H.B. Compliance Solutions

Intentional Radiator Test Report

For the

Wilson Electronics.

WeBoost Sky

Tested under

The FCC Rules contained in Title 47 of the CFR, Part 20 and ISED RSS-131 Issue 4

For Mobile Wideband Consumer Signal Booster

Prepared for:

Wilson Electronics

1444 E. Venture Drive,

St. George, UT 84790

Prepared By:

H.B. Compliance Solutions

5005 S. Ash Avenue, Suite # A-10

Tempe, Arizona 85282

Reviewed By:

Hoosamuddin Bandukwala

Cert # ATL-0062-E

Engineering Statement: The measurements shown in this report were made in accordance with the procedure indicated, and the emissions from this equipment were found to be within the limits applicable. 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 measurement made, the equipment tested is capable of operation in accordance with the requirements of Part 20 of the FCC Rules under normal use and maintenance. All results contained herein relate only to the sample tested.

Report Status Sheet

Revision #	Report Date	Reason for Revision
Ø	February 16, 2026	Initial Issue

Table of Contents

EXECUTIVE SUMMARY

1. Testing Summary

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 20 and RSS-GEN Issue 5 and RSS-131 Issue 4. All tests were conducted using measurement procedure from ANSI C.63.26 2015 and FCC Signal Booster Measurement KDB 935210 D03 v04r04 Apr 03, 2020 as appropriate.

Test Name	Test Method/FCC Standard	ISED Standard	Result	Comments
Authorized Frequency Band	20.21(e)(3)	§4.7.2	Pass	
Maximum Power & Booster Gain	20.21(e)(8)(i)(B) 20.21(e)(8)(i)(C) 20.21(e)(8)(i)(D)	§6.2, §7.2 & §7.4	Pass	
Intermodulation	20.21(e)(8)(i)(F)	§7.6	Pass	
Out-of-Band Emissions	20.21(e)(8)(i)(E)	§7.5	Pass	
Conducted Spurious Emissions	2.1051	§7.5	Pass	
Noise Limits/Transmit power off mode	20.21(e)(8)(i)(A) 20.21(e)(9)(i)(I)	§7.1, §7.3 & §7.7	Pass	
Uplink Inactivity	20.21(e)(8)(i)(I) 20.21(e)(9)(i)(J)	§7.7	Pass	
Variable Booster Gain	20.21(e)(8)(i)(C)	§6.1.2 & §7.2	Pass	
Occupied Bandwidth	2.1049	RSS-Gen §6.7	Pass	
Oscillation Detection	20.21(e)(8)(ii)(A)	§6.1.1	Pass	
Radiated Spurious Emissions	2.1053	RSS-Gen §6.13	Pass	
Spectrum Block Filtering	20.21(e)(8)(i)(B)	§6.2	N/A	Applies to devices utilizing spectrum block filtering, In this case this is not applicable

EQUIPMENT CONFIGURATION

1. Overview

H.B. Compliance Solutions was contracted by Wilson Electronics to perform testing on WeBoost Sky under the purchase order number PO020914.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of the Wilson Electronics, WeBoost Sky.

The tests were based on FCC Part 20 Rules. The tests described in this document were formal tests as described with the objective of the testing was to evaluate compliance of the Equipment Under Test (EUT) to the requirements of the aforementioned specifications. Wilson Electronics should retain a copy of this document and it should be kept on file for at least five years after the manufacturing of the EUT has been permanently discontinued. The results obtained relate only to the item(s) tested.

Product Name:	WeBoost Sky
Model(s) Tested:	470086
FCC ID:	PWO086
IC ID:	4726A-086
Supply Voltage Input:	Primary Power: 5.0 Vdc
Frequency Range:	Uplink 1850-1915MHz Downlink 1930-1995MHz
No. of Channels:	N/A
Type(s) of Modulation:	CDMA, GSM, EDGE, HSPA, EVDO, LTE
Range of Operation Power:	0.388 – 0.41W
Emission Designator:	F9W, GXW, G7W & G7D, W7D
Channel Spacing(s)	N/A
Test Item:	Pre-Production
Type of Equipment:	Mobile Wideband Consumer Booster
Firmware Version:	V4.04r1.04
Antenna Requirement	External Server Port, Internal Donor Port
Environmental Test Conditions:	Temperature: 15-35°C Humidity: 30-60% Barometric Pressure: 860-1060 mbar
Modification to the EUT:	None
Evaluated By:	Staff at H.B. Compliance Solutions
Test Date(s):	February 05-10, 2026

2. Test Facility

All testing was performed at H.B. Compliance Solutions. This facility is located at 5005 S. Ash Avenue, Suite # A-10, Tempe AZ-85282. All equipment used in making physical determination is accurate and bears recent traceability to the National Institute of Standards and Technology.

Radiated Emissions measurements from 30MHz to 1GHz were performed in a GTEM chamber (equivalent to an Open Area Test Site). Radiated Emission above 1GHz were performed on an Open Area Test Site (OATS). In accordance with §2.948(a)(3), a complete site description is contained at H.B. Compliance Solutions.

Test facility H.B. Compliance Solutions is an ANAB accredited test site. The ANAB certificate number is L2458. The scope of accreditation can be found on ANAB website www.anab.org

FCC Registered Number: 738876

ISED Test Site Registration number is 9481A

3. Description of Test Sample

The Wilson WeBoost Sky is a mobile bi-directional signal booster that improves RF coverage for areas in which low signal strength is a problem when using a host device inside a vehicle or building. The components are contained in a plastic enclosure.

4. Equipment Configuration

Ref. ID	Name / Description	Model Number	Serial Number
# 1	WeBoost Sky	470086	N/A

Table 1. Equipment Configuration

5. Support Equipment

All support equipment supplied is listed in the following Support Equipment List.

Ref ID	Name / Description	Manufacturer	Model #	Serial #
# 2	DC 5V Bias T	Wilson Electronics	-	-

Table 2. Support Equipment

6. Ports and Cabling Information

Ref ID	Port name on the EUT	Cable Description	Qty.	Length (m)	Shielded? (Y/N)	Termination Box ID & Port ID
# 3	Power	2 wire	1	1.5	N	# 2
# 4	Server Port	SMA	1	0.3	N	# 2

Table 3. Ports and Cabling Information

7. Method of Monitoring EUT Operation

A test receiver will be used to monitor the data transmission from the EUT.

8. Mode of Operation

The EUT will be configured as defined in each section of this document. These settings were created for testing purpose only.

9. Modifications

9.1 Modifications to EUT

A conducted SWF antenna port was provided to perform conducted measurements on the Donor Port.

9.2 Modifications to Test Standard

No Modifications were made to the test standard.

10. Disposition of EUT

The test sample including all support equipment submitted to H.B Compliance Solutions for testing will be returned to Wilson Electronics upon completion of testing & certification.

Criteria for Intentional Radiators

1. Authorized Frequency Band

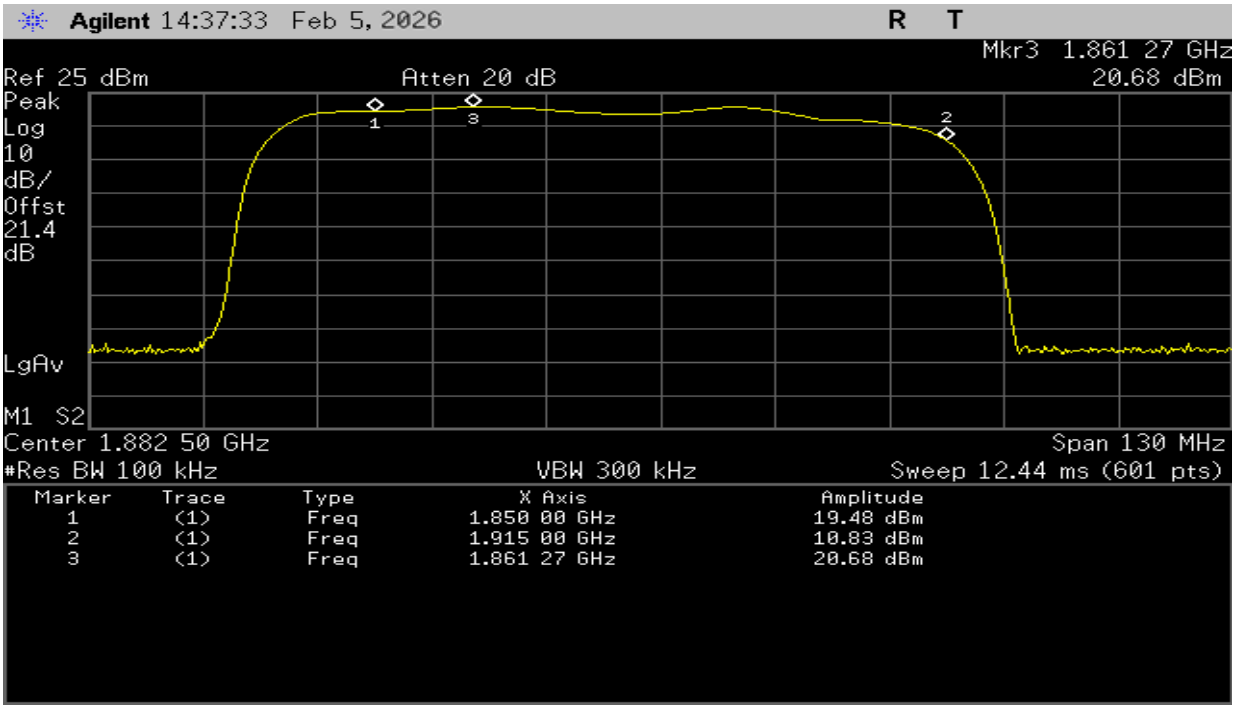
Test Requirement(s):	§20.21(e)(3) and RSS-131 §4.7.2	**Test Engineer(s):**	Sean E.
Test Results:	Pass	**Test Date(s):**	February 05, 2026

Test Procedures: As required by 47 CFR §20.21(e)(3) and RSS-131 §4.7.2, Authorized frequency band measurements were made at the RF output terminals of the EUT.

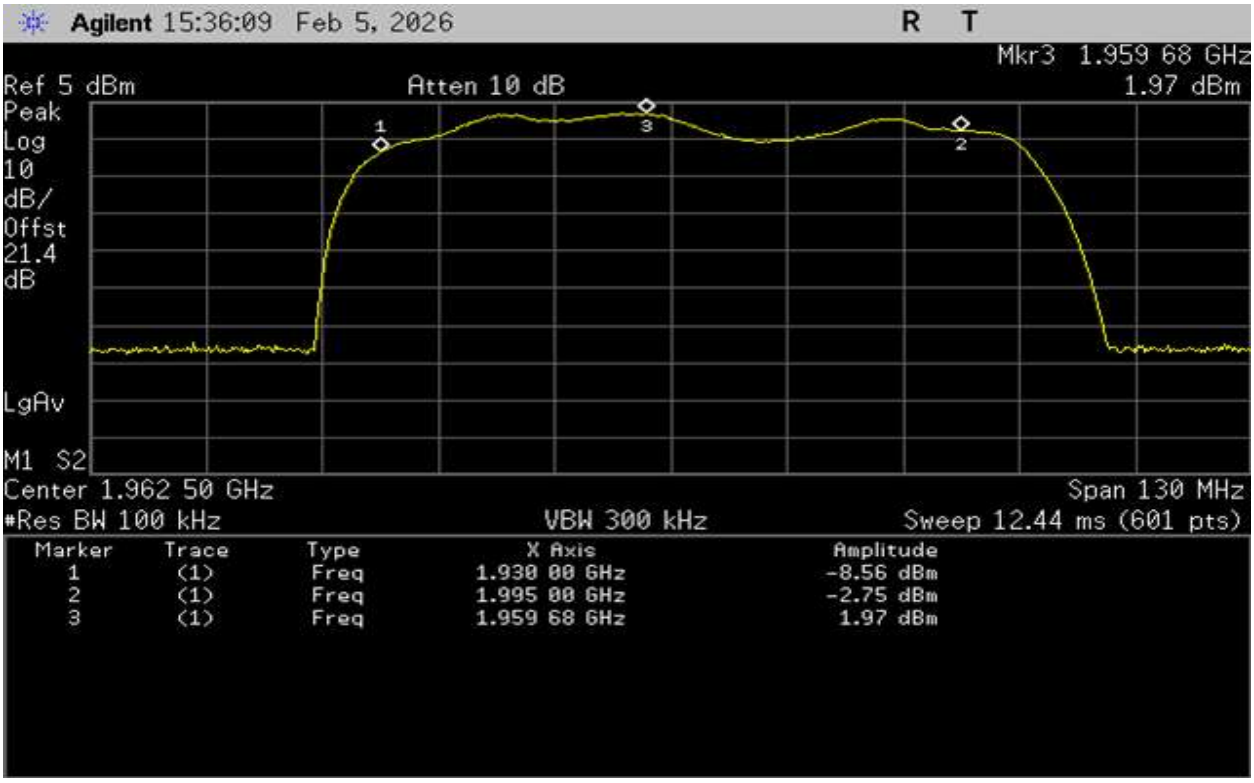
The EUT was connected through an attenuator to a Spectrum Analyzer. A signal generator was used for the input to the EUT to provide a CW signal swept over twice the width of each uplink and downlink operational band. Measurements were made at the low and high channels of each uplink and downlink frequency band.

Test Setup:

Figure 1 – Band Verification



Plot 1 – 1850-1915MHz Band – Uplink



Plot 2 – 1930-1995MHz Band – Downlink

2. Maximum Power and Gain

Test Requirement(s):	§20.21(e)(8)(i)(D) and RSS-131 §6.2, §7.2 & §7.4	Test Engineer(s):	Sean E.
Test Results:	Pass	Test Date(s):	February 05, 2026

Test Procedure: As required by 47 CFR 20.21(e)(8)(i)(D) and RSS-131 §6.2, §7.2 & §7.4: Maximum power measurements were made at the RF output terminals of the EUT.
The EUT was connected as per Figure 1 through an attenuator to a Spectrum Analyzer. A signal generator was used for the input to the EUT to provide a GSM & AWGN with 99% of 4.1MHz bandwidth signal tuned to the highest gain frequency measured in Authorized frequency band test of each uplink and downlink operational band.

KDB Procedure 935210 D03 §7.2.2 and §7.3 was used to measure the maximum power of Mobile Direct Connect Booster and to calculate the maximum gain.

