

September 4, 2025

Trackonomy
Priyanka Jantre
214 Devcon Dr.
San Jose, CA 95112

Dear Priyanka Jantre,

Enclosed is the Electromagnetic Compatibility for the Trackonomy, FBO-3001, tested to the requirements of:

- FCC Part 22H, 24E, 27 and 90

Thank you for using the services of Eurofins E&E Testing NA, LLC. Please contact me if you have any questions regarding these results or if Eurofins E&E can be of further service to you.

Sincerely,

Rheine Nguyen

Documentation Department
Eurofins E&E Testing NA, LLC.

Reference: EMCS135654-FCC Part 22H, 24E, 27 and 90 Rev. 4



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Report Status Sheet

Revision	Report Date	Reason for Revision
Ø	May 30, 2025	Initial Issue.
1	June 6, 2025	Photos transferred into a Photo File document.
2	June 30, 2025	Company Contact Updated.
3	July 1, 2025	Added Configuration Form.
4	September 4, 2025	Change Company Name to Trackonomy.

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1.0 Testing Summary

The Trackonomy, FBO-3001 was found to be compliant to the following specification(s).

- FCC Part 22H, 24E, 27 & 90 and KDB 996369 D04 v02 Module Integration Guide



Chin Ming Lui
Senior Wireless Test Engineer

Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements.



Brandon Quan
Senior Wireless Test Engineer

2.0 Overview

Eurofins E&E Testing NA, LLC. was contracted by Trackonomy to perform testing on the FBO-3001, under purchase order number 2037.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of Trackonomy, FBO-3001.

The results obtained relate only to the item(s) tested.

Model(s) Tested:	FBO-3001
Equipment Emissions Class:	B

2.1 Test Site

All testing was performed at Eurofins E&E Testing NA, LLC., 3162 Belick St. Santa Clara, CA 95054. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology. Eurofins E&E Testing NA, LLC. has been accredited by the American Association for Laboratory Accreditation (A2LA) (Certificate #: 0591.02) in accordance with ISO/IEC 17025:2017.

2.2 Equipment Overview and Test Configuration

Name of EUT/Model:	FBO-3001
Additional Models Covered, but not tested:	N/A
Description of EUT and Intended Use:	Multifunctional IoT Platform Sensor Device. It uses multi-radio multi-protocol consumer electronics wireless communication for multi-modal situational awareness and end-to-end reporting mechanism. Data is handled through the Trackonomy Ecosystem via multiple data paths including fixed and mobile infrastructure, mesh and cloud integration. The unit is powered by one or two non-rechargeable Lithium-Metal battery(ies) with nominal system voltage of 3.0V. The unit has optional External Temperature Device.
Mode(s) of Operation:	BLE
Rationale for the selection of the Operation Mode(s):	Bluetooth is based upon module capabilities with no modifications to the module
Monitoring Method(s):	There is no physical or electrical indication. Unit is monitored via Data received wirelessly.
Configuration(s):	Test mode
EUT Power Requirement	
Voltage:	3V
AC or DC	DC
Voltage Frequency:	Not Applicable – Battery Operated
Number of Phases:	N/A
Amperage:	N/A
Uses an external AC/DC Adapter:	No
Battery Configuration	Primary battery powered only. Not user replaceable.
Physical Description	
EUT Arrangement:	Secured by adhesive to vertical or horizontal flat surface
System with Multiple Chassis:	No
Size (HxWxD) mm:	140 x 100 x 6
Weight (g):	450
Emissions Class Declaration:	B
Other Info:	
Highest frequency used in device:	2480 MHz (highest channel frequency of BLE radio)
EUT Software (internal to EUT):	Custom firmware by Trackonomy
Support Software (used to exercise EUT):	Trackonomy App by Trackonomy

Note: EUT information was provided by Trackonomy.

Equipment Configuration List

N/A

Support Equipment List

Ref. ID	Name/Description	Manufacturer	Model Number	*Customer Supplied Calibration Data
1	Trackonomy APK	Trackonomy	N/A	N/A

Ports and Cabling List

N/A

Antenna Information

Radio	Antenna Type	Manufacturer	Model No	Frequency Range	Peak Gain
BLE	Inverted F	Trackonomy	FBO-3001-ANT	2.4 – 2.48 GHz	2.07 dBi

Note: Antenna information was provided by Trackonomy. Eurofins E&E Testing NA, LLC did not test or verify the accuracy of the antenna information.

Test Configuration

The BLE radio was configured to low, middle, and high channels as follows:

Channel	Frequency (MHz)	Advertising Power Setting
Low	2402	7
Mid	2440	7
High	2480	7

2.3 Modifications to the EUT

No modifications were made to the EUT.

2.4 Modifications to the Standard

No modifications were made to the Test Standard.

2.5 Disposition of EUT

The test sample including all support equipment (if any), submitted to the Electromagnetic Compatibility Lab for testing was returned to Trackonomy upon completion of testing.

3.0 Electromagnetic Compatibility Criteria for Intentional Radiators

3.1 Radiated Spurious Emissions

Test Method: ANSI C63.26:2015; FCC KDB 996369 D04 v02 Module Integration Guide

Test Requirement(s): The following standards specified below are covered in the scope of this section of the test report:

- FCC Part 22H, 24E, 27 & 90 and KDB 996369 D04 v02 Module Integration Guide

22.917 (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.

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.

27.53(c)(1) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB.

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.

27.53(h)(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log(P)$ dB.

FCC §90.210 – Emission mask limits for applicable Part 90 bands.

Sample Calculation for Distance Correction factor (DCF) measurement:

$$F_d = 20 \cdot \log_{10} (D_m/D_s)$$

where:

$$F_d = \text{Distance Factor in dB}$$

$$D_m = \text{Measurement Distance in meters}$$

$$D_s = \text{Specification Distance in meters}$$

Sample formula for calculating the Corrected Data for the Radiated Emissions Measurements:

Frequency (MHz)	Antenna Polarity	EUT Azimuth (Degrees)	Antenna Height (cm)	Uncorrected Amplitude (dBμV)	ACF (dB/m) (+)	Pre Amp Gain (dB)(-)	CBL (dB) (+)	DCF (dB) (+)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
249.99	V	359.9	240.7	55.46	11.4	28.335	0	0	38.505	47	-8.495

$$\begin{aligned} \text{Corrected Amplitude (dBμV/m)} &= \text{Uncorrected Amplitude (dBμV)} + \text{ACF (dB/m)} - \text{Preamp Gain (dB)} + \text{CBL (dB)} + \text{DCF (dB)} \\ &= 55.46 + 11.4 - 28.335 + 0 + 0 = \mathbf{38.505} \end{aligned}$$

Test Procedure:

The method of testing, test conditions, and test procedures of ANSI C63.26:2015 were used in addition to FCC KDB 996369 D04 Module Integration Guide. Any measured frequency that exhibits a margin of compliance that is less than 3 dB below the specification limit is marked. Eurofins E&E recommends that every emission measured has at least a 3 dB margin to allow for deviations in the emission characteristics that may occur during the production process.

For emissions between 30 MHz and 1000 MHz, the EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber a biconilog antenna was located 10m from the EUT on an adjustable mast. A pre-scan was first performed to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT was rotated, and the antenna height was varied between 1 m and 4 m to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. Unless otherwise specified, measurements were made using a quasi-peak detector with a 120 kHz resolution bandwidth.

For emissions between 1 GHz and 18 GHz, a double ridged guide horn was located 3 m from the EUT on an adjustable mast. The EUT was placed on a non-metallic table 150 cm above the ground plane inside a semi-anechoic chamber. A pre-scan was performed and used to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT was rotated, and the antenna height was varied depending on the geometry of the EUT. To ensure maximized emissions, the horn antenna was positioned both vertically and horizontally. Unless otherwise specified, measurements were made using a peak and average detector with a 1 MHz resolution bandwidth.

For emission between 18 GHz and 20 GHz, a high frequency standard gain horn antenna was located 3 m from the EUT on an adjustable mast. The EUT was placed on a non-metallic table 150 cm above the ground plane inside a semi-anechoic chamber. A pre-scan was performed and used to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT was rotated, and the antenna height was varied depending on the geometry of the EUT. To ensure maximized emissions, the horn antenna was positioned both vertically and horizontally. Unless otherwise specified, measurements were made using a peak and average detector with a 1 MHz resolution bandwidth.

Due to the size of the EUT, pre-liminary measurements were performed with the EUT rotated on different axis (X, Y, Z). The worst-case data is presented in this report.

Test Software Used: Nexio BAT-EMC MSSQL Version: V2023.0.5.0 was used to perform this test.

Test Results:

Test Standard:	FCC Part 22H, 24E and 27 (Per FCC KDB 996369 D04 Module Integration Guide v02; ANSI C63.26:2015)
Test Name	Radiated Spurious Emissions
Test Dates:	04/10/2025 – 04/11/2025
Laboratory	Eurofins E&E Testing NA, LLC.
Test Engineer:	Chin Ming Lui
Test Results:	Compliant

Test Data (KDB 996369 D04 – LTE CAT-M1)

FCC Part 22

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
215.561	Manual suspects	-48.955	-13	2	349	Horizontal	1.98
288.214	Manual suspects	-52.317	-13	0.999	358	Vertical	4.375

Table 1. Radiated Spurious Emissions, LTE CAT-M1 Band 5 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

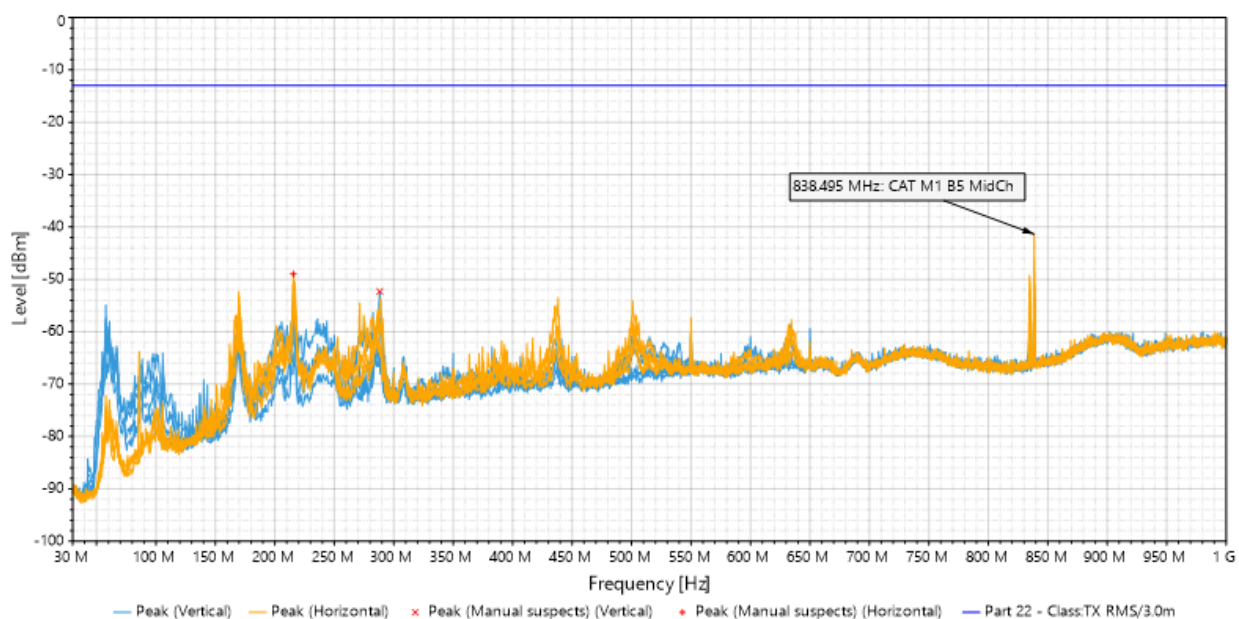


Figure 1. Radiated Spurious Emissions, LTE CAT-M1 Band 5 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
3337.8	RMS (PASS)	-50.216	-13	-37.216	1.466	22	Horizontal	1000000	0.1	20.606
9103.9	RMS (PASS)	-46.068	-13	-33.068	3.719	67	Vertical	1000000	0.1	29.823

