

March 17, 2026

BI Incorporated
Curtis Lange
6265 Gunbarrel Ave, Suite B
Boulder, CO 80301

Dear Curtis Lange,

Enclosed is the Electromagnetic Compatibility for the BI Incorporated, SoberTech ST-100, tested to the requirements of:

- FCC Part 24E and 27
- ISSED RSS-133 and RSS-130, RSS-139, and RSS-GEN

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: WIRS138901-FCC Part 24E_27 ISSED_RSS-133 RSS-GEN Rev. 4



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Report Status Sheet

Revision	Report Date	Reason for Revision
Ø	November 24, 2025	Initial Issue.
1	November 24, 2025	Updated Configuration Form.
2	January 8, 2026	Added ISED and CAB Identifier.
3	January 16, 2026	Added HVIN and PMN.
4	March 17, 2026	Added Executive Summary & Measurement uncertainty

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1.0 Testing Summary

The BI Incorporated, SoberTech ST-100 was found to be compliant to the following specification(s).

- FCC Part 24E & 27, FCC KDB 971168 D01 Power Meas License Digital Systems v03r0, FCC KDB 996369 D04 Module Integration Guide v02
- ISED RSS-133 and RSS-130, RSS-139, and RSS-GEN



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.

2.0 Overview

Eurofins E&E Testing NA, LLC. was contracted by BI Incorporated to perform testing on the SoberTech ST-100, under purchase order number EM00246105.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of BI Incorporated, SoberTech ST-100.

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

Model(s) Tested:	SoberTech ST-100
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2.1 FCC ID and IC

FCC ID: CSQ-ST100A

IC: 1499A-ST100A

2.2 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.

CAB ID: CAB Identifier US0129

2.3 Executive Summary

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with accordance with SoberTech ST-100, under purchase order number EM00246105. All tests were conducted using measurement procedures of ANSI C63.26,

Description	FCC Reference Clause	IC Reference Clause	Compliance
Maximum Output power	FCC Part 24 24.232	RSS-GEN Issue 5, 6, 12 RSS-133 Issue, 6.4	Compliant
Radiated Spurious Emissions	FCC part 24 24.236	RSS-GEN Issue 5, 6.13 RSS-133 Issue, 6.5	Compliant
Maximum Output power	FCC Part 27 27.50	RSS-GEN Issue 5, 6, 12 RSS-130 Issue 2, 4.6.2/4.6.3 RSS-139 Issue 3, 6.5 RSS-199 Issue3, 4.4	Compliant
Radiated Spurious Emissions	FCC Part 27 27.53	RSS-GEN Issue 5, 6.13 RSS-130 Issue2, 4.7.1/4.7.2 RSS-139 Issue 3, 6.6 RSS-199 Issue 3, 4.5	Compliant

Table 1. Executive Summary

2.4 Equipment Overview and Test Configuration

Name of EUT/Model:	SoberTech ST-100
Additional Models Covered, but not tested:	N/A
Description of EUT and Intended Use:	The BI SoberTech product is a mobile breathalyzer that allows individuals to discretely submit BrAC tests from any location. BrAC test data is transmitted to BI TotalAccess via a cellular connection (LTE). Each test report includes a client photo, BrAC reading, and GNSS location with time and date stamp to ensure accuracy. In the absence of a cell signal, SoberTech stores the results and sends them when the device reenters cell range.
Mode(s) of Operation:	LTE CAT-M1
Rationale for the selection of the Operation Mode(s):	Use of cellular transmitter
Monitoring Method(s):	Transmit data via Radio Communicator Analyzer
Configuration(s):	Verizon, AT&T, T-Mobile
HVIN:	BI SoberTech
PMN:	BI SoberTech
EUT Power Requirement	
Voltage:	USB-C Input Voltage Range: 4.94V to 5.46V (5.2V NOM) AC/DC Input Voltage Range: 90VAC to 264VAC
Voltage Frequency:	47 Hz to 63 Hz
Number of Phases:	N/A
Amperage:	N/A
Uses an external AC/DC Adapter:	Yes, used to charge internal battery pack
Battery Configuration	Rechargeable Lithium-Ion battery pack
Physical Description	
EUT Arrangement:	Portable device with external interfaces including a power button, an LCD touch screen, and insertion point for a breath tube, and a USB-C connector for charging and data (UART)
System with Multiple Chassis:	No
Size (HxWxD) in:	4.9 x 2.8 x 1.3
Weight (oz):	7.6
Emissions Class Declaration:	B
Other Info:	
Highest frequency used in device:	--
EUT Software (internal to EUT):	Firmware via USB-C port restricted and password protected
Support Software (used to exercise EUT):	SoberTech Proprietary Firmware Ver2.0

Note: EUT information was provided by BI Incorporated.

Nexio Software BAT-EMC Version: 2023.0.5.0 was used by the lab to control instruments and to get Plots.

Equipment Configuration List

Name/Description	Model Number	Part Number	Serial Number
SoberTech / Mobile Breathalyzer	ST-100	--	--

Accessoires List

Name/Description	Manufacturer	Model Number	*Customer Supplied Calibration Data
USB-C to USB 2.0A Charging Cable	--	--	--
AC/DC Wall Mount Power Supply	Amazon.com Services LLC	PS57CP	--
Breath Tube	--	--	--

Antenna Information

Radio	Antenna Type	Manufacturer	Part No	Ave. Gain
Cellular	External to Module, Passive	--	--	-2.0 dB

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

2.5 Modifications to the EUT

No modifications were made to the EUT.

2.6 Modifications to the Standard

No modifications were made to the Test Standard.