Test Results:

Frequency (MHz)	Input Level (dBm)	Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Lower Limit (dBm)	Upper Limit (dBm)
1850-1915 GSM	-21.9	25.89	1.7	27.59	17	30
1850-1915 AWGN	-20.9	26.13	1.7	27.83	17	30

Table 4 - Uplink Max Power Test Results

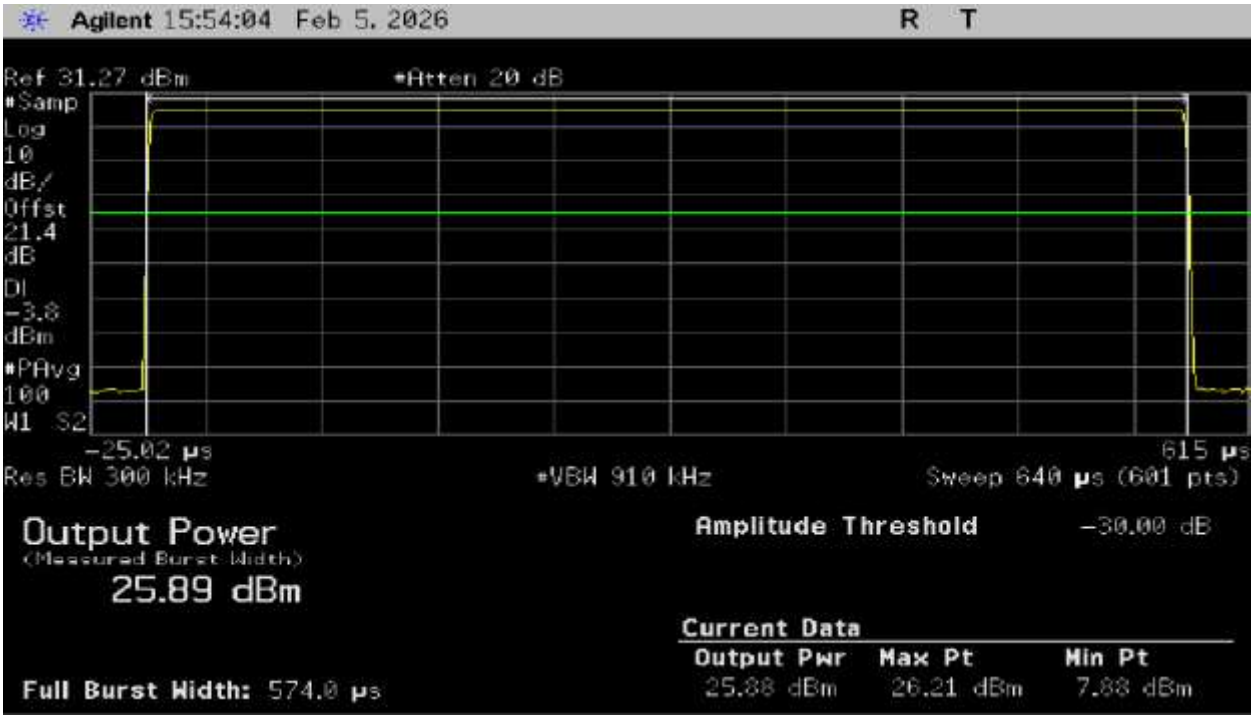
Frequency (MHz)	Input Level (dBm)	Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Upper Limit (dBm)
1930-1995 GSM	-42.5	4.75	2.6	7.35	17
1930-1995 AWGN	-42.3	5.07	2.6	7.67	17

Table 5 - Downlink Max Power Test Results

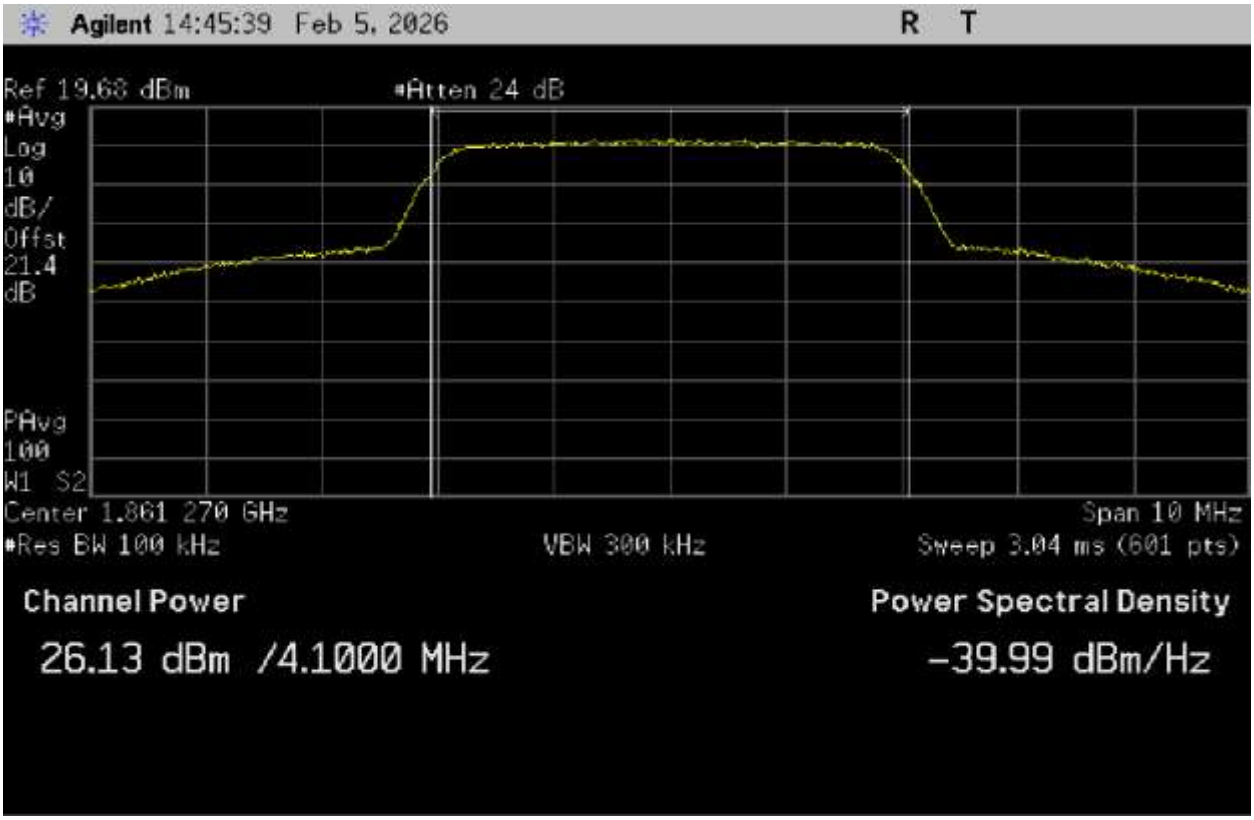
Modulation	Uplink Frequency (MHz	Downlink Frequency (MHz)	Uplink Gain (dB)	Uplink Limit (dB)	Downlink Gain (dB)	Downlink Limit (dB)	UL Gain -DL Gain (Delta in dB)	Limit (dB)	Margin (dB)
GSM	1861.27	1959.68	47.79	50	47.25	50	0.54	9	-8.46
AWGN	1861.27	1959.68	47.03	50	47.37	50	0.34	9	-8.66

Table 6 - Maximum Booster Gain Test Results

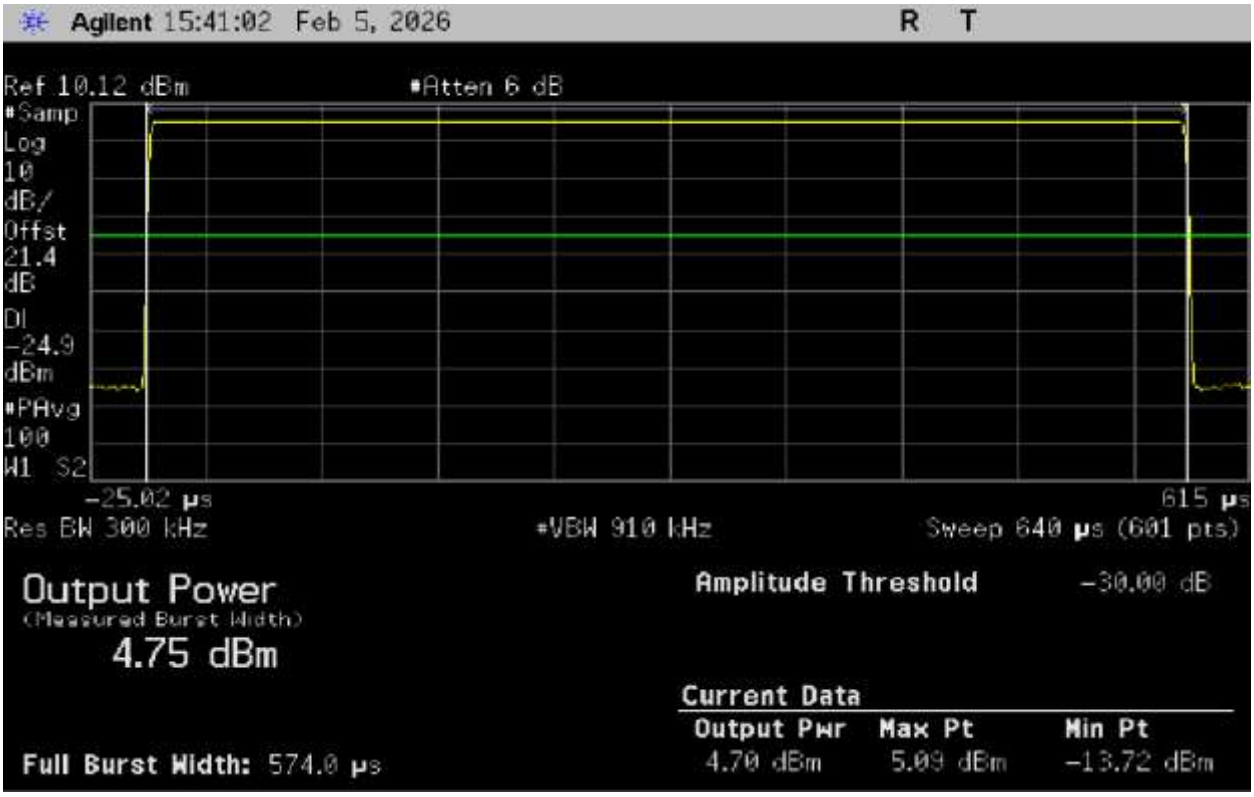
Statement: Device complies with 10dB above AGC power level for both uplink and downlink bands



Plot 3 - 1850-1915MHz Band – Uplink (GSM Output Power)



Plot 4 - 1850-1915MHz Band – Uplink (AWGN Output Power)



Plot 5 – 1930-1995MHz Band – Downlink (GSM Output Power)

Plot 6 – 1930-1995MHz Band – Downlink (AWGN Output Power)

3. Intermodulation

Test Requirement(s):	CFR §20.21(e)(8)(i)(F) and RSS-131 §7.6	Test Engineer(s):	Sean E.
Test Results:	Pass	Test Date(s):	February 05, 2026

Test Procedures: As required by 47 CFR §20.21(e)(8)(i)(F) and RSS-131 §7.6, Intermodulation measurements were made at the RF output terminals of the EUT.

The EUT was connected through an attenuator to a Spectrum Analyzer. Signal generator was setup for a two-tone CW signal with 300kHz offset below and above the operational band frequency. Measurements were made as per KDB 935210 D03 §7.4 procedure.

Detector Setting	Resolution Bandwidth	Video Bandwidth	Span
RMS	3kHz	≥3 x RBW	5MHz

Table 7 - Analyzer Settings

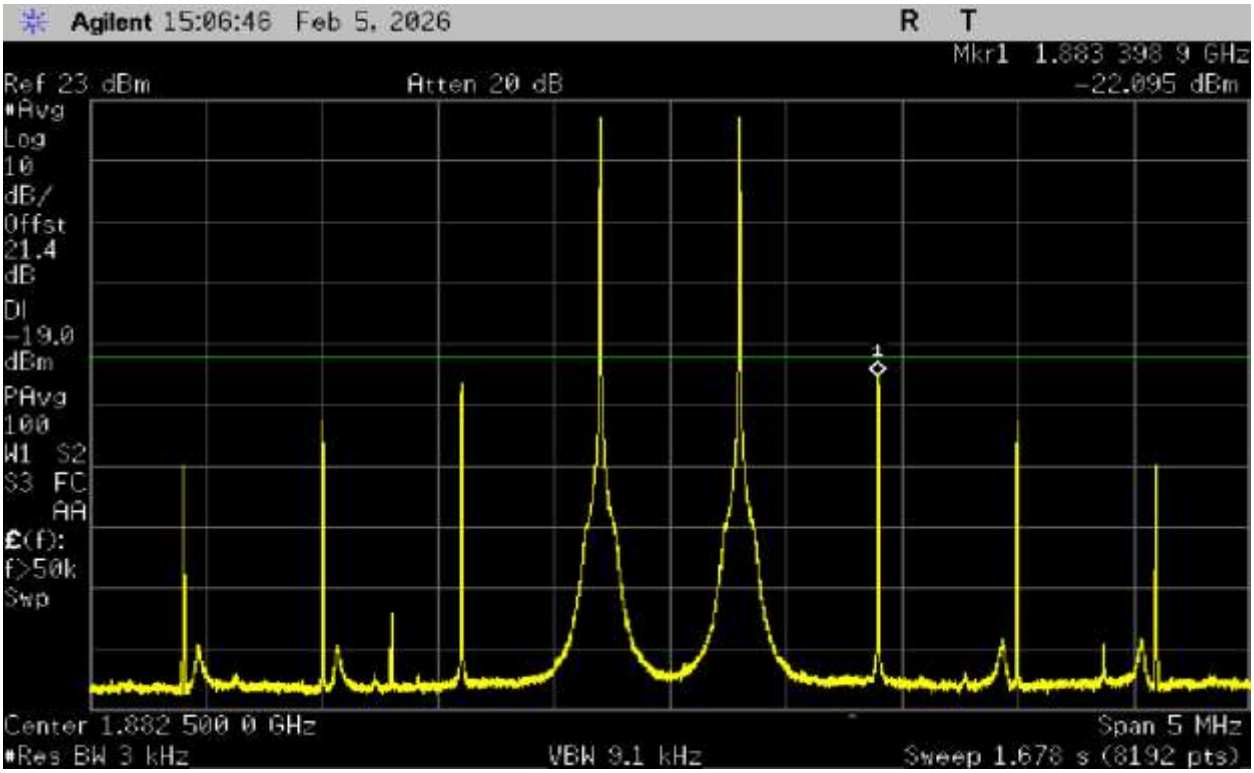
Frequency Band (MHz)	Intermodulation Level (dBm)	Limit (dBm)	Margin (dB)
1850-1915	-22.09	-19	-3.09

Table 8 - Summary Uplink Intermodulation, Test Results

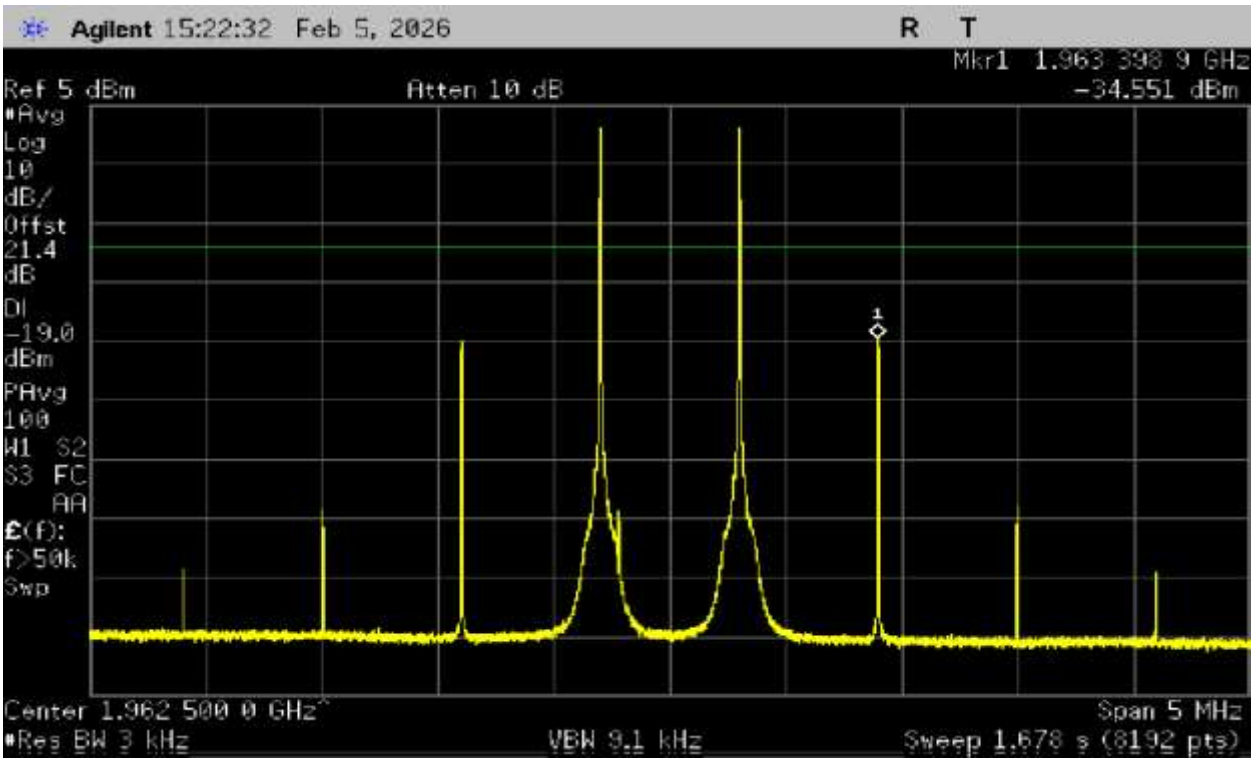
Frequency (MHz)	Intermodulation Level (dBm)	Limit (dBm)	Margin (dB)
1930-1995	-34.55	-19	-15.55

Table 9 - Summary Downlink Intermodulation Test Results

Statement: Device complies with 10dB above AGC power level for both uplink and downlink bands



Plot 7 – 1850-1915MHz Band – Uplink



Plot 8 – 1930-1995MHz Band – Downlink

4. Out-of-band emissions

Test Requirement(s):	§20.21§(8)(i)(E) and RSS-131 §7.5	Test Engineer(s):	Sean E.
Test Results:	Pass	Test Date(s):	February 06, 2026

Test Procedures:

As required by 47 CFR §20.21(8)(i)(E) and RSS-131 §7.5, Out-of-band emissions measurements were made at the RF output terminals of the EUT.

The EUT was connected through an attenuator to a Spectrum Analyzer as per figure 1. Signal generator was setup to produce GSM, LTE & CDMA signals for all uplink and downlink bands. Measurements were made as per procedure defined in KDB 935210 D03 §7.5.

Out of Band Emission Limits = P1 - 6 – (43 _ 10log (P2)) = -19dBm

Where P1 = Power in dBm and P2 = Power in Watts

Frequency Band (MHz)	Band Edge	Measured Level (dBm)	Limit (dBm)
1850-1915	Lower	-21.36	-19
1850-1915	Upper	-23.43	-19

Table 10 - GSM Uplink – Out-of-band Emissions, Test Results

Frequency Band (MHz)	Band Edge	Measured Level (dBm)	Limit (dBm)
1850-1915	Lower	-19.36	-19
1850-1915	Upper	-42.06	-19

Table 11 - CDMA Uplink – Out-of-band Emissions, Test Results

Frequency Band (MHz)	Band Edge	Measured Level (dBm)	Limit (dBm)
1850-1915	Lower	-19.83	-19
1850-1915	Upper	-40.33	-19

Table 12 - LTE Uplink – Out-of-band Emissions, Test Results

Frequency Band (MHz)	Band Edge	Measured Level (dBm)	Limit (dBm)
1930-1995	Lower	-43.38	-19
1930-1995	Upper	-29.96	-19

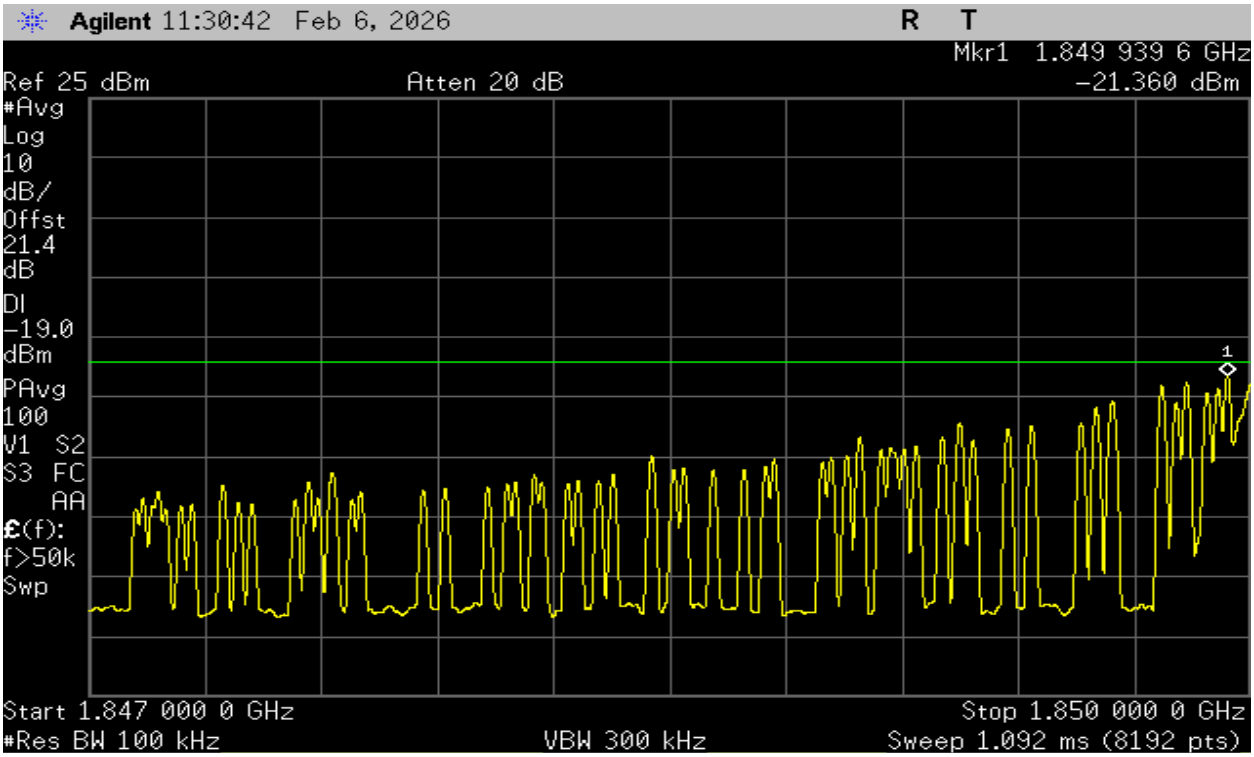
Table 13 - GSM Downlink – Out-of-band Emissions, Test Results

Frequency Band (MHz)	Band Edge	Measured Level (dBm)	Limit (dBm)
1930-1995	Lower	-60.81	-19
1930-1995	Upper	-53.02	-19

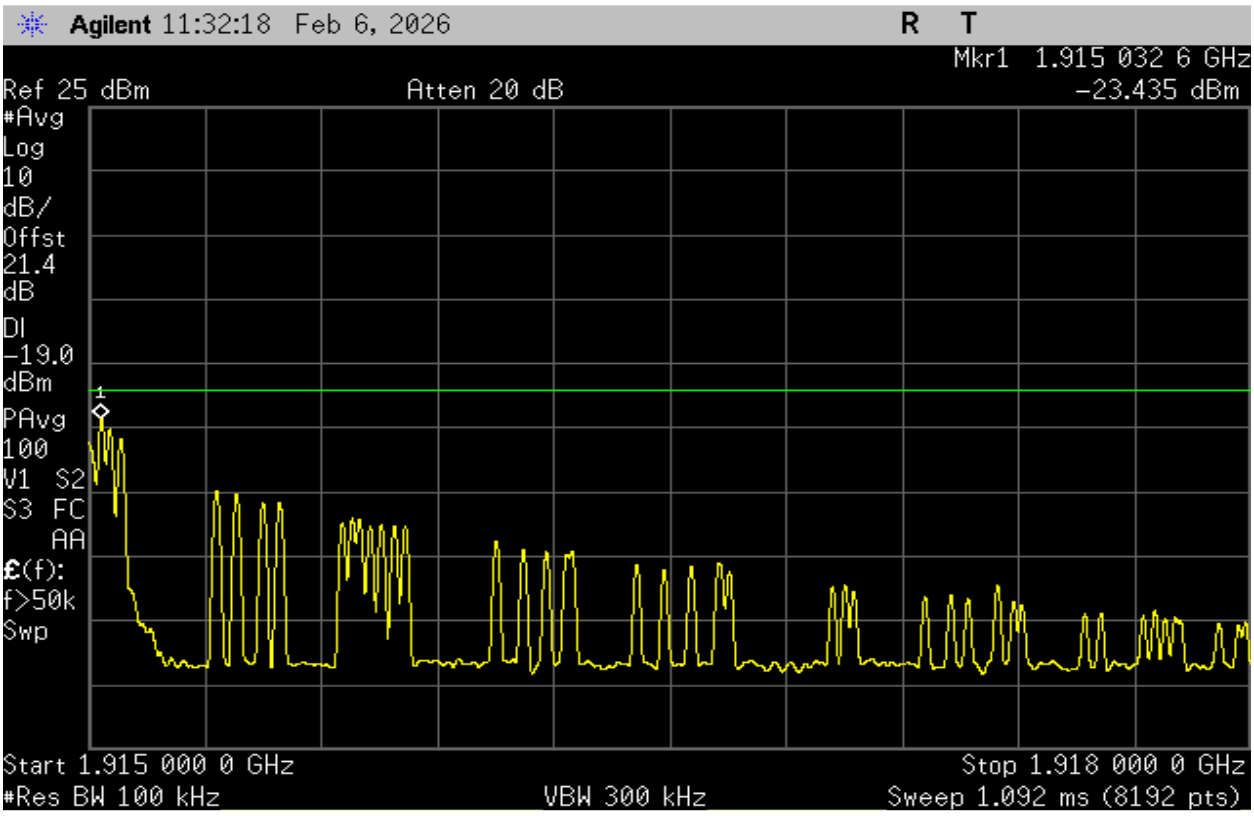
Table 14 - CDMA Downlink – Out-of-band Emissions, Test Results

Frequency Band (MHz)	Band Edge	Measured Level (dBm)	Limit (dBm)
1930-1995	Lower	-58.31	-19
1930-1995	Upper	-49.40	-19

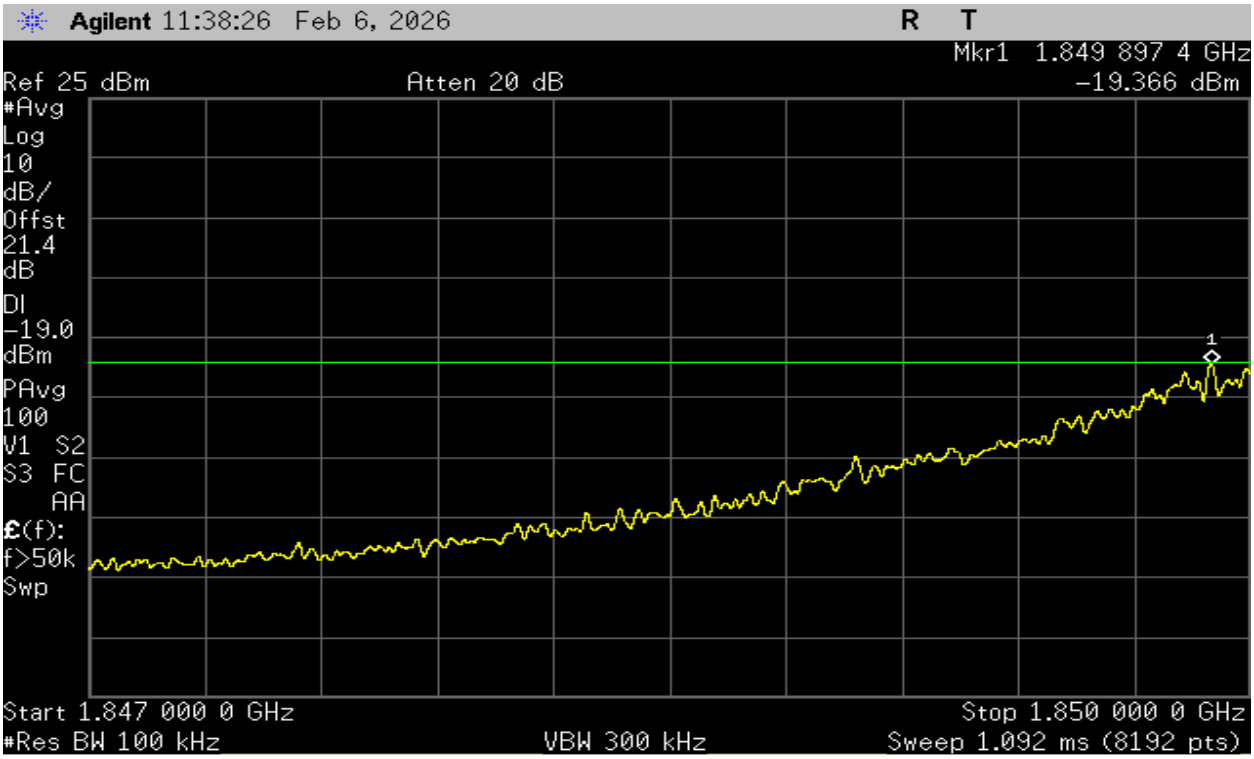
Table 15 - LTE Downlink – Out-of-band Emissions, Test Results



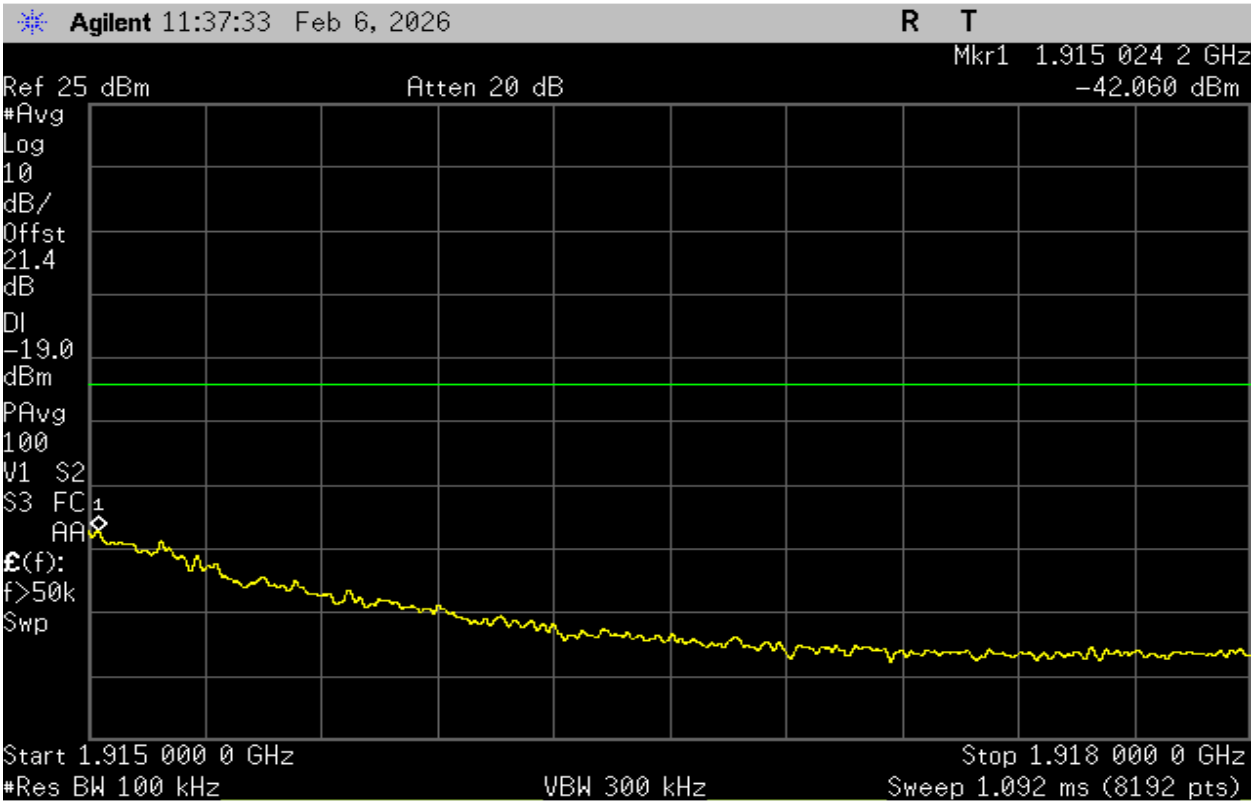
Plot 9 – 1850-1915MHz Band – GSM Uplink Lower Band Edge



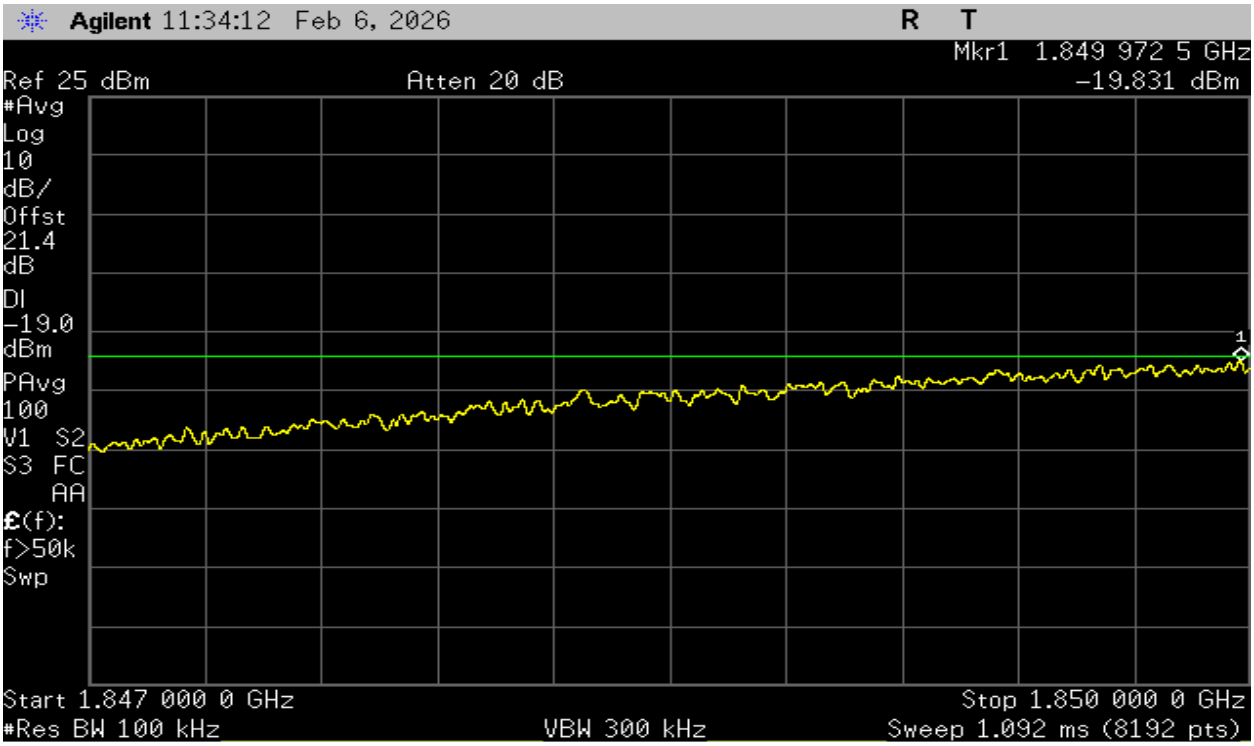
Plot 10 – 1850-1915MHz Band – GSM Uplink Upper Band Edge



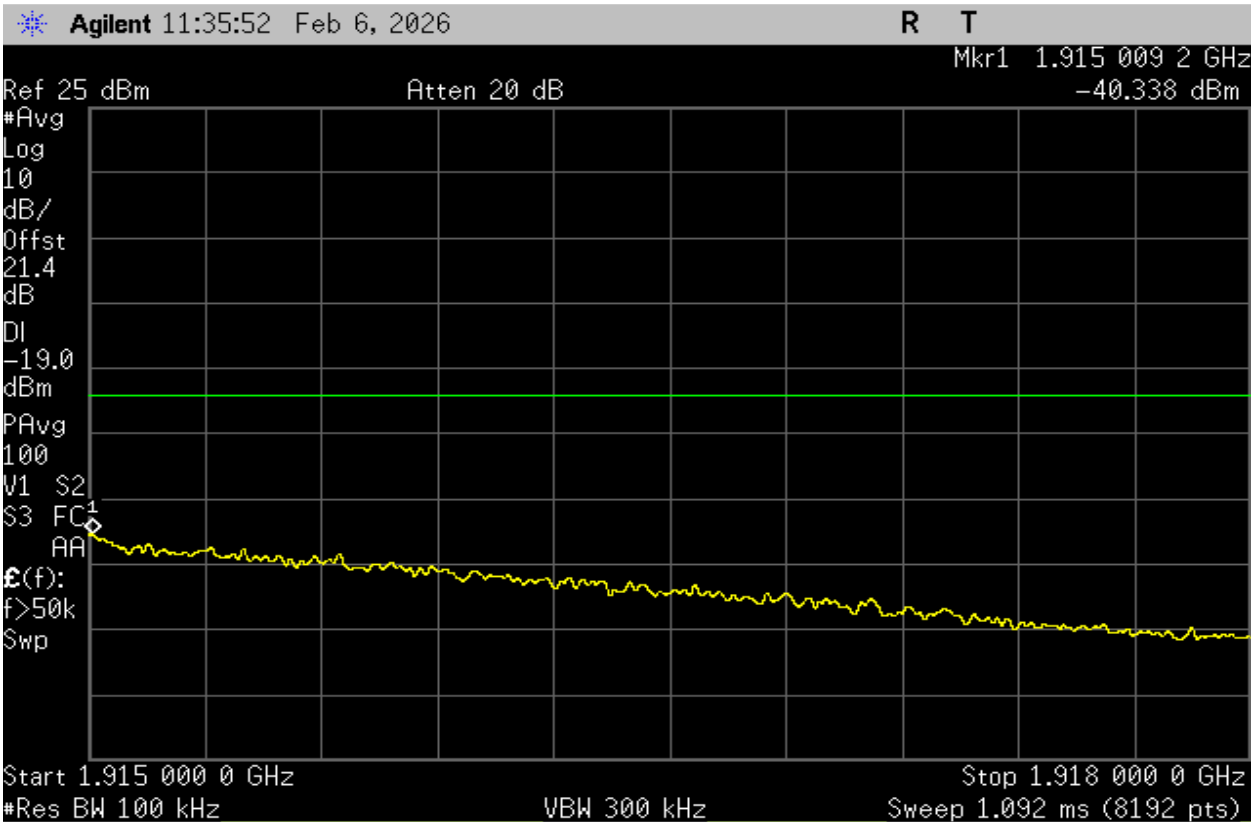
Plot 11 – 1850-1915MHz Band – CDMA Uplink Lower Band Edge



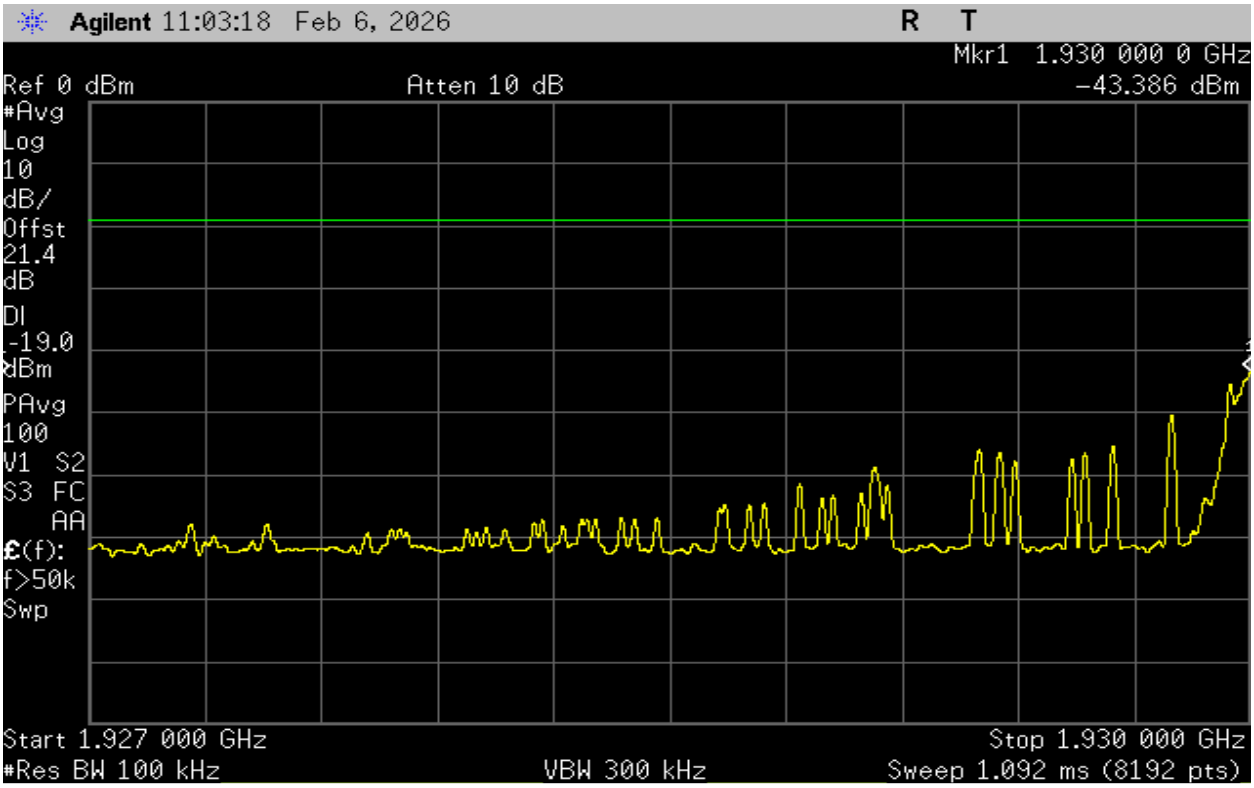
Plot 12 – 1850-1915MHz Band – CDMA Uplink Upper Band Edge



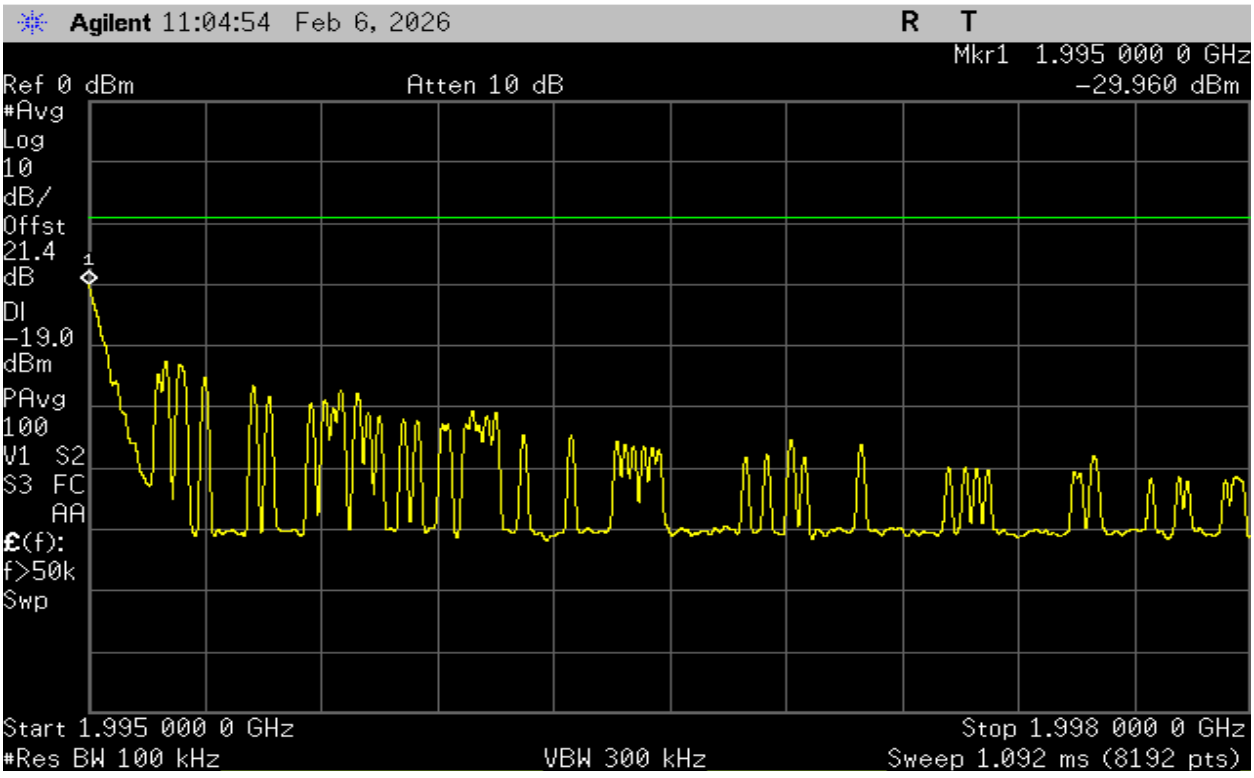
Plot 13 – 1850-1915MHz Band – LTE Uplink Lower Band Edge



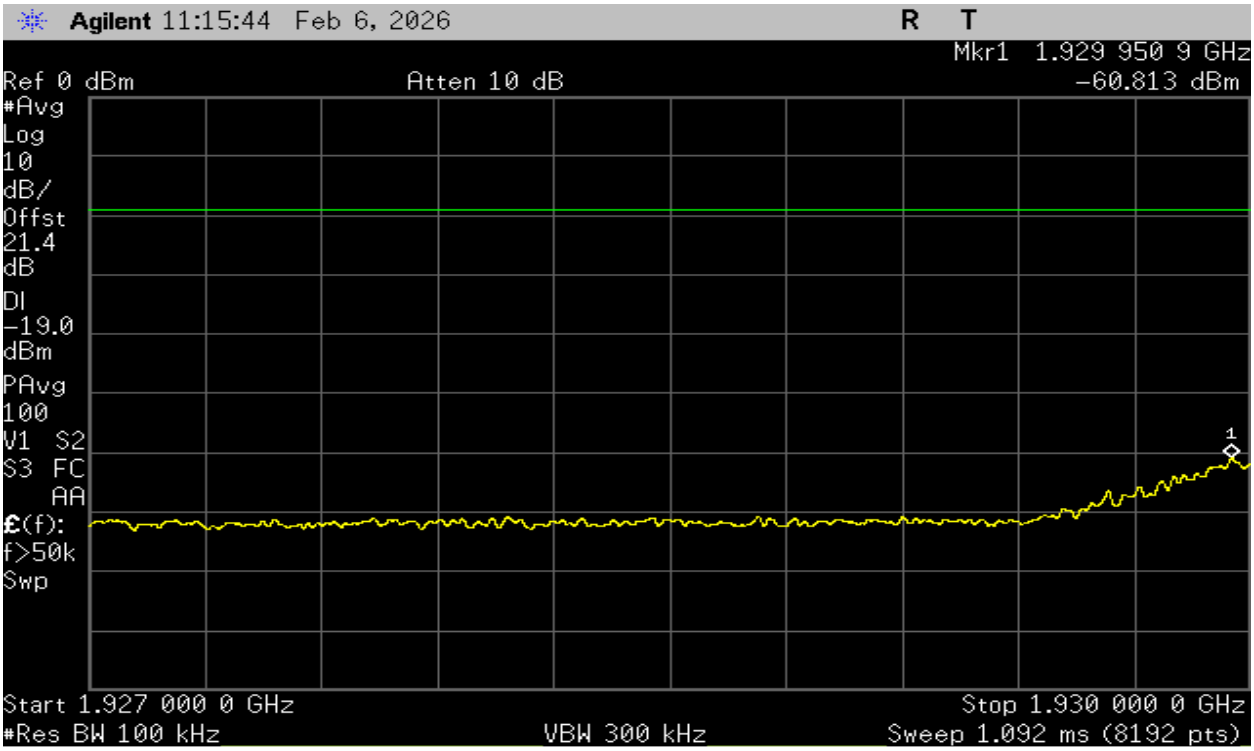
Plot 14 – 1850-1915MHz Band – LTE Uplink Upper Band Edge



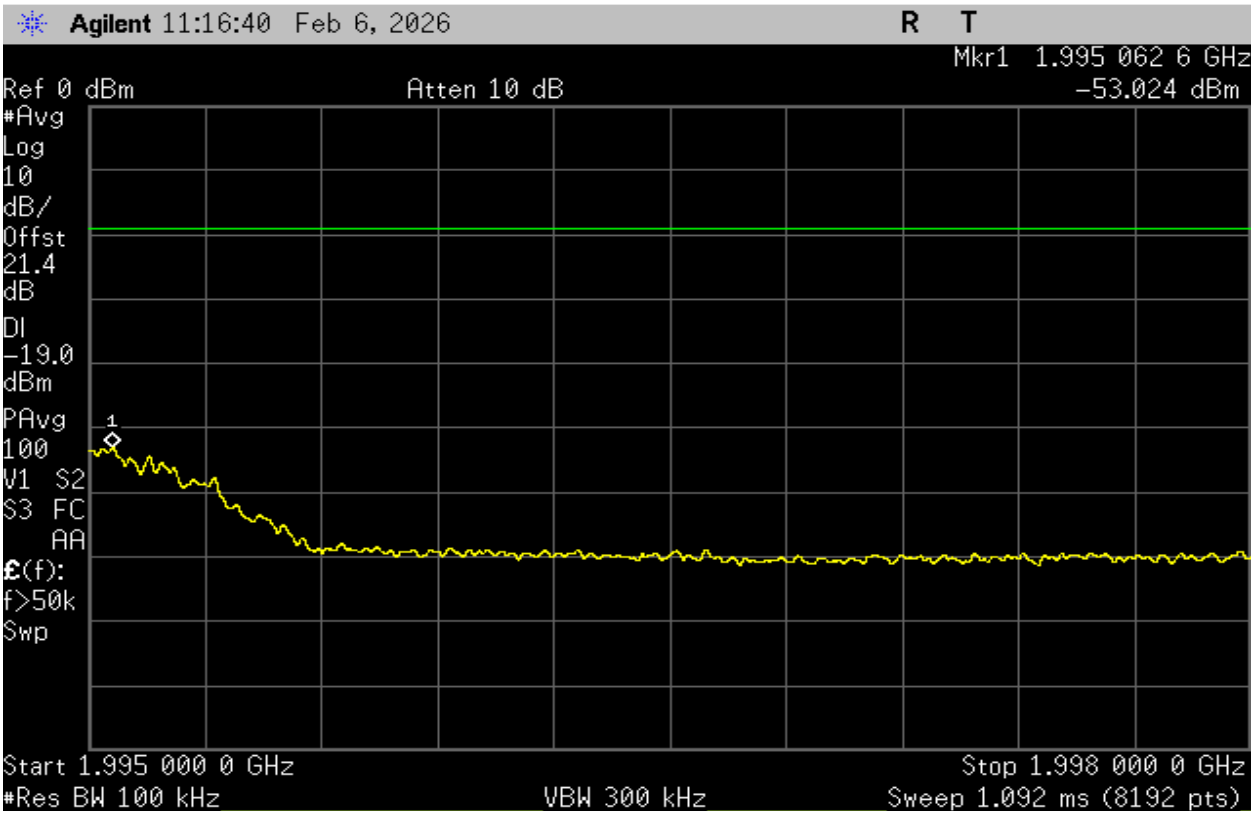
Plot 15 – 1930-1995MHz Band – GSM Downlink Lower Band Edge



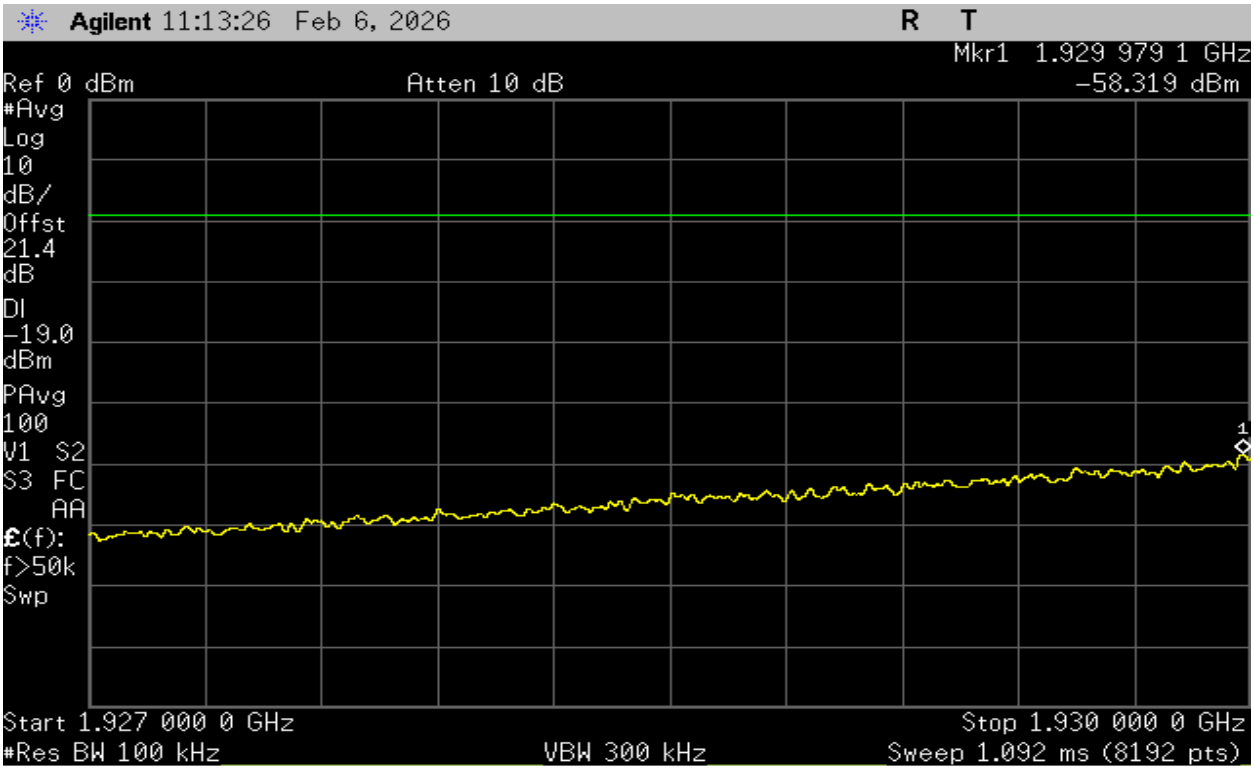
Plot 16 – 1930-1995MHz Band – GSM Downlink Upper Band Edge



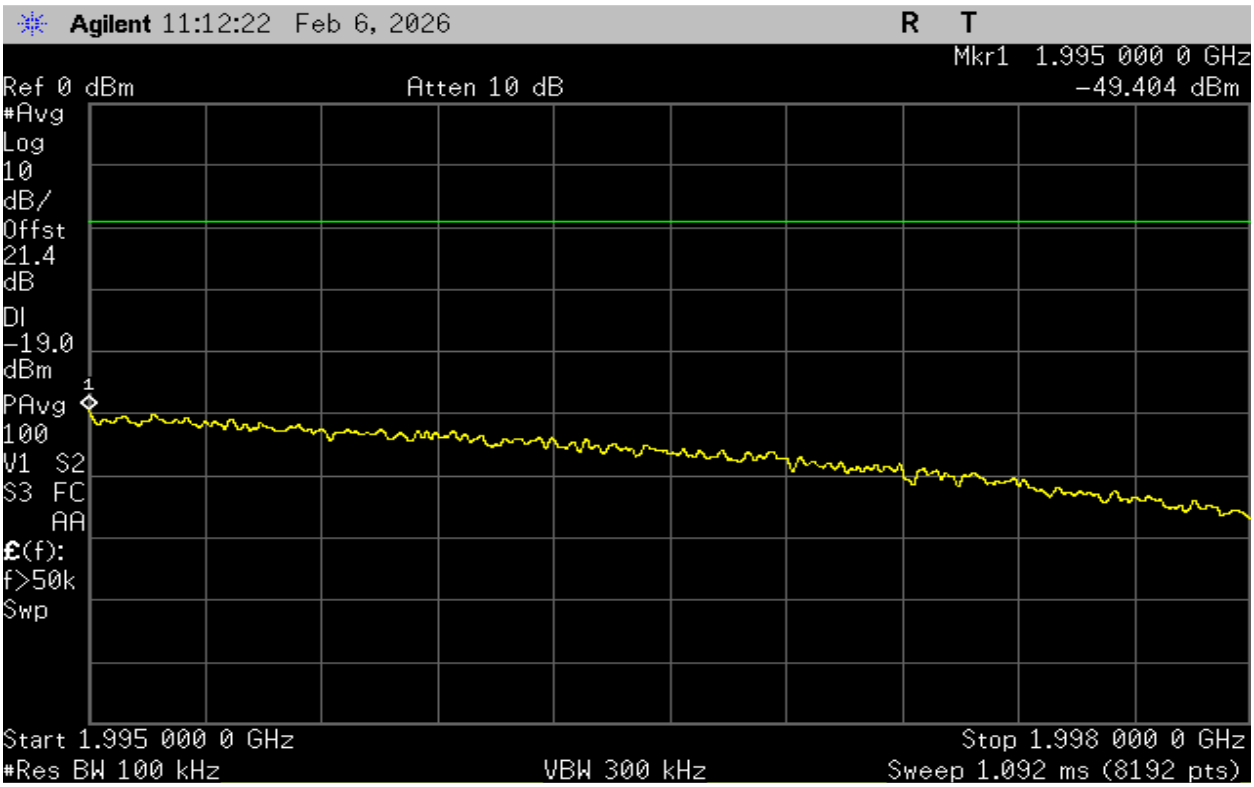
Plot 17 – 1930-1955MHz Band – CDMA Downlink Lower Band Edge



Plot 18 – 1930-1955MHz Band – CDMA Downlink Upper Band Edge



Plot 19 – 1930-1995MHz Band – LTE Downlink Lower Band Edge



Plot 20 – 1930-1995MHz Band – LTE Downlink Upper Band Edge

5. Conducted Spurious Emissions

Test Requirement(s):	§2.1051 and RSS-130 §4.7.1, 4.7.2, RSS-132 §5.5, RSS-133 §6.5.1 & RSS-139 §5.6	**Test Engineer(s):**	Sean E.
Test Results:	Pass	**Test Date(s):**	February 06, 2026

Test Procedures: As required by 47 CFR §2.1051, RSS-130, RSS-132 RSS-133 and RSS-139, Spurious emissions measurements were made at antenna terminals in accordance with the procedures of the KDB 935210 D03.

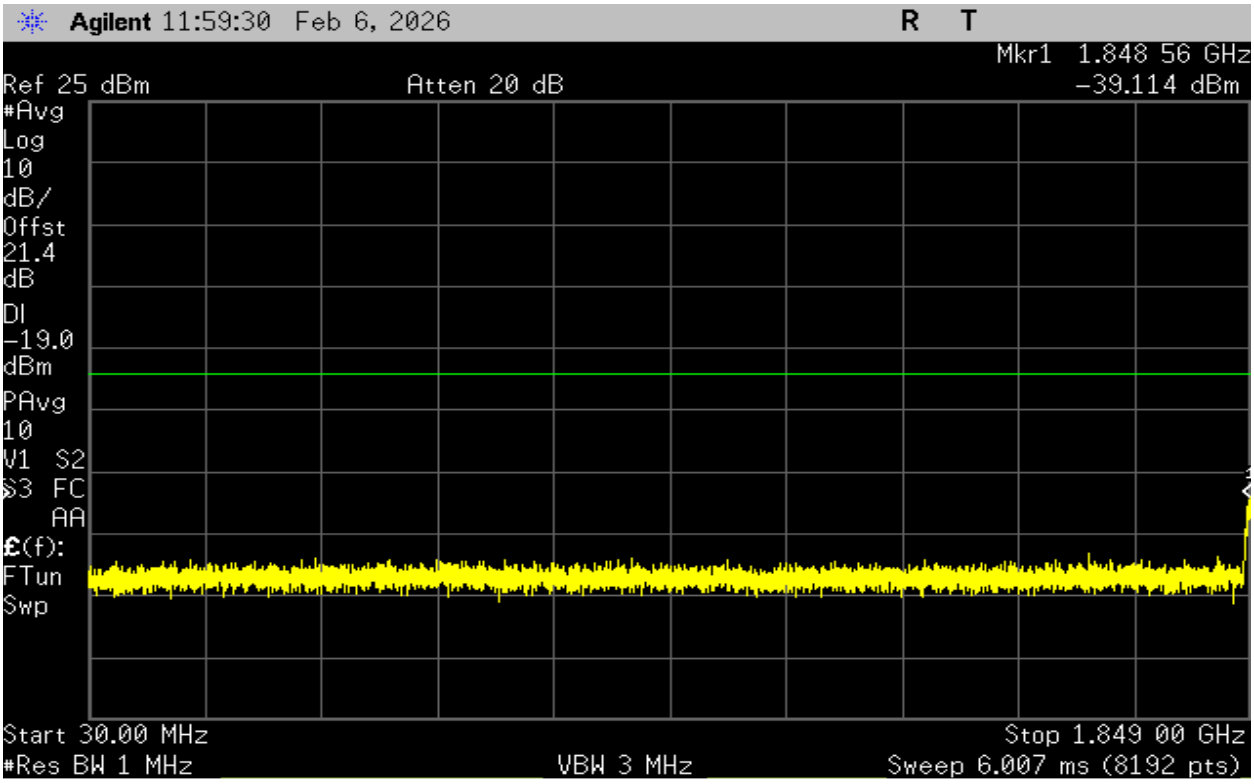
The EUT was connected through an attenuator to a spectrum analyzer. A signal generator was used at the input of the EUT to produce a 4.1MHz AWGN signal at the center of each CMRS operating band. Measurements were made at the center frequency of the uplink and downlink operational bands. The required minimum resolution bandwidth was used as stated by different rule part (i.e. Part 22, 27, 24 etc.)

Frequency Band (MHz)	Measured Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin
1850-1915	1848.56	-39.11	-13	-26.11

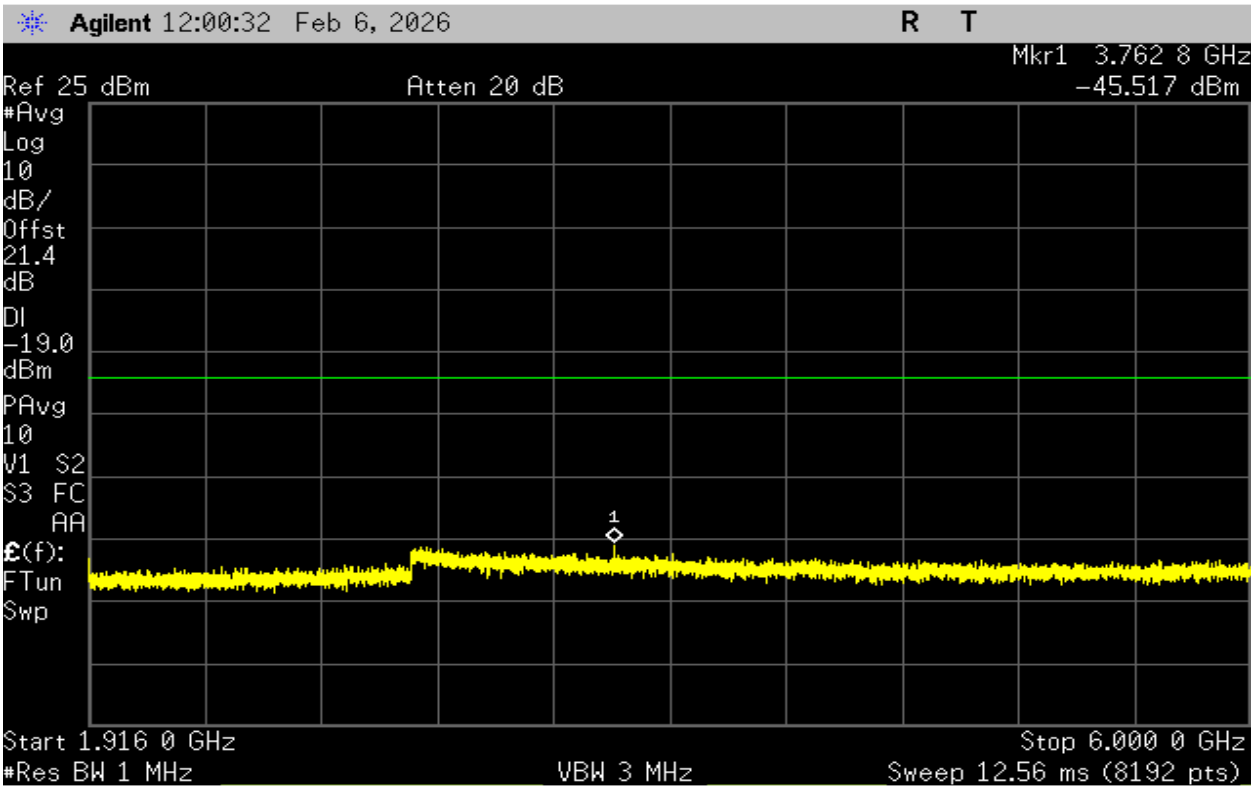
Table 16 – Conducted Spurious Emission Data – Uplink Summary

Frequency Band (MHz)	Measured Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin
1930-1995	19307	-52.00	-13	-39.00

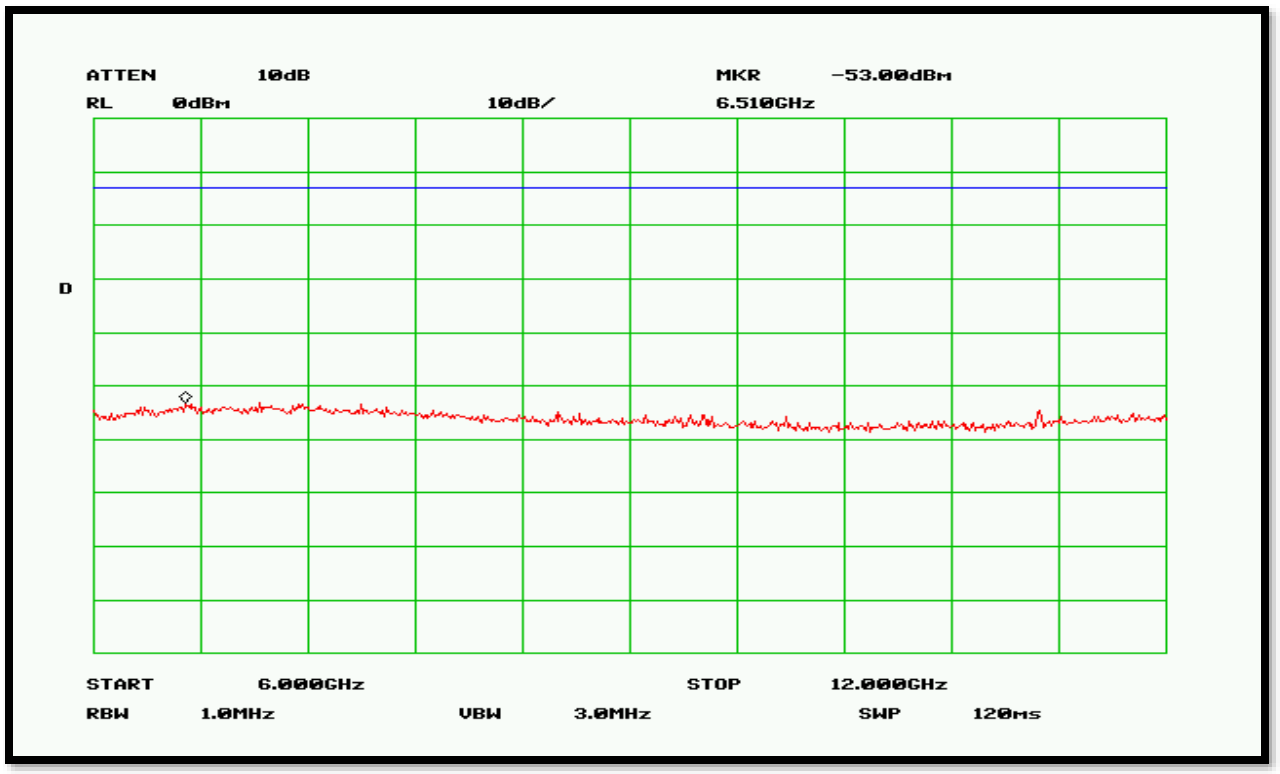
Table 17 – Conducted Spurious Emission Data – Downlink Summary



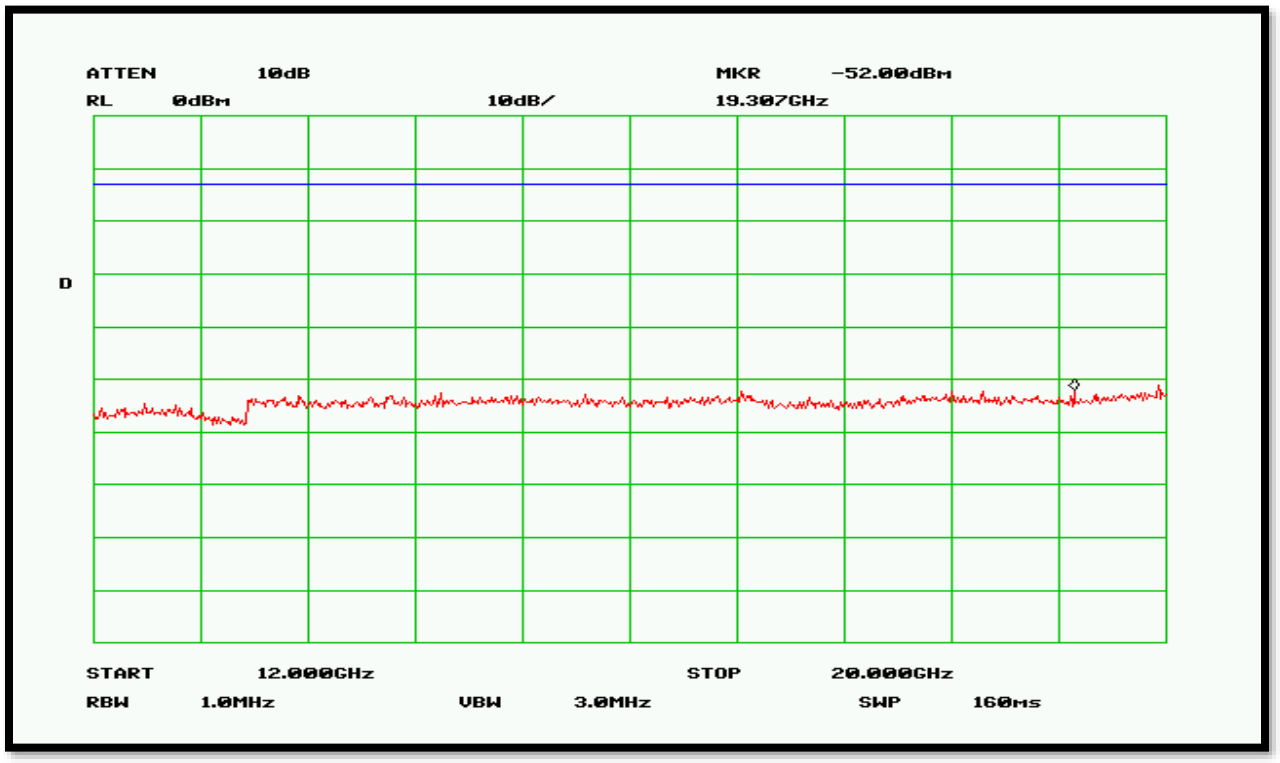
Plot 21 – 1850-1915MHz Band – Uplink



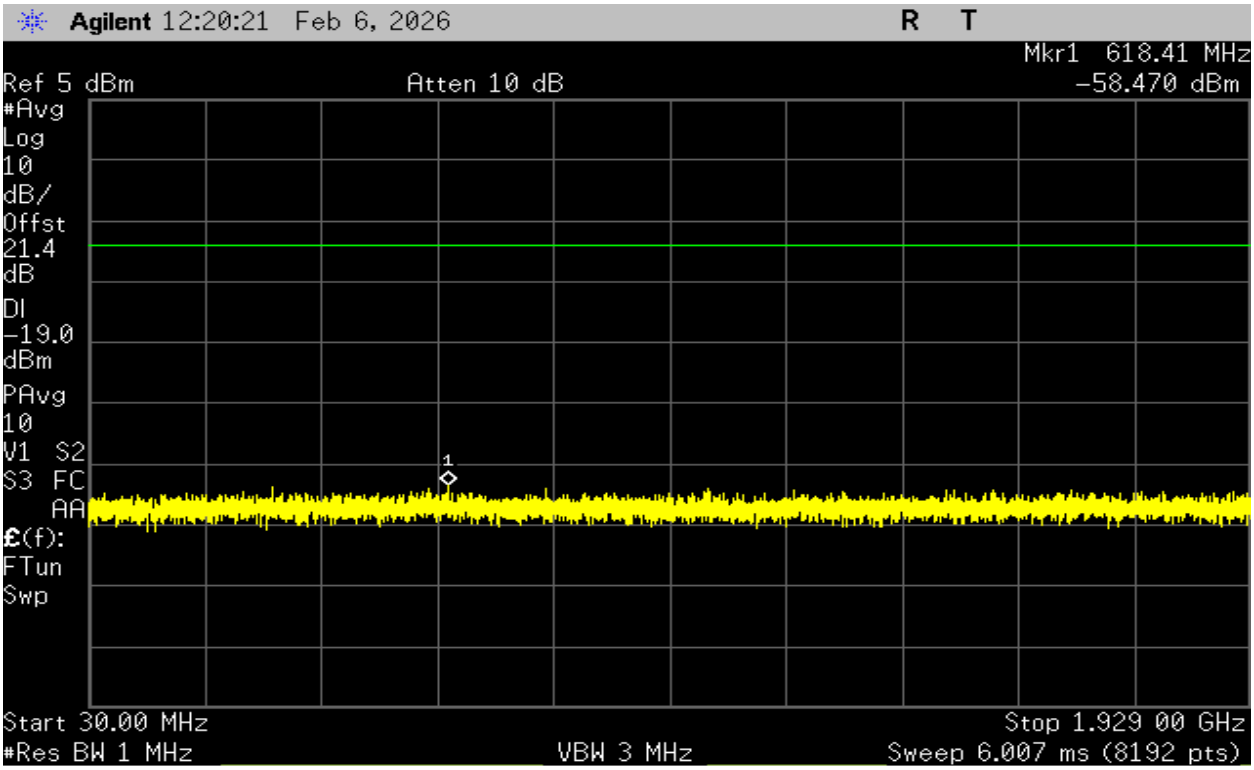
Plot 22 – 1850-1915MHz Band – Uplink



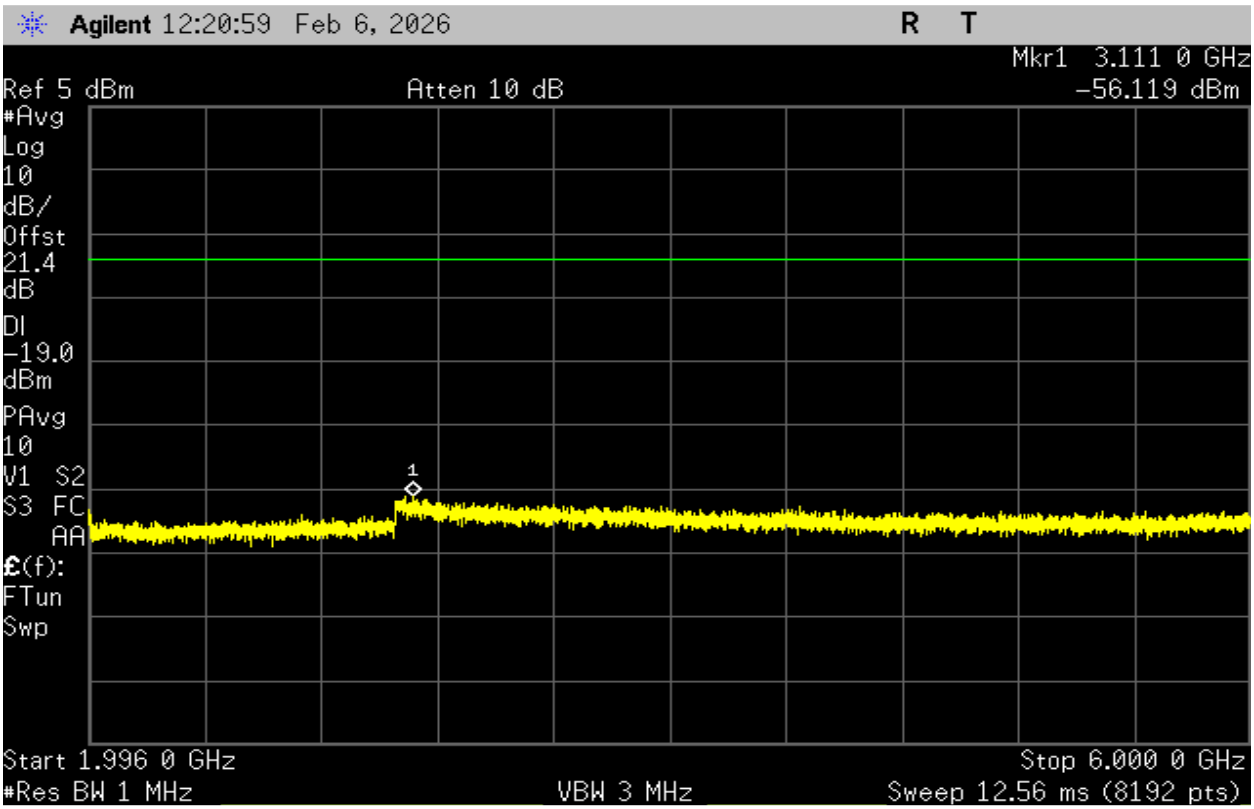
Plot 23 – 1850-1915MHz Band – Uplink



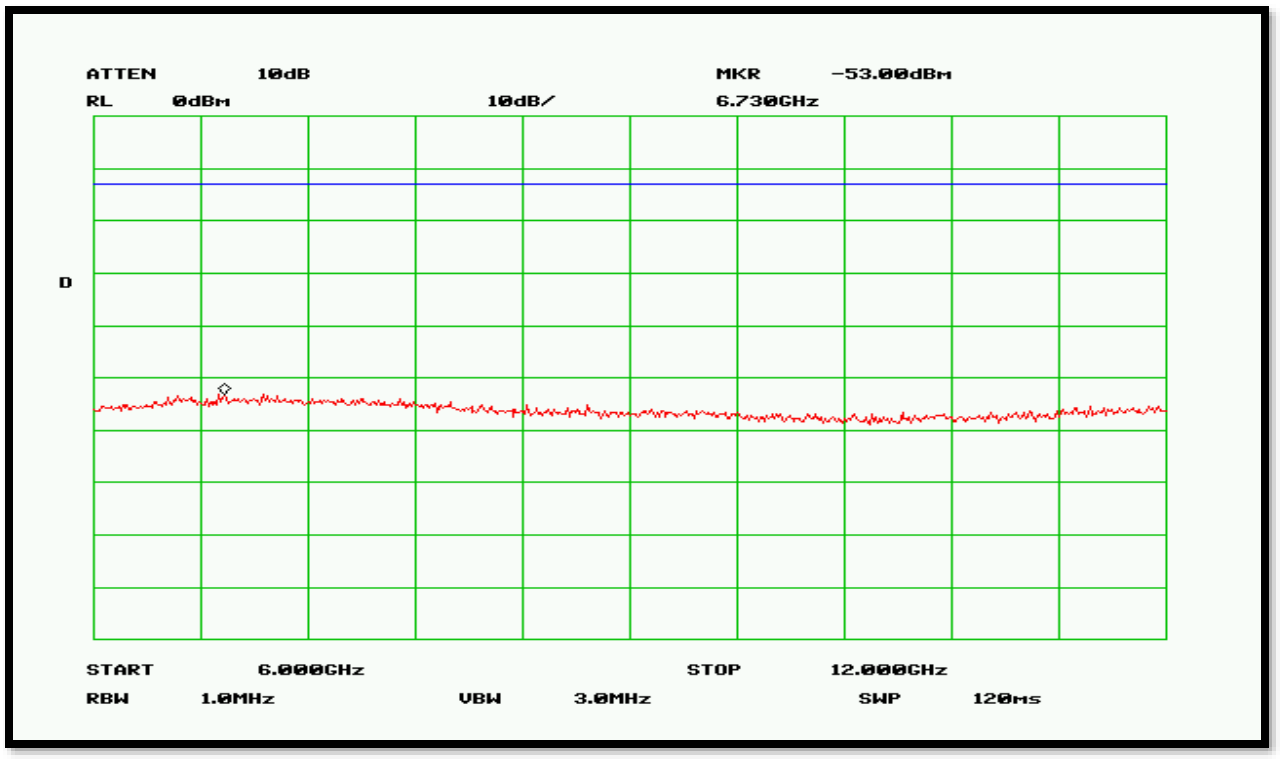
Plot 24 – 1850-1915MHz Band – Uplink



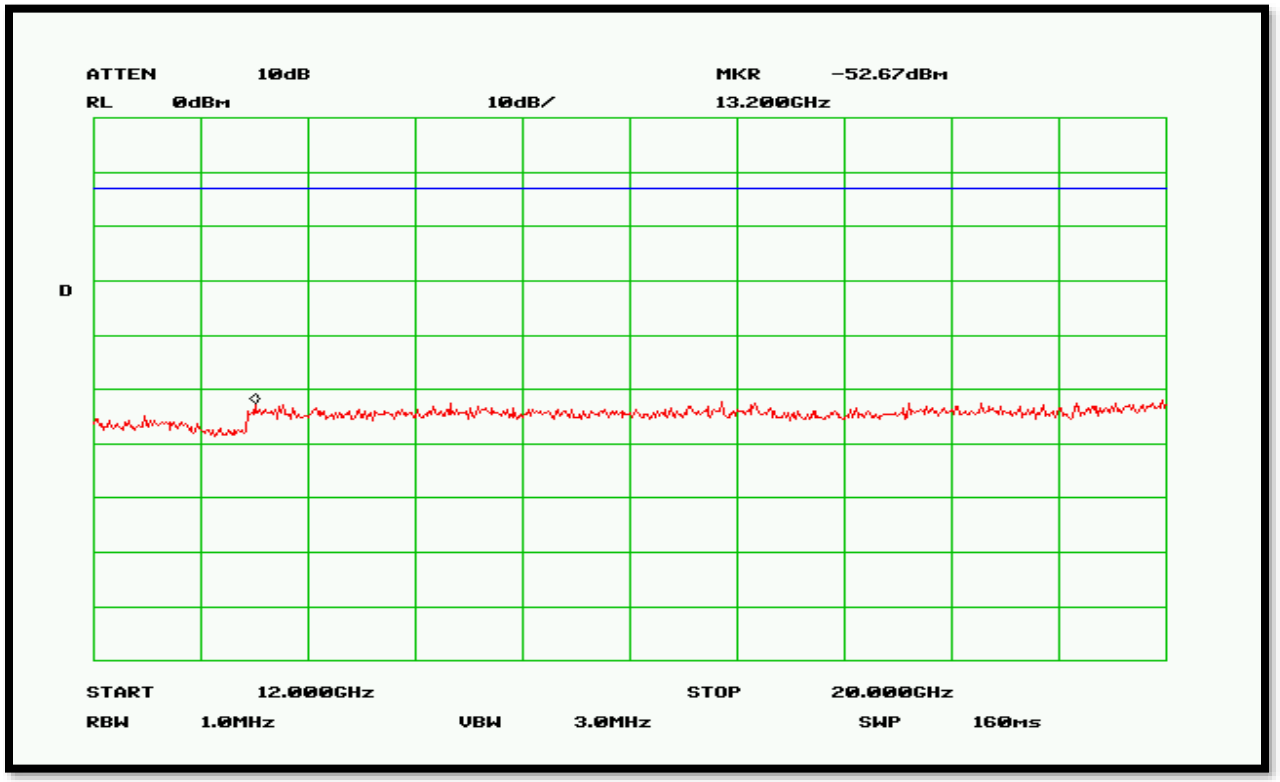
Plot 25 – 1930-1995MHz Band – Downlink



Plot 26 – 1930-1995MHz Band – Downlink



Plot 27 – 1930-1995MHz Band – Downlink



Plot 28 – 1930-1995MHz Band – Downlink

6. Noise Limits/Transmit Power Off Mode

Test Requirement(s):	§20.21(e)(8)(i)(A) and RSS-131 §7.1, §7.3 & §7.7	**Test Engineer(s):**	Sean E.
Test Results:	Pass	**Test Date(s):**	February 09, 2026

Test Procedures: As required by 47 CFR §20.21(e)(8)(i)(A) and RSS-131 §7.1, §7.3 & §7.7, Noise limits measurements were made as per the FCC KDB 935210 D03 procedures defined in §7.7.

The EUT was set up as per Figure 2 and 3.

Test Setup:

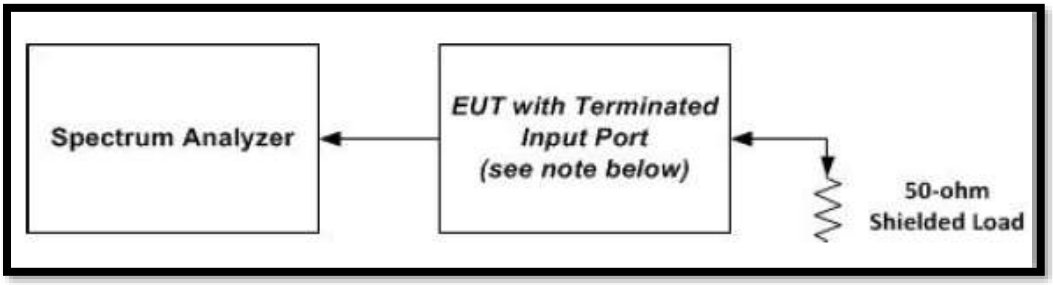


Figure 2 – Noise Limit

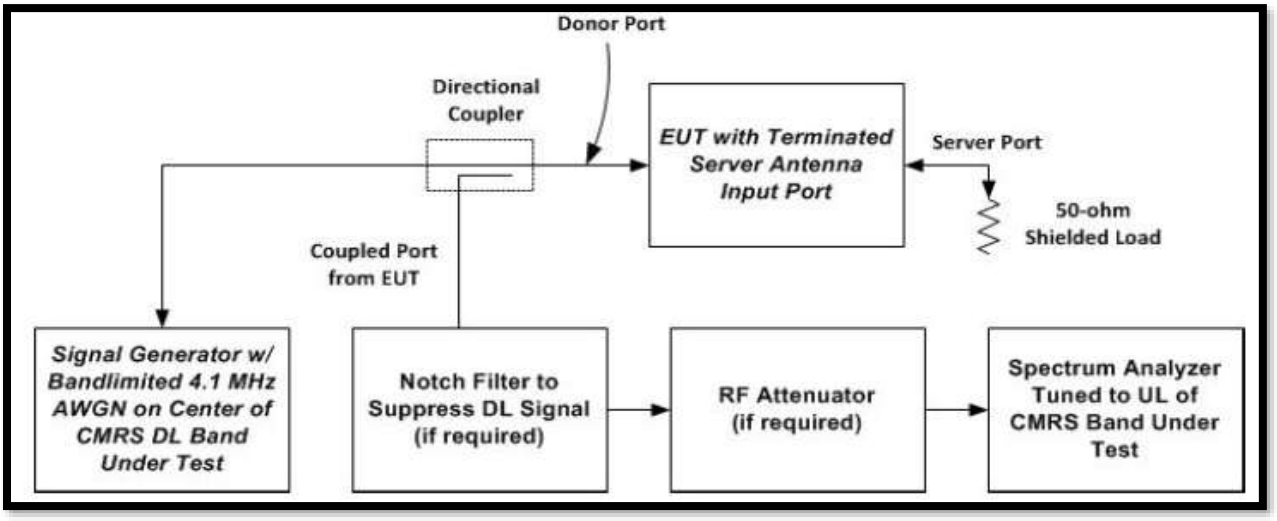


Figure 3 – Uplink Noise power in presence of a downlink signal

Limit: -103dBm/MHz – RSSI for Variable Uplink Noise, -59dBm/MHz Maximum Noise

Frequency Band (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
1850-1915	-60.26	-59	-1.26

Table 18 – Maximum Uplink Noise Summary

Frequency Band (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
1930-1995	-62.09	-59	-3.09

Table 19 – Maximum Downlink Noise Summary

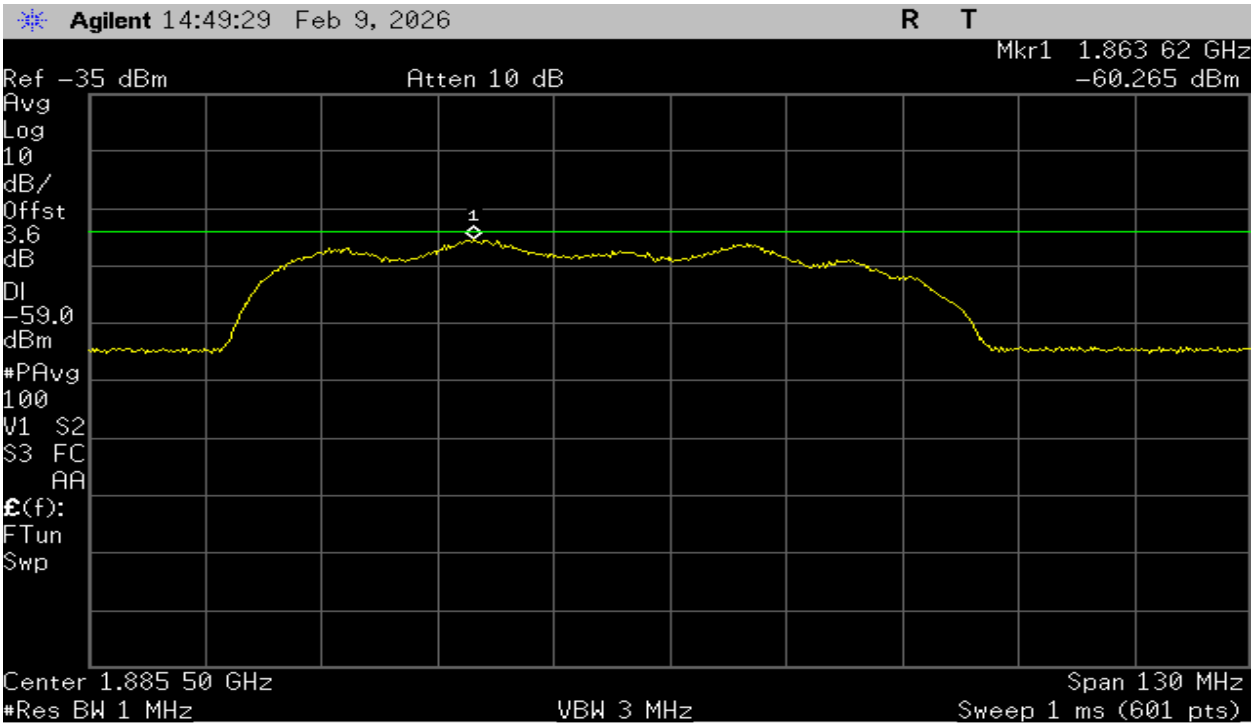
RSSI (dBm)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
-70	-59.63	-59	-0.63
-60	-60.74	-59	-1.74
-50	-60.65	-59	-1.65
-30	-74.82	-73	-1.82
-29	-75.06	-74	-1.06
-28	Shutdown	-75	-

Table 20 – 1850-1915MHz Band – Variable Uplink Noise Power Summary

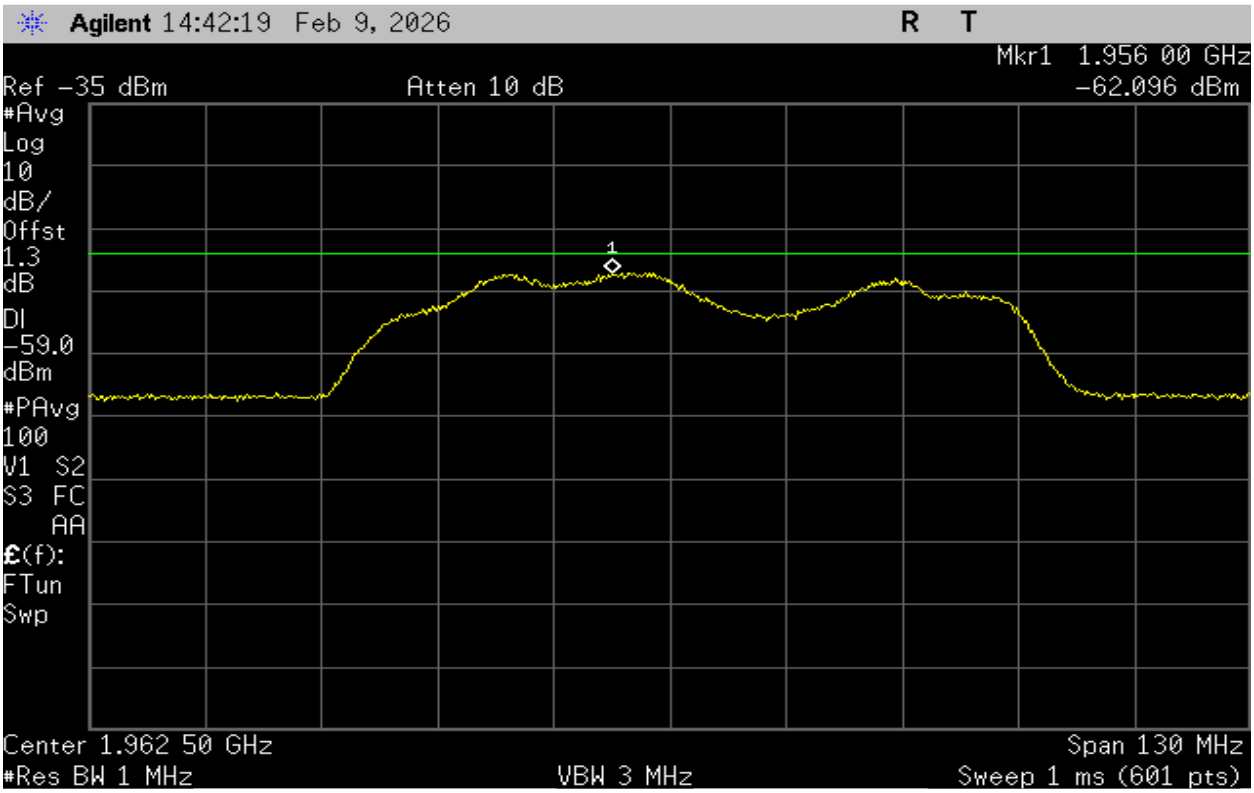
Frequency Band (MHz)	Measured Time (s)	Limit (s)
1850-1915	0.460	1

Table 21 – Variable Uplink Noise Timing Summary

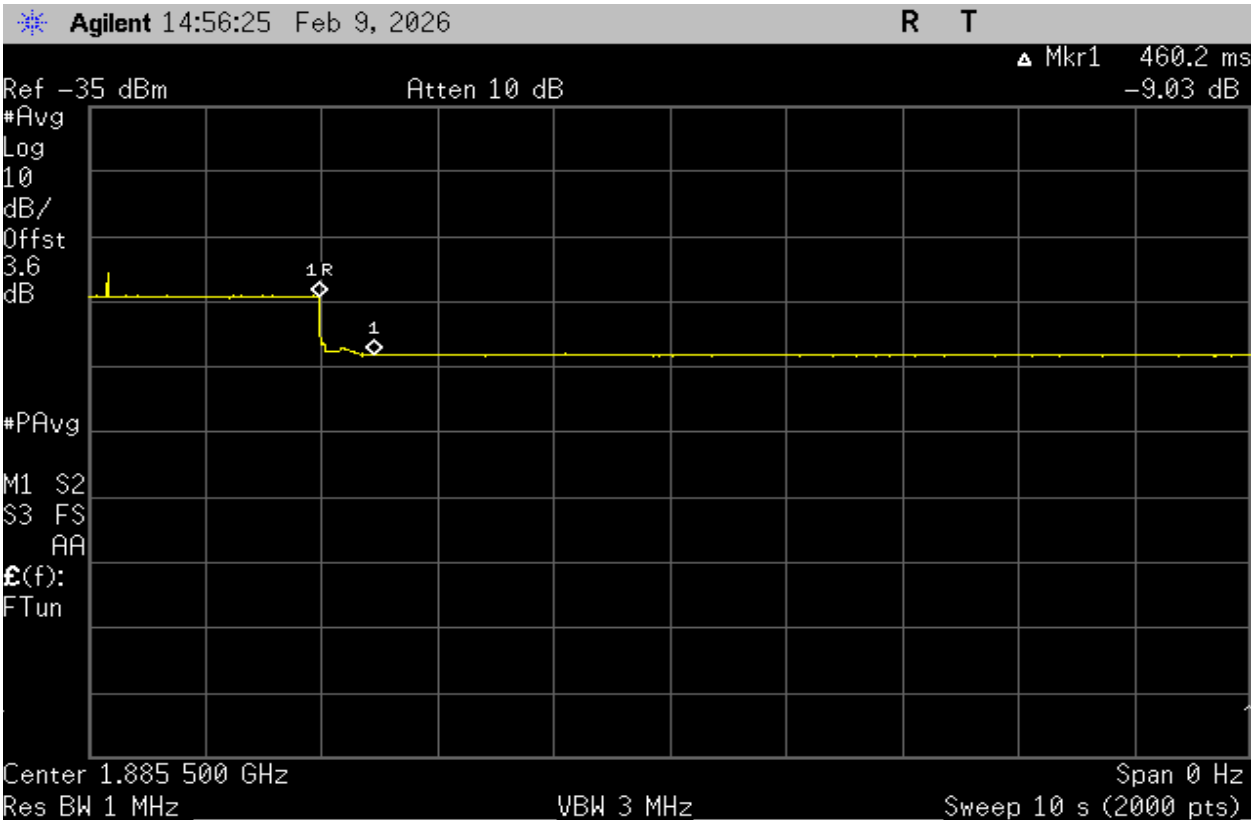
Note:



Plot 29 – 1850-1915MHz Band – Maximum Uplink Noise



Plot 30 – 1930-1995MHz Band – Maximum Downlink Noise



Plot 31 – 1850-1915MHz Band – Variable Uplink Noise Timing

7. Uplink Inactivity

Test Requirement(s):	§20.21(e)(8)(i)(I) and RSS-131 §7.7	Test Engineer(s):	Sean E.
Test Results:	Pass	Test Date(s):	February 09, 2026

Test Procedures: As required by 47 CFR §20.21(e)(8)(i)(I) and RSS-131 §7.7, Uplink Inactivity measurements were made as per the FCC KDB 935210 D03 procedures defined in §7.8.

The EUT was set up as per Figure 4.

Test Setup:

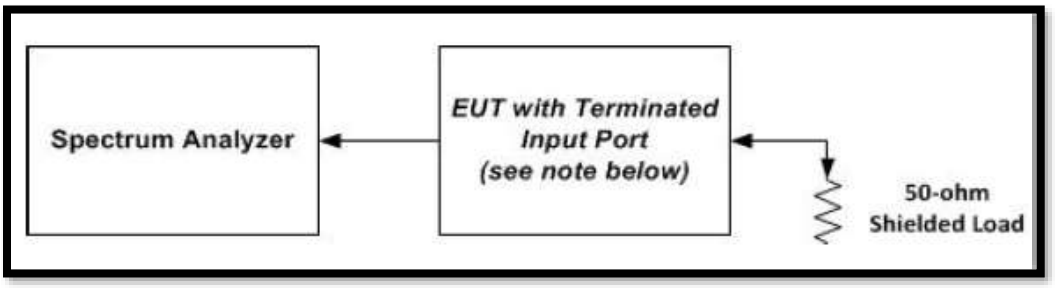
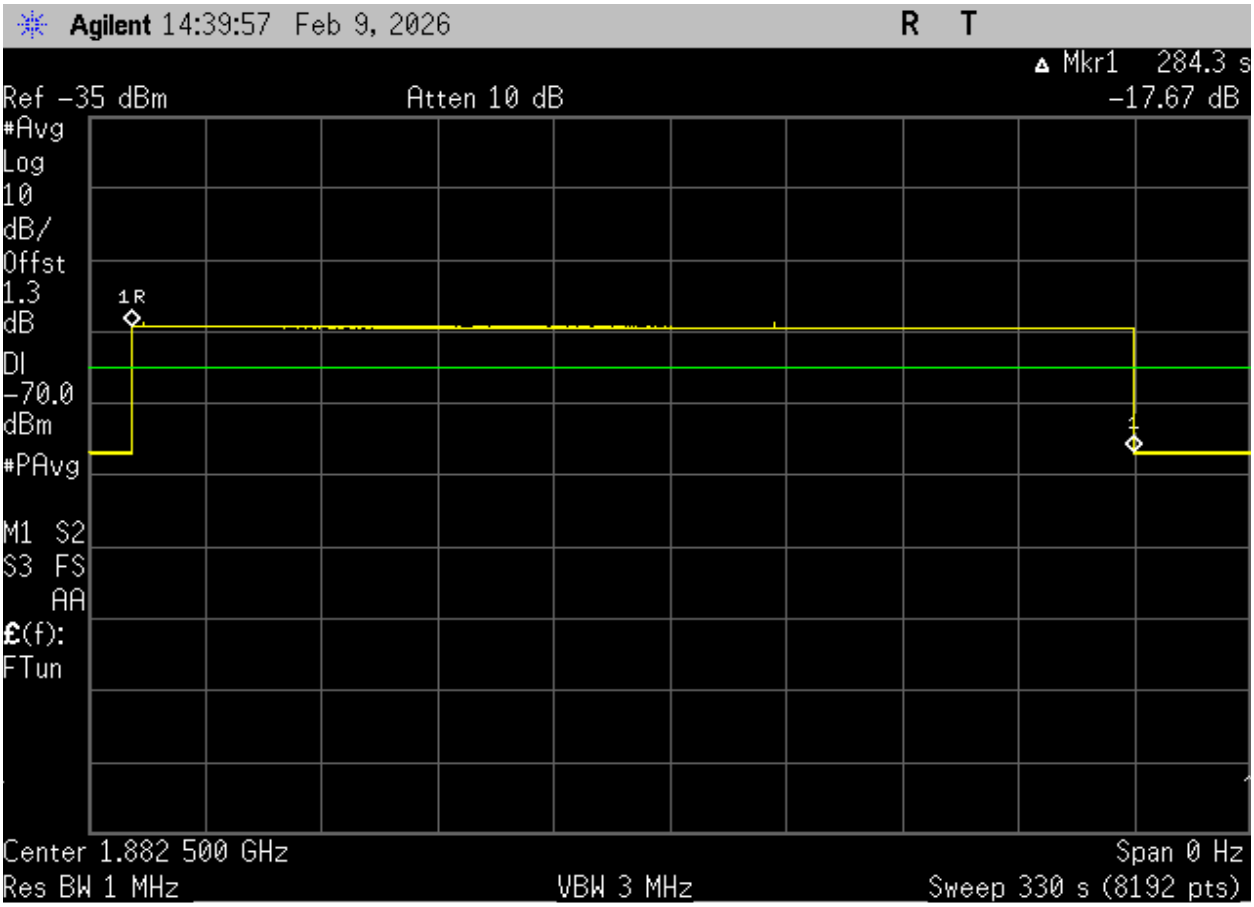


Figure 4 – Uplink Inactivity

Frequency Band (MHz)	Measured Time (Seconds)	Limit (Seconds)
1850 - 1915	284.3	300

Table 22 – Uplink Inactivity Data

Note:



Plot 32 – 1850-1915MHz Band – Uplink Inactivity

8. Variable Booster Gain

Test Requirement(s):	§20.21(e)(8)(i)(c)(1) and RSS-131 §6.1.2& 7.2	Test Engineer(s):	Sean E.
Test Results:	Pass	Test Date(s):	February 09, 2026

Test Procedures: As required by 47 §20.21(e)(8)(i)(c)(1) and RSS-131 §6.1.2 & 7.2, Variable Booster Gain measurements were made as per FCC KDB procedures 935210 D03 defined in §7.9.

The EUT was set up as per Figure 5.

Gain limits are based on §20.21(e)(8)(i)(C) for consumer booster Fixed devices shall not exceed -34dB – RSSI + MSCL.

Test Setup:

