

RADIO TEST REPORT

Report ID

REP151724

Project ID

PRJ0097083

Type of assessment:

Modular transmitter integration

Applicant:

Geotab Inc.

Product:

Asset Tracker

Model:

GATBA1

FCC ID:

FCC ID: 2AV57GATBA1

ISED Certification number:

IC: 11140A-GATBA1

Specifications:

- ◆ FCC 47 CFR Part 24, Subpart E
- ◆ FCC 47 CFR Part 27, Subpart C
- ◆ RSS-130 Issue 2, February 2019
- ◆ RSS-133 Issue 7, July 2024

Date of issue: May 25, 2026

Dishant Champaneri, EMC/RF Specialist

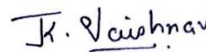
Tested by



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Dhara Patel, EMC/RF Specialist

Reviewed by



Signature

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ANAB File Number: AT-3195 (Ottawa); AT-3193 (Pointe-Claire); AT-3194 (Cambridge)

Lab and test locations

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Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contained in this report are within Nemko Canada's ISO/IEC 17025 accreditation.

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Report summary

1.1 Test specifications

Se	FCC 47 CFR Part 24, Subpart E	Broadband Personal Communications Services (PCS)
	FCC 47 CFR Part 27, Subpart C	Miscellaneous wireless communications services
	RSS-130 Issue 2, February 2019	Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz
	RSS-133 Issue 7, July 2024	Personal Communications Service Equipment Operating in the Bands 1850-1915 MHz and 1930-1995 MHz

1.2 Test methods

KDB 996369 D04 Module Integration Guide v02	Modular transmitter integration guide, guidance for host product manufacturers
ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

1.3 Exclusions

Partial testing was performed on the product with the transmitter operating to confirm that the host product meets the FCC and ISCED requirements. This investigation of the final product was done by spot checking emissions from the device while operating the host as a composite system. This testing was performed with the host product configured in typical operational modes to check the spurious emissions for compliance with all the applicable rules.

1.4 Statement of compliance

Statement of Conformity:

The reported results have been evaluated against the specified limits of the standard(s) listed in **Section 1.1** of this report.

Conformity with the specified requirements is determined by comparing the measured results directly to the applicable limits. Measurement uncertainty is not applied to adjust or attribute to the measured value for the purpose of compliance determination.

In the configuration tested, the **Equipment Under Test (EUT)** was found to be compliant. Unless otherwise noted in **Section 1.2**, all testing was performed against the relevant requirements of the applicable test standard(s).

The results obtained indicate that the product under test complies in full with the requirements tested, and the test results relate only to the items tested.

Refer to the **Summary of Test Results** section for full details.

1.5 Test report revision history

Table 1.5-1: Test report revision history

Revision #	Date of issue	Details of changes made to test report
REP151724	May 25, 2026	Original report issued

Engineering considerations

2.1 Modifications incorporated in the EUT for compliance

There were no modifications performed to the EUT during this assessment.
Section 2

2.2 Technical judgment

The EUT incorporates an LTE module (GATBA1, FCC ID: 2AV57GATBA1, IC: 11140A-GATBA, originally certified by WNC Corporation). All testing procedures and configuration details referenced the module's original certification documentation and regulatory requirements to ensure technical reliability and compliance.

To validate compliance of the host product, radiated spurious emissions testing was carried out with the cellular module active and transmitting inside the EUT. Test parameters including transmit frequencies, channel bandwidth, and power levels were configured in accordance with the module's certification documents and relevant regulatory standards. The representative test scenario was selected based on the highest anticipated output power and antenna gain across all supported bands, ensuring a rigorous assessment of worst-case emissions. LTE Band 2 and Band 12 were specifically chosen due to their regulatory importance and frequent usage in typical deployment environments, further aligning the testing process with industry and certification requirements. This approach reinforces the credibility of the compliance assessment by transparently addressing critical selection criteria and regulatory expectations.

2.3 Model variant declaration

There were no model variants declared by the applicant.

