03	Peak	26.00	200	Vertical	Pass
3**	5413.500	47.68	54.0	6.32	AV	26.00	200	Vertical	Pass
4	6328.500	59.70	74.0	14.30	Peak	36.00	200	Vertical	Pass
4**	6328.500	53.86	--	--	AV	36.00	200	Vertical	N/A
5	14830.050	51.61	74.0	22.39	Peak	204.00	400	Vertical	Pass
5**	14830.050	41.85	54.0	12.15	AV	204.00	400	Vertical	Pass
6	17441.663	52.96	74.0	21.04	Peak	360.00	400	Vertical	Pass
6**	17441.663	43.67	54.0	10.33	AV	360.00	400	Vertical	Pass

MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H



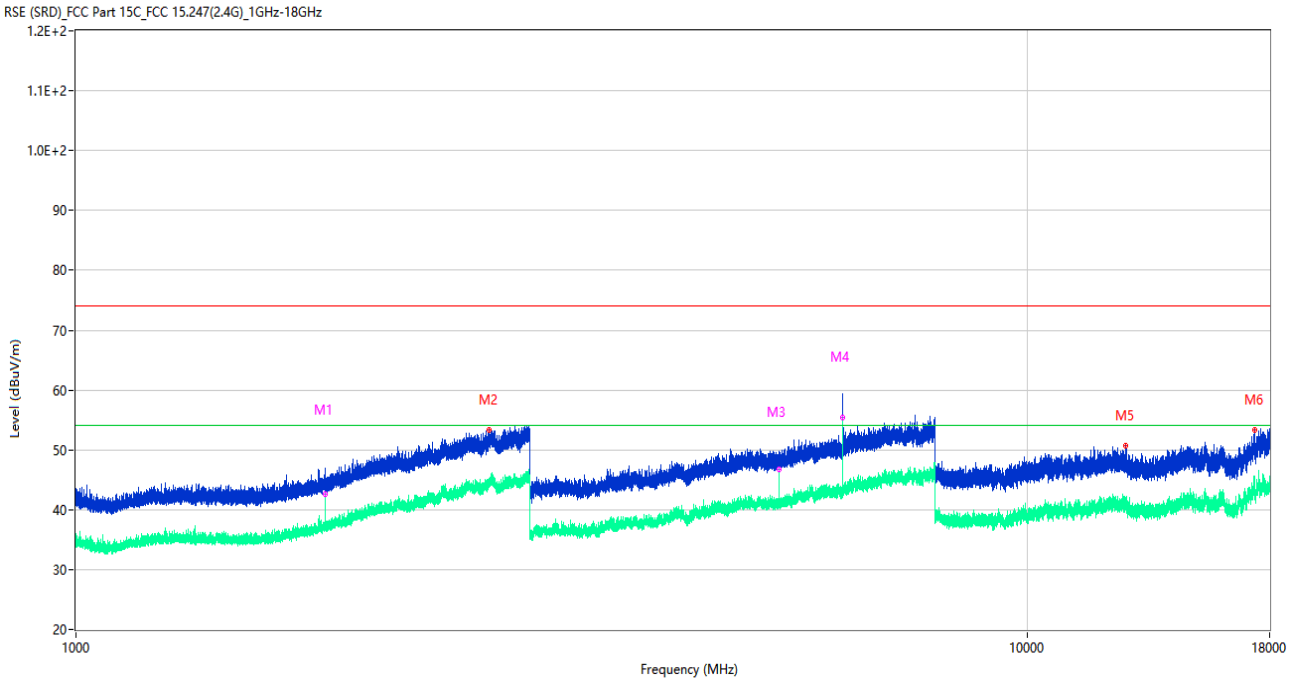
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1815.800	48.79	74.0	25.21	Peak	106.00	100	Horizontal	Pass
1**	1815.800	48.57	54.0	5.43	AV	106.00	100	Horizontal	Pass
2	2911.600	53.69	74.0	20.31	Peak	310.00	400	Horizontal	Pass
2**	2911.600	44.78	54.0	9.22	AV	310.00	400	Horizontal	Pass
3	5448.500	48.89	74.0	25.11	Peak	220.00	200	Horizontal	Pass
3**	5448.500	47.26	54.0	6.74	AV	220.00	200	Horizontal	Pass
4	6354.000	61.40	74.0	72.60	Peak	75.00	300	Horizontal	Pass
4**	6354.000	55.45	--	--	AV	75.00	300	Horizontal	Pass
5	12193.299	51.16	74.0	22.84	Peak	112.00	200	Horizontal	Pass
5**	12193.299	40.22	54.0	13.78	AV	112.00	200	Horizontal	Pass
6	17352.151	53.22	74.0	20.78	Peak	143.00	400	Horizontal	Pass
6**	17352.151	44.06	54.0	9.94	AV	143.00	400	Horizontal	Pass

MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V



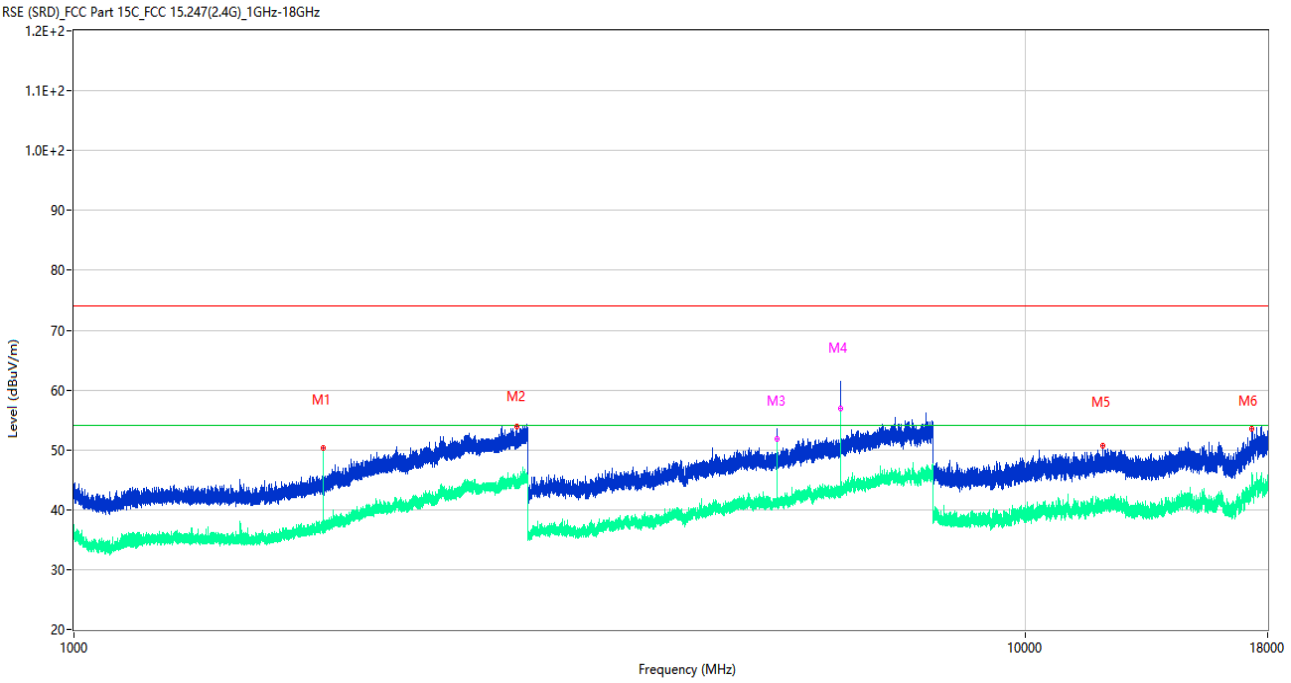
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1815.500	52.18	74.0	21.82	Peak	116.00	400	Vertical	Pass
1**	1815.500	51.15	54.0	2.85	AV	116.00	400	Vertical	Pass
2	2951.700	53.98	74.0	20.02	Peak	358.00	400	Vertical	Pass
2**	2951.700	44.80	54.0	9.20	AV	358.00	400	Vertical	Pass
3	5448.250	55.27	74.0	18.73	Peak	119.00	200	Vertical	Pass
3**	5448.250	52.94	54.0	1.06	AV	119.00	200	Vertical	Pass
4	6354.000	59.13	74.0	14.87	Peak	233.00	300	Vertical	Pass
4**	6354.000	54.97	--	--	AV	233.00	300	Vertical	Pass
5	11772.925	50.18	74.0	23.82	Peak	52.00	300	Vertical	Pass
5**	11772.925	40.47	54.0	13.53	AV	52.00	300	Vertical	Pass
6	17337.448	52.90	74.0	21.10	Peak	279.00	300	Vertical	Pass
6**	17337.448	44.35	54.0	9.65	AV	279.00	300	Vertical	Pass

HIGH CHANNEL 1 GHz to 18 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1828.600	45.05	74.0	28.95	Peak	213.00	400	Horizontal	Pass
1**	1828.600	42.60	54.0	11.40	AV	213.00	400	Horizontal	Pass
2	2719.400	53.27	74.0	20.73	Peak	282.00	100	Horizontal	Pass
2**	2719.400	44.53	54.0	9.47	AV	282.00	100	Horizontal	Pass
3	5485.250	48.98	74.0	25.02	Peak	222.00	200	Horizontal	Pass
3**	5485.250	46.78	54.0	7.22	AV	222.00	200	Horizontal	Pass
4	6399.250	59.80	74.0	14.20	Peak	2.00	300	Horizontal	Pass
4**	6399.250	55.32	--	--	AV	2.00	300	Horizontal	Pass
5	12714.375	50.76	74.0	23.24	Peak	158.00	300	Horizontal	Pass
5**	12714.375	40.88	54.0	13.12	AV	158.00	300	Horizontal	Pass
6	17343.224	53.37	74.0	20.63	Peak	331.00	400	Horizontal	Pass
6**	17343.224	44.90	54.0	9.10	AV	331.00	400	Horizontal	Pass

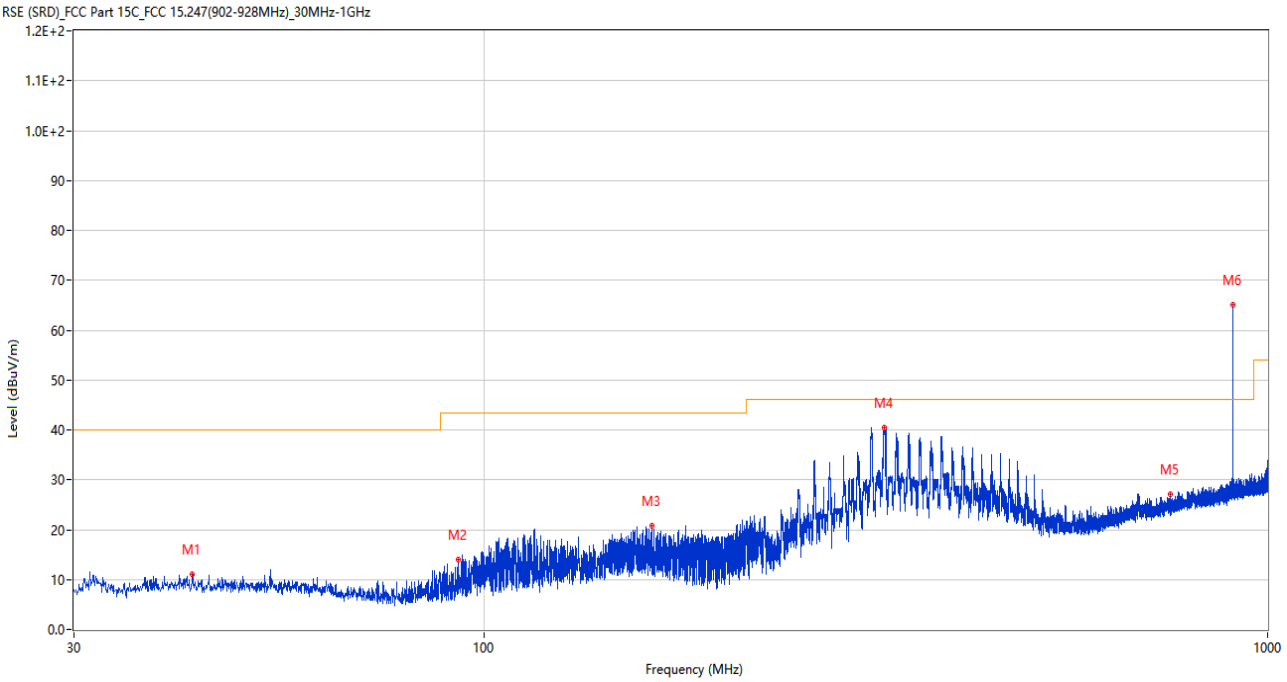
HIGH CHANNEL 1 GHz to 18 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1828.600	50.31	74.0	23.69	Peak	114.00	300	Vertical	Pass
1**	1828.600	50.08	54.0	3.92	AV	114.00	300	Vertical	Pass
2	2922.900	53.95	74.0	20.05	Peak	99.00	400	Vertical	Pass
2**	2922.900	44.29	54.0	9.71	AV	99.00	400	Vertical	Pass
3	5484.750	53.70	74.0	20.30	Peak	119.00	200	Vertical	Pass
3**	5484.750	52.79	54.0	1.21	AV	119.00	200	Vertical	Pass
4	6399.500	61.87	74.0	12.13	Peak	150.00	100	Vertical	Pass
4**	6399.500	56.90	--	--	AV	150.00	100	Vertical	Pass
5	12089.987	50.73	74.0	23.27	Peak	152.00	100	Vertical	Pass
5**	12089.987	40.42	54.0	13.58	AV	152.00	100	Vertical	Pass
6	17332.724	53.51	74.0	20.49	Peak	47.00	100	Vertical	Pass
6**	17332.724	45.02	54.0	8.98	AV	47.00	100	Vertical	Pass

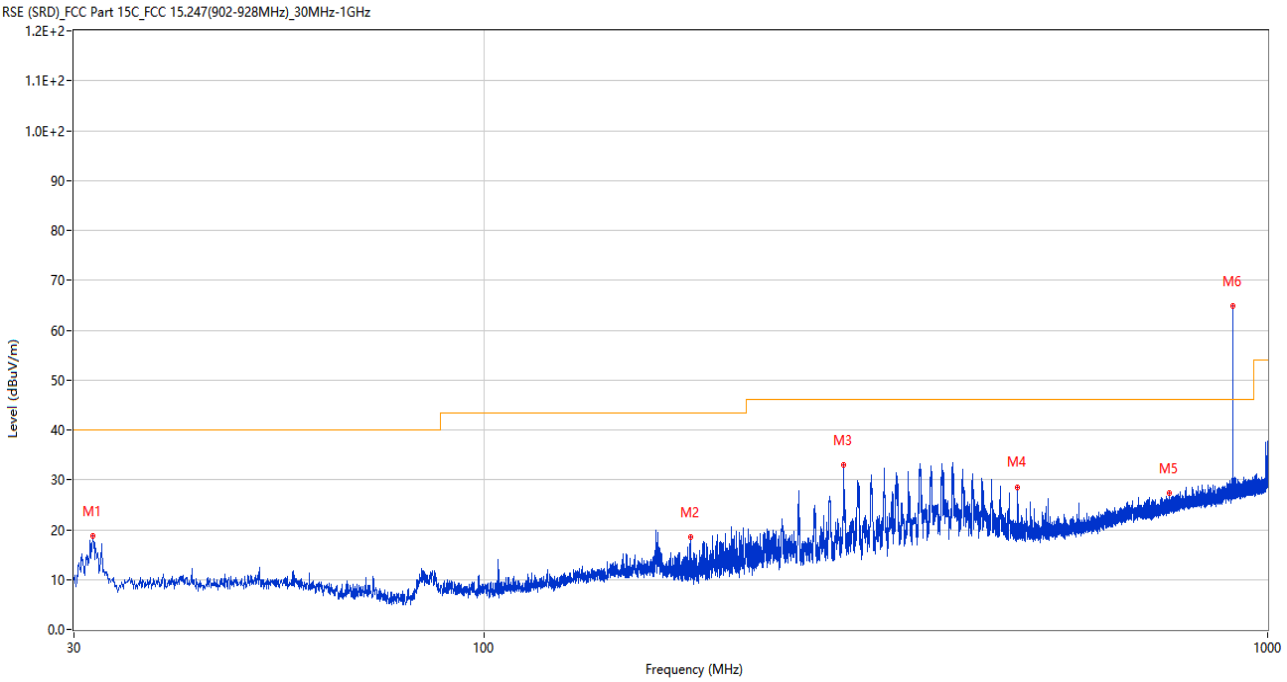
Spring Antenna 1 (DOG-617)