Table 2. Radiated Spurious Emissions, LTE CAT-M1 Band 5 KDB 996369 D04 RSE – (1 – 10 GHz) Test Results

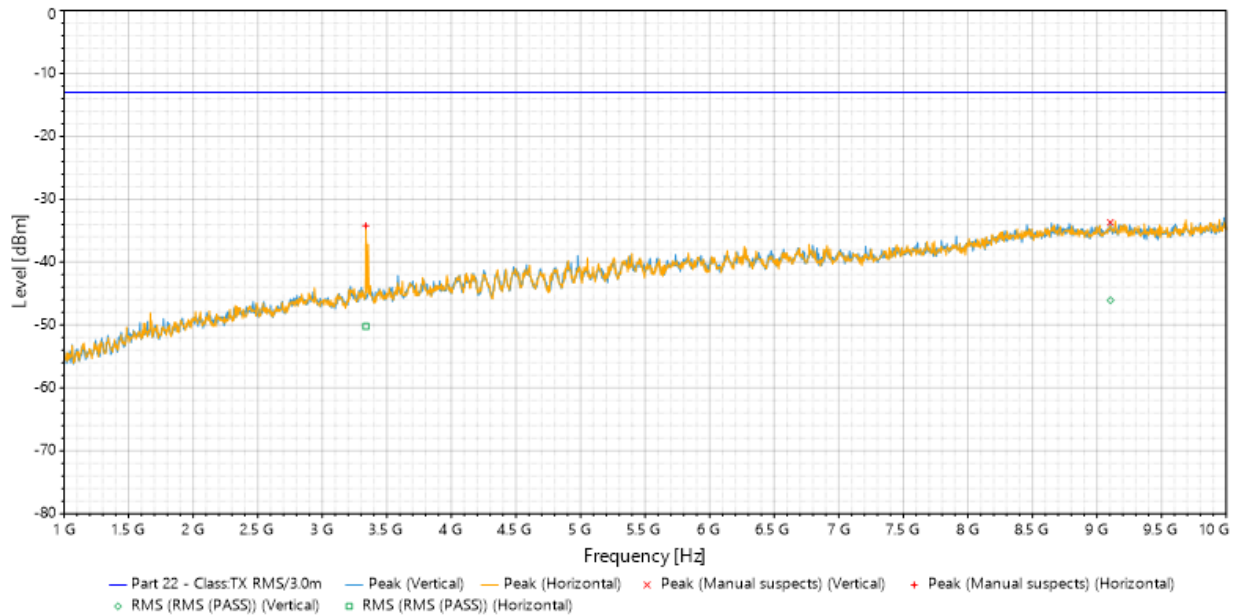


Figure 2. Radiated Spurious Emissions, LTE CAT-M1 Band 5 KDB 996369 D04 RSE – (1 – 10 GHz) Plot

FCC Part 24

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
214.882	Manual suspects	-49.305	-13	0.999	239	Vertical	1.953
288.311	Manual suspects	-47.455	-13	1	120	Horizontal	4.386

Table 3. Radiated Spurious Emissions, LTE CAT-M1 Band 2 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

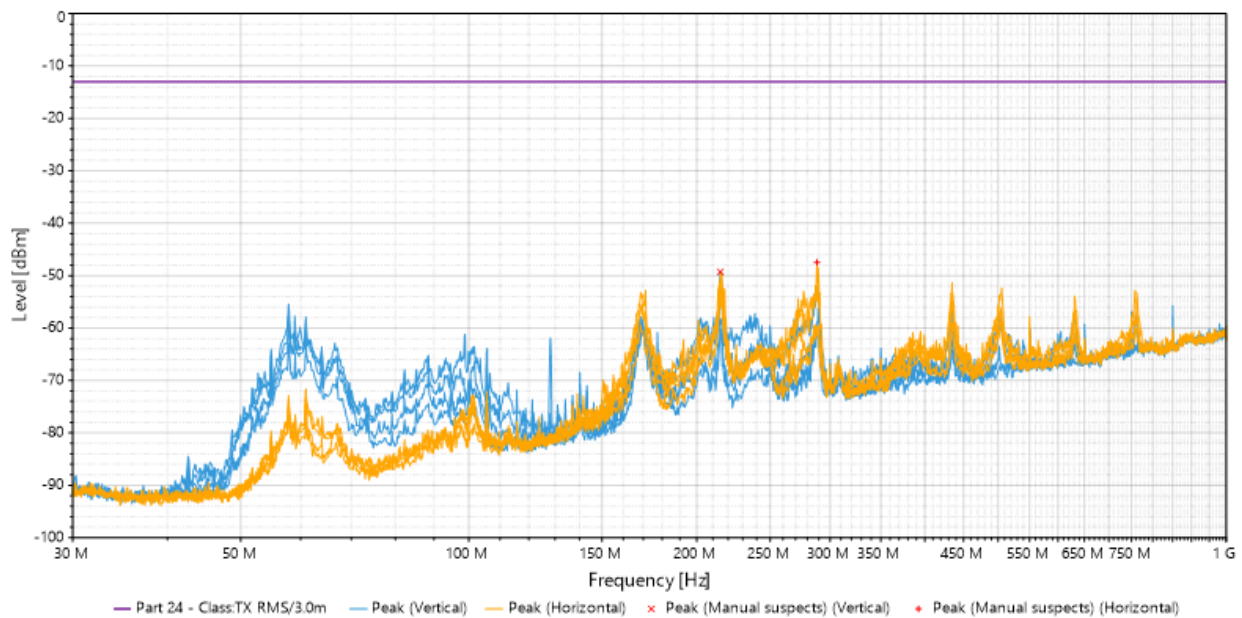


Figure 3. Radiated Spurious Emissions, LTE CAT-M1 Band 2 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
17280.9	Manual suspects	-26.12	-13	1.5	116	Horizontal	31.957
17797.7	Manual suspects	-26.04	-13	1.001	196	Vertical	31.567

Table 4. Radiated Spurious Emissions, LTE CAT-M1 Band 2 KDB 996369 D04 RSE – (1 – 18 GHz) Test Results

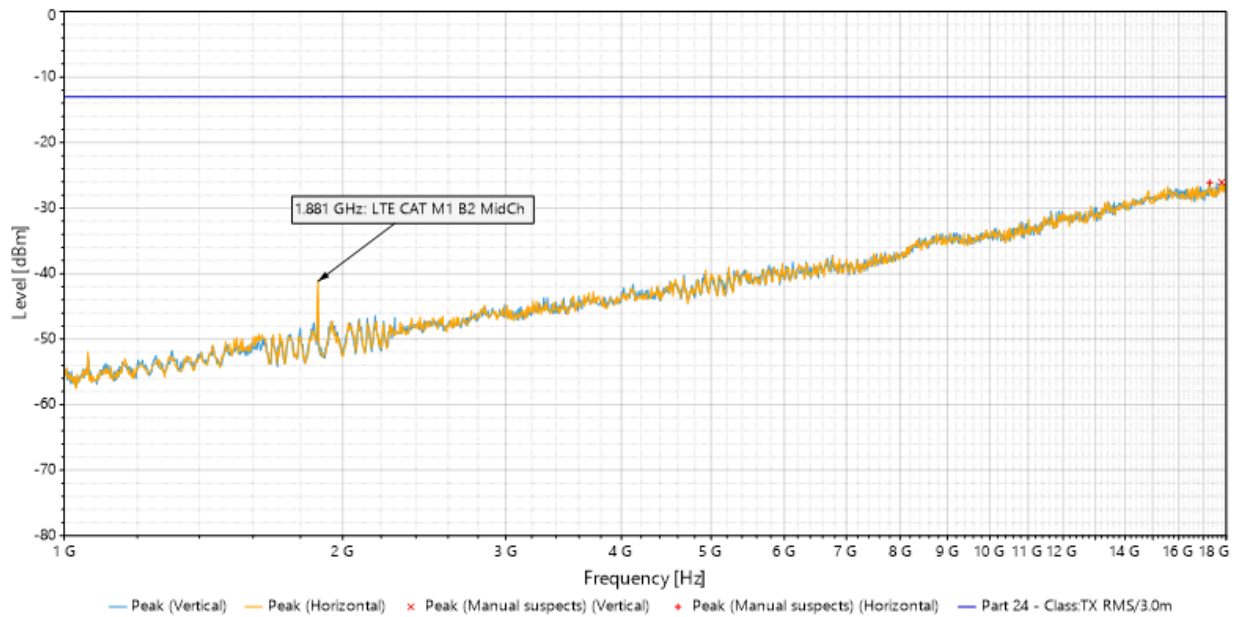


Figure 4. Radiated Spurious Emissions, LTE CAT-M1 Band 2 KDB 996369 D04 RSE – (1 – 18 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
18315	Manual suspects	-58.543	-13	1	29	Horizontal	-1.898
18624	Manual suspects	-59.513	-13	0.999	269	Vertical	-2.531

Table 5. Radiated Spurious Emissions, LTE CAT-M1 Band 2 KDB 996369 D04 RSE – (18 – 20 GHz) Test Results