2.7 Disposition of EUT

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

2.8 Measurement uncertainty

Measurement uncertainty calculated as per NIST Technical Note (TN) 1297 and ANSI / NCSL Z540-2, as equivalent to EN 55016-4-2 / IEC CISPR 16-4-2.

Test Method	Typical Expanded Uncertainty (dB)	K	Confidence Level
Radiated Emissions, (30 MHz – 1 GHz)	±4.61	2	95%
Radiated Emissions, (1 GHz – 40 GHz)	±4.2	2	95%
Conducted Emission Voltage	±3.06	2	95%
Power Measurement	±0.64	2	95%

3.0 Electromagnetic Compatibility Criteria for Intentional Radiators

3.1 Maximum Output Power

Test Method: ANSI C63.26:2015;
FCC Part 24E and Part 27;
ISED RSS-133 and RSS-130, RSS-139, and RSS-GEN;
FCC KDB 971168 D01 Power Meas Licensed Digital Systems V03r01;
FCC KDB 996369 D04 Module Integration Guide V02

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

- FCC Part 24E and Part 27;
ISED RSS-133 and RSS-130, RSS-139, and RSS-GEN;
FCC KDB 971168 D01 Power Meas Licensed Digital Systems V03r01;
FCC KDB 996369 D04 Module Integration Guide V02

*Compliance with ISED RSS-133 and RSS-GEN is demonstrated using the same measurement procedures and test data as FCC Part 24E and Part 27, as permitted by ISED.

24.232(c) Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

27.50(b)(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

27.50(c)(10) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

27.50(d)(4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

Test Procedure: The method of testing, test conditions, and test procedures of ANSI C63.26:2015 were used in addition to KDB 971168 D01 Power Meas License Digital Systems and FCC KDB 996369 D04 Module Integration Guide.

Test Results:

Test Standard:	FCC Part 24E and 27; ISED RSS-133 and RSS-130, RSS-139, and RSS-GEN; (Per ANSI C63.26:2015; KDB 971168 D01; FCC KDB 996369 D04)
Test Name	Maximum Output Power
Test Dates:	10/17/2025
Laboratory	Eurofins E&E Testing NA, LLC.
Test Engineer:	Chin Ming Lui
Test Results:	Compliant

Maximum Output Power Data

LTE CAT-M1 Band	Mode	Conducted Output Power ¹ (W)	Conducted Output Power (dBm)	Antenna Gain ² (dB)	EIRP ³ (dBm)	EIRP (W)	EIRP Limit (W)
2	QPSK	0.1963	22.93	-2.0	20.93	0.1239	2
4	QPSK	0.2128	23.28	-2.0	21.28	0.1343	1
66	QPSK	0.2393	23.79	-2.0	21.79	0.151	1
LTE CAT-M1 Band	Mode	Conducted Output Power ¹ (W)	Conducted Output Power (dBm)	Antenna Gain ² (dB)	ERP ⁴ (dBm)	ERP (W)	ERP Limit (W)
12	QPSK	0.1995	23	-2.0	18.85	0.0767	3
13	QPSK	0.2065	23.15	-2.0	19	0.0794	3

Note 1: Conducted Output Power leveraged from Transa (ublox) SARA-R520M10-02 Module FCC Grant (FCC ID: XPYUBX19KM01). Eurofins did not test or verify the conducted output power.

Note 2: Average Antenna Gain leveraged from “SoberTech Operational Description & SAR Calculation” provided by BI Incorporated. Eurofins did not test or verify the antenna gain.

Note 3: EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dB)

Note 4: ERP (dBm) = EIRP (dBm) – 2.15

3.2 Radiated Spurious Emissions

Test Method: ANSI C63.26:2015.
FCC Part 24E and Part 27;
ISED RSS-133 and RSS-130, RSS-139, and RSS-GEN;
FCC KDB 971168 D01 Power Meas Licensed Digital Systems V03r01.
FCC KDB 996369 D04 Module Integration Guide V02

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

- FCC Part 24E and Part 27;
ISED RSS-133 and RSS-130, RSS-139, and RSS-GEN;
FCC KDB 971168 D01 Power Meas Licensed Digital Systems V03r01;
FCC KDB 996369 D04 Module Integration Guide V02

*Compliance with ISED RSS-133 and RSS-GEN is demonstrated using the same measurement procedures and test data as FCC Part 24E and Part 27, as permitted by ISED.

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.

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 (dBμV/m)	Measurement Distance (m)
30 - 88	40	3
88 - 216	43.5	3
216 - 960	46	3
Above 960	54	3

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

$$\text{Corrected Amplitude (dB}\mu\text{V/m)} = \text{Uncorrected Amplitude (dB}\mu\text{V)} + \text{ACF (dB/m)} - \text{Preamp Gain (dB)} + \text{CBL (dB)} + \text{DCF (dB)}$$

$$= 55.46 + 11.4 - 28.335 + 0 + 0 = \mathbf{38.505}$$

Test Procedure:

The method of testing, test conditions, and test procedures of ANSI C63.26:2015 were used in addition to KDB 971168 D01 Power Meas License Digital Systems and 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 24E and 27; ISED RSS-133 and RSS-130, RSS-139, and RSS-GEN; (Per ANSI C63.26:2015; KDB 971168 D01; FCC KDB 996369 D04)
Test Name	Radiated Spurious Emissions
Test Mode:	QPSK
Test Dates:	10/17/2025
Laboratory	Eurofins E&E Testing NA, LLC.
Test Engineer:	Chin Ming Lui
Test Results:	Compliant

Test Data (FCC Part 24)

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
155.75	Manual suspects	-69.56	-13	1.024	216	Vertical	0.815
979.25	Manual suspects	-62.548	-13	1.984	300	Horizontal	15.627

Table 2. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 2 MidCh 1880 MHz (30 MHz – 1 GHz)
Test Results