LOW CHANNEL, 30 MHz to 1 GHz, ANT H



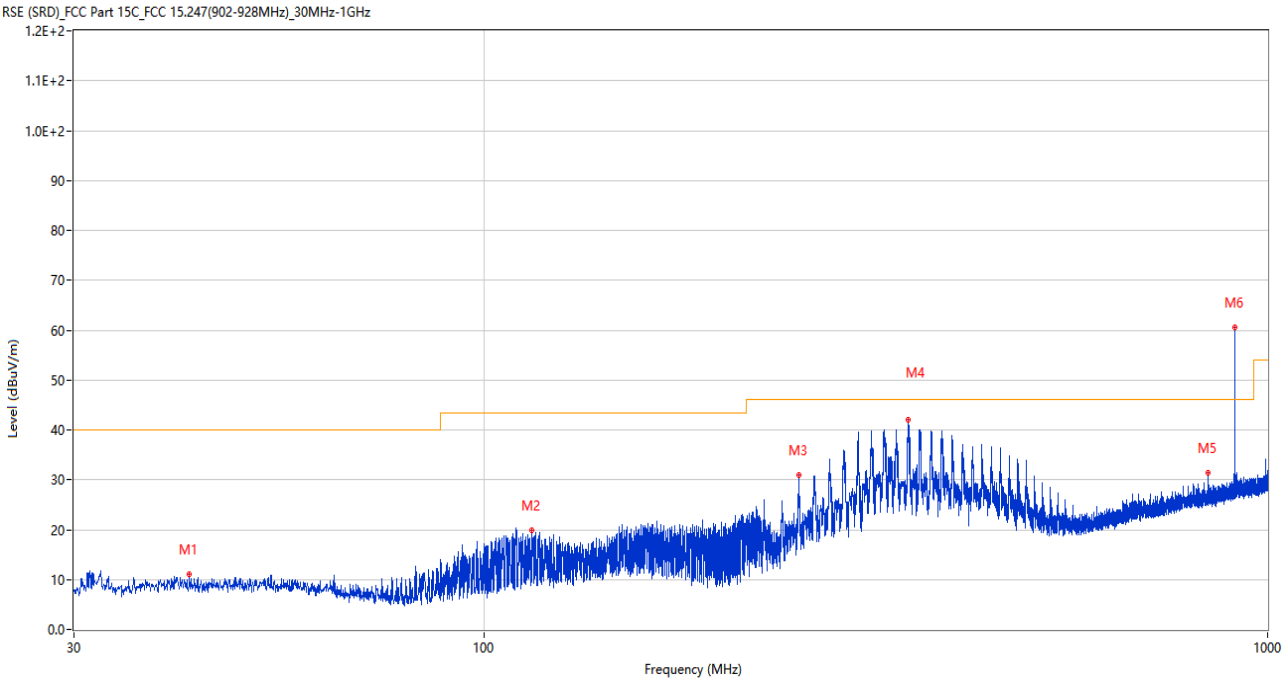
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	42.513	10.97	40.0	29.03	Peak	80.00	150	Horizontal	Pass
2	92.856	13.94	43.5	29.56	Peak	57.00	150	Horizontal	Pass
3	163.666	20.70	43.5	22.80	Peak	68.00	150	Horizontal	Pass
4	324.056	40.51	46.0	5.49	Peak	183.00	150	Horizontal	Pass
5	750.613	27.03	46.0	18.97	Peak	119.00	150	Horizontal	Pass
6	902.175	65.01	46.0	-19.01	Peak	68.00	150	Horizontal	N/A

LOW CHANNEL, 30 MHz to 1 GHz, ANT V



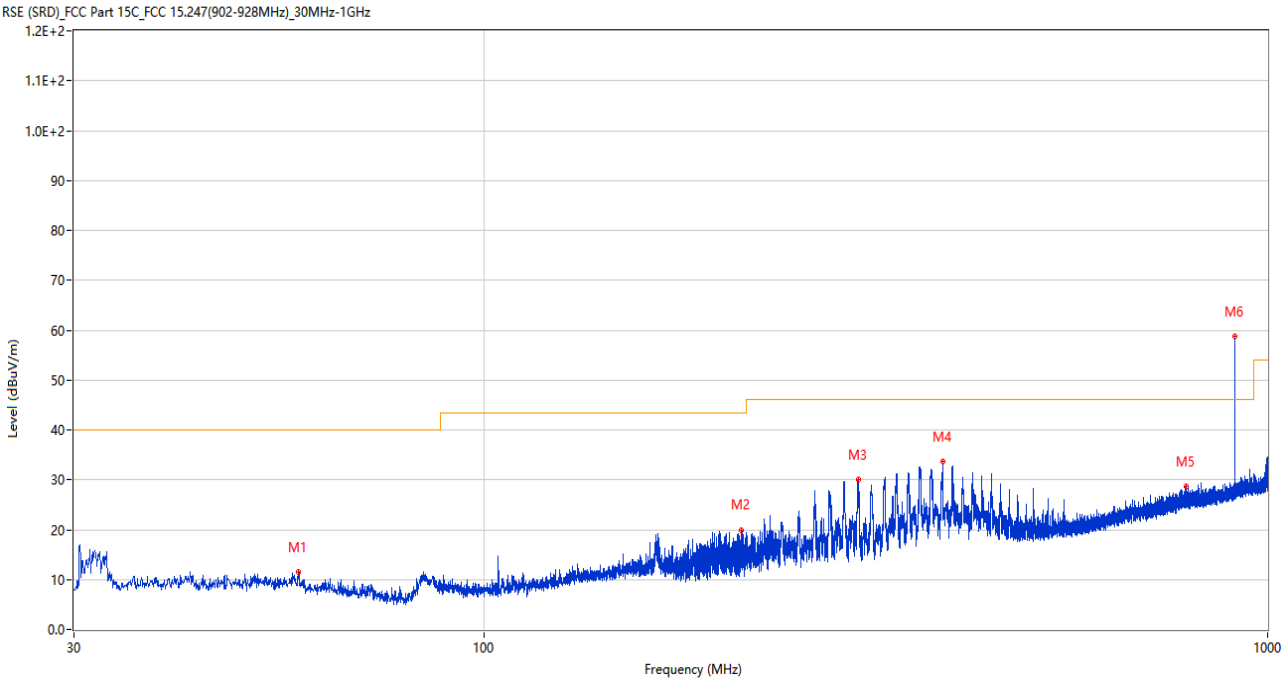
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	31.698	18.77	40.0	21.23	Peak	343.00	150	Vertical	Pass
2	183.357	18.62	43.5	24.88	Peak	356.00	150	Vertical	Pass
3	288.117	33.03	46.0	12.97	Peak	49.00	150	Vertical	Pass
4	480.080	28.58	46.0	17.42	Peak	63.00	150	Vertical	Pass
5	749.643	27.41	46.0	18.59	Peak	155.00	150	Vertical	Pass
6	902.418	64.82	46.0	-18.82	Peak	210.00	150	Vertical	N/A

MIDDLE CHANNEL, 30 MHz to 1 GHz, ANT H



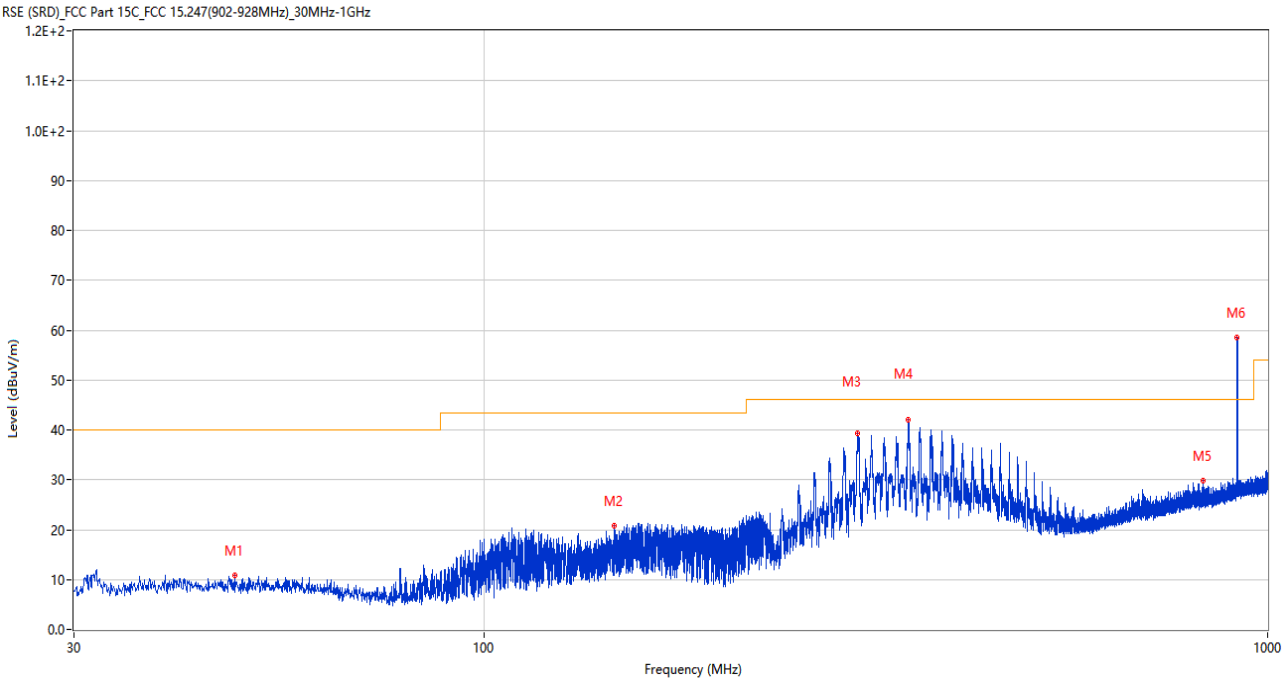
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	42.125	11.00	40.0	29.00	Peak	358.00	150	Horizontal	Pass
2	115.166	19.81	43.5	23.69	Peak	0.00	150	Horizontal	Pass
3	252.324	30.96	46.0	15.04	Peak	77.00	150	Horizontal	Pass
4	348.112	41.98	46.0	4.02	Peak	179.00	150	Horizontal	Pass
5	839.902	31.34	46.0	14.66	Peak	350.00	150	Horizontal	Pass
6	908.432	60.54	46.0	-14.54	Peak	135.00	150	Horizontal	N/A

MIDDLE CHANNEL, 30 MHz to 1 GHz, ANT V



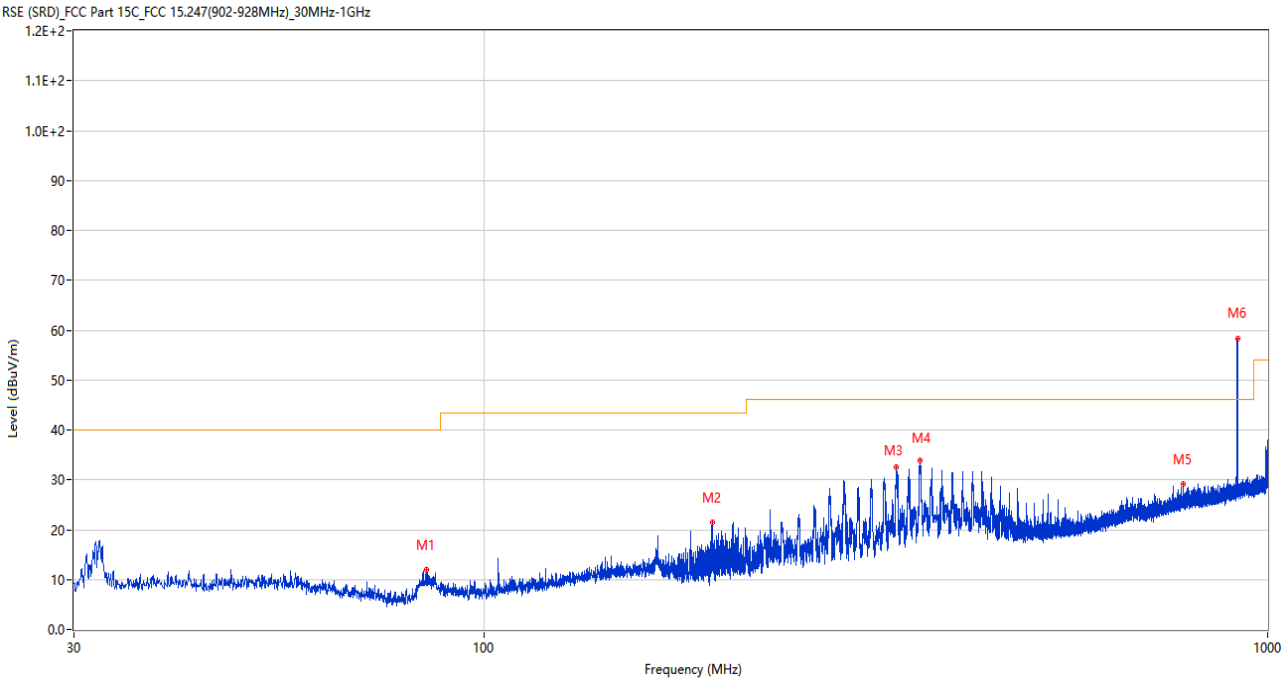
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	58.081	11.45	40.0	28.55	Peak	280.00	150	Vertical	Pass
2	213.330	19.98	43.5	23.52	Peak	83.00	150	Vertical	Pass
3	300.582	30.11	46.0	15.89	Peak	57.00	150	Vertical	Pass
4	384.729	33.74	46.0	12.26	Peak	292.00	150	Vertical	Pass
5	787.376	28.66	46.0	17.34	Peak	174.00	150	Vertical	Pass
6	908.432	58.87	46.0	-12.87	Peak	212.00	150	Vertical	N/A

HIGH CHANNEL, 30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.187	10.76	40.0	29.24	Peak	330.00	150	Horizontal	Pass
2	146.691	20.70	43.5	22.80	Peak	215.00	150	Horizontal	Pass
3	300.097	39.25	46.0	6.75	Peak	175.00	150	Horizontal	Pass
4	348.014	41.97	46.0	4.03	Peak	181.00	150	Horizontal	Pass
5	828.116	29.74	46.0	16.26	Peak	64.00	150	Horizontal	Pass
6	914.786	58.61	46.0	-12.61	Peak	137.00	150	Horizontal	N/A