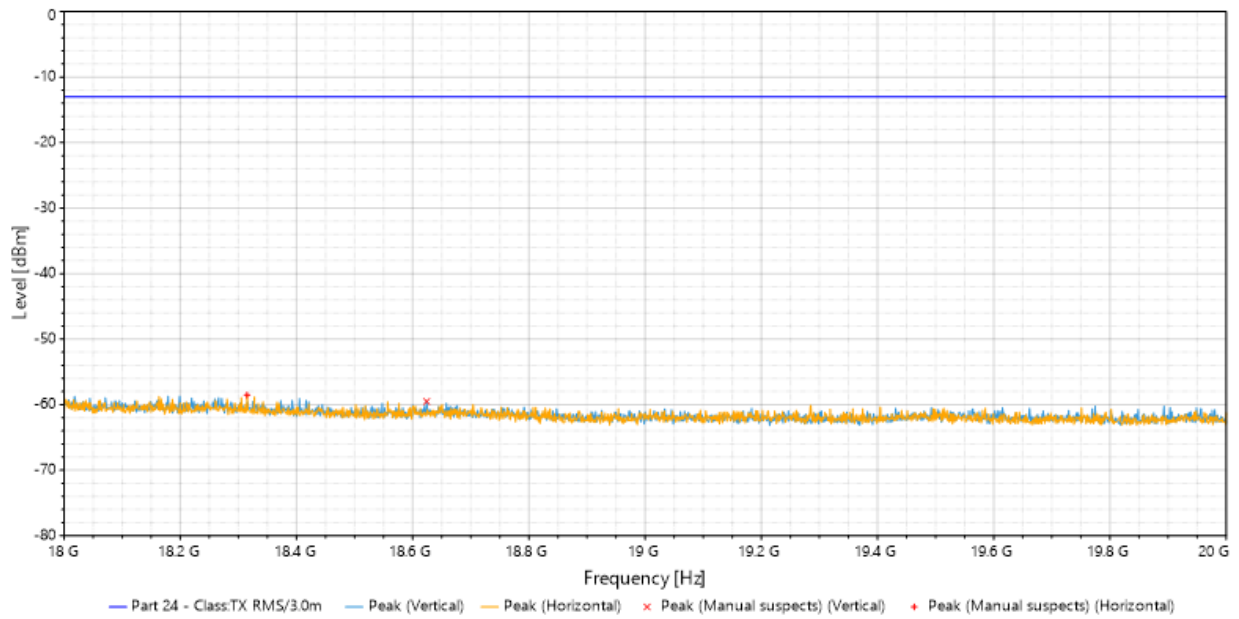


Figure 5. Radiated Spurious Emissions, LTE CAT-M1 Band 2 KDB 996369 D04 RSE – (18 – 20 GHz) Plot

FCC Part 27

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
215.173	Manual suspects	-48.108	-13	0.999	194	Vertical	1.964
215.658	Manual suspects	-46.048	-13	1	194	Horizontal	1.984

Table 6. Radiated Spurious Emissions, LTE CAT-M1 Band 4 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

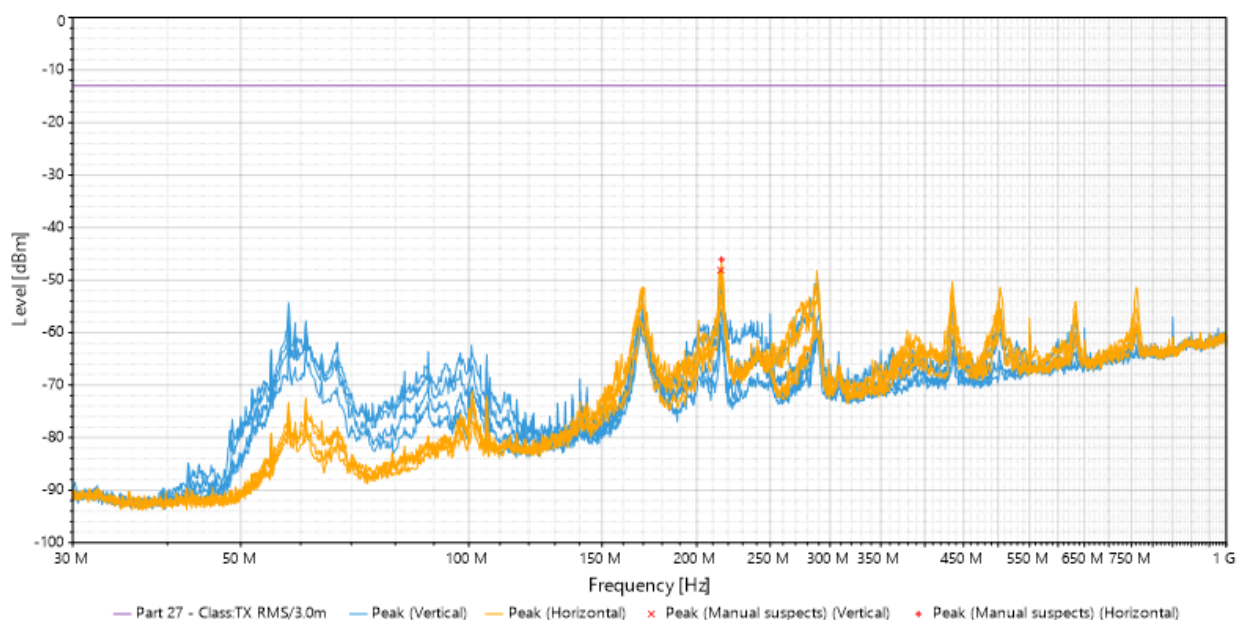


Figure 6. Radiated Spurious Emissions, LTE CAT-M1 Band 4 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
17190.8	Manual suspects	-25.762	-13	1.001	275	Vertical	32.08
17843.6	Manual suspects	-25.932	-13	1	255	Horizontal	31.557

Table 7. Radiated Spurious Emissions, LTE CAT-M1 Band 4 KDB 996369 D04 RSE – (1 – 18 GHz) Test Results

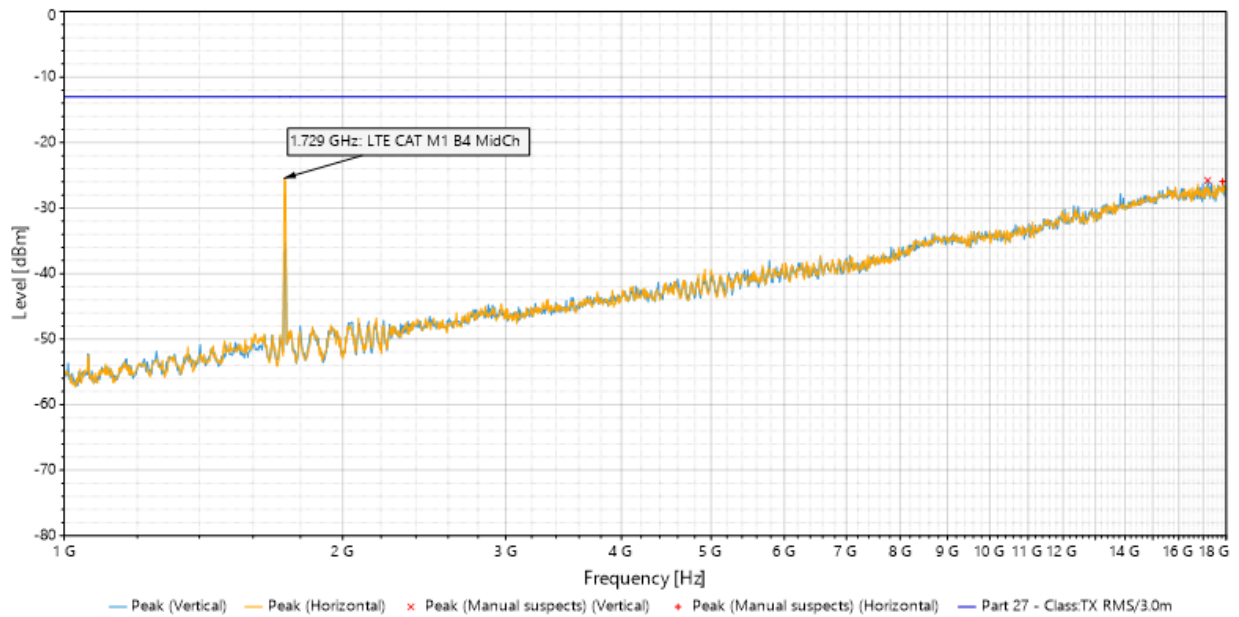


Figure 7. Radiated Spurious Emissions, LTE CAT-M1 Band 4 KDB 996369 D04 RSE – (1 – 18 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
168.807	Manual suspects	-51.414	-13	2	305	Horizontal	-1.378
215.949	Manual suspects	-46.516	-13	1	207	Vertical	1.995

Table 8. Radiated Spurious Emissions, LTE CAT-M1 Band 12 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

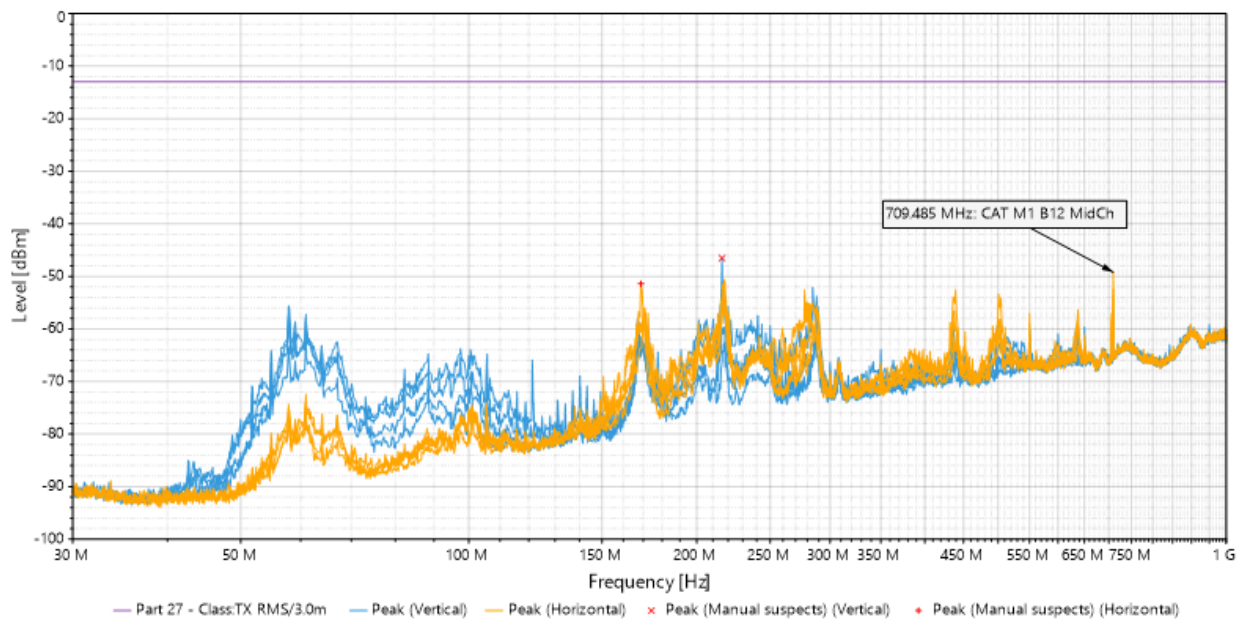


Figure 8. Radiated Spurious Emissions, LTE CAT-M1 Band 12 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
1411	RMS (PASS)	-54.906	-13	-41.906	1.247	75	Horizontal	1000000	0.1	12.243
1411.1	RMS (PASS)	-61.726	-13	-48.726	3.046	171	Vertical	1000000	0.1	12.244
1418.9	RMS (PASS)	-58.405	-13	-45.405	1.246	70	Horizontal	1000000	0.1	12.325
2116.6	RMS (PASS)	-53.943	-13	-40.943	1.47	283	Horizontal	1000000	0.1	16.082
2128.5	RMS (PASS)	-58.063	-13	-45.063	1	73	Horizontal	1000000	0.1	16.112

Table 9. Radiated Spurious Emissions, LTE CAT-M1 Band 12 KDB 996369 D04 RSE – (1 – 18 GHz) Test Results