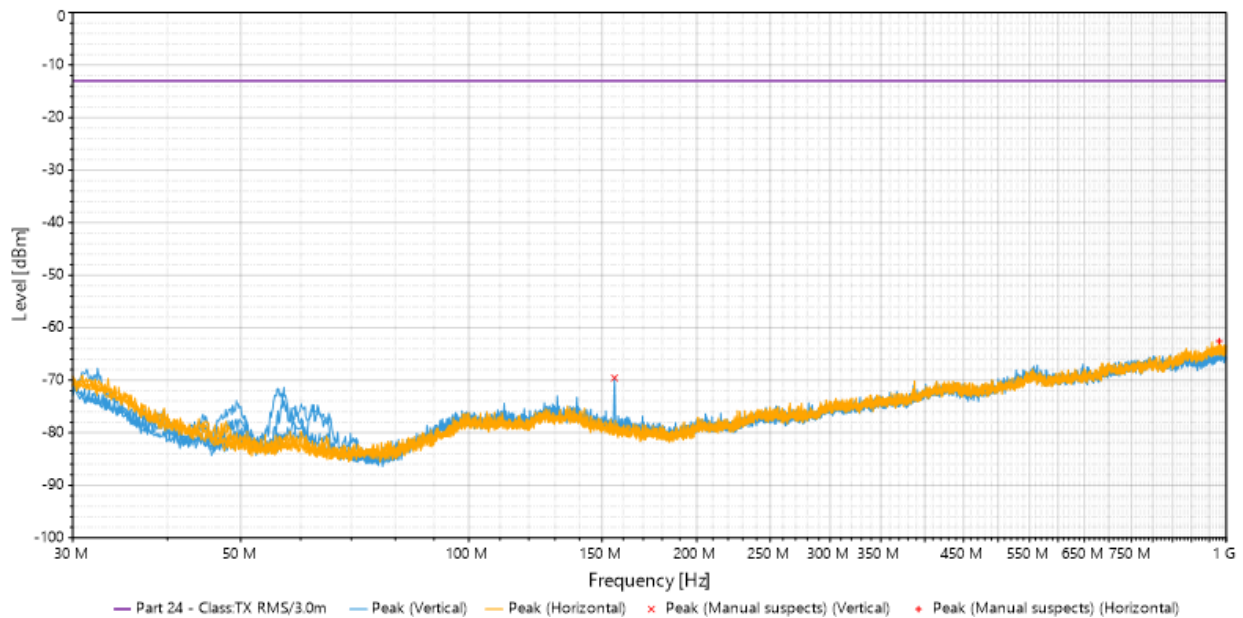


Figure 1. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 2 MidCh 1880 MHz (30 MHz – 1 GHz)
Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
3756.1	RMS (PASS)	-55.723	-13	-42.723	1.152	316	Horizontal	1000000	0.1	13.542
3764.1	RMS (PASS)	-58.664	-13	-45.664	1.568	316	Vertical	1000000	0.1	13.809
3917.9	RMS (PASS)	-48.962	-13	-35.962	1.344	332	Horizontal	1000000	0.1	13.692
3918	RMS (PASS)	-57.528	-13	-44.528	1.792	110	Vertical	1000000	0.1	13.912
4238.8	RMS (PASS)	-61.768	-13	-48.768	1.568	97	Vertical	1000000	0.1	13.849
5634	RMS (PASS)	-60.442	-13	-47.442	1.088	291	Vertical	1000000	0.1	15.841

Table 3. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 2 (1 – 18 GHz) Test Results

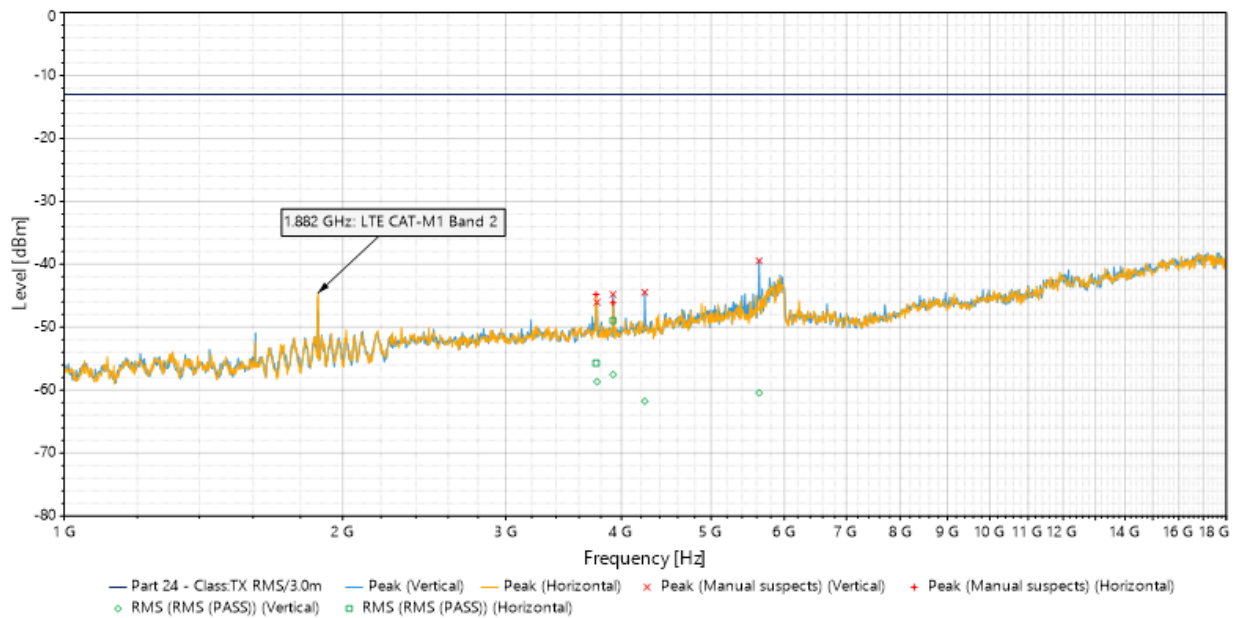


Figure 2. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 2 (1 – 18 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
18265	Manual suspects	-43.193	-13	4	278	Vertical	10.533
18335	Manual suspects	-43.918	-13	1.504	0	Horizontal	10.279