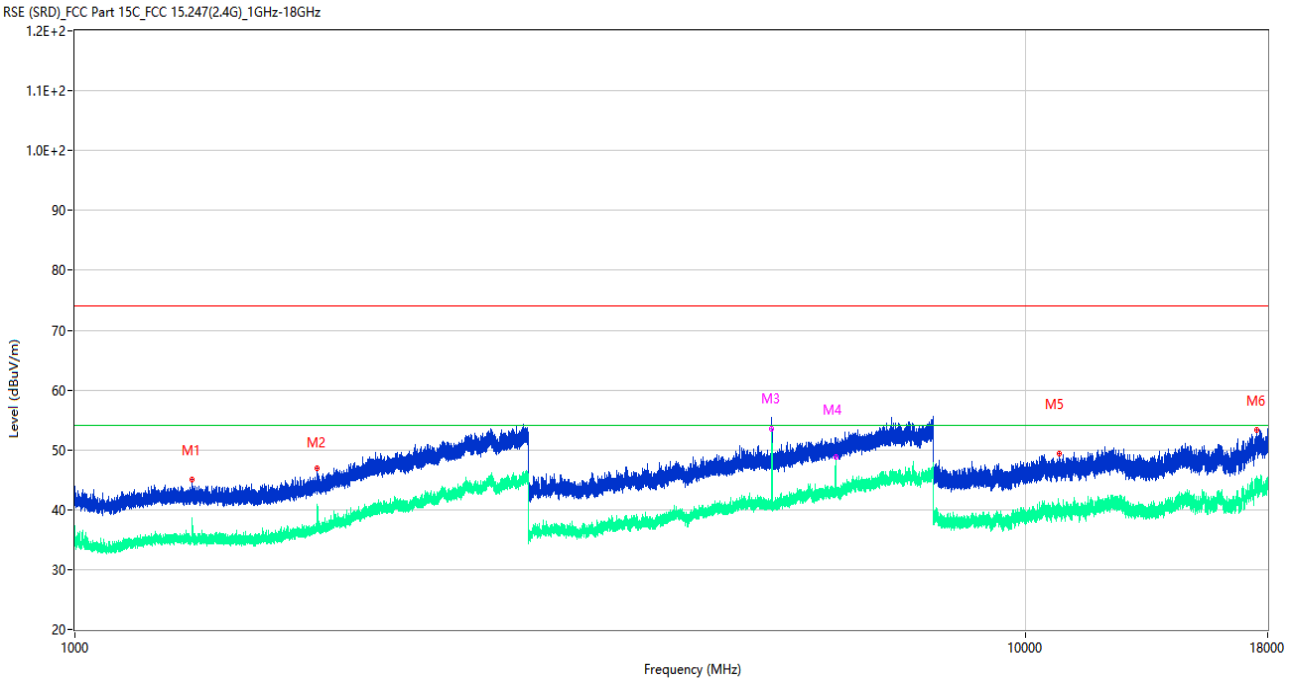
HIGH CHANNEL, 30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	84.465	11.96	40.0	28.04	Peak	0.00	150	Vertical	Pass
2	195.822	21.40	43.5	22.10	Peak	98.00	150	Vertical	Pass
3	335.986	32.59	46.0	13.41	Peak	153.00	150	Vertical	Pass
4	360.042	33.81	46.0	12.19	Peak	127.00	150	Vertical	Pass
5	780.295	29.17	46.0	16.83	Peak	215.00	150	Vertical	Pass
6	915.125	58.37	46.0	-12.37	Peak	212.00	150	Vertical	N/A

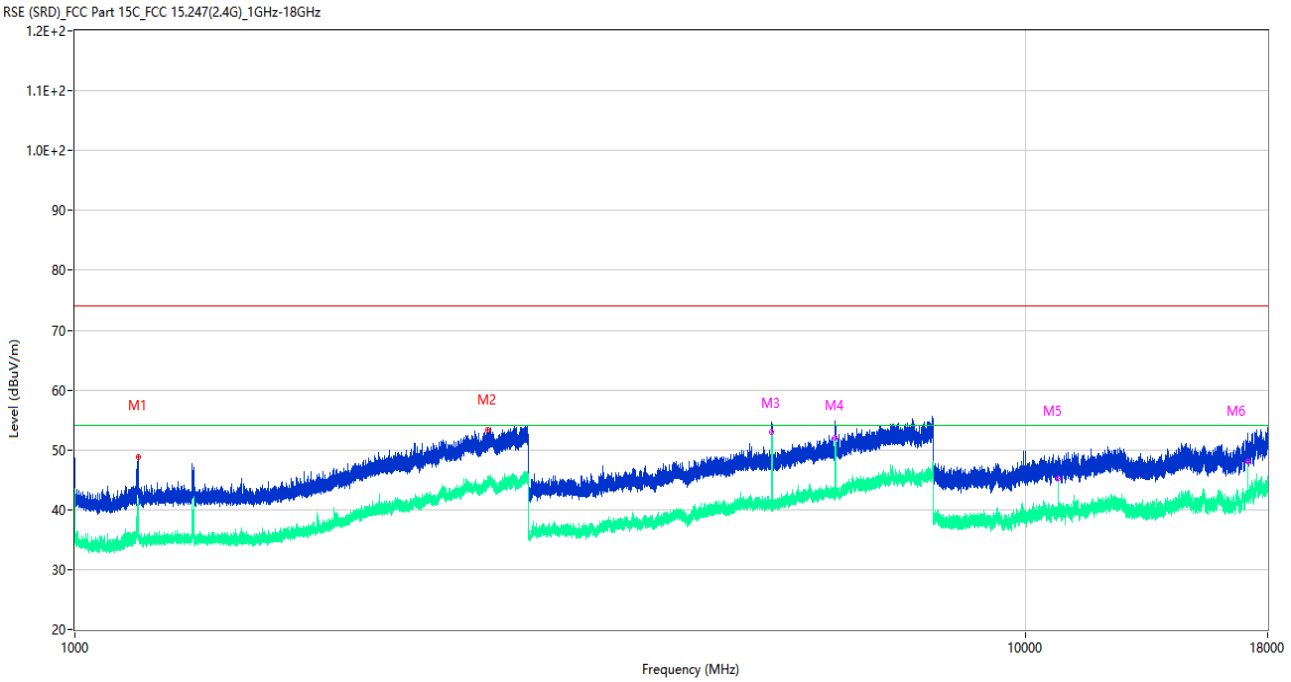
Note: The spurious from 18GHz-25GHz is noise only, do not show on the report.

LOW CHANNEL 1 GHz to 18 GHz, ANT H



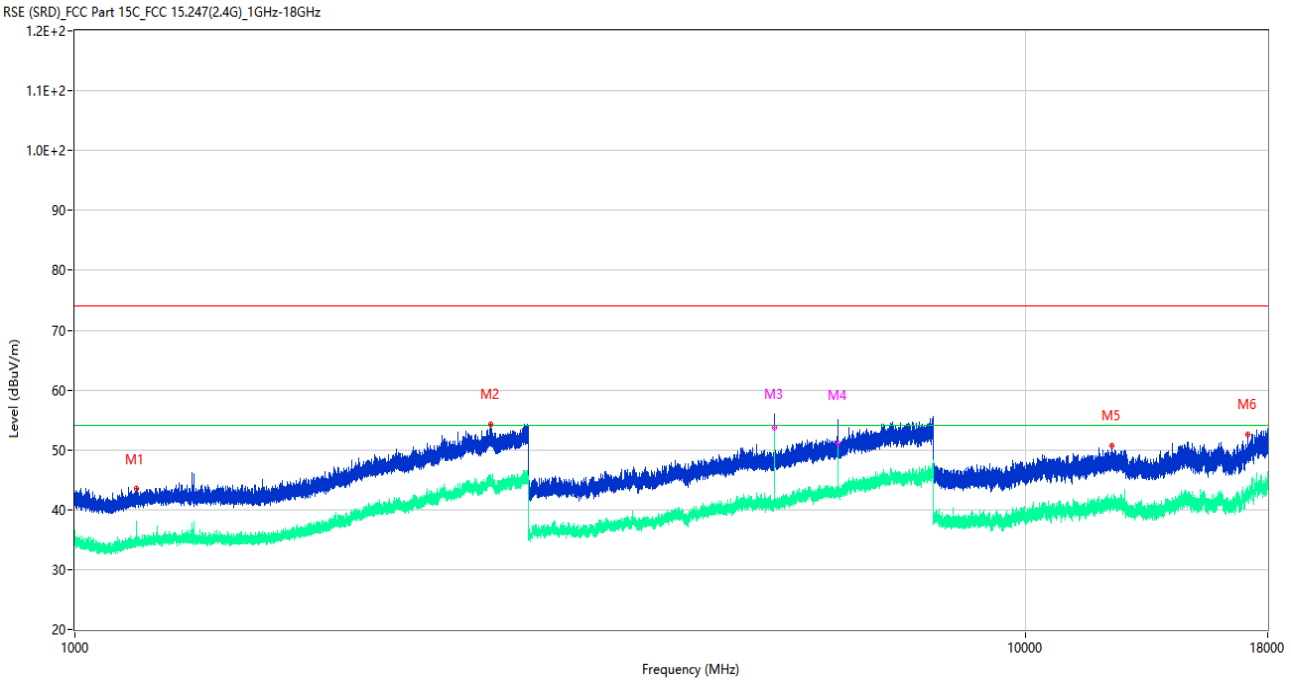
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.200	45.02	74.0	28.98	Peak	1.00	400	Horizontal	Pass
1**	1329.200	34.68	54.0	19.32	AV	1.00	400	Horizontal	Pass
2	1800.000	47.01	74.0	26.99	Peak	313.00	200	Horizontal	Pass
2**	1800.000	40.53	54.0	13.47	AV	313.00	200	Horizontal	Pass
3	5412.750	54.32	74.0	19.68	Peak	212.00	200	Horizontal	Pass
3**	5412.750	53.57	54.0	0.43	AV	212.00	200	Horizontal	Pass
4	6317.750	51.68	74.0	22.32	Peak	255.00	300	Horizontal	Pass
4**	6317.750	49.07	--	--	AV	255.00	300	Horizontal	N/A
5	10864.725	49.34	74.0	24.66	Peak	153.00	100	Horizontal	Pass
5**	10864.725	40.32	54.0	13.68	AV	153.00	100	Horizontal	Pass
6	17534.587	53.34	74.0	20.66	Peak	276.00	200	Horizontal	Pass
6**	17534.587	44.87	54.0	9.13	AV	276.00	200	Horizontal	Pass

LOW CHANNEL 1 GHz to 18 GHz, ANT V



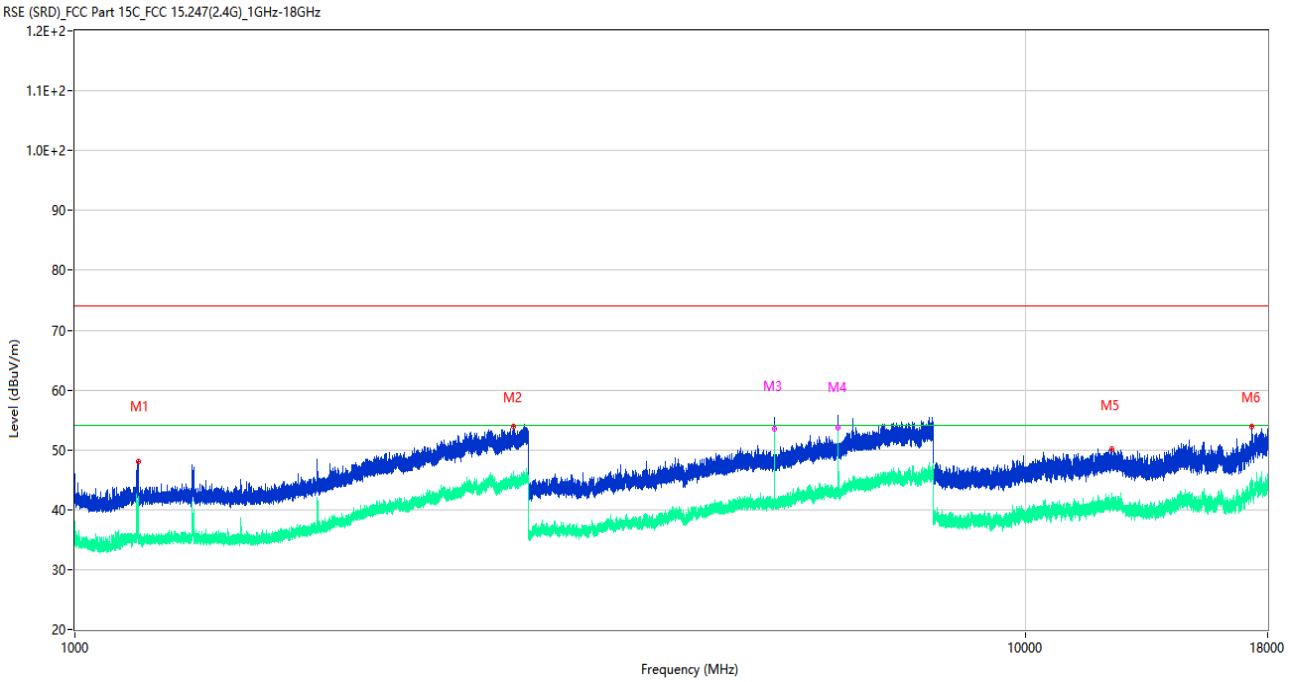
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.000	48.66	74.0	25.34	Peak	44.00	200	Vertical	Pass
1**	1165.000	36.87	54.0	17.13	AV	44.00	200	Vertical	Pass
2	2717.900	53.37	74.0	20.63	Peak	117.00	200	Vertical	Pass
2**	2717.900	44.01	54.0	9.99	AV	117.00	200	Vertical	Pass
3	5413.250	54.96	74.0	19.04	Peak	360.00	200	Vertical	Pass
3**	5413.250	53.41	54.0	0.59	AV	360.00	200	Vertical	Pass
4	6315.250	54.29	74.0	19.71	Peak	284.00	200	Vertical	Pass
4**	6315.250	52.14	--	--	AV	284.00	200	Vertical	N/A
5	10829.575	48.52	74.0	25.48	Peak	57.00	300	Vertical	Pass
5**	10829.575	45.23	54.0	8.77	AV	57.00	300	Vertical	Pass
6	17147.926	52.50	74.0	21.50	Peak	62.00	100	Vertical	Pass
6**	17147.926	47.98	54.0	6.02	AV	62.00	100	Vertical	Pass

MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H



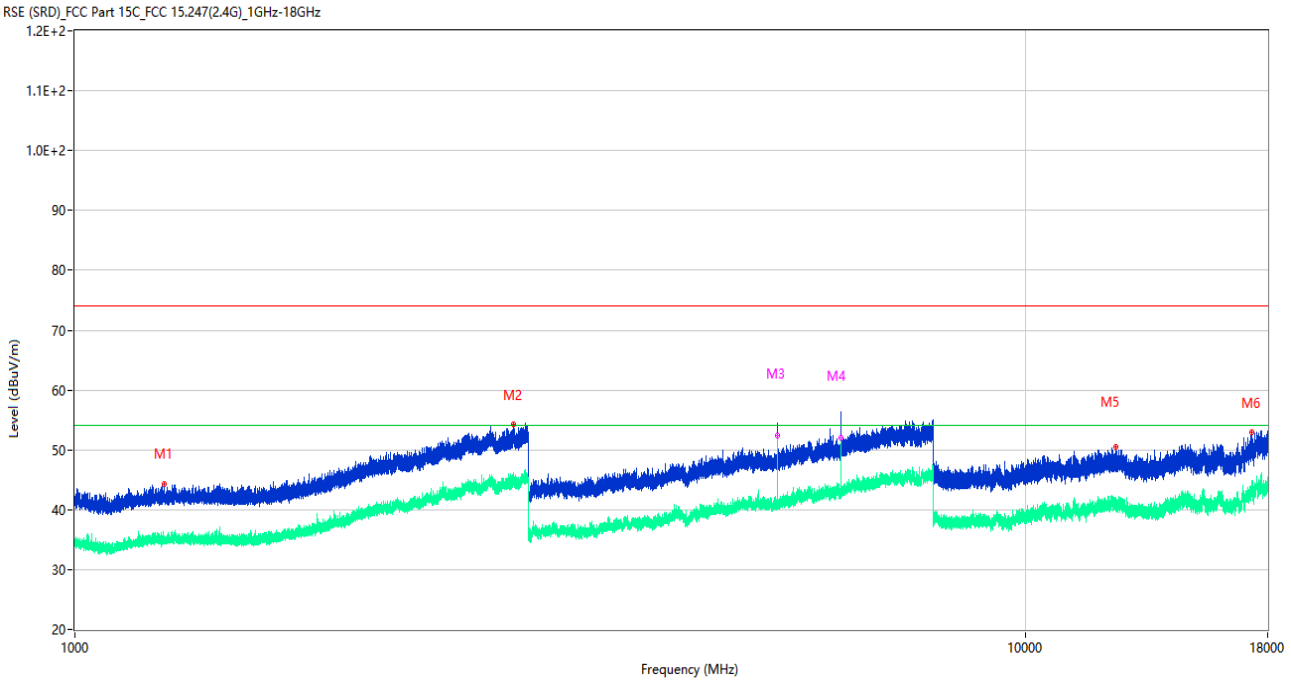
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1160.900	43.45	74.0	30.55	Peak	282.00	200	Horizontal	Pass
1**	1160.900	34.91	54.0	19.09	AV	282.00	200	Horizontal	Pass
2	2738.500	54.32	74.0	19.68	Peak	75.00	300	Horizontal	Pass
2**	2738.500	44.27	54.0	9.73	AV	75.00	300	Horizontal	Pass
3	5451.500	55.41	74.0	18.59	Peak	213.00	200	Horizontal	Pass
3**	5451.500	53.78	54.0	0.22	AV	213.00	200	Horizontal	Pass
4	6358.250	53.03	74.0	20.97	Peak	254.00	400	Horizontal	Pass
4**	6358.250	51.26	--	--	AV	254.00	400	Horizontal	N/A
5	12336.750	50.69	74.0	23.31	Peak	196.00	300	Horizontal	Pass
5**	12336.750	40.94	54.0	13.06	AV	196.00	300	Horizontal	Pass
6	17149.762	52.64	74.0	21.36	Peak	235.00	300	Horizontal	Pass
6**	17149.762	43.15	54.0	10.85	AV	235.00	300	Horizontal	Pass

MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V



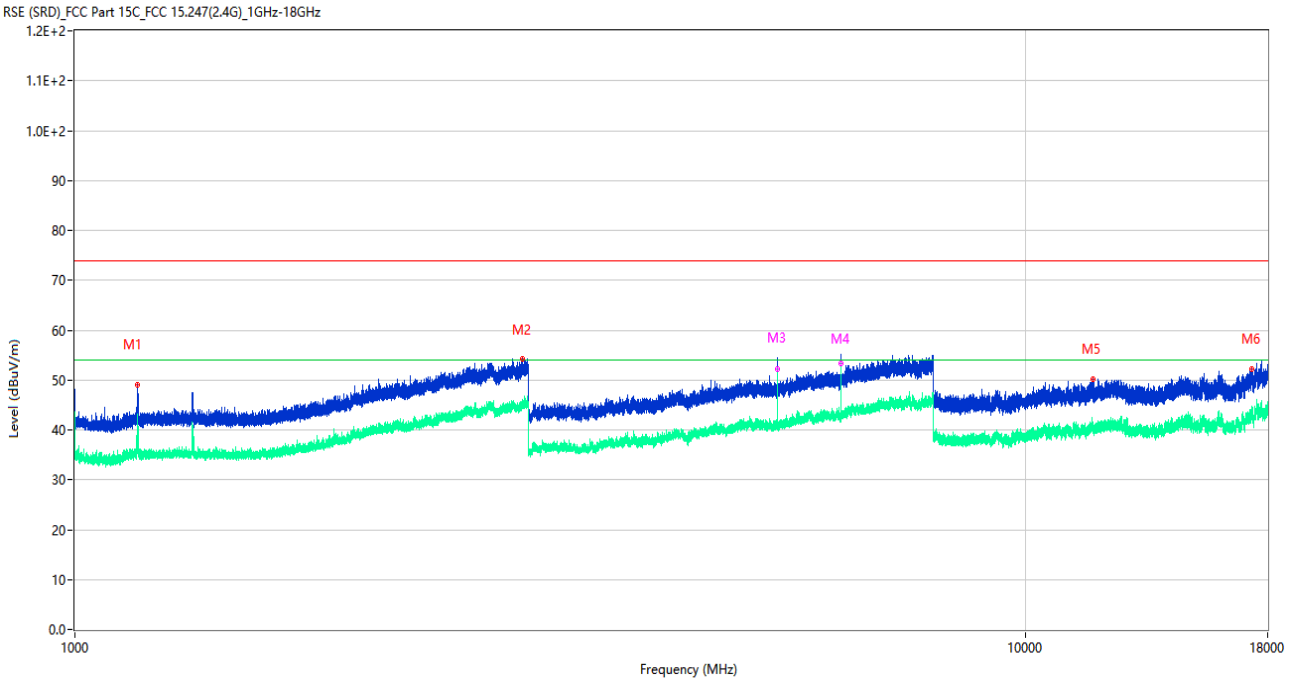
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.100	48.24	74.0	25.76	Peak	230.00	100	Vertical	Pass
1**	1165.100	41.85	54.0	12.15	AV	230.00	100	Vertical	Pass
2	2894.200	53.85	74.0	20.15	Peak	148.00	100	Vertical	Pass
2**	2894.200	44.85	54.0	9.15	AV	148.00	100	Vertical	Pass
3	5452.250	55.05	74.0	18.95	Peak	274.00	200	Vertical	Pass
3**	5452.250	53.43	54.0	0.57	AV	274.00	200	Vertical	Pass
4	6359.000	55.51	74.0	18.49	Peak	284.00	200	Vertical	Pass
4**	6359.000	53.87	--	--	AV	284.00	200	Vertical	N/A
5	12335.325	50.11	74.0	23.89	Peak	50.00	400	Vertical	Pass
5**	12335.325	41.49	54.0	12.51	AV	50.00	400	Vertical	Pass
6	17331.937	53.81	74.0	20.19	Peak	163.00	400	Vertical	Pass
6**	17331.937	44.39	54.0	9.61	AV	163.00	400	Vertical	Pass

HIGH CHANNEL 1 GHz to 18 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1241.000	44.28	74.0	29.72	Peak	236.00	200	Horizontal	Pass
1**	1241.000	35.69	54.0	18.31	AV	236.00	200	Horizontal	Pass
2	2894.400	54.19	74.0	19.81	Peak	350.00	200	Horizontal	Pass
2**	2894.400	45.21	54.0	8.79	AV	350.00	200	Horizontal	Pass
3	5488.500	54.16	74.0	19.84	Peak	213.00	300	Horizontal	Pass
3**	5488.500	52.41	--	--	AV	213.00	300	Horizontal	N/A
4	6404.750	56.48	74.0	17.52	Peak	254.00	100	Horizontal	Pass
4**	6404.750	51.91	--	--	AV	254.00	100	Horizontal	N/A
5	12472.600	50.43	74.0	23.57	Peak	0.00	100	Horizontal	Pass
5**	12472.600	40.65	54.0	13.35	AV	0.00	100	Horizontal	Pass
6	17335.349	52.93	74.0	21.07	Peak	208.00	300	Horizontal	Pass
6**	17335.349	43.90	54.0	10.10	AV	208.00	300	Horizontal	Pass

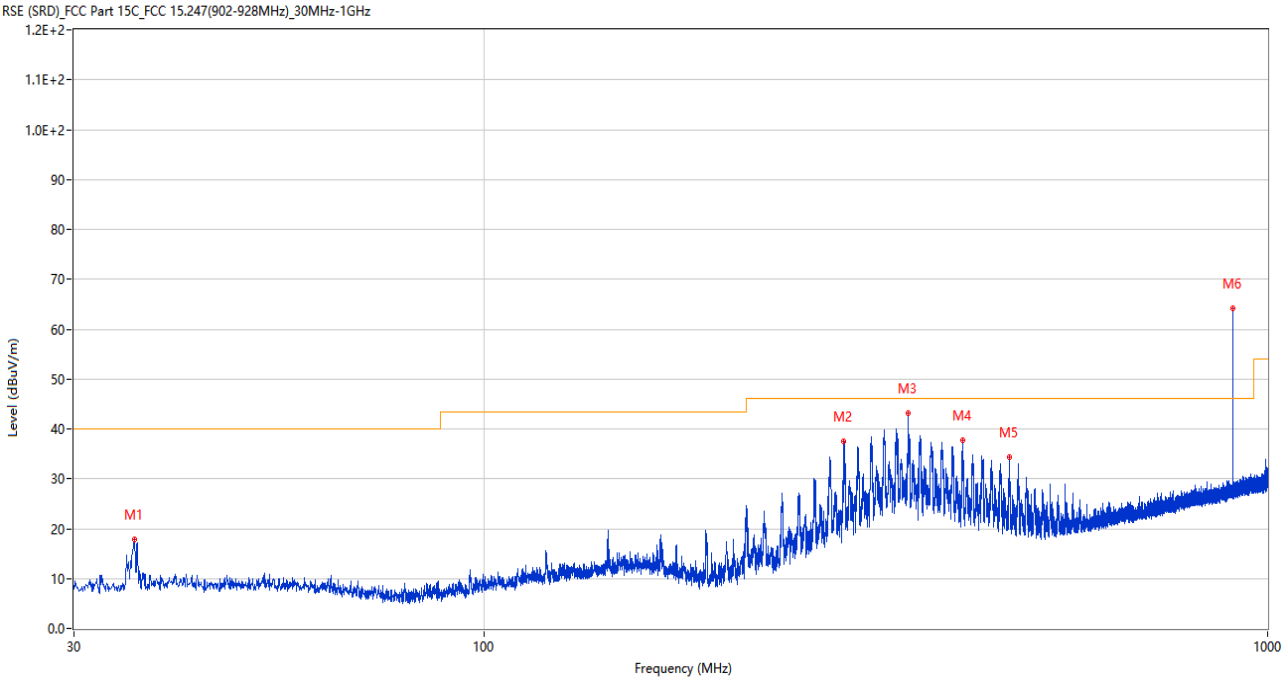
HIGH CHANNEL 1 GHz to 18 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.800	48.79	74.0	25.21	Peak	42.00	200	Vertical	Pass
1**	1162.800	37.13	54.0	16.87	AV	42.00	200	Vertical	Pass
2	2955.400	54.19	74.0	19.81	Peak	245.00	200	Vertical	Pass
2**	2955.400	45.64	54.0	8.36	AV	245.00	200	Vertical	Pass
3	5488.500	54.57	74.0	19.43	Peak	7.00	400	Vertical	Pass
3**	5488.500	52.77	--	--	AV	7.00	400	Vertical	N/A
4	6406.250	54.06	74.0	19.94	Peak	284.00	300	Vertical	Pass
4**	6406.250	53.81	--	--	AV	284.00	300	Vertical	N/A
5	11802.849	50.10	74.0	23.90	Peak	207.00	400	Vertical	Pass
5**	11802.849	39.65	54.0	14.35	AV	207.00	400	Vertical	Pass
6	17340.600	52.10	74.0	21.90	Peak	360.00	200	Vertical	Pass
6**	17340.600	44.18	54.0	9.82	AV	360.00	200	Vertical	Pass

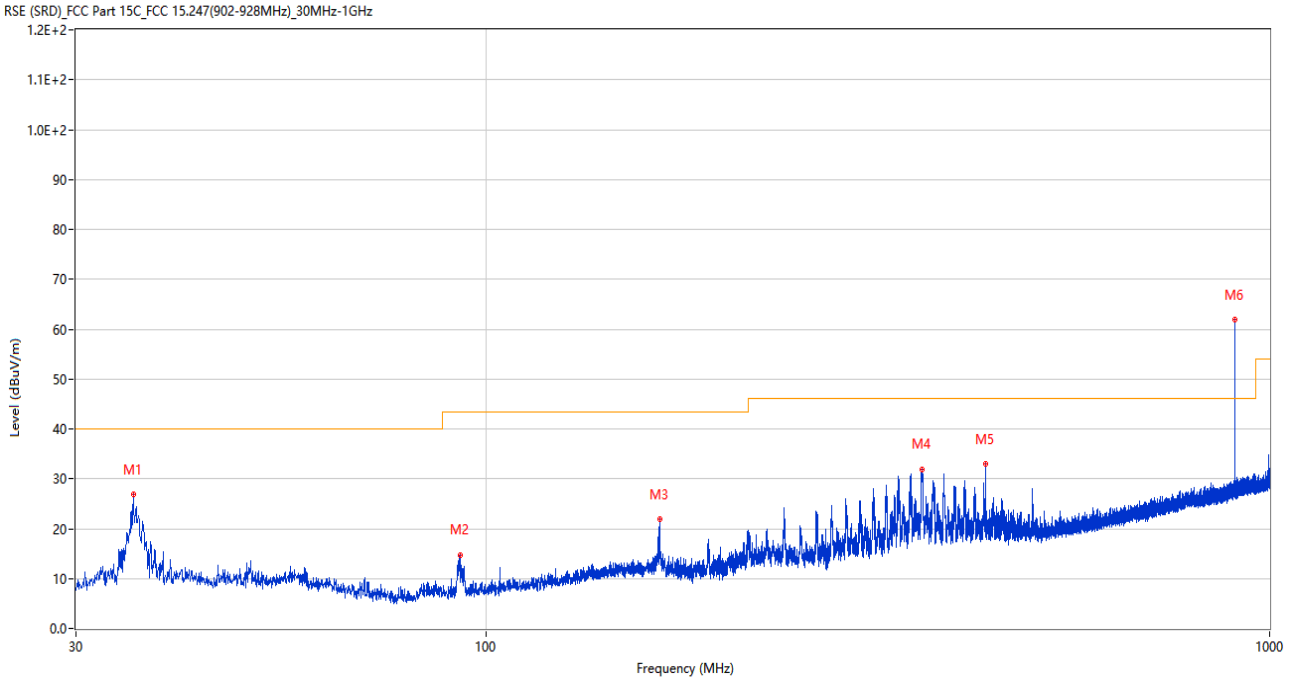
Spring Antenna 2 (DOG-622)

LOW CHANNEL, 30 MHz to 1 GHz, ANT H



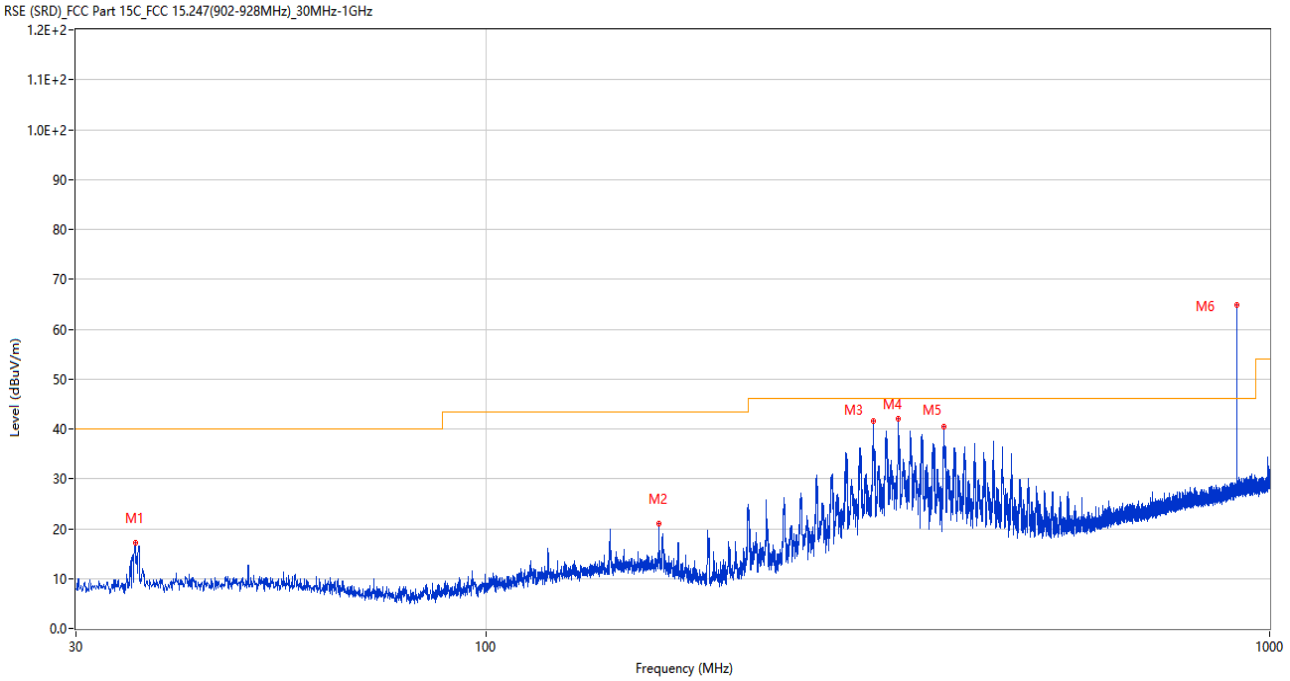
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	35.868	17.88	40.0	22.12	Peak	86.00	150	Horizontal	Pass
2	288.166	37.59	46.0	8.41	Peak	220.00	150	Horizontal	Pass
3	348.014	43.12	46.0	2.88	Peak	206.00	150	Horizontal	Pass
4	408.251	37.65	46.0	8.35	Peak	166.00	150	Horizontal	Pass
5	468.294	34.32	46.0	11.68	Peak	108.00	150	Horizontal	Pass
6	903.097	64.25	46.0	-18.25	Peak	83.00	150	Horizontal	N/A