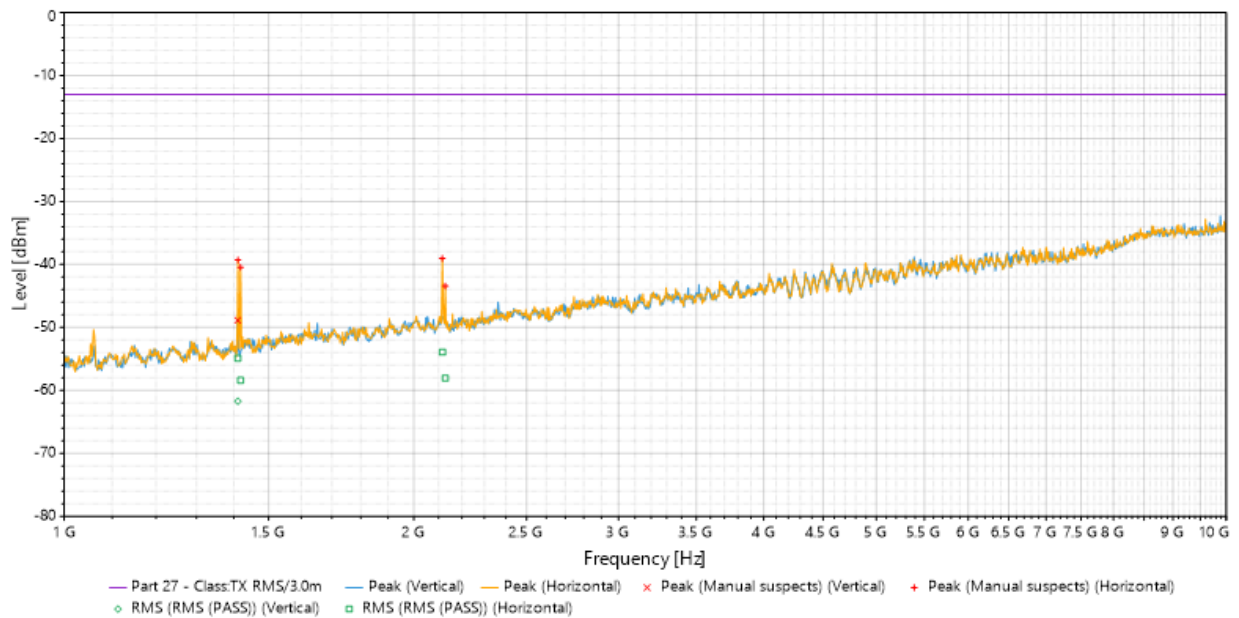


Figure 9. Radiated Spurious Emissions, LTE CAT-M1 Band 12 KDB 996369 D04 RSE – (1 – 18 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
216.531	Manual suspects	-46.75	-13	0.999	229	Vertical	2.019
217.598	Manual suspects	-43.36	-13	2	346	Horizontal	2.062

Table 10. Radiated Spurious Emissions, LTE CAT-M1 Band 13 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

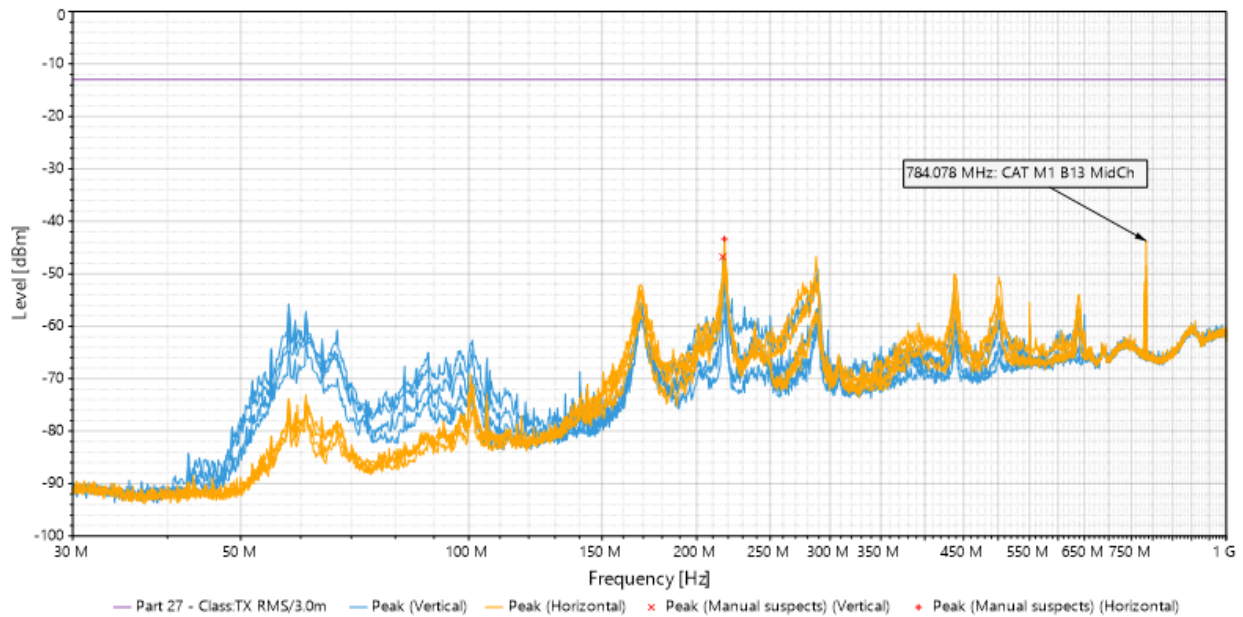


Figure 10. Radiated Spurious Emissions, LTE CAT-M1 Band 13 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
2340.8	RMS (PASS)	-53.946	-13	-40.946	1.245	281	Horizontal	1000000	0.1	17.111
2352	RMS (PASS)	-54.37	-13	-41.37	1.351	317	Horizontal	1000000	0.1	17.163
2352.1	RMS (PASS)	-58.987	-13	-45.987	4	131	Vertical	1000000	0.1	17.164
3121.1	RMS (PASS)	-52.839	-13	-39.839	1.14	356	Horizontal	1000000	0.1	19.888
3136	RMS (PASS)	-50.894	-13	-37.894	1.47	0	Horizontal	1000000	0.1	19.945

Table 11. Radiated Spurious Emissions, LTE CAT-M1 Band 13 KDB 996369 D04 RSE – (1 – 18 GHz) Test Results

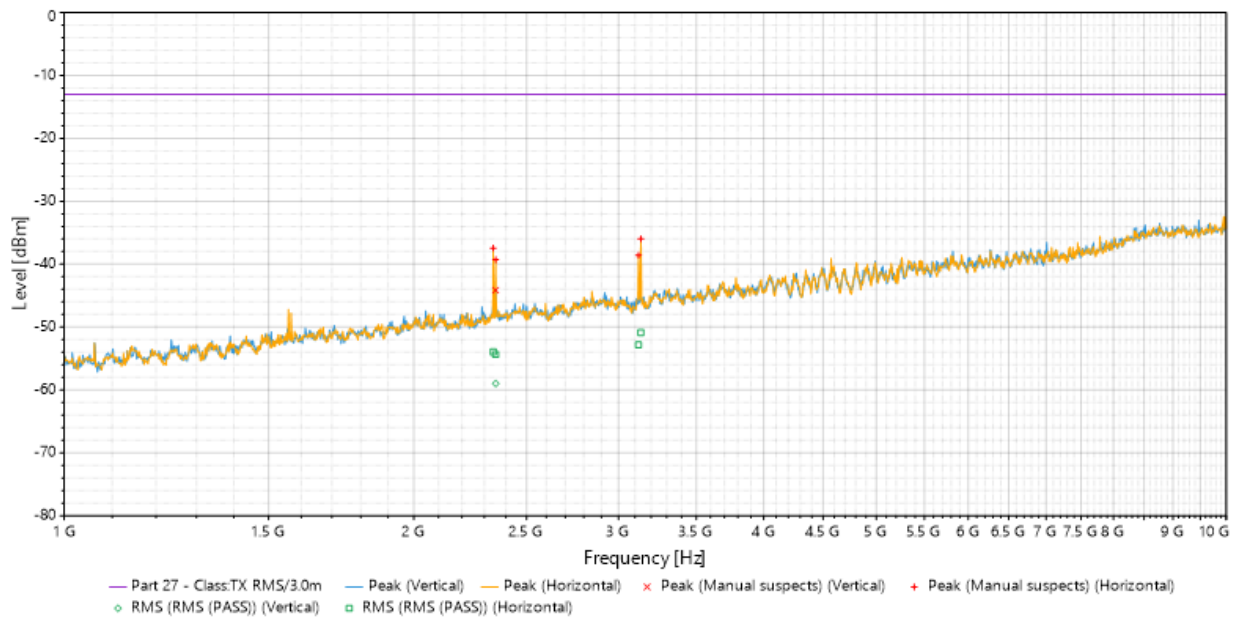


Figure 11. Radiated Spurious Emissions, LTE CAT-M1 Band 13 KDB 996369 D04 RSE – (1 – 18 GHz) Plot

FCC Part 90

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
209.45	Manual suspects	-52.34	-13	1	31	Vertical	1.743
285.013	Manual suspects	-49.514	-13	1	136	Horizontal	4.008

Table 12. Radiated Spurious Emissions, LTE CAT-M1 Band 26 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

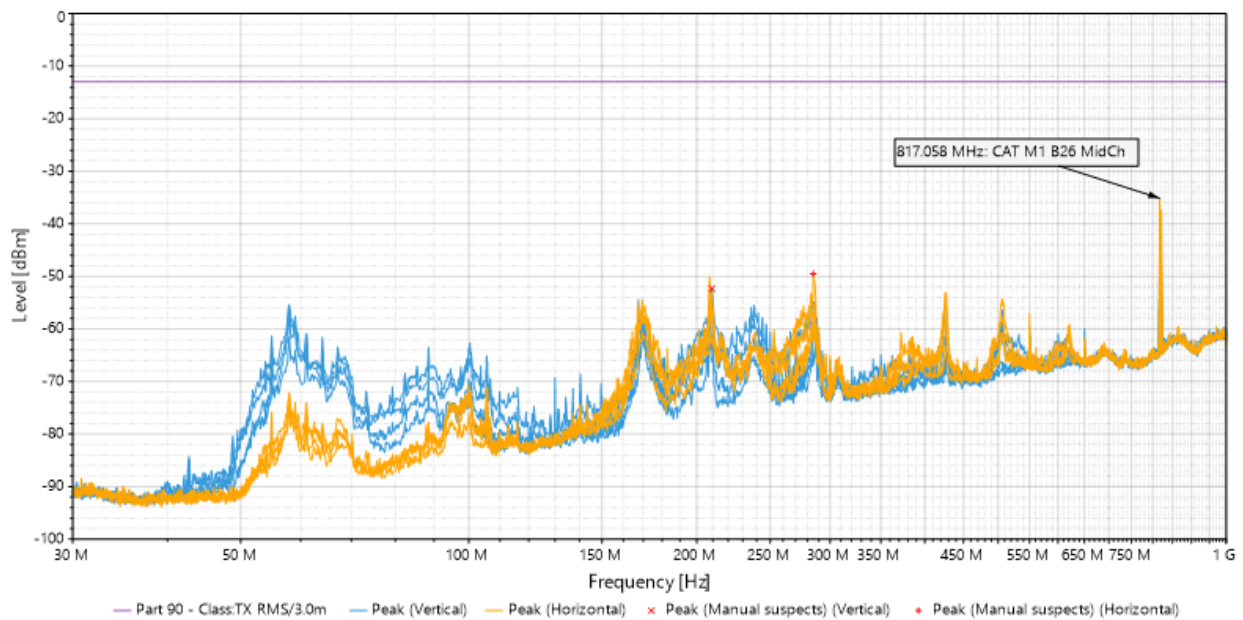


Figure 12. Radiated Spurious Emissions, LTE CAT-M1 Band 26 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
1634	RMS (PASS)	-58.966	-13	-45.966	1.356	206	Horizontal	1000000	0.1	13.881
2450.8	RMS (PASS)	-58.39	-13	-45.39	1.351	293	Horizontal	1000000	0.1	17.515
3268.3	RMS (PASS)	-45.137	-13	-32.137	1.47	334	Horizontal	1000000	0.1	20.466
3283.9	RMS (PASS)	-47.59	-13	-34.59	1.241	345	Horizontal	1000000	0.1	20.501