Table 4. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 2 MidCh 1880 MHz (18 – 20 GHz) Test Results

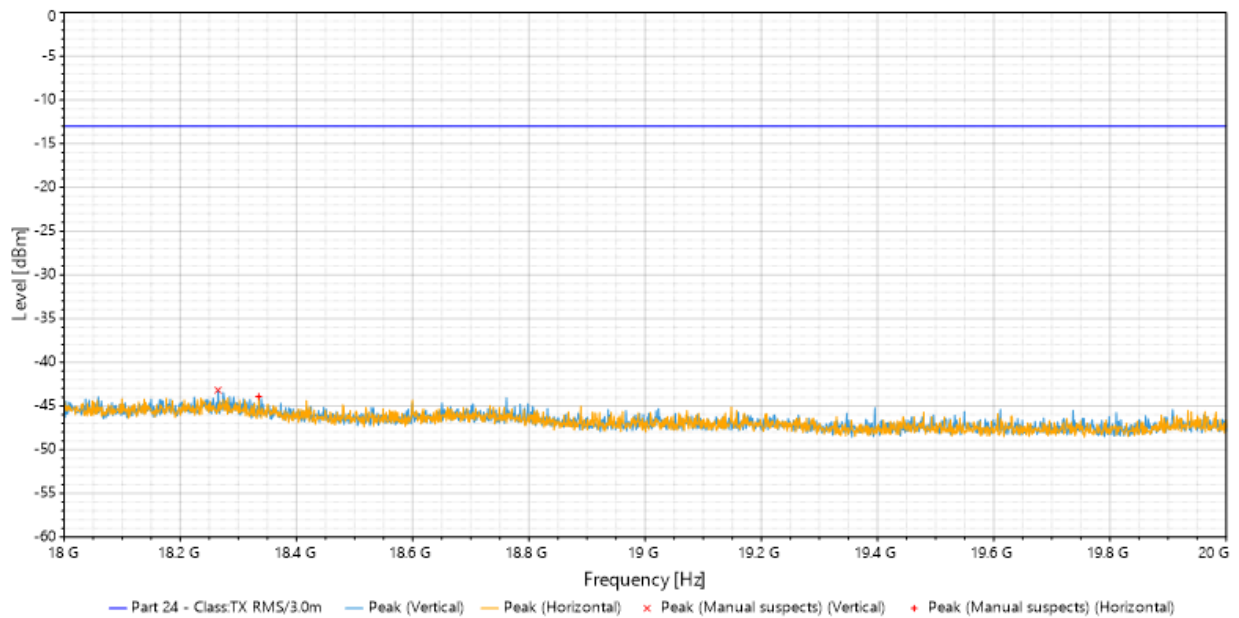


Figure 3. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 2 MidCh 1880 MHz (18 – 20 GHz) Plot

Test Data (FCC Part 27)

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
791.2	Manual suspects	-64.495	-13	1.984	0	Vertical	12.677
975.55	Manual suspects	-62.161	-13	4	224	Horizontal	15.536

Table 5. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 4 MidCh 1732.5 MHz (30 MHz – 1 GHz) Test Results