LOW CHANNEL, 30 MHz to 1 GHz, ANT V



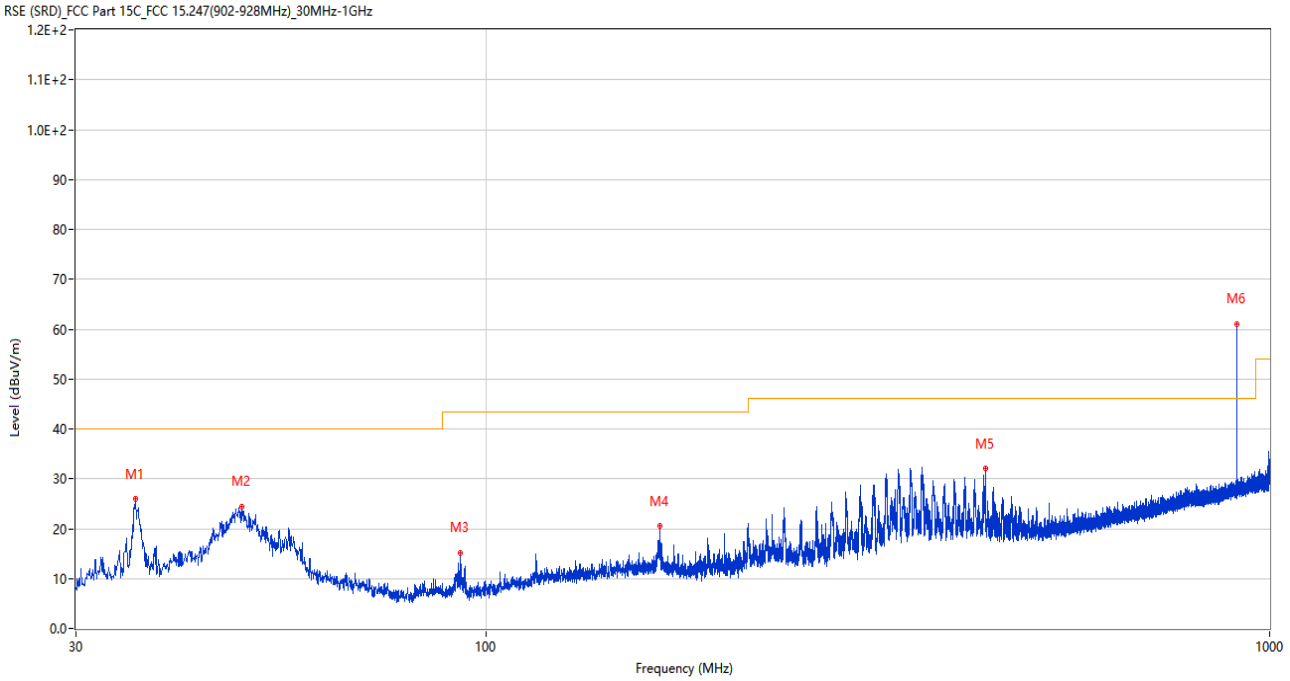
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	35.529	26.79	40.0	13.21	Peak	168.00	150	Vertical	Pass
2	92.711	14.80	43.5	28.70	Peak	215.00	150	Vertical	Pass
3	166.528	21.98	43.5	21.52	Peak	231.00	150	Vertical	Pass
4	359.751	31.98	46.0	14.02	Peak	141.00	150	Vertical	Pass
5	433.957	32.96	46.0	13.04	Peak	278.00	150	Vertical	Pass
6	902.951	61.88	46.0	-15.88	Peak	138.00	150	Vertical	N/A

MIDDLE CHANNEL, 30 MHz to 1 GHz, ANT H



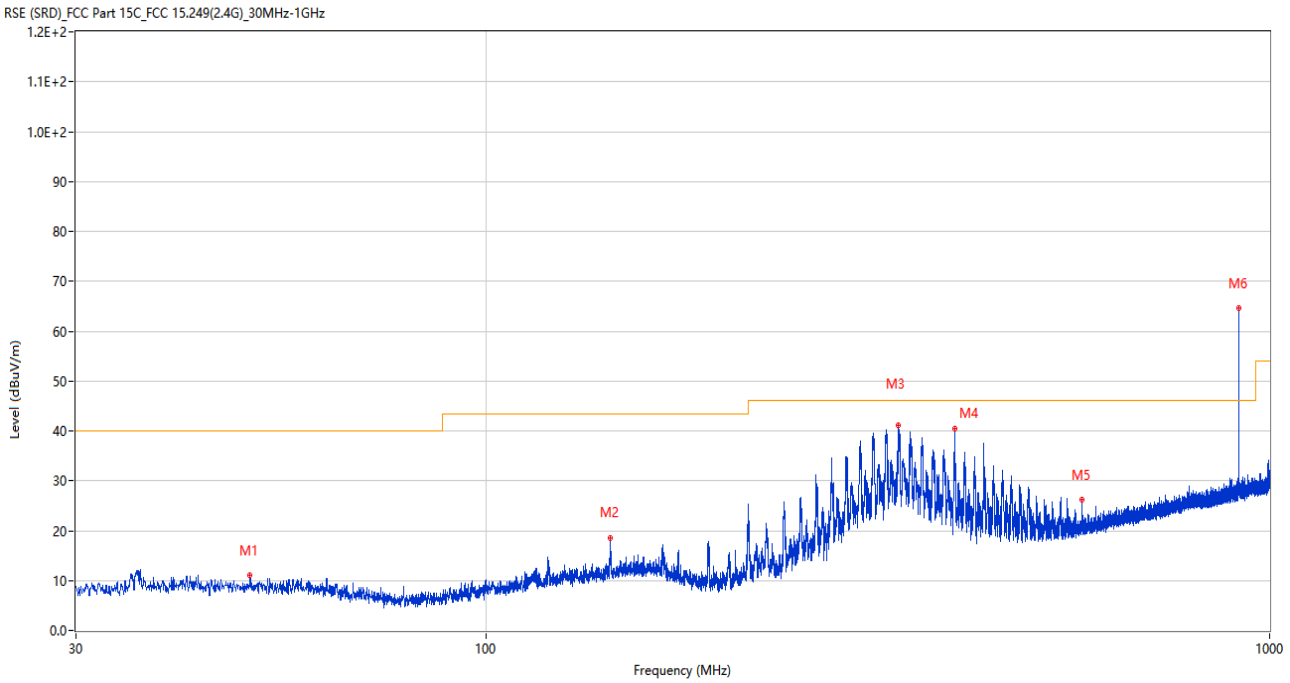
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	35.723	17.24	40.0	22.76	Peak	272.00	150	Horizontal	Pass
2	166.236	21.03	43.5	22.47	Peak	305.00	150	Horizontal	Pass
3	312.222	41.68	46.0	4.32	Peak	179.00	150	Horizontal	Pass
4	336.035	41.93	46.0	4.07	Peak	72.00	150	Horizontal	Pass
5	384.050	40.44	46.0	5.56	Peak	161.00	150	Horizontal	Pass
6	907.607	64.76	46.0	-18.76	Peak	82.00	150	Horizontal	N/A

MIDDLE CHANNEL, 30 MHz to 1 GHz, ANT V



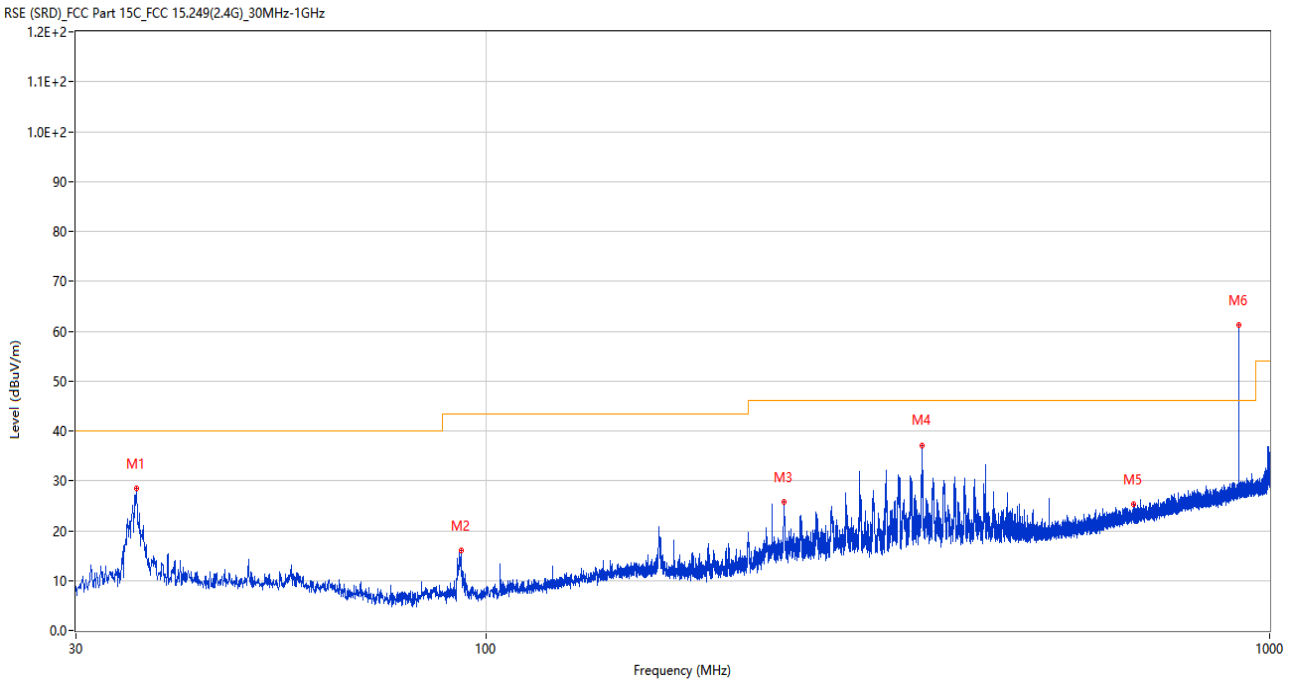
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	35.772	25.91	40.0	14.09	Peak	166.00	150	Vertical	Pass
2	48.770	24.51	40.0	15.49	Peak	19.00	150	Vertical	Pass
3	92.808	15.25	43.5	28.25	Peak	187.00	150	Vertical	Pass
4	166.770	20.51	43.5	22.99	Peak	176.00	150	Vertical	Pass
5	433.957	31.99	46.0	14.01	Peak	124.00	150	Vertical	Pass
6	907.656	61.11	46.0	-15.11	Peak	133.00	150	Vertical	N/A

HIGH CHANNEL, 30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	50.031	11.13	40.0	28.87	Peak	6.00	150	Horizontal	Pass
2	144.024	18.62	43.5	24.88	Peak	23.00	150	Horizontal	Pass
3	336.035	41.15	46.0	4.85	Peak	52.00	150	Horizontal	Pass
4	396.369	40.49	46.0	5.51	Peak	67.00	150	Horizontal	Pass
5	576.159	26.14	46.0	19.86	Peak	274.00	150	Horizontal	Pass
6	914.446	64.67	46.0	-18.67	Peak	127.00	150	Horizontal	N/A

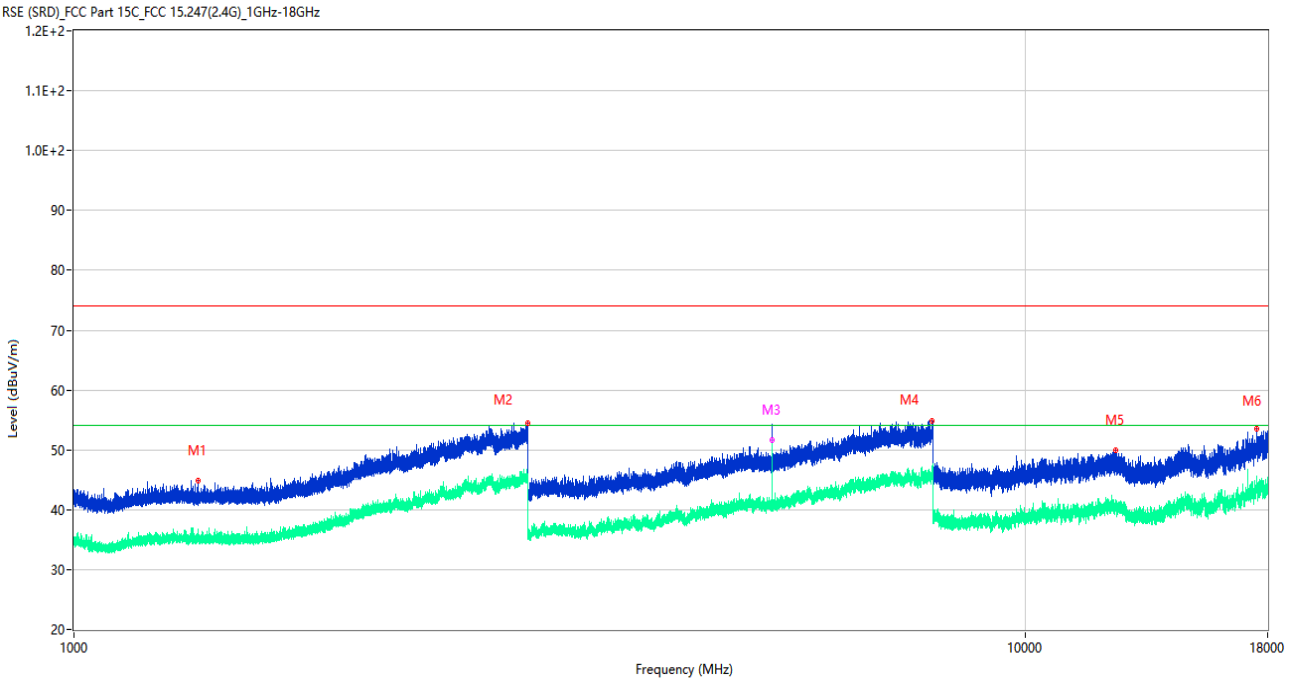
HIGH CHANNEL, 30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	35.820	28.37	40.0	11.63	Peak	238.00	150	Vertical	Pass
2	93.002	16.11	43.5	27.39	Peak	295.00	150	Vertical	Pass
3	240.102	25.67	46.0	20.33	Peak	94.00	150	Vertical	Pass
4	360.042	37.16	46.0	8.84	Peak	117.00	150	Vertical	Pass
5	670.831	25.27	46.0	20.73	Peak	106.00	150	Vertical	Pass
6	914.300	61.23	46.0	-15.23	Peak	19.00	150	Vertical	N/A

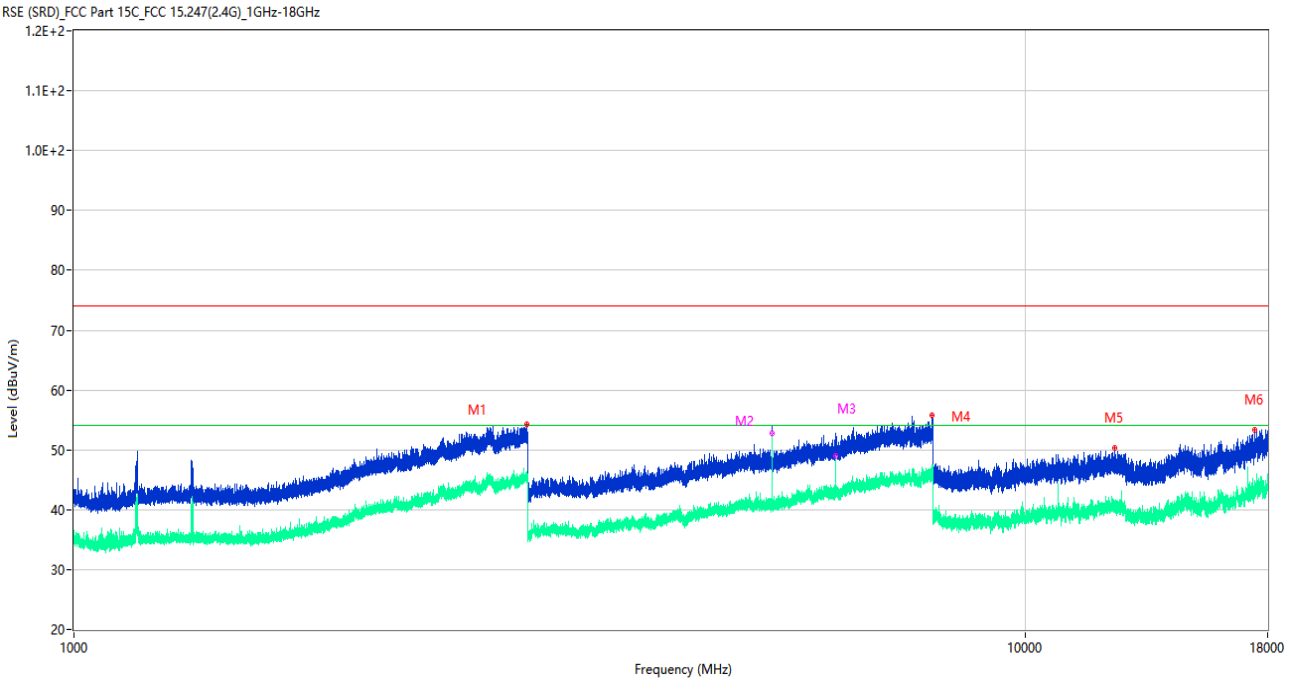
Note: The spurious from 18GHz-25GHz is noise only, do not show on the report.