Table 13. Radiated Spurious Emissions, LTE CAT-M1 Band 26 KDB 996369 D04 RSE – (1 – 10 GHz) Test Results

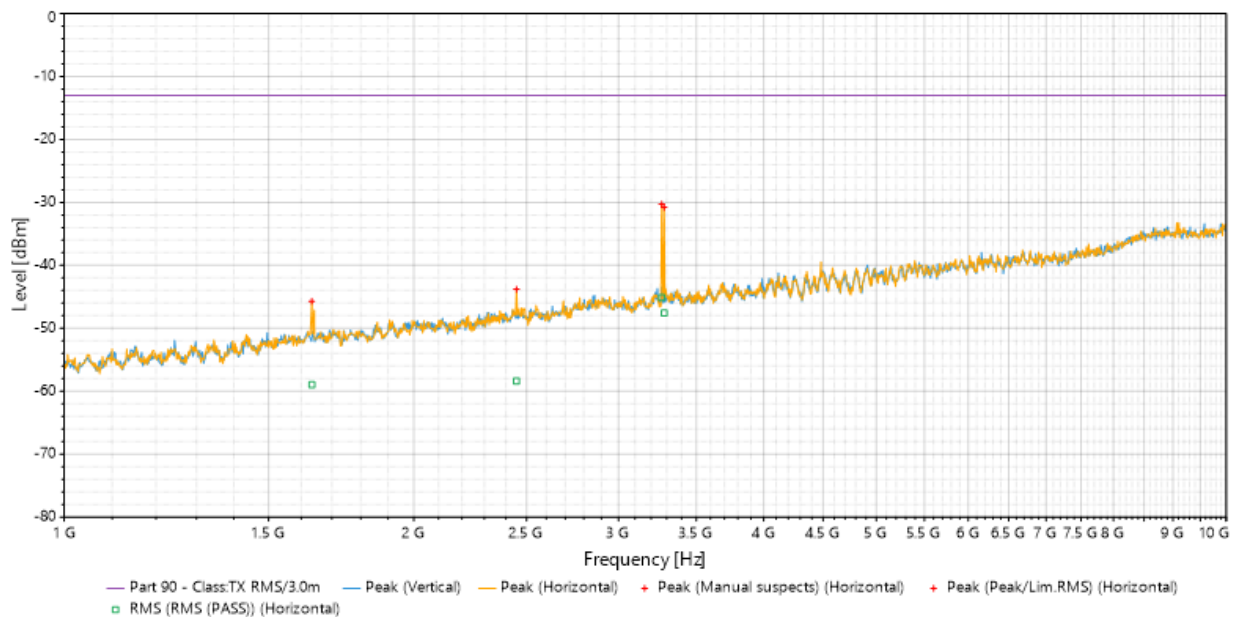


Figure 13. Radiated Spurious Emissions, LTE CAT-M1 Band 26 KDB 996369 D04 RSE – (1 – 10 GHz) Plot

Test Data (KDB 996369 D04 – LTE NB-IoT)

FCC Part 22

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
76.754	Manual suspects	-53.065	-13	1.001	344	Vertical	-8.567
289.475	Manual suspects	-57.95	-13	1	101	Horizontal	4.522

Table 14. Radiated Spurious Emissions, LTE NB-IoT Band 5 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

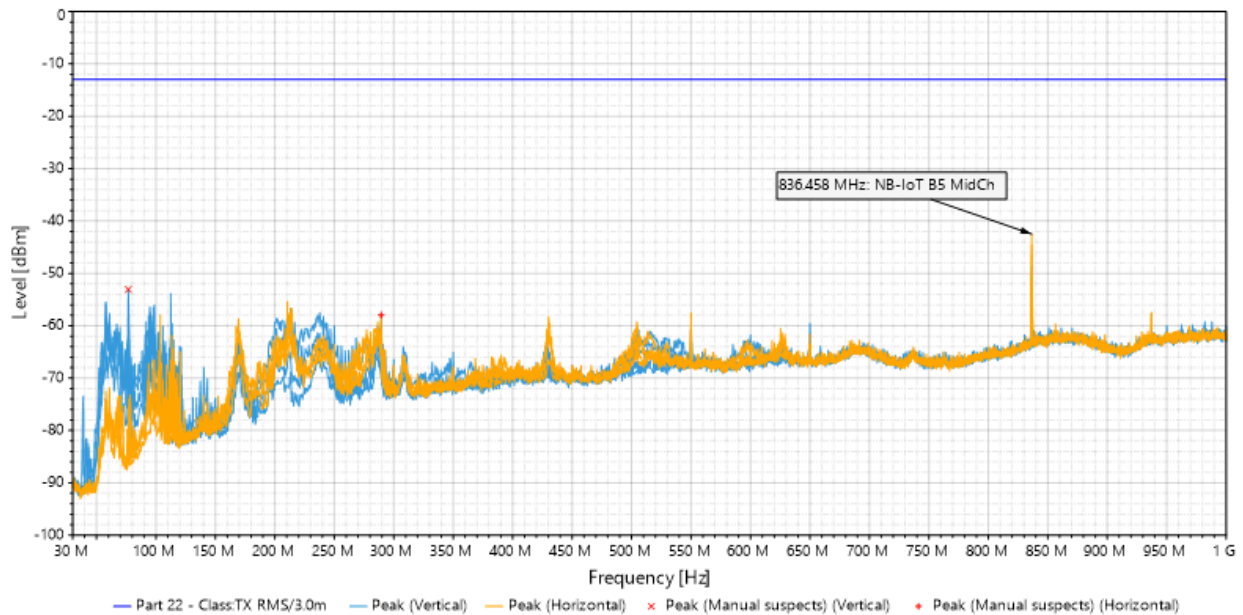


Figure 14. Radiated Spurious Emissions, LTE NB-IoT Band 5 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
1672.9	RMS (PASS)	-58.342	-13	-45.342	2.133	98	Horizontal	1000000	0.1	14.031
3345.7	RMS (PASS)	-46.873	-13	-33.873	1.58	344	Horizontal	1000000	0.1	20.618

Table 15. Radiated Spurious Emissions, LTE NB-IoT Band 5 KDB 996369 D04 RSE – (1 – 10 GHz) Test Results

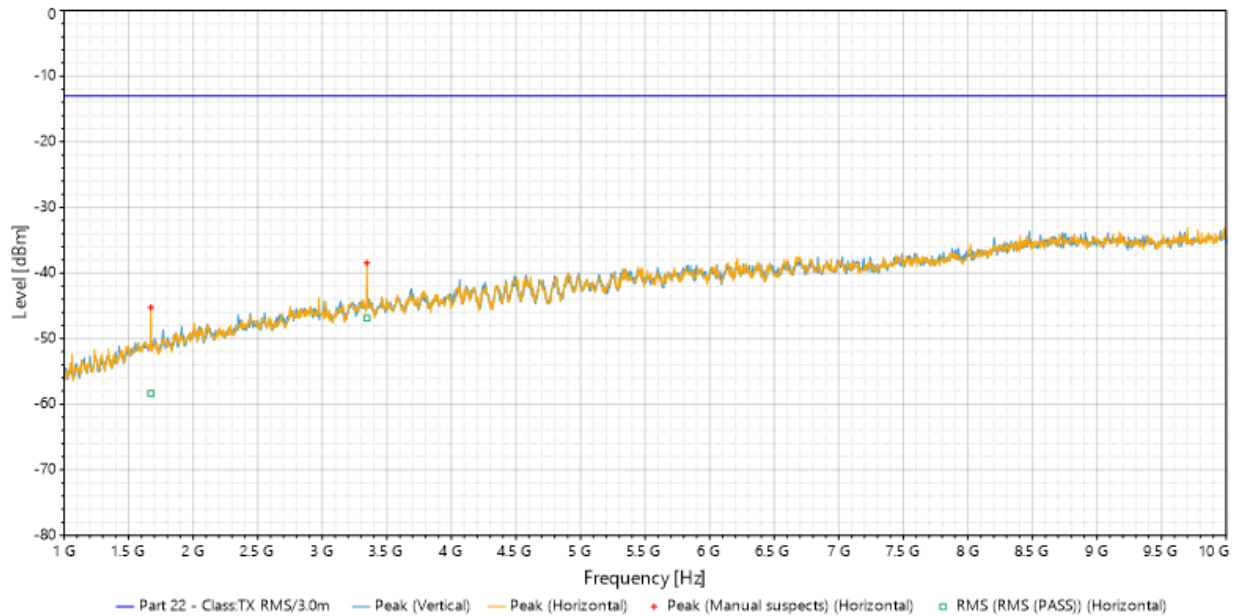


Figure 15. Radiated Spurious Emissions, LTE NB-IoT Band 5 KDB 996369 D04 RSE – (1 – 10 GHz) Plot

FCC Part 24

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
214.3	Manual suspects	-53.704	-13	1	180	Vertical	1.93
214.494	Manual suspects	-52.034	-13	1	335	Horizontal	1.937

Table 16. Radiated Spurious Emissions, LTE NB-IoT Band 2 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