2.4 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Test conditions

3.1 Atmospheric conditions

See	Temperature	15 °C – 35 °C
	Relative humidity	20 % – 75 %
	Air pressure	86 kPa (860 mbar) – 106 kPa (1060 mbar)

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

3.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages $\pm 5\%$, for which the equipment was designed.

Information provided by the applicant

4.1 Disclaimer

This section contains information provided by the applicant and has been utilized to support the test plan. Inaccurate information provided by the applicant can affect the validity of the results contained within this test report. Nemko accepts no responsibility for the information contained within this section and the impact it may have on the test plan and resulting measurements.

4.2 Applicant/Manufacture

Applicant name	Geotab Inc.
Applicant address	2440 Winston Park Drive, Oakville, Ontario, Canada, L6H 7V2
Manufacturer name	Same as applicant
Manufacturer address	Same as applicant

4.3 EUT information

Product description	GO Anywhere
Model / HVIN	GATBA1
Serial number	B3-WD1-733-PE26
Power supply requirements	Battery: 3.0 V _{DC}
Product description and theory of operation	The GO Anywhere 2 asset tracker (model GATBA1) is an advanced asset tracker specifically engineered for tractor-trailers, non-powered equipment (trolleys, roll-off bins), and powered equipment (generators, yellow iron) within the transportation sector. This device offers robust global connectivity and detailed track-and-trace capabilities, superseding its predecessor with an expanded feature set. It provides critical insights into asset utilization, location, and potential misuse through features like impact and tamper detection, aiming for high reliability and cost-effectiveness in high-volume deployments. The product also continues to serve existing GO Anywhere markets such as construction, agriculture, and stolen vehicle recovery.

4.4 Transmitter info

Wireless technology	LTE CAT-M1
Frequency band	Bands supported: 2, 4, 5, 12, 13, 25, 26, 66, 85 (1.4 MHz BW)
Manufacturer	WNC Corporation
OEM Model	DLSA-WI13-WW
Modulation	QPSK
Antenna information	Manufacturer: Qisda Vietnam Co. Ltd Part No.: 6T.128H2.001 Type: Metal Stamped Antenna Peak Gain: 3.12 dBi

4.5 EUT setup details

4.5.1 Radio exercise details

Operating conditions	– EUT was powered up using battery. – EUT was in cellular link mode via callbox.
Transmitter state	Transmitter was set into continuous transmitting mode at selected Band: B2 and B12

4.5.2 EUT setup configuration

Table 4.5-1: Support equipment

Description	Brand name	Serial number, Part number, Model, Revision level
Laptop	Dell Latitude 7420	SN: 65XL7M3
Wideband Radio Communication Tester	Rohde & Schwarz	SN: 107499, MN: CMW500, FA003156

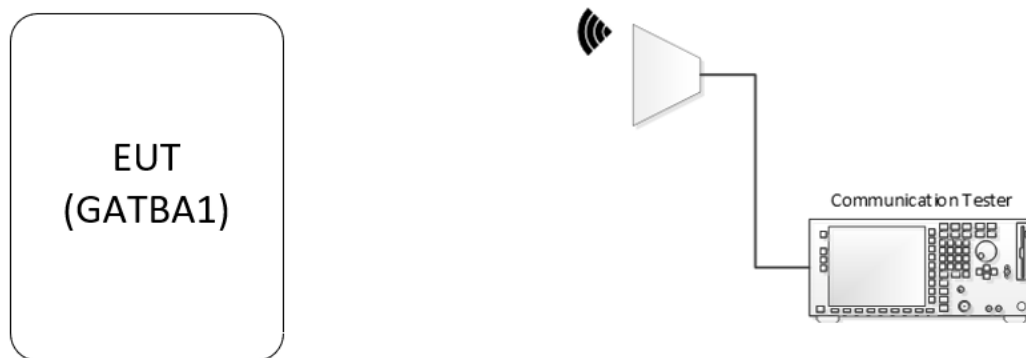


Figure 4.5-1: Radiated testing block diagram

Summary of test results

5.1 Testing period

Test start date	February 17, 2026	Test end date	February 17, 2026
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Section 5

5.2 Sample information

Receipt date	February 17, 2026	Nemko sample ID number	PRJ00970830001
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5.3 Test results

Table 5.3-1: FCC Test results

Part	Test description	Verdict
§24.238(a)	Field strength of spurious radiation	Pass
§27.53	Radiated spurious emissions	Pass

Notes: As per scope of this report, only radiated emissions were evaluated.