LOW CHANNEL 1 GHz to 18 GHz, ANT H



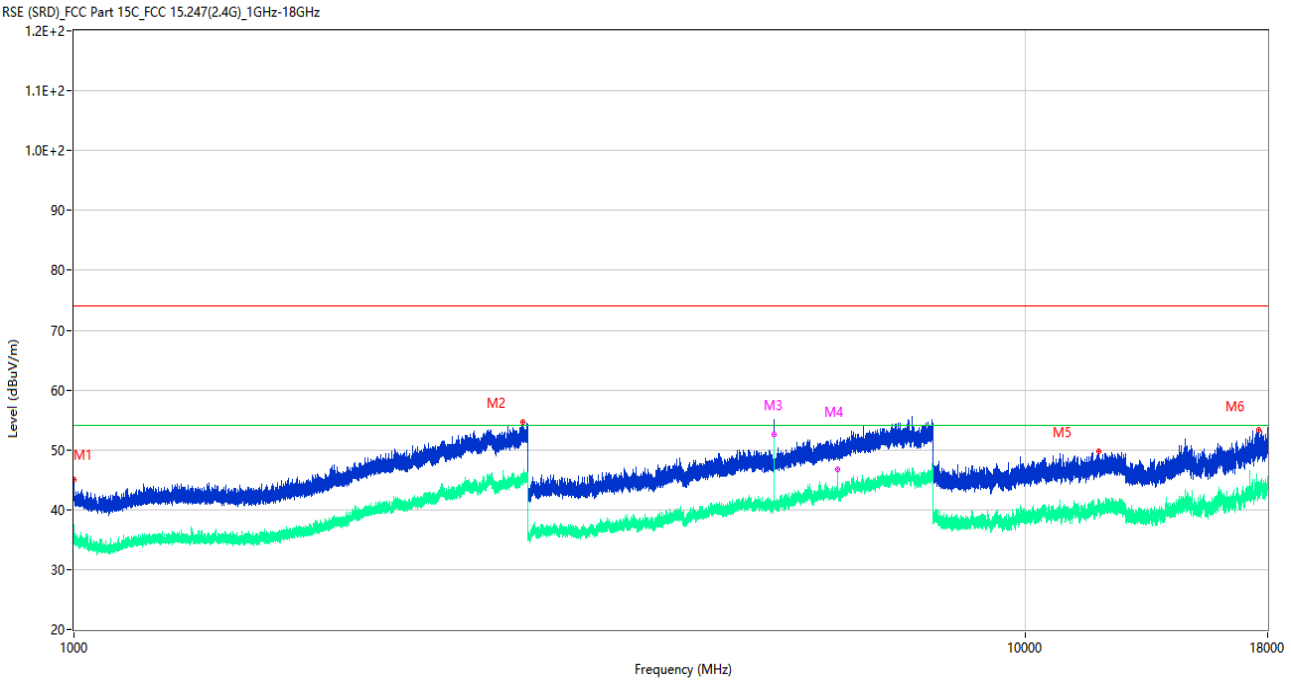
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1349.500	44.95	74.0	29.05	Peak	251.00	400	Horizontal	Pass
1**	1349.500	34.98	54.0	19.02	AV	251.00	400	Horizontal	Pass
2	2999.800	54.47	74.0	19.53	Peak	4.00	100	Horizontal	Pass
2**	2999.800	44.61	54.0	9.39	AV	4.00	100	Horizontal	Pass
3	5419.250	53.56	74.0	20.44	Peak	110.00	150	Horizontal	Pass
3**	5419.250	51.70	54.0	2.30	AV	110.00	150	Horizontal	Pass
4	7983.250	54.93	74.0	19.07	Peak	142.00	400	Horizontal	Pass
4**	7983.250	46.79	54.0	7.21	AV	142.00	400	Horizontal	Pass
5	12445.050	49.96	74.0	24.04	Peak	186.00	400	Horizontal	Pass
5**	12445.050	40.35	54.0	13.65	AV	186.00	400	Horizontal	Pass
6	17521.463	53.46	74.0	20.54	Peak	24.00	150	Horizontal	Pass
6**	17521.463	44.44	54.0	9.56	AV	24.00	150	Horizontal	Pass

LOW CHANNEL 1 GHz to 18 GHz, ANT V



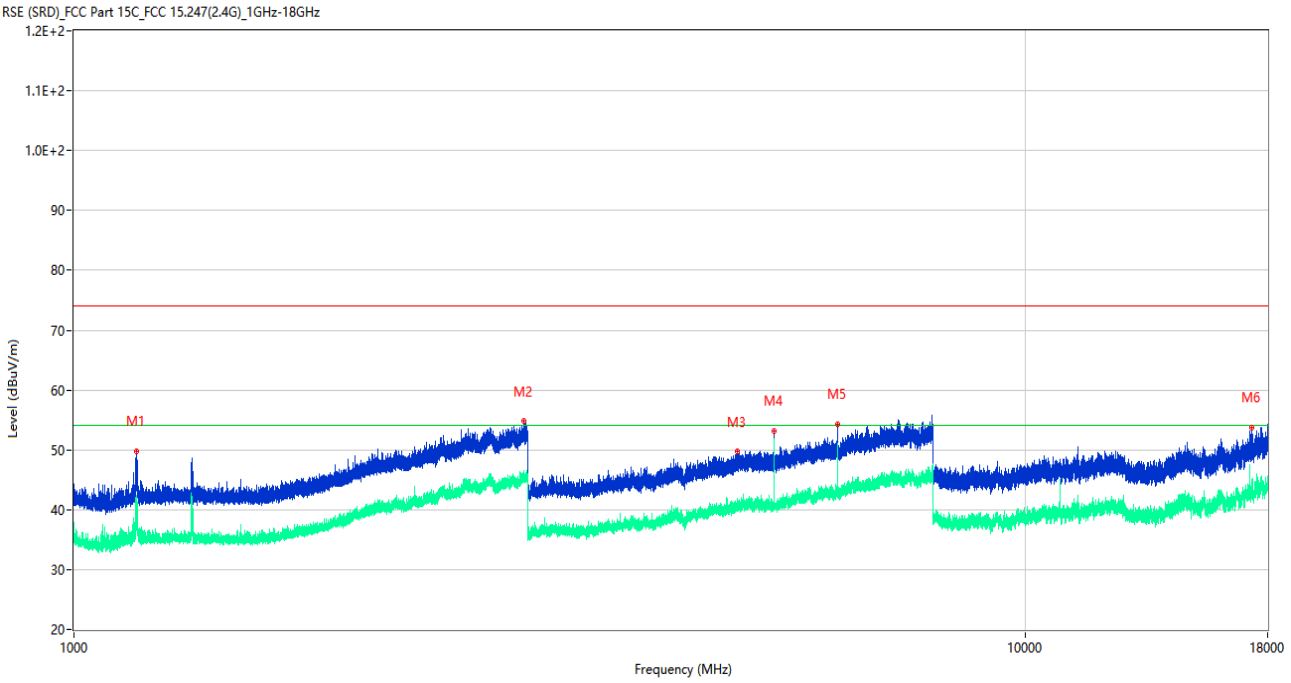
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2990.600	54.29	74.0	19.71	Peak	339.00	100	Vertical	Pass
1**	2990.600	45.17	54.0	8.83	AV	339.00	100	Vertical	Pass
2	5418.250	57.87	74.0	16.13	Peak	322.00	150	Vertical	Pass
2**	5418.250	52.68	54.0	1.32	AV	322.00	150	Vertical	Pass
3	6321.750	52.76	74.0	21.24	Peak	39.00	150	Vertical	Pass
3**	6321.750	49.04	--	--	AV	39.00	150	Vertical	N/A
4	7990.750	55.75	74.0	18.25	Peak	359.00	150	Vertical	Pass
4**	7990.750	46.59	54.0	7.41	AV	359.00	150	Vertical	Pass
5	12442.438	50.32	74.0	23.68	Peak	315.00	300	Vertical	Pass
5**	12442.438	41.20	54.0	12.80	AV	315.00	300	Vertical	Pass
6	17451.637	53.42	74.0	20.58	Peak	189.00	100	Vertical	Pass
6**	17451.637	43.95	54.0	10.05	AV	189.00	100	Vertical	Pass

MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H



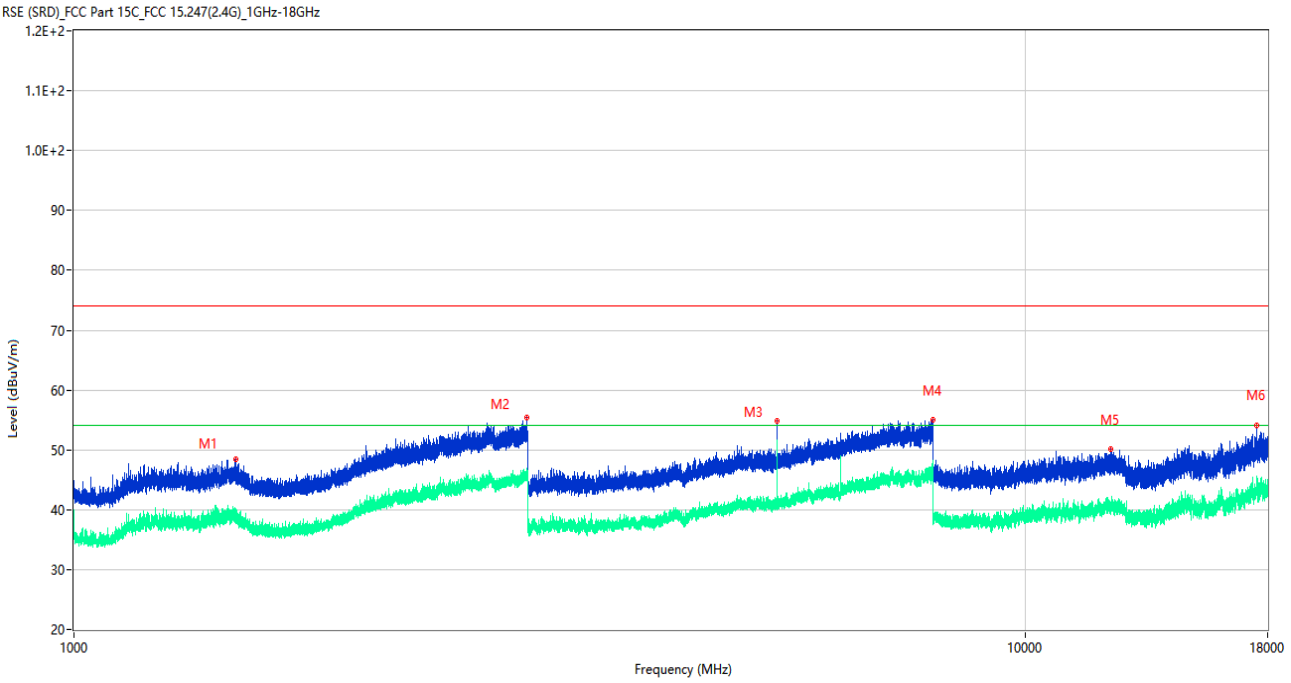
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.500	45.11	74.0	28.89	Peak	136.00	100	Horizontal	Pass
1**	1000.500	36.37	54.0	17.63	AV	136.00	100	Horizontal	Pass
2	2966.500	54.72	74.0	19.28	Peak	320.00	150	Horizontal	Pass
2**	2966.500	44.91	54.0	9.09	AV	320.00	150	Horizontal	Pass
3	5447.750	55.02	74.0	18.98	Peak	0.00	150	Horizontal	Pass
3**	5447.750	52.68	54.0	1.32	AV	0.00	150	Horizontal	Pass
4	6355.750	51.06	74.0	22.94	Peak	356.00	150	Horizontal	Pass
4**	6355.750	46.71	--	--	AV	356.00	150	Horizontal	N/A
5	11954.612	49.81	74.0	24.19	Peak	132.00	200	Horizontal	Pass
5**	11954.612	41.34	54.0	12.66	AV	132.00	200	Horizontal	Pass
6	17629.350	53.31	74.0	20.69	Peak	0.00	150	Horizontal	Pass
6**	17629.350	43.62	54.0	10.38	AV	0.00	150	Horizontal	Pass

MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V



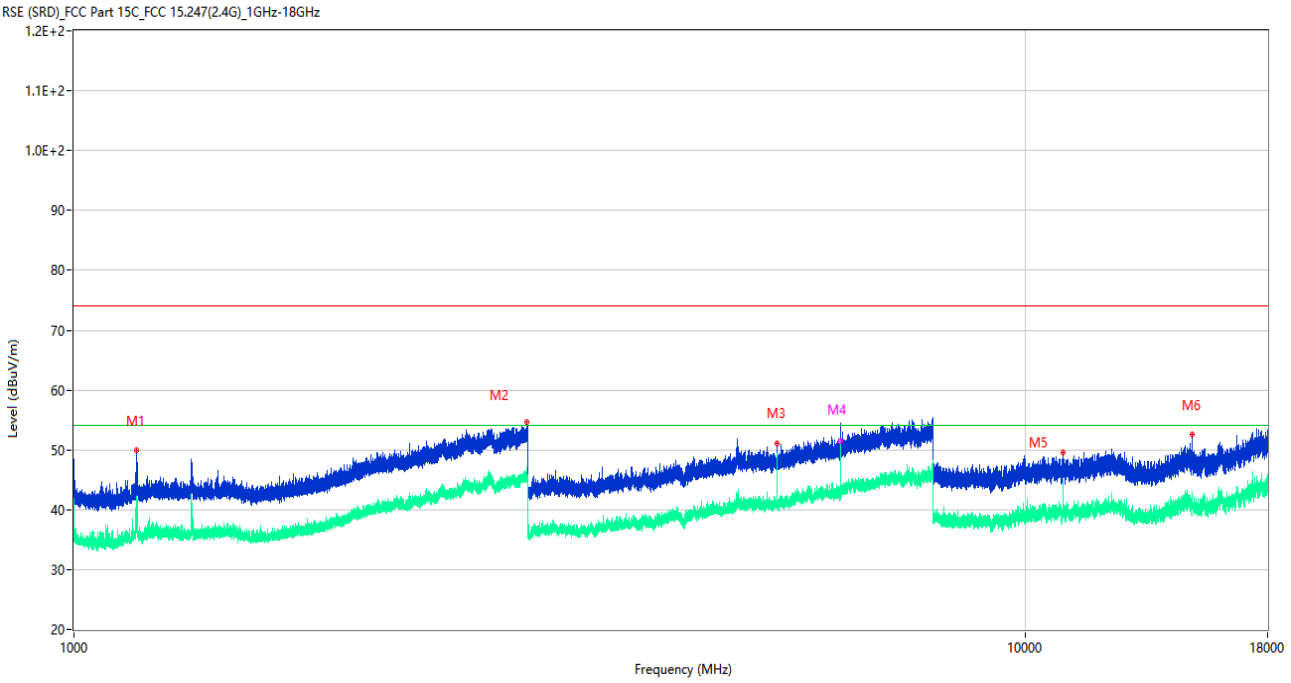
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.200	49.82	74.0	24.18	Peak	70.00	400	Vertical	Pass
1**	1162.200	37.42	54.0	16.58	AV	70.00	400	Vertical	Pass
2	2970.800	54.82	74.0	19.18	Peak	202.00	150	Vertical	Pass
2**	2970.800	45.44	54.0	8.56	AV	202.00	150	Vertical	Pass
3	4980.500	49.70	74.0	24.30	Peak	272.00	200	Vertical	Pass
3**	4980.500	40.64	54.0	13.36	AV	272.00	200	Vertical	Pass
4	5445.500	58.06	74.0	15.94	Peak	313.00	100	Vertical	Pass
4**	5445.500	51.49	54.0	2.51	AV	313.00	100	Vertical	Pass
5	6355.250	54.20	74.0	19.80	Peak	49.00	150	Vertical	Pass
5**	6355.250	49.92	--	--	AV	49.00	150	Vertical	N/A
6	17337.713	53.79	74.0	20.21	Peak	4.00	400	Vertical	Pass
6**	17337.713	43.28	54.0	10.72	AV	4.00	400	Vertical	Pass