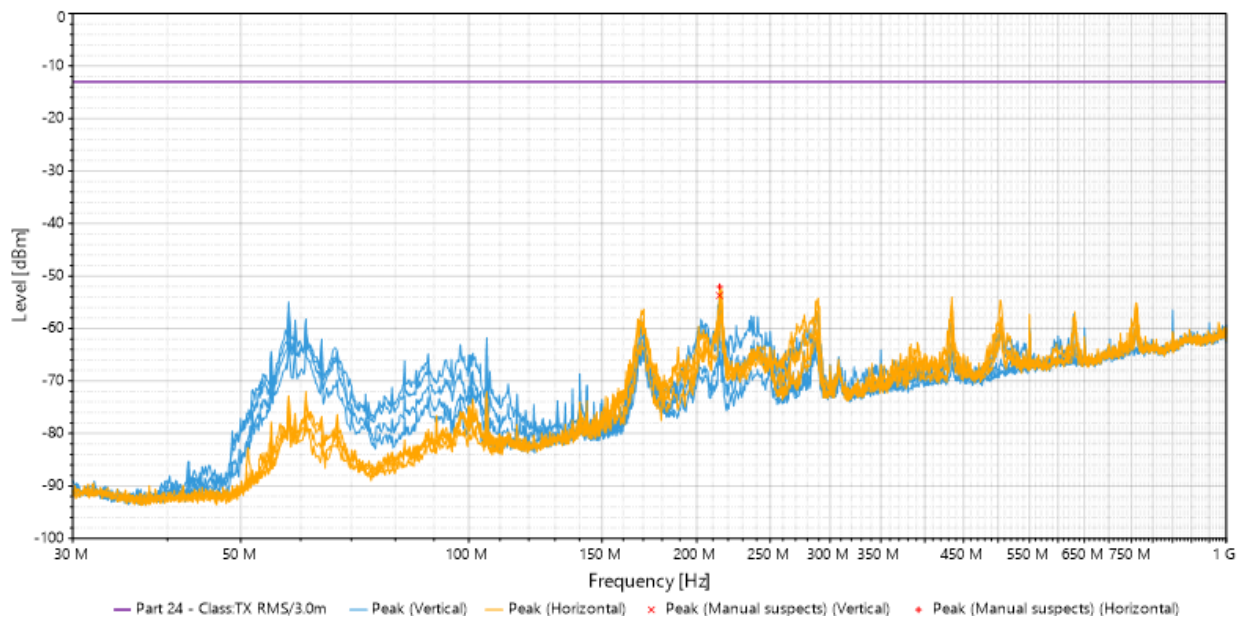


Figure 16. Radiated Spurious Emissions, LTE NB-IoT Band 2 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
3916.1	RMS (PASS)	-55.755	-13	-42.755	2.581	360	Vertical	1000000	0.1	21.912
3919.9	RMS (PASS)	-50.804	-13	-37.804	1.919	176	Horizontal	1000000	0.1	21.923

Table 17. Radiated Spurious Emissions, LTE NB-IoT Band 2 KDB 996369 D04 RSE – (1 – 18 GHz) Test Results

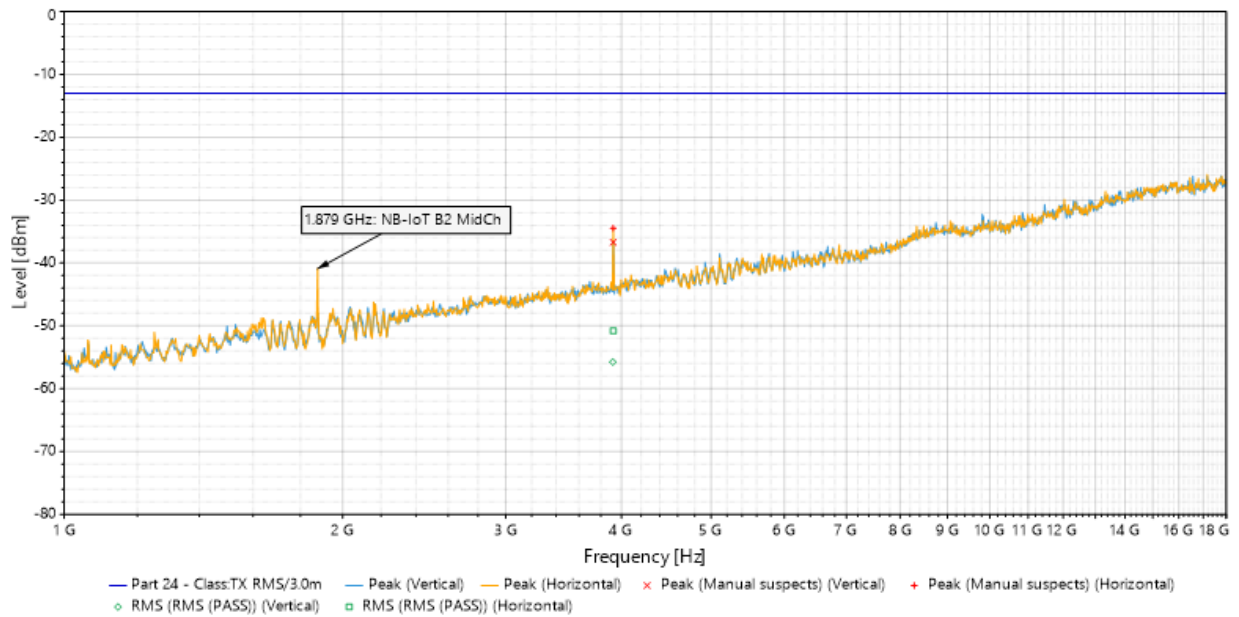


Figure 17. Radiated Spurious Emissions, LTE NB-IoT Band 2 KDB 996369 D04 RSE – (1 – 18 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
18626	Manual suspects	-59.356	-13	1	338	Horizontal	-2.576
19070	Manual suspects	-59.629	-13	1.5	324	Vertical	-2.82

Table 18. Radiated Spurious Emissions, LTE NB-IoT Band 2 KDB 996369 D04 RSE – (18 – 20 GHz) Test Results

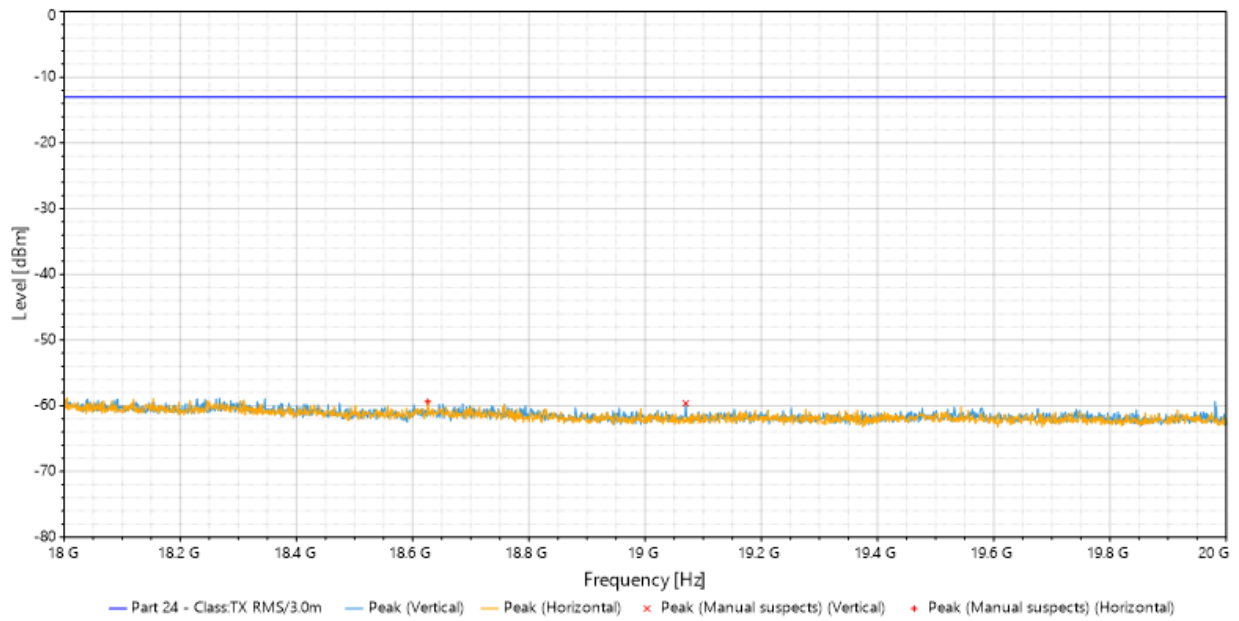


Figure 18. Radiated Spurious Emissions, LTE NB-IoT Band 2 KDB 996369 D04 RSE – (18 – 20 GHz) Plot

FCC Part 27

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
214.203	Manual suspects	-50.618	-13	1	353	Horizontal	1.926
287.826	Manual suspects	-51.984	-13	0.999	1	Vertical	4.33

Table 19. Radiated Spurious Emissions, LTE NB-IoT Band 4 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

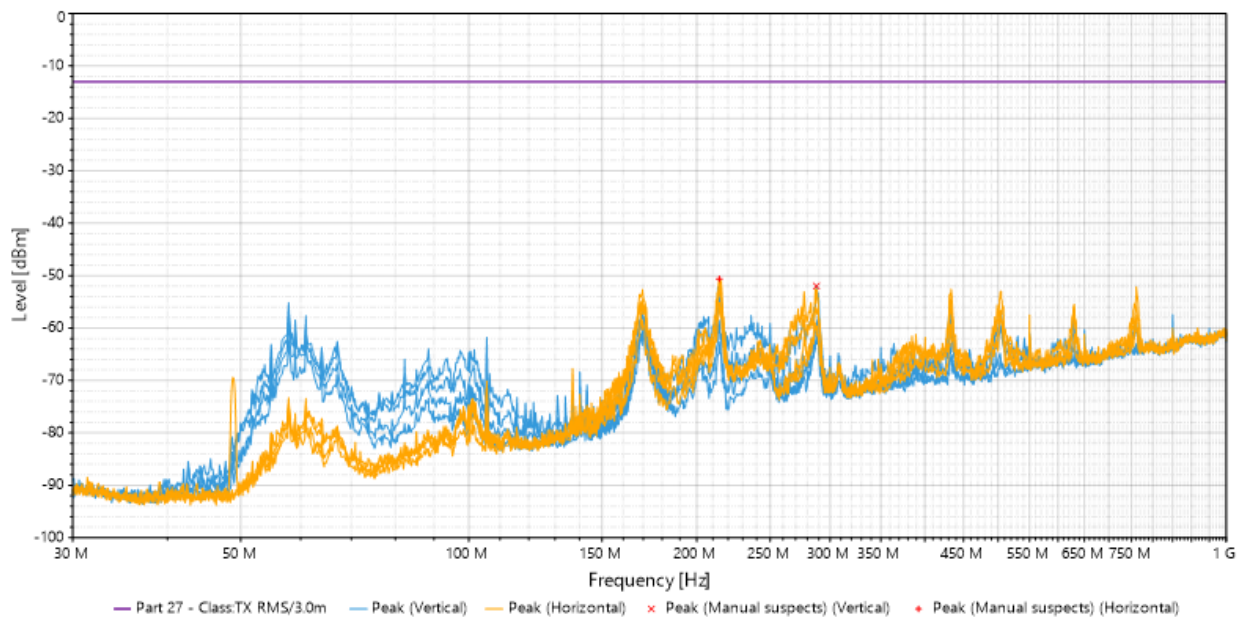


Figure 19. Radiated Spurious Emissions, LTE NB-IoT Band 4 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
17685.5	Manual suspects	-25.856	-13	2.5	52	Vertical	31.556
17736.5	Manual suspects	-25.952	-13	4	162	Horizontal	31.564

Table 20. Radiated Spurious Emissions, LTE NB-IoT Band 4 KDB 996369 D04 RSE – (1 – 18 GHz) Test Results

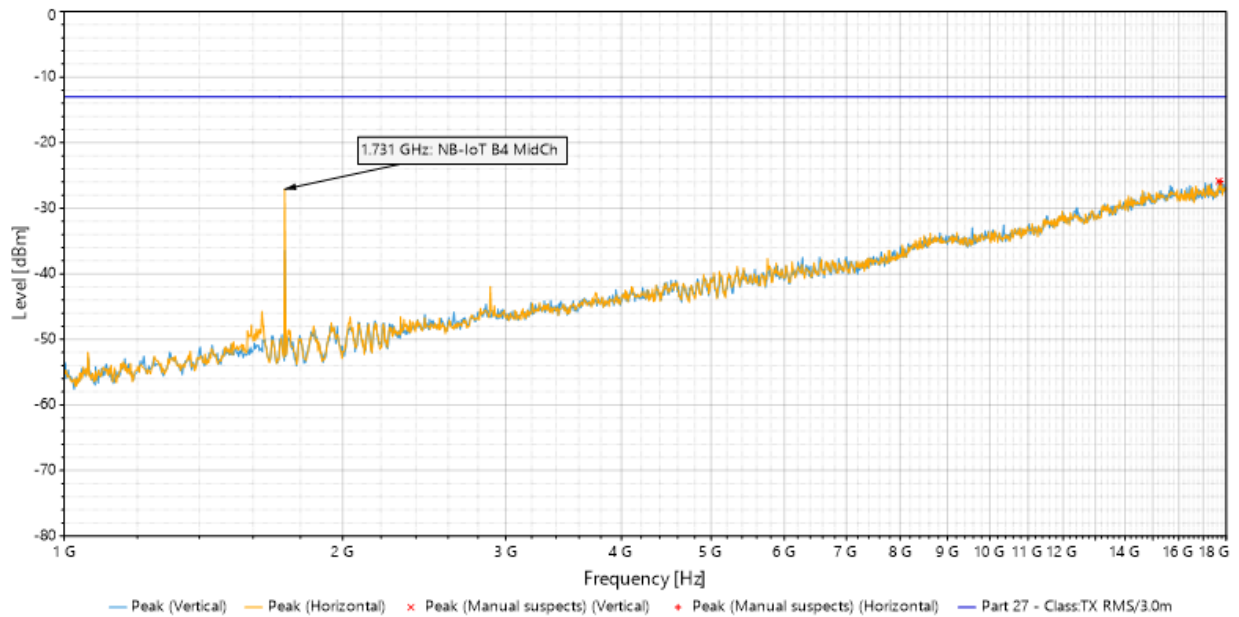


Figure 20. Radiated Spurious Emissions, LTE NB-IoT Band 4 KDB 996369 D04 RSE – (1 – 18 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
57.839	Manual suspects	-55.548	-13	1	82	Vertical	-9.986
213.621	Manual suspects	-55.063	-13	2	351	Horizontal	1.903

Table 21. Radiated Spurious Emissions, LTE NB-IoT Band 12 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

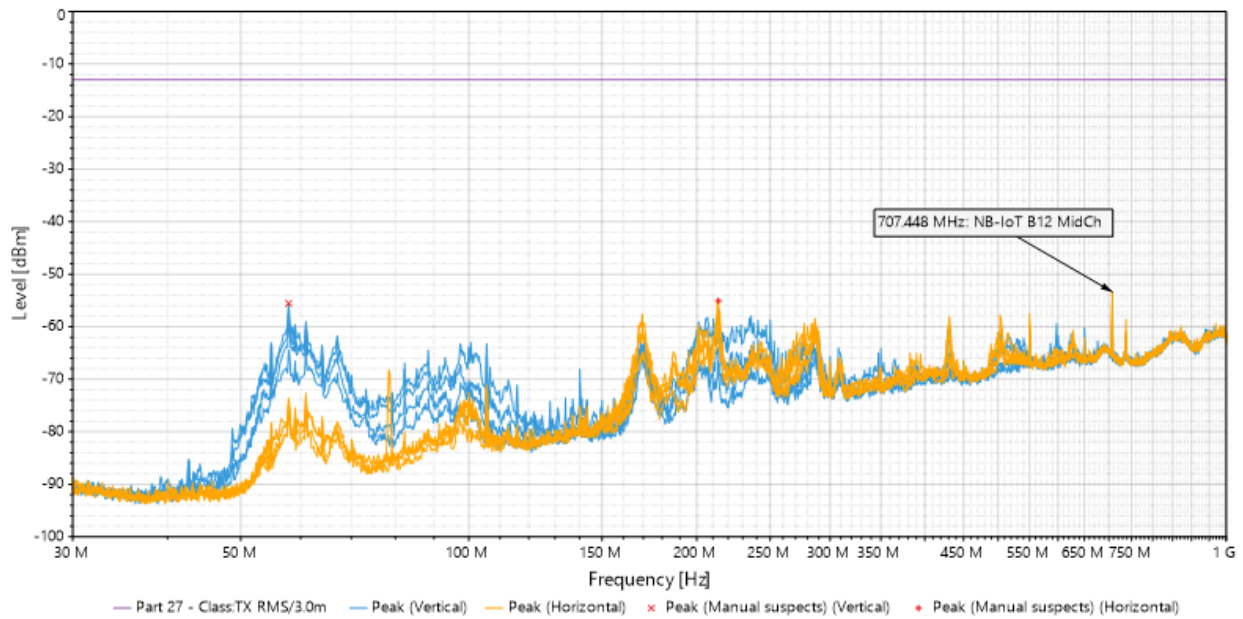


Figure 21. Radiated Spurious Emissions, LTE NB-IoT Band 12 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
1414.8	RMS (PASS)	-49.332	-13	-36.332	1.25	286	Horizontal	1000000	0.1	12.283
1475.2	RMS (PASS)	-62.188	-13	-49.188	1.57	134	Horizontal	1000000	0.1	12.903
2122.2	RMS (PASS)	-52.734	-13	-39.734	1.581	313	Horizontal	1000000	0.1	16.096

Table 22. Radiated Spurious Emissions, LTE NB-IoT Band 12 KDB 996369 D04 RSE – (1 – 10 GHz) Test Results

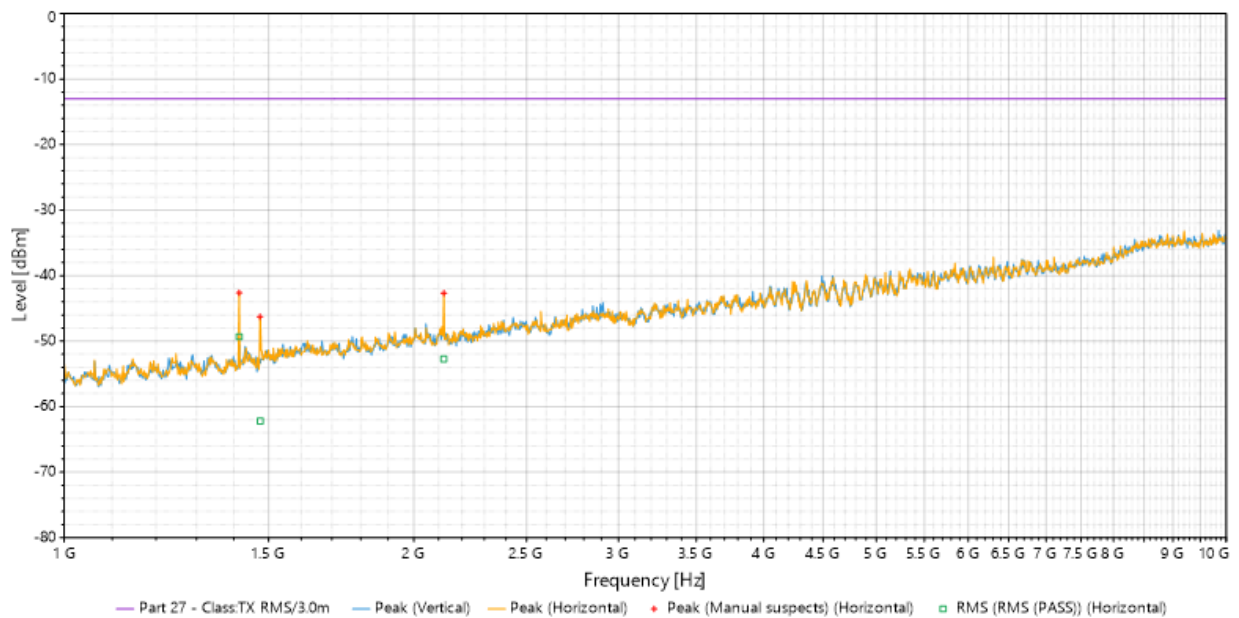


Figure 22. Radiated Spurious Emissions, LTE NB-IoT Band 12 KDB 996369 D04 RSE – (1 – 10 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
213.427	Manual suspects	-49.842	-13	0.999	8	Vertical	1.896
214.494	Manual suspects	-46.811	-13	2	327	Horizontal	1.937

Table 23. Radiated Spurious Emissions, LTE NB-IoT Band 13 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

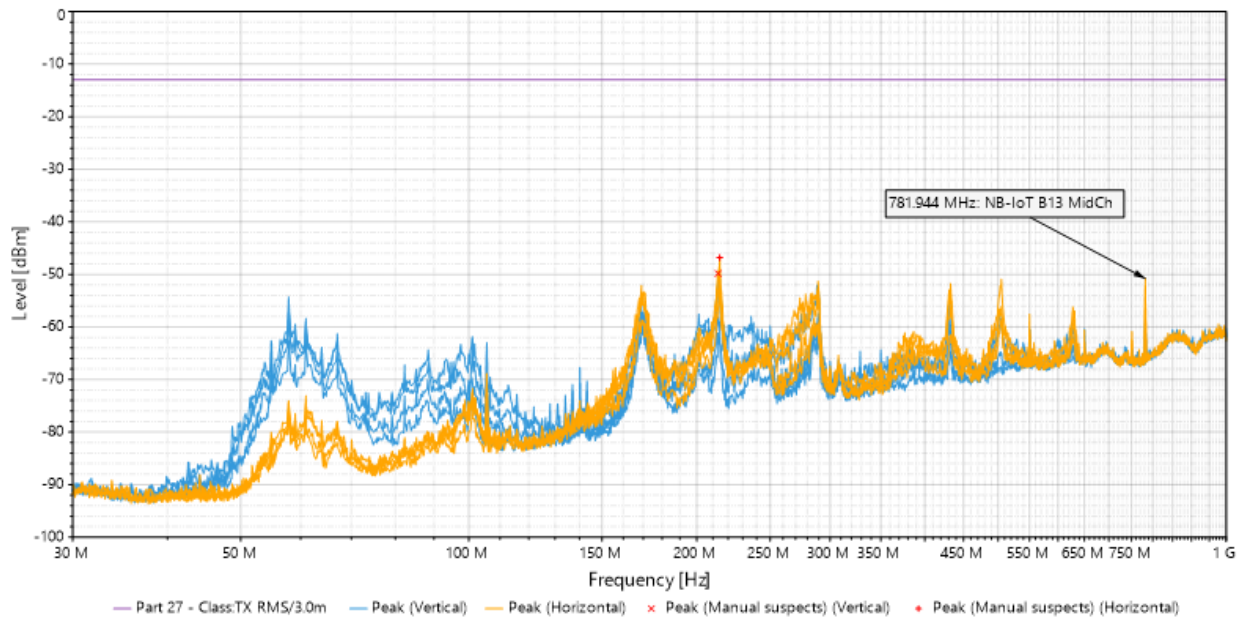


Figure 23. Radiated Spurious Emissions, LTE NB-IoT Band 13 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
1502	RMS (PASS)	-60.959	-13	-47.959	1.573	115	Horizontal	1000000	0.1	13.141
2345.8	RMS (PASS)	-50.545	-13	-37.545	1.559	67	Horizontal	1000000	0.1	17.135
3127.7	RMS (PASS)	-46.849	-13	-33.849	1.359	346	Horizontal	1000000	0.1	19.913

Table 24. Radiated Spurious Emissions, LTE NB-IoT Band 13 KDB 996369 D04 RSE – (1 – 18 GHz) Test Results

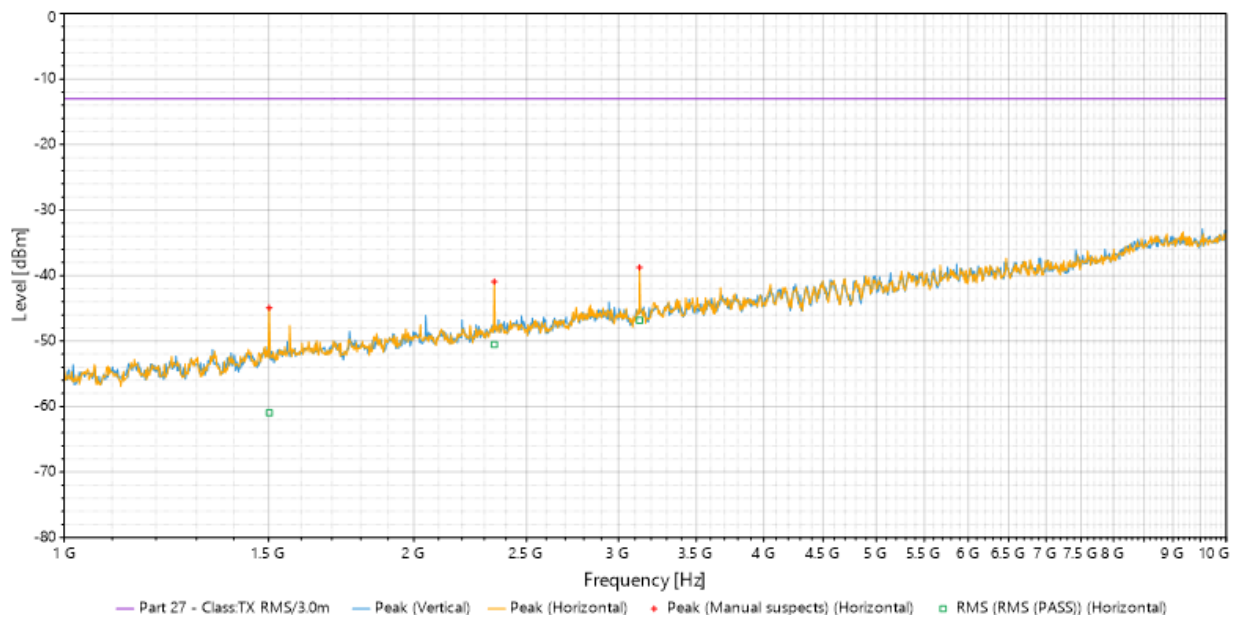


Figure 24. Radiated Spurious Emissions, LTE NB-IoT Band 13 KDB 996369 D04 RSE – (1 – 18 GHz) Plot

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Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
75.881	Manual suspects	-49.422	-13	1	29	Vertical	-8.615
972.064	Manual suspects	-54.983	-13	1	200	Horizontal	18.342

Table 25. Radiated Spurious Emissions, LTE NB-IoT Band 26 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Test Results

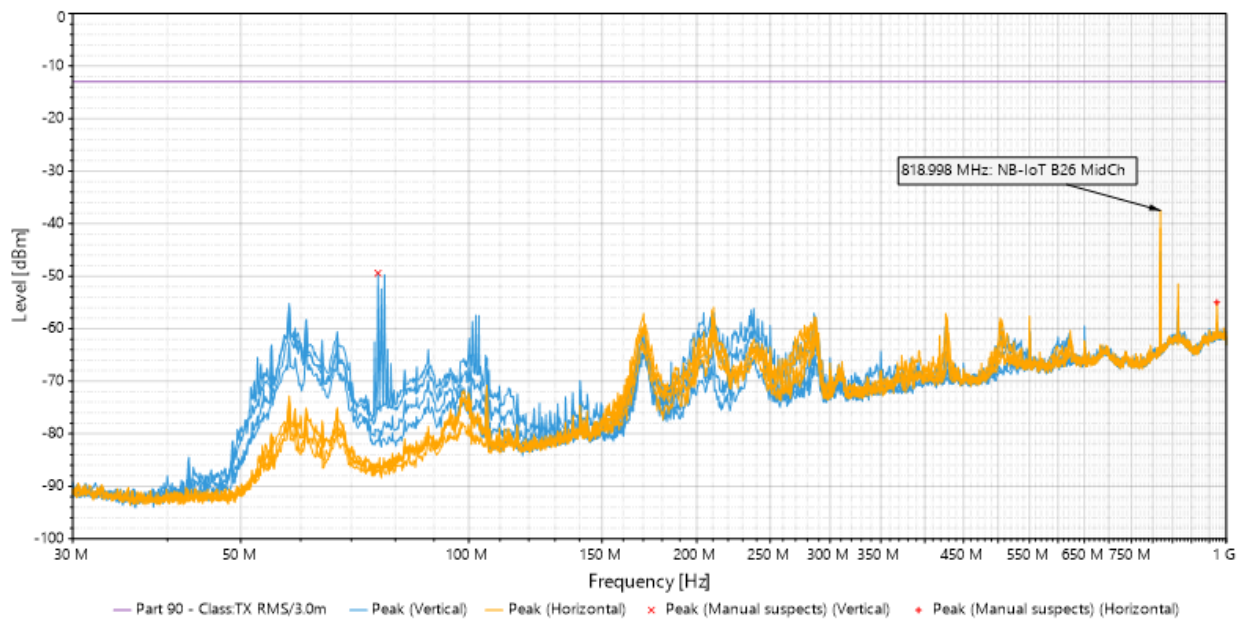


Figure 25. Radiated Spurious Emissions, LTE NB-IoT Band 26 KDB 996369 D04 RSE – (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
1637.9	RMS (PASS)	-54.06	-13	-41.06	1.478	234	Horizontal	1000000	0.1	13.895
3275.7	RMS (PASS)	-41.133	-13	-28.133	1.36	353	Horizontal	1000000	0.1	20.485

Table 26. Radiated Spurious Emissions, LTE NB-IoT Band 26 KDB 996369 D04 RSE – (1 – 10 GHz) Test Results

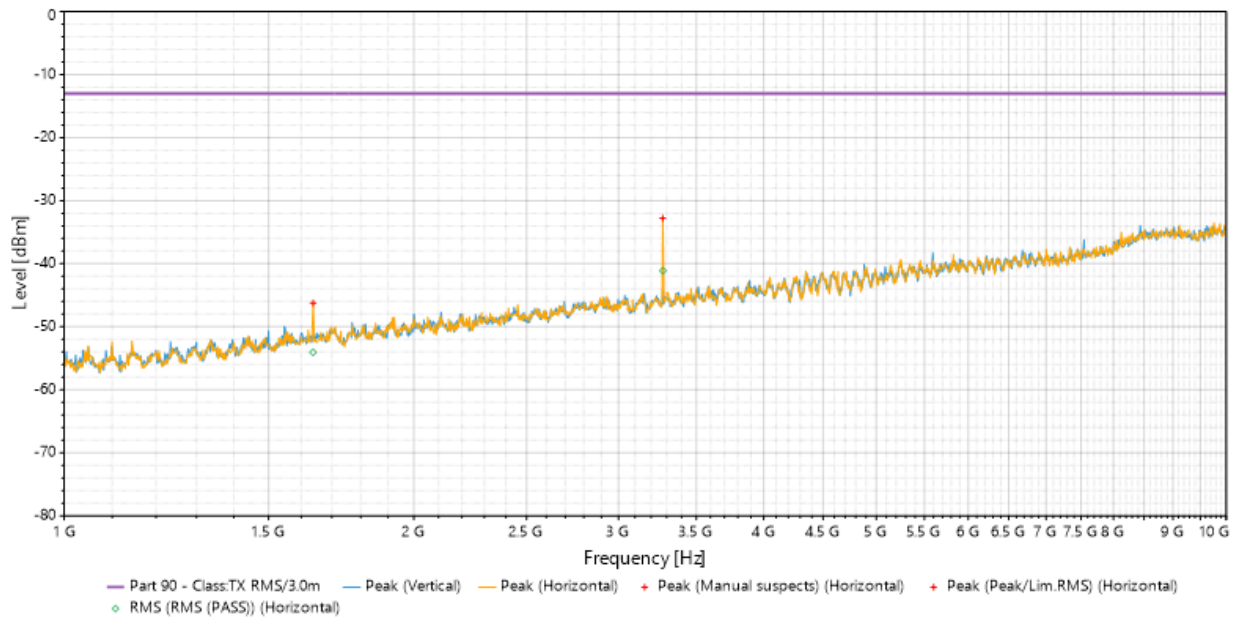


Figure 26. Radiated Spurious Emissions, LTE NB-IoT Band 26 KDB 996369 D04 RSE – (1 – 10 GHz) Plot

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2017.

Test Name: KDB 996369 D04 RSE			Test Date(s): 04/10/2025 – 04/11/2025		
MET Asset #	Equipment	Manufacturer	Model	Last Cal Date	Cal Due Date
1S2399	Turntable Controller	Sunol Sciences	SC99V	See Note 1	
1S4856	Antenna Positioning Tower	ETS-Lindgren	2171B	See Note 1	
1S2482	5 Meter Chamber	Panashield - ETS	5 Meter Semi-Anechoic Chamber	See Note 2	
1S4852	Radio Communicator Analyzer	Anritsu	MT8821C	N/A	
1S4804	EMI Test Receiver	Rohde & Schwarz	ESW44	08/07/2024	08/07/2025
1S2485	Bilog Antenna	Teseq	CBL6112D	11/27/2024	11/27/2026
1S2435	Horn Antenna	ETS-Lindgren	3117	03/17/2025	03/17/2027
1S3818	DRG Horn Antenna	A.H. Systems, Inc.	SAS-574	05/24/2023	05/24/2025
1S2668	Pre-Amplifier	Sonoma Instruments	310 N	03/18/2025	03/18/2027
1S4802	Pre-Amplifier	EMC Instruments Corporation	EMC118A45SE	See Note 1	
1S3865	Table Top Amplifier	MITEQ	TTA1840-35-HG	See Note 1	
Note 1: Functionally tested equipment is verified using calibrated instrumentation at the time of testing.					
Note 2: Latest NSA and VSWR data available upon request.					

Table 27. Radiated Spurious Emissions, Test Equipment

END OF REPORT