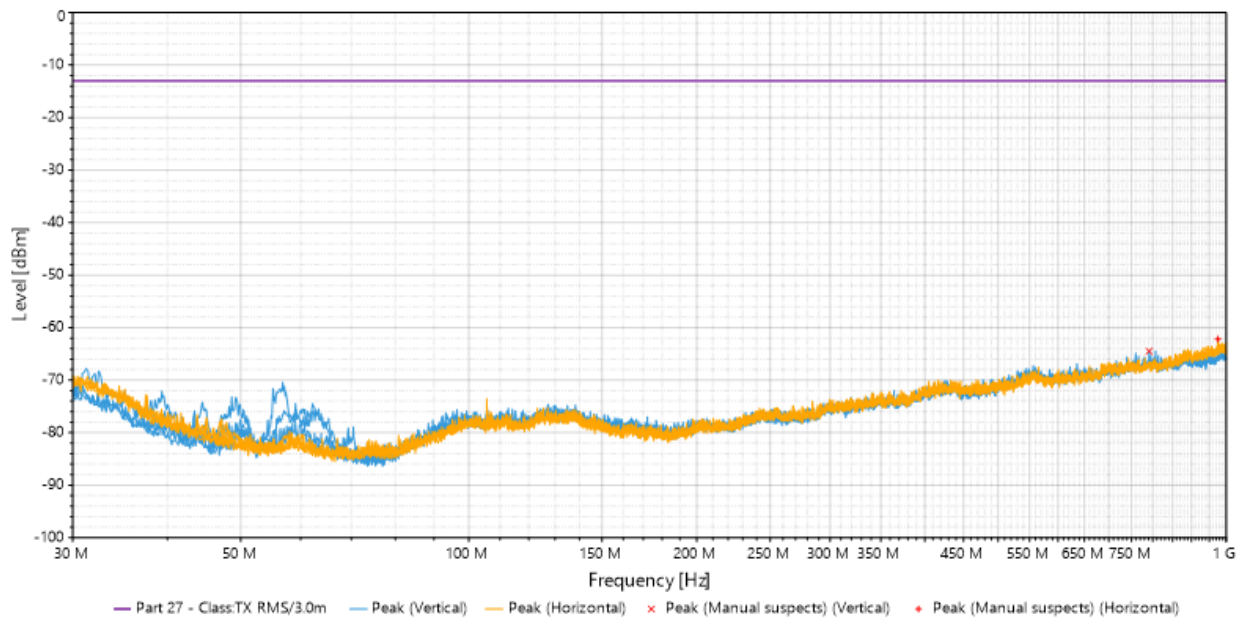


Figure 4. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 4 MidCh 1732.5 MHz (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
3461.1	RMS (PASS)	-53.891	-13	-40.891	3.392	178	Vertical	1000000	0.1	13.547
3461.1	RMS (PASS)	-49.987	-13	-36.987	1.088	43	Horizontal	1000000	0.1	13.459
4262.9	RMS (PASS)	-44.735	-13	-31.735	1.248	261	Horizontal	1000000	0.1	13.775
4262.9	RMS (PASS)	-49.508	-13	-36.508	2.144	117	Vertical	1000000	0.1	13.91

Table 6. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 4 MidCh 1732.5 MHz (1 – 18 GHz) Test Results

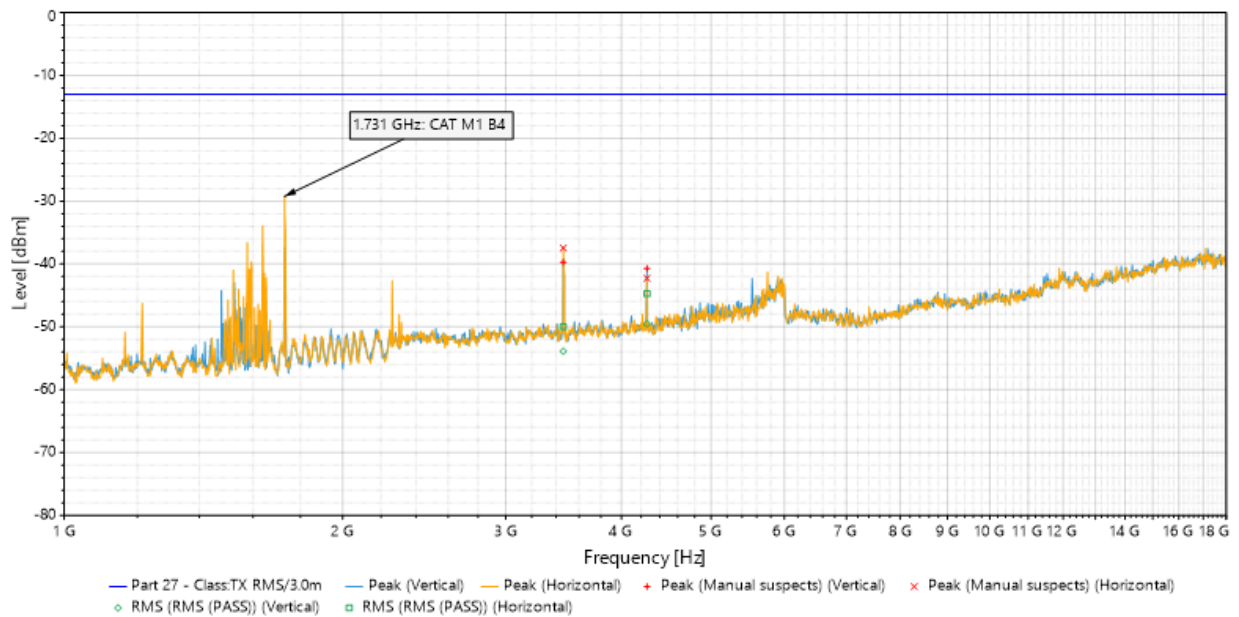


Figure 5. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 4 MidCh 1732.5 MHz (1 – 18 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
198.32	RMS (PASS)	-91.41	-13	-78.41	3.328	304	Vertical	100000	0.1	0.692
940.85	RMS (PASS)	-76.861	-13	-63.861	1.024	369	Horizontal	100000	0.1	14.552

Table 7. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 12 MidCh 707.5 MHz (30 MHz – 1 GHz) Test Results

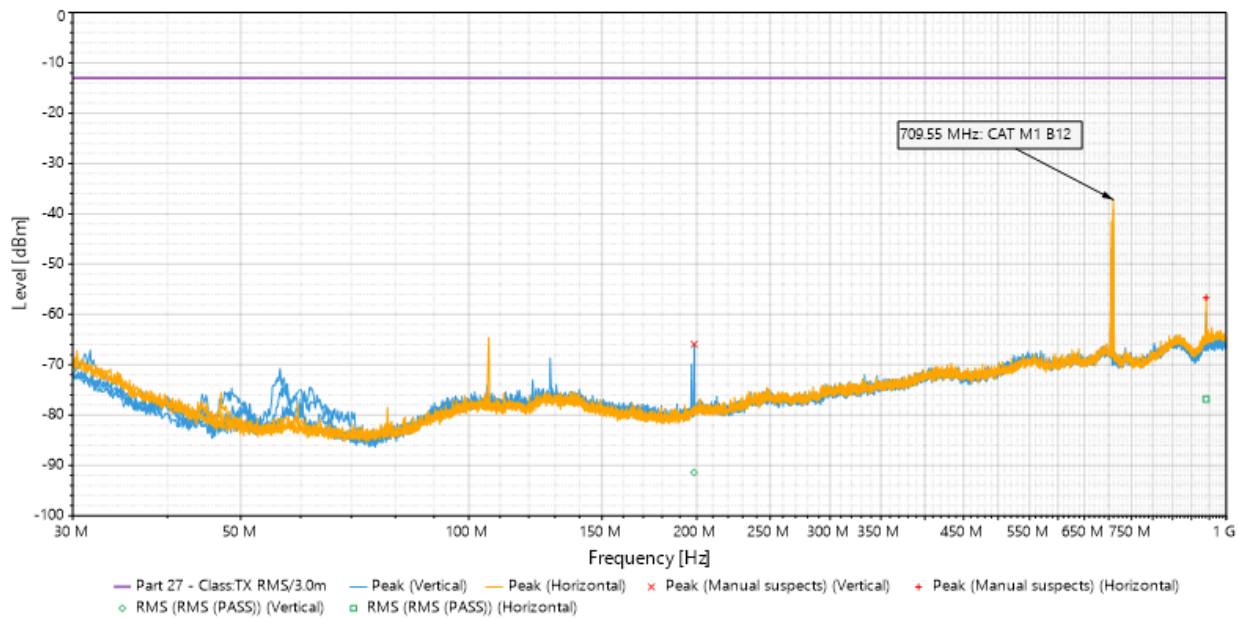


Figure 6. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 12 MidCh 707.5 MHz (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
8852	Manual suspects	-49.971	-13	1.504	0	Vertical	17.41
9243.5	Manual suspects	-50.936	-13	1.504	338	Horizontal	16.914

Table 8. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 12 MidCh 707.5 MHz (1 – 10 GHz) Test Results

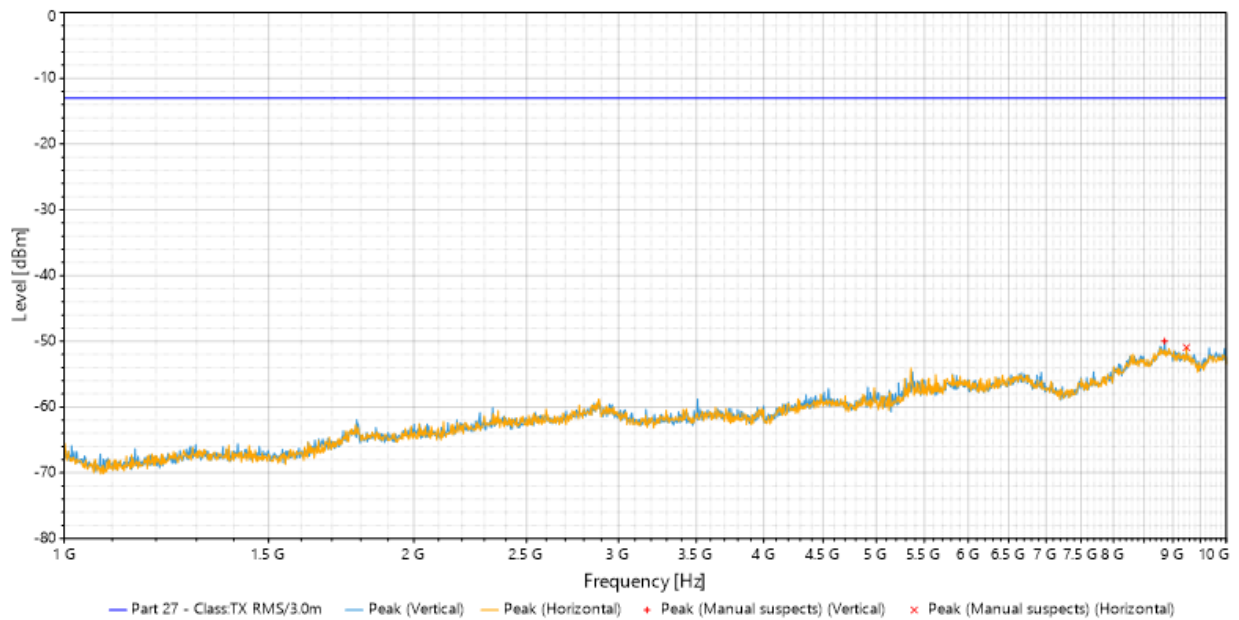


Figure 7. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 12 MidCh 707.5 MHz (1 – 10 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
861.45	Manual suspects	-64.434	-13	1.984	311	Vertical	12.255
964	Manual suspects	-62.628	-13	1.984	101	Horizontal	15.245

Table 9. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 13 MidCh 782 MHz (30 MHz – 1 GHz) Test Results

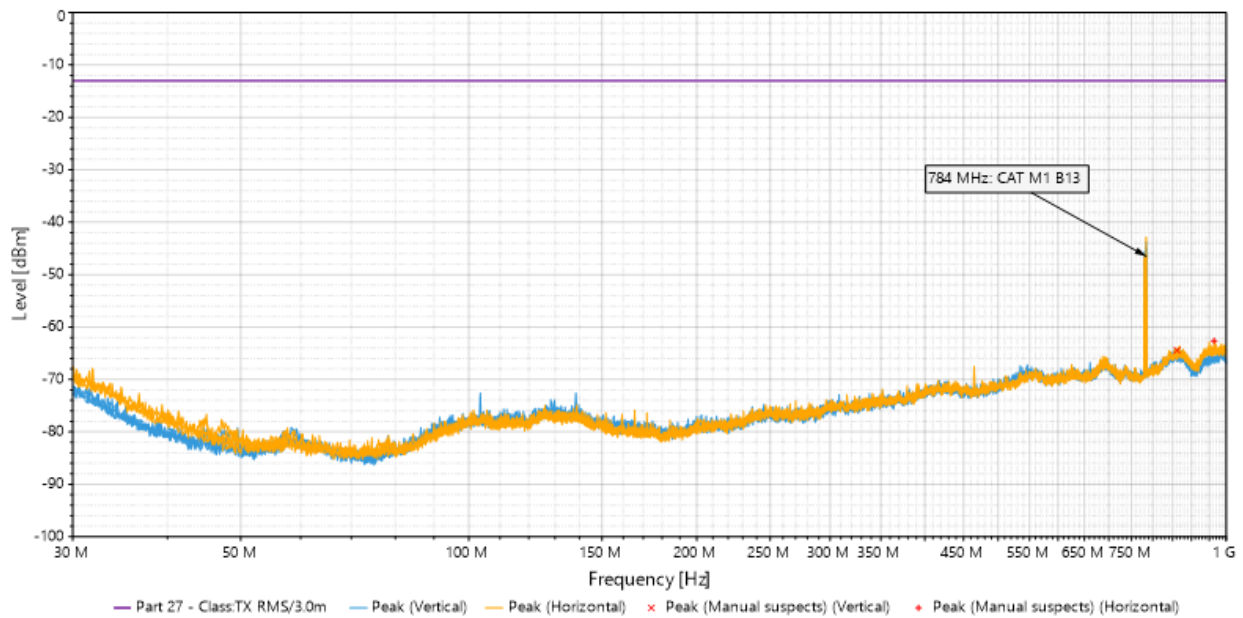


Figure 8. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 13 MidCh 782 MHz (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
8778	Manual suspects	-49.848	-13	1.504	0	Horizontal	17.504
8891.5	Manual suspects	-50.437	-13	4	11	Vertical	17.27

Table 10. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 13 MidCh 782 MHz (1 – 10 GHz) Test Results

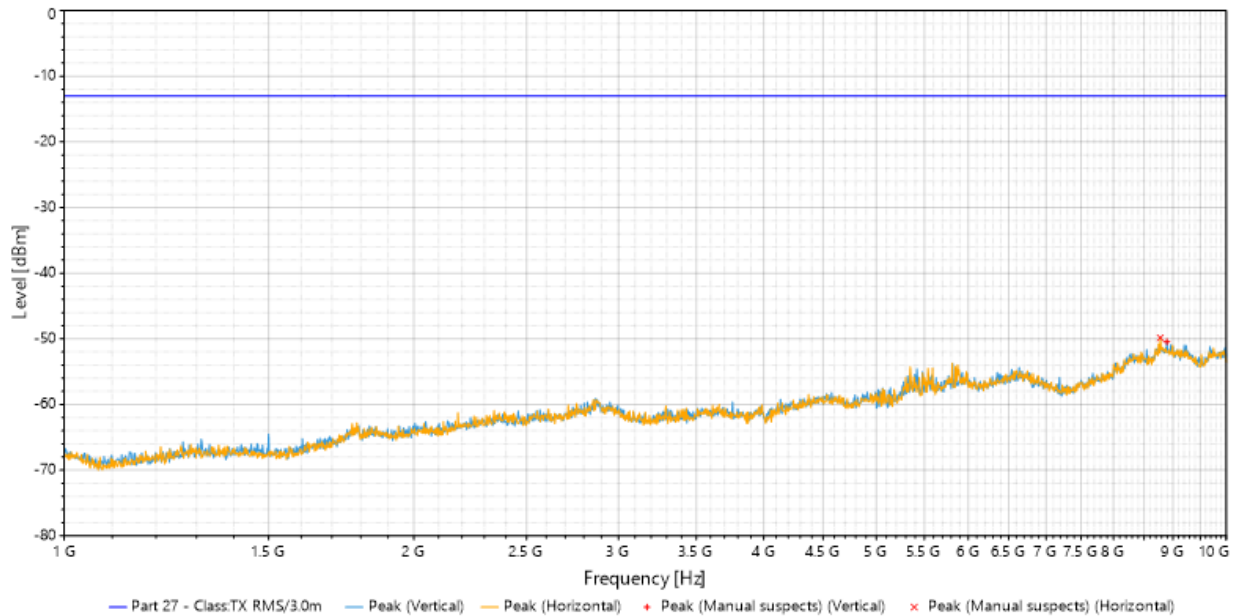


Figure 9. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 13 MidCh 782 MHz (1 – 10 GHz) Plot

Frequency (MHz)	Source	Peak (dBm)	Lim.RMS (dBm)	Height (m)	Azimuth (°)	Polarization	Correction (dB)
793.35	Manual suspects	-64.657	-13	1.984	37	Vertical	12.736
970.05	Manual suspects	-63.207	-13	1.984	262	Horizontal	15.403

Table 11. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 66 MidCh 1745 MHz (30 MHz – 1 GHz) Test Results

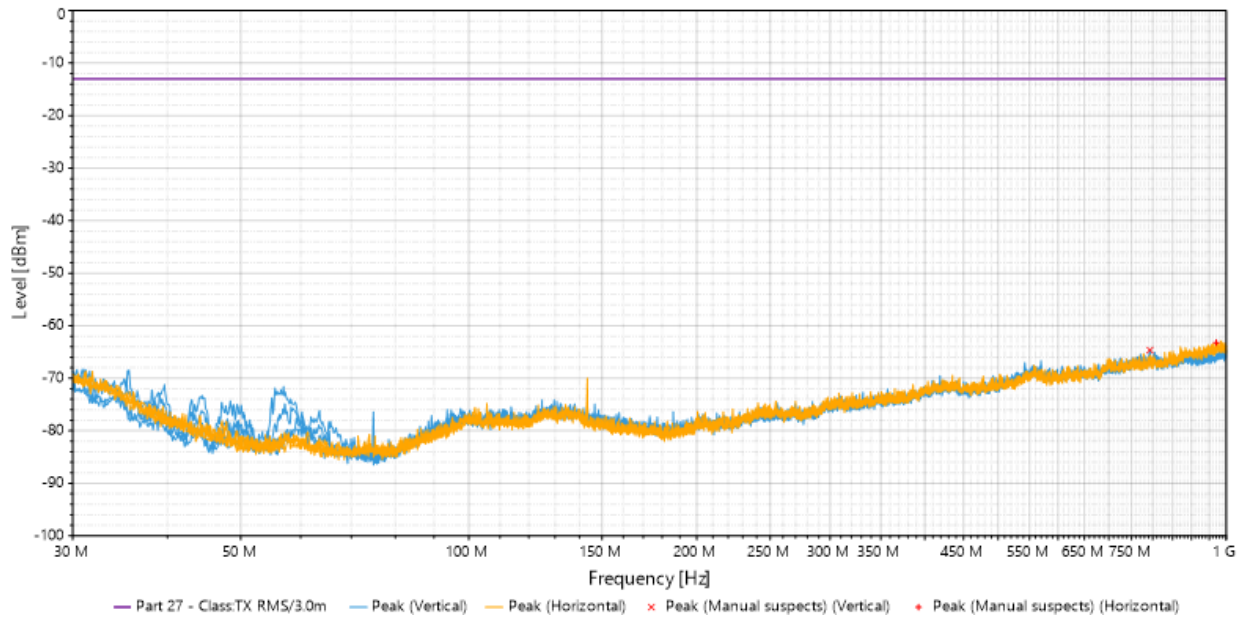


Figure 10. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 66 MidCh 1745 MHz (30 MHz – 1 GHz) Plot

Frequency (MHz)	Source	RMS (dBm)	RMS Limit (dBm)	Margin (dB)	Height (m)	Azimuth (°)	Pol.	RBW (Hz)	Meas. Time (s)	Correction (dB)
3486.6	RMS (PASS)	-58.516	-13	-45.516	2.944	84	Vertical	1000000	0.1	13.542
3486.6	RMS (PASS)	-51.228	-13	-38.228	1.056	209	Horizontal	1000000	0.1	13.447
4287.6	RMS (PASS)	-50.728	-13	-37.728	1.44	106	Vertical	1000000	0.1	13.982
4287.8	RMS (PASS)	-45.236	-13	-32.236	1.568	259	Horizontal	1000000	0.1	13.841

Table 12. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 66 MidCh 1745 MHz (1 – 18 GHz) Test Results

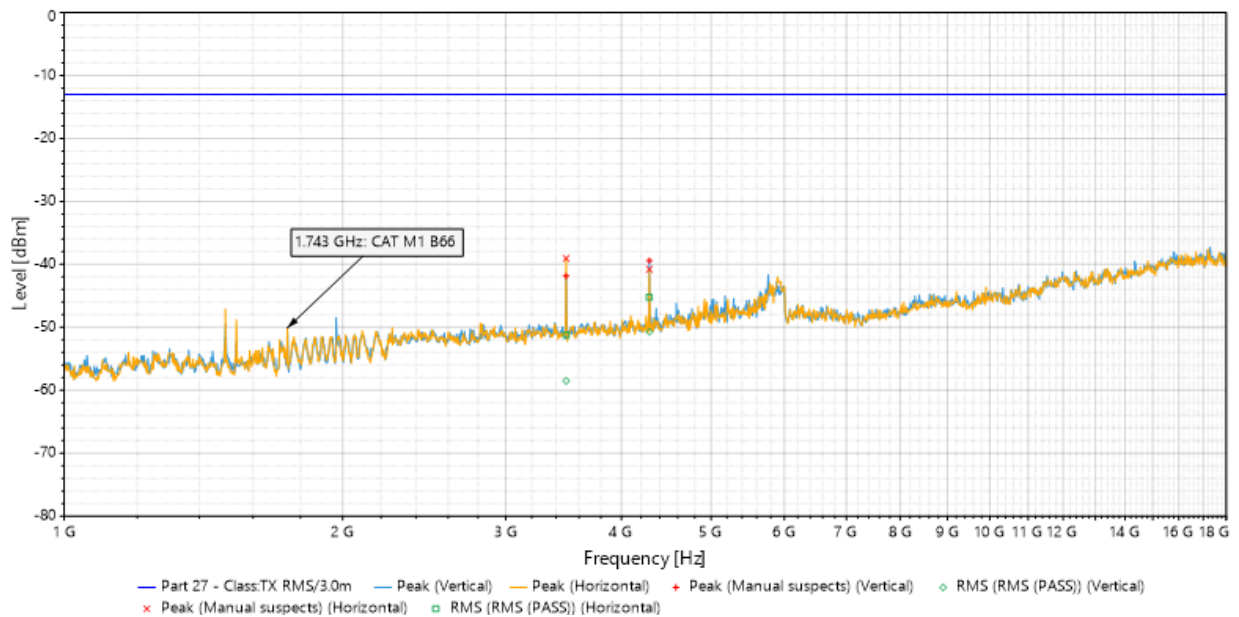


Figure 11. Radiated Spurious Emissions, LTE CAT-M1 QPSK Band 66 MidCh 1745 MHz (1 – 18 GHz) Plot

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

Test Name: FCC Part 24E and 27			Test Date(s): 10/17/2025		
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	08/15/2025	08/15/2026
1S2600	Bilog Antenna	Teseq	CBL6112D	06/10/2025	06/10/2027
1S2435	Horn Antenna	ETS-Lindgren	3117	03/17/2025	03/17/2027
1U0327	DRG Horn Antenna	A.H. Systems, Inc.	SAS-574	11/28/2024	11/28/2026
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 13. Radiated Spurious Emissions, Test Equipment

END OF REPORT