Table 5.3-2: ISED Test results

Part	Test description	Verdict
RSS-130, 4.7	Transmitter Unwanted Emissions	Pass
RSS-133, 5.6	Unwanted emission limits	Pass

Notes: As per scope of this report, only radiated emissions were evaluated.

Test equipment

6.1 Test equipment list

Section 6

Table 6.1-1: Equipment list

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
3 m EMI test chamber	TDK	SAC-3	FA003012	1 year	March 9, 2026
Flush mount turntable	SUNAR	FM2022	FA003006	—	NCR
Controller	SUNAR	SC110V	FA002976	—	NCR
Antenna mast	SUNAR	TLT2	FA003007	—	NCR
Receiver/spectrum analyzer	Rohde & Schwarz	ESR26	FA002969	1 years	May 28, 2026
Bilog antenna (30–2000 MHz)	Sunol	JB3	FA002108	1 year	April 8, 2026
Horn antenna (1–18 GHz)	EMCO	3115	FA000649	1 year	April 16, 2026
Preamplifier (1–18 GHz)	ETS Lindgren	124334	FA002956	1 year	April 11, 2026
High pass filter (1.2–12 GHz)	Microwave circuits	H1G212G1	FA003031	—	NCR
High pass filter (3–18 GHz)	Microwave circuits	H3G020G8	FA003026	—	NCR
50 Ω coax cable	Huber + Suhner	None	FA003047	1 year	August 6, 2026
50 Ω coax cable	Huber + Suhner	None	FA003402	1 year	August 6, 2026
50 Ω SMA coax cable	Huber + Suhner	None	FA003056	1 year	August 6, 2026

Notes: NCR - no calibration required

All equipment related to the contribution of measurement has been included in this list. Such items include, but are not limited to, cables, attenuators, directional couplers, and pre-amps.

Table 6.1-2: Automation software details

Test description	Manufacturer of Software	Details
EMC/Radio test software	Rohde & Schwarz	EMC32, Software for EMC Measurements, Version 10.60.00

Table 6.1-3: Measurement uncertainty calculations based on equipment list

Measurement	Measurement uncertainty, ±dB
Radiated spurious emissions (30 MHz to 1 GHz)	4.27
Radiated spurious emissions (1 GHz to 6 GHz)	4.74
Radiated spurious emissions (6 GHz to 18 GHz)	5.04

Notes: UKAS Lab 34, TIA-603 and ETSI TR 100 028-1&2 have been used as guidance for measurement uncertainty reasonable estimations with regards to previous experience and validation of data. Nemko Canada Inc. follows these test methods in order to satisfy ISO/IEC 17025 requirements for estimation of uncertainty of measurement for wireless products. Measurement uncertainty calculations assume a coverage factor of K = 2 with 95% certainty.

Testing data

7.1 Radiated spurious (unwanted) emissions

Section 7.1.1 References, definitions and limits

FCC §24.238:

- (a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

FCC §27.53:

- (g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

RSS-130, Clause 4.7:

The unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least $43 + 10 \log_{10} P$ (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

RSS-133, Clause 5.6:

Unwanted emissions shall be measured in terms of average values while the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen.