HIGH CHANNEL 1 GHz to 18 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1478.100	48.35	74.0	25.65	Peak	78.00	300	Horizontal	Pass
1**	1478.100	39.11	54.0	14.89	AV	78.00	300	Horizontal	Pass
2	2997.000	55.46	74.0	18.54	Peak	209.00	100	Horizontal	Pass
2**	2997.000	45.73	54.0	8.27	AV	209.00	100	Horizontal	Pass
3	5485.750	54.80	74.0	19.20	Peak	360.00	150	Horizontal	Pass
3**	5485.750	51.40	--	--	AV	360.00	150	Horizontal	N/A
4	7995.750	55.01	74.0	18.99	Peak	357.00	300	Horizontal	Pass
4**	7995.750	46.15	54.0	7.85	AV	357.00	300	Horizontal	Pass
5	12315.375	50.08	74.0	23.92	Peak	8.00	300	Horizontal	Pass
5**	12315.375	39.73	54.0	14.27	AV	8.00	300	Horizontal	Pass
6	17544.825	54.06	74.0	19.94	Peak	34.00	150	Horizontal	Pass
6**	17544.825	44.41	54.0	9.59	AV	34.00	150	Horizontal	Pass

HIGH CHANNEL 1 GHz to 18 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1163.200	49.92	74.0	24.08	Peak	238.00	300	Vertical	Pass
1**	1163.200	41.62	54.0	12.38	AV	238.00	300	Vertical	Pass
2	2995.600	54.68	74.0	19.32	Peak	297.00	100	Vertical	Pass
2**	2995.600	45.54	54.0	8.46	AV	297.00	100	Vertical	Pass
3	5485.500	57.12	74.0	16.88	Peak	50.00	400	Vertical	Pass
3**	5485.500	50.20	--	--	AV	50.00	400	Vertical	N/A
4	6399.250	54.33	74.0	19.67	Peak	39.00	150	Vertical	Pass
4**	6399.250	51.47	--	--	AV	39.00	150	Vertical	N/A
5	10971.125	49.49	74.0	24.51	Peak	302.00	150	Vertical	Pass
5**	10971.125	42.74	54.0	11.26	AV	302.00	150	Vertical	Pass
6	14979.151	52.55	74.0	21.45	Peak	173.00	200	Vertical	Pass
6**	14979.151	42.19	54.0	11.81	AV	173.00	200	Vertical	Pass

A.7 Band Edge (Restricted-band band-edge)

Note [1]: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note [2]: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note [3]: According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note [4]: The Level (dBuV/m) has been corrected by factor.

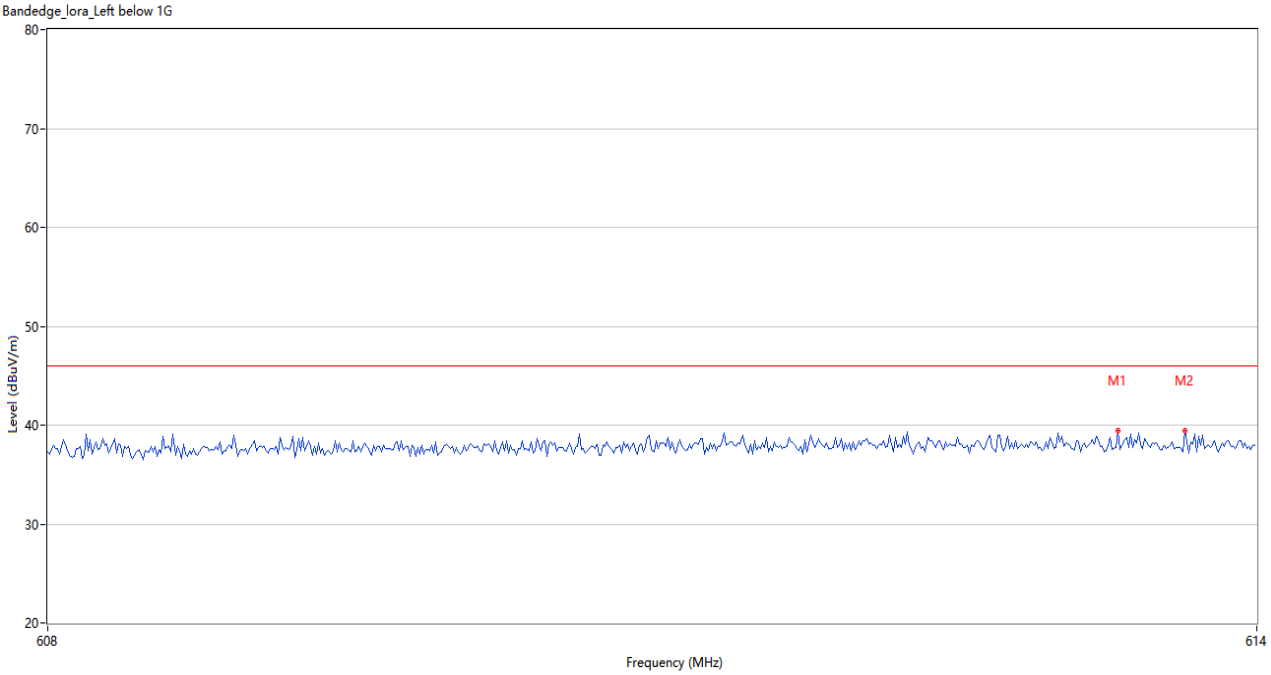
Note [5]: Both horizontal and vertical directions were pre tested, only the worst configuration has been reported in this report.

Note [6]: The Band Edge (Restricted-band band-edge) please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.7 Band Edge (Restricted-band band-edge).**
just Band Edge (Restricted-band band-edge) (Dipole Antenna 2 & Spring Antenna) were tested in this report.

Test Data and Plots

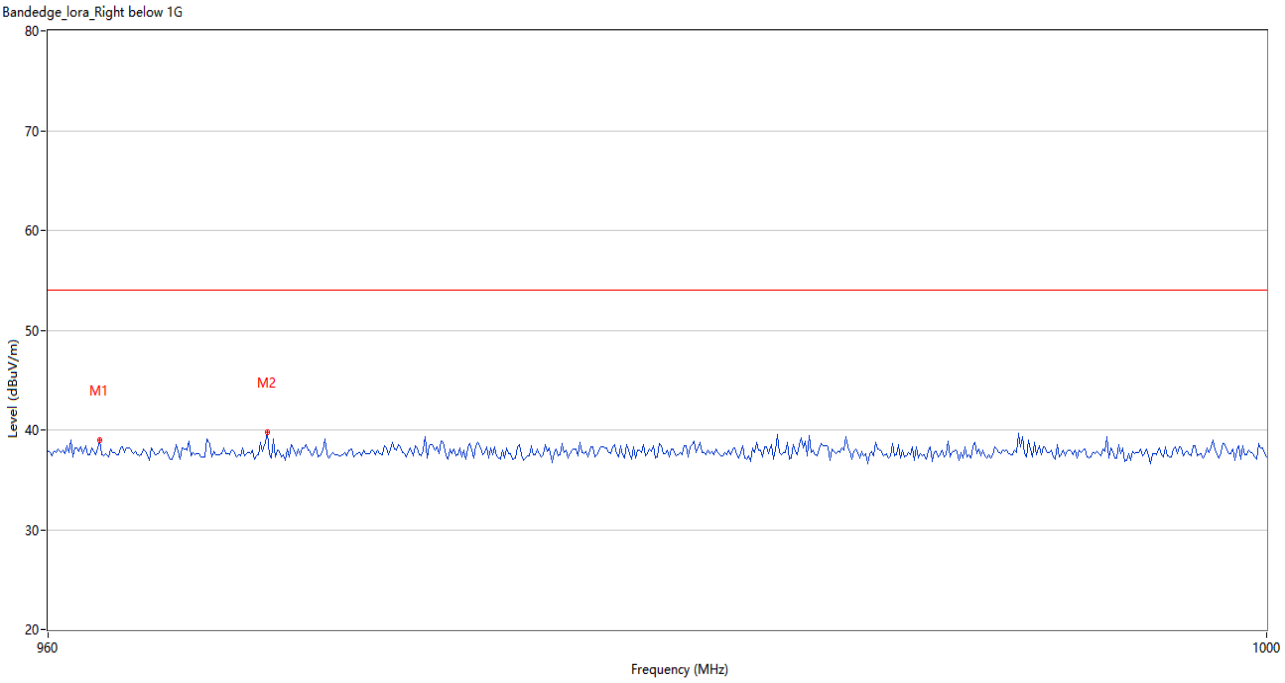
Dipole Antenna 2

608 MHz to 614 MHz



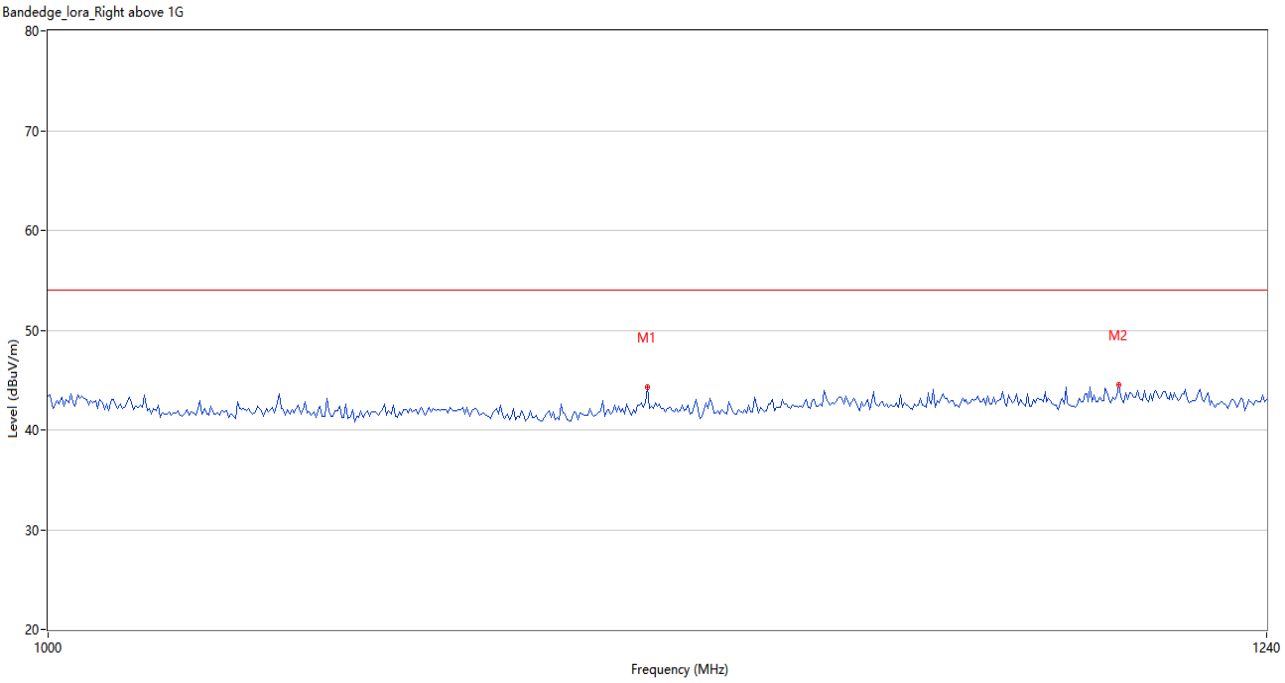
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	613.310	39.47	46.0	6.53	Peak	129.00	150	Vertical	Pass
2	613.640	39.40	46.0	6.60	Peak	76.00	150	Vertical	Pass

960 MHz to 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	961.667	38.97	54.0	15.03	Peak	104.00	150	Vertical	Pass
2	967.067	39.72	54.0	14.28	Peak	8.00	150	Vertical	Pass

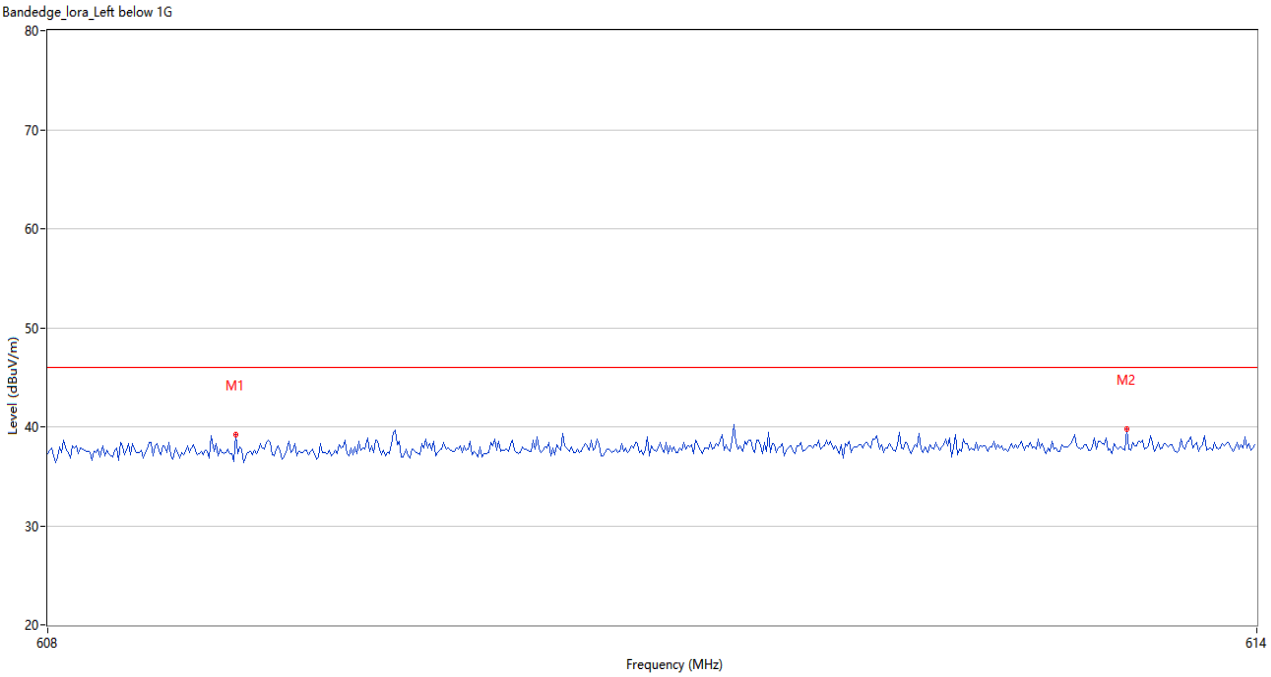
1 GHz to 1.24 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1111.600	44.30	54.0	9.70	Peak	305.00	150	Vertical	Pass
2	1208.000	44.48	54.0	9.52	Peak	181.00	150	Vertical	Pass

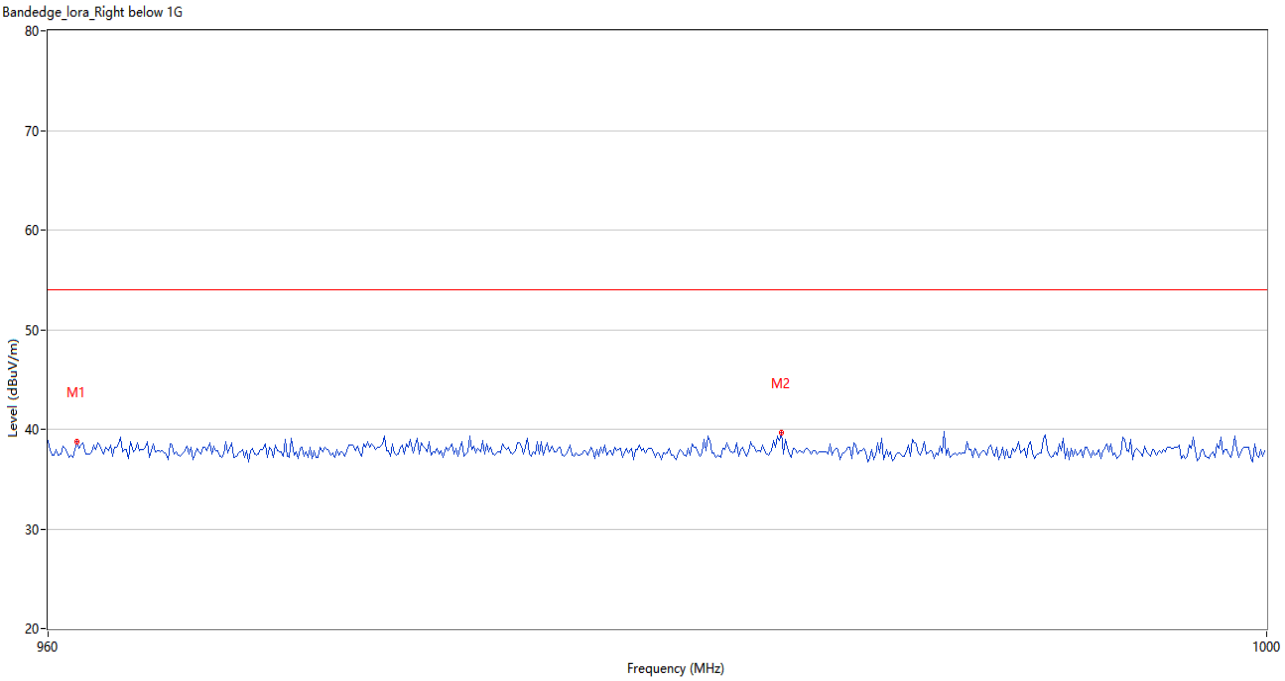
Spring Antenna 1 (DOG-617)

608 MHz to 614 MHz



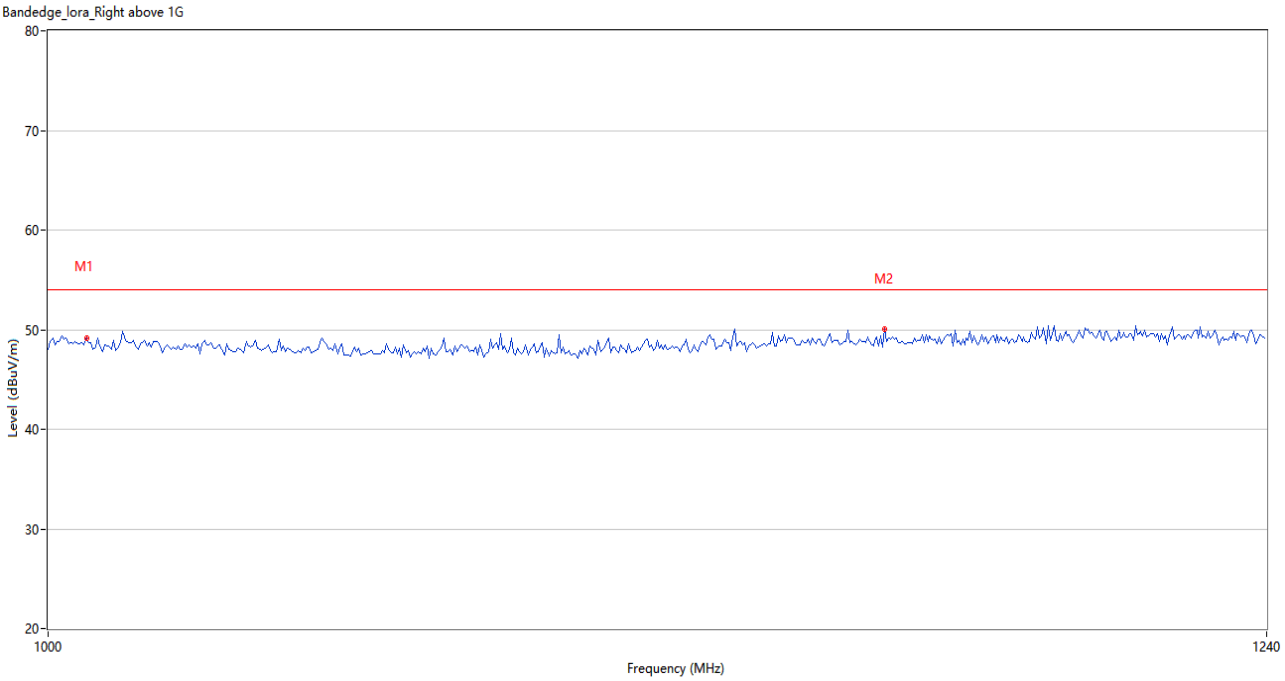
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	608.930	39.23	46.0	6.77	Peak	352.00	150	Horizontal	Pass
2	613.350	39.77	46.0	6.23	Peak	0.00	150	Horizontal	Pass

960 MHz to 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	960.933	38.78	54.0	15.22	Peak	52.00	150	Horizontal	Pass
2	983.867	39.71	54.0	14.29	Peak	58.00	150	Horizontal	Pass

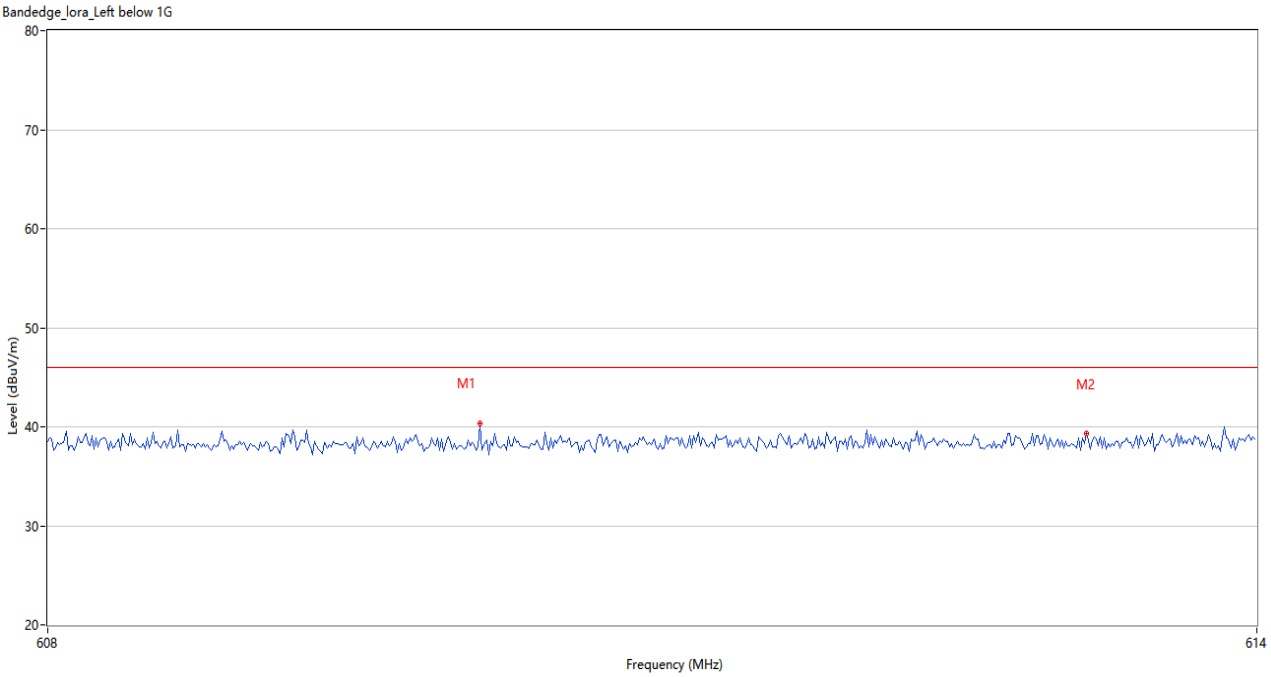
1 GHz to 1.24 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1006.800	49.20	54.0	4.80	Peak	150.00	150	Horizontal	Pass
2	1159.200	50.09	54.0	3.91	Peak	194.00	150	Horizontal	Pass

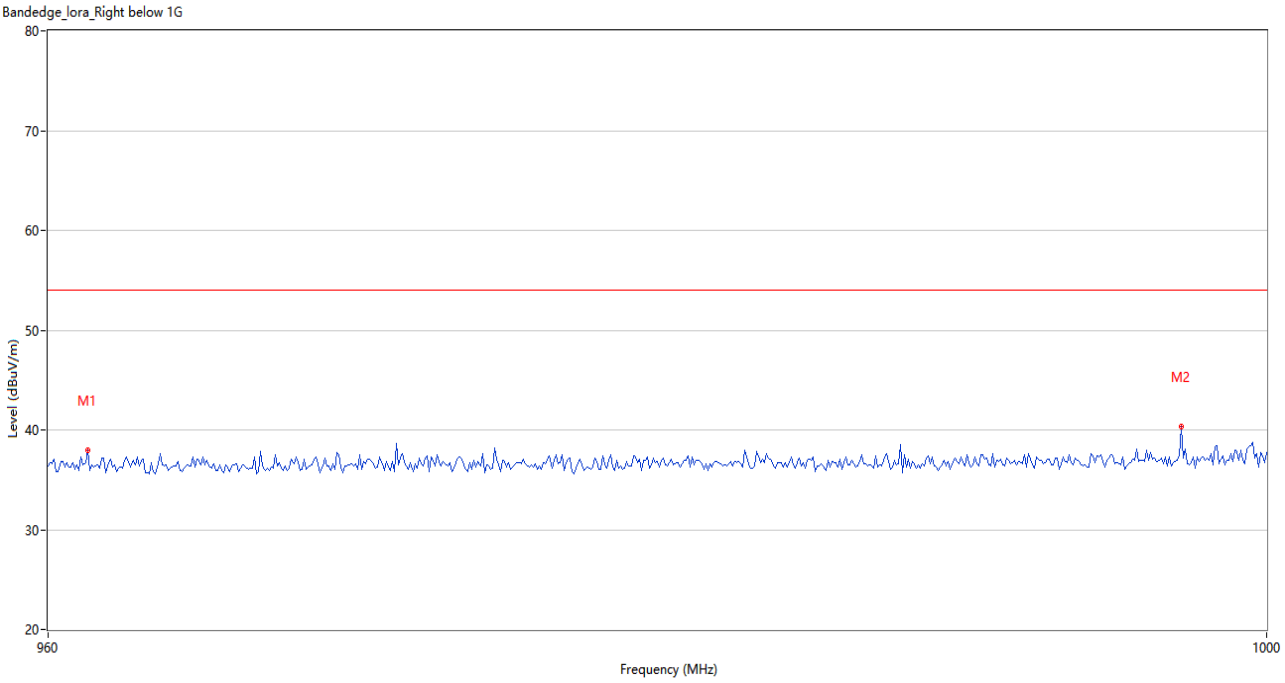
Spring Antenna 2 (DOG-622)

608 MHz to 614 MHz



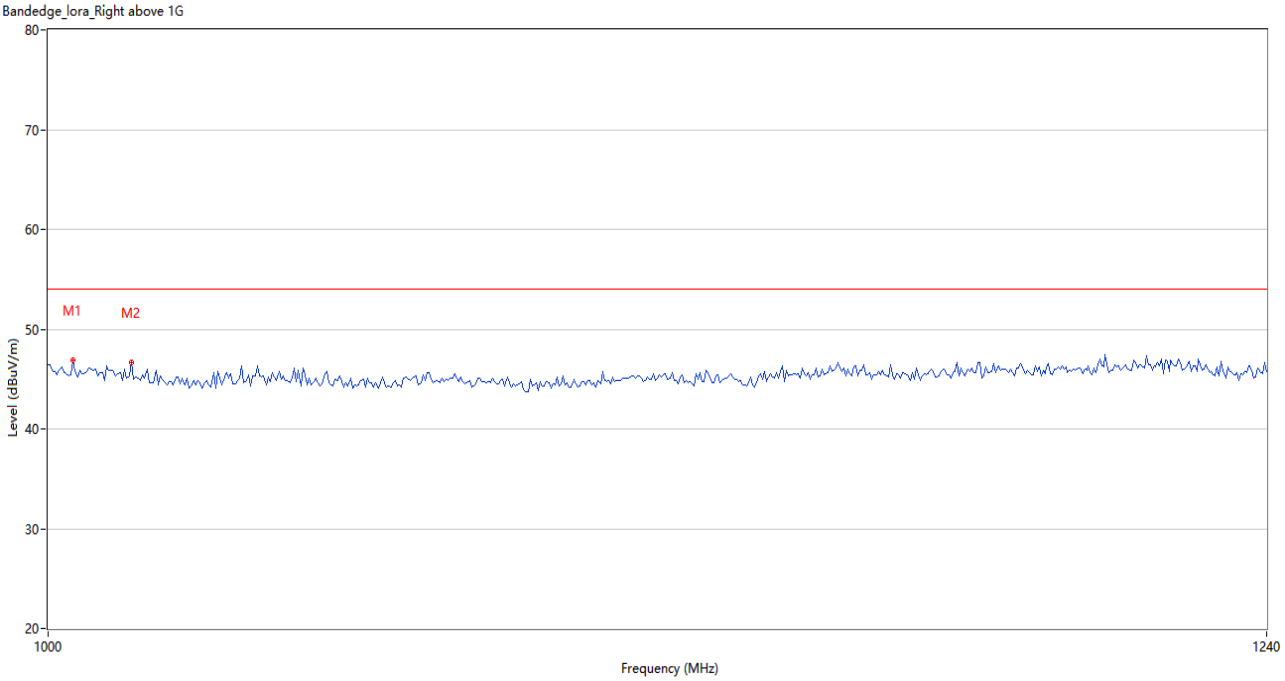
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	613.150	39.30	46.0	5.70	Peak	248.00	150	Horizontal	Pass
2	610.140	40.30	46.0	6.70	Peak	359.00	150	Horizontal	Pass

960 MHz to 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	961.267	37.92	54.0	16.08	Peak	4.00	150	Horizontal	Pass
2	997.133	40.36	54.0	13.64	Peak	76.00	150	Horizontal	Pass

1 GHz to 1.24 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1004.400	46.84	54.0	7.16	Peak	124.00	150	Horizontal	Pass
2	1014.800	46.61	54.0	7.39	Peak	124.00	150	Horizontal	Pass

A.8 Power Spectral Density (PSD)

Note: The Power Spectral Density (PSD) please refer to the Report No. BL-SZ2080378-601 issued by Shenzhen BALUN Technology Co., Ltd. on Nov. 25, 2020, **Section A.8 Power Spectral Density (PSD).**

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2610075-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2610075-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2610075-AI.PDF”.

Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the “inspection and testing dedicated stamp” or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--