For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported below -13dBm



7.1.2 Test summary

Verdict	Pass		
Test date	February 17, 2026	Temperature	24 °C
Tested by	Dishant Champaneri, Inas Bahadori	Air pressure	960 mbar
Test location	Cambridge	Relative humidity	40 %

7.1.3 Observations, settings and special notes

- As part of the current assessment, the test range of 9 kHz to 10th harmonic has been fully considered and compared to the actual frequencies utilized within the EUT. Since the EUT contains a transmitter in the GHz range, the EUT has been deemed compliant without formal testing in the 9 kHz to 30 MHz test range, therefore formal test results (tabular data and/or plots) are not provided within this test report.
- Where tabular data has not been provided, no emissions were observed within 10 dB of the specified limit when measured with the appropriate detector. Additionally, where less than 6 measurements per detector have been provided, fewer than 6 emissions were observed within 10 dB of the specified limit when measured with the appropriate detector.
- All measurements were performed as per ANSI C63.26.
- All measurements were performed at the distance of 3 m.

Spectrum analyser settings

Resolution bandwidth:	Measurements below 1 GHz: 120 kHz Q-Peak, Measurements above 1 GHz: 1 MHz
Video bandwidth:	Measurements below 1 GHz: 300 kHz, Measurements above 1 GHz: 3 MHz
Detector mode:	Peak or Q-Peak
Trace mode:	Max Hold

7.1.4 Test data

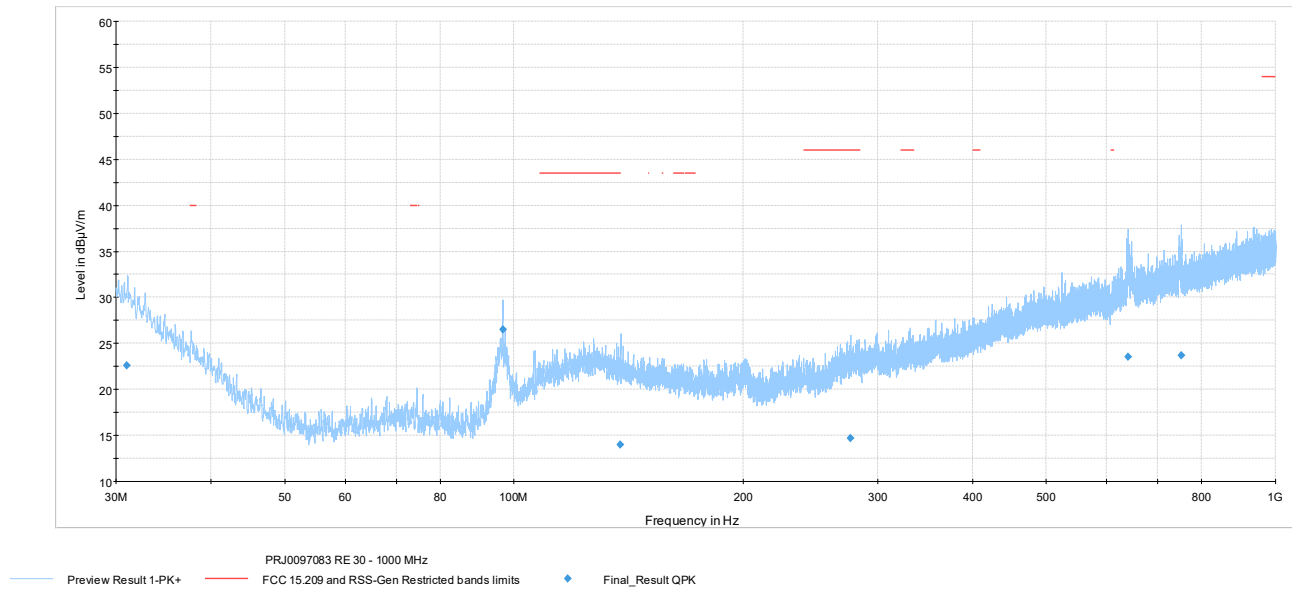


Figure 7.1-1: Radiated spurious emissions 30 – 1000 MHz, Band 2

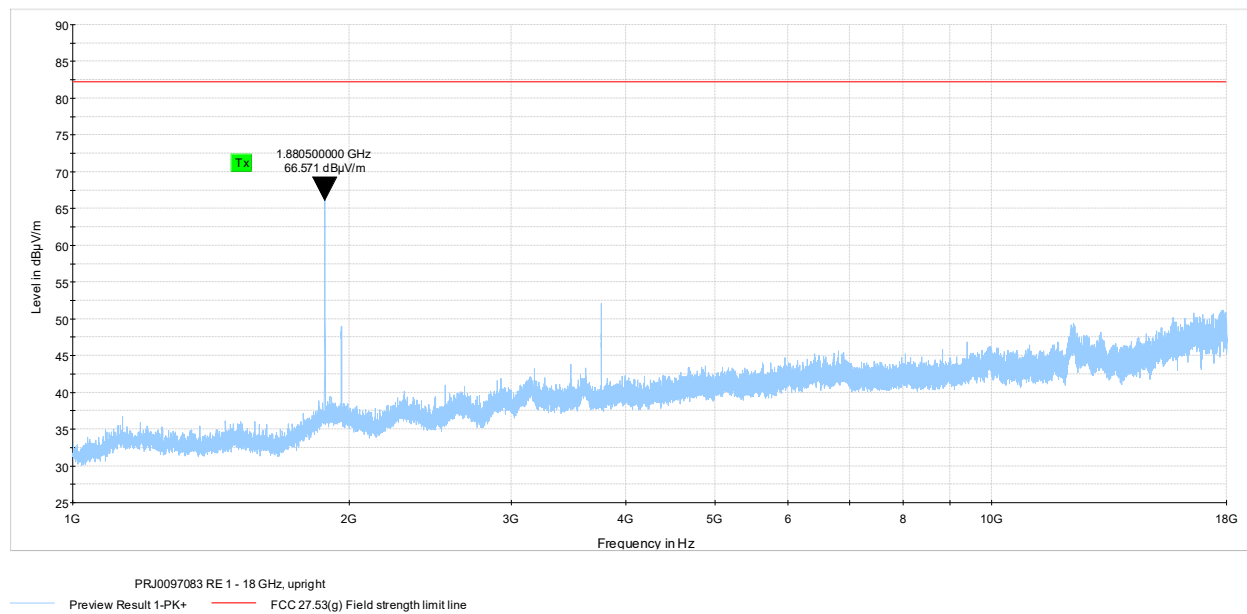


Figure 7.1-2: Radiated spurious emissions 1 – 18 GHz, Band 2

Note: -13 dBm was converted to 82.2 dBuV/m value with 95.2 conversion factor (dBuV/m = dBm + 95.2)

Test data, continued

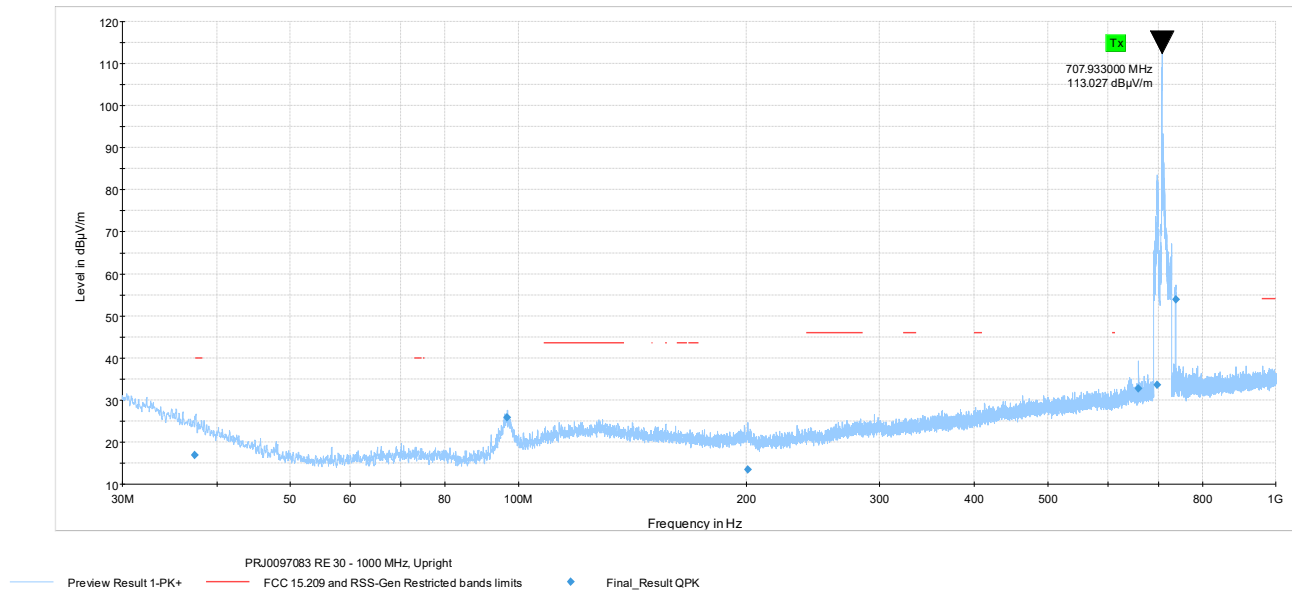


Figure 7.1-3: Radiated spurious emissions 30 – 1000 MHz, Band 12

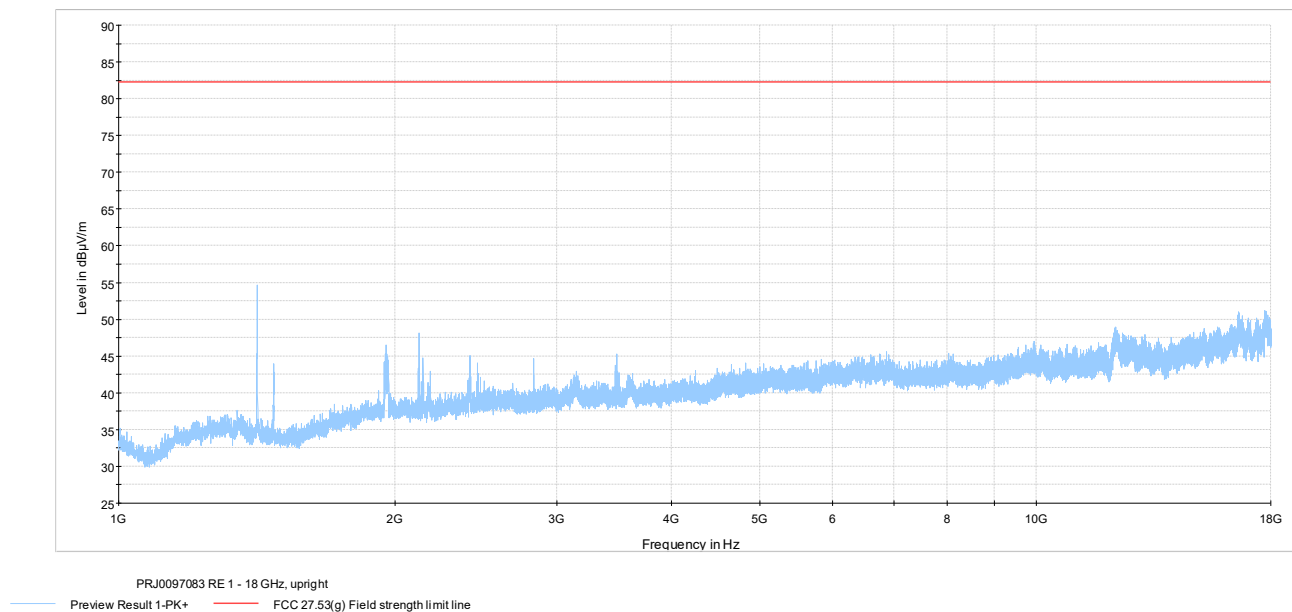


Figure 7.1-4: Radiated spurious emissions 1 – 18 GHz, Band 12

Note: -13 dBm was converted to 82.2 dBuV/m value with 95.2 conversion factor ($\text{dBuV/m} = \text{dBm} + 95.2$)

End of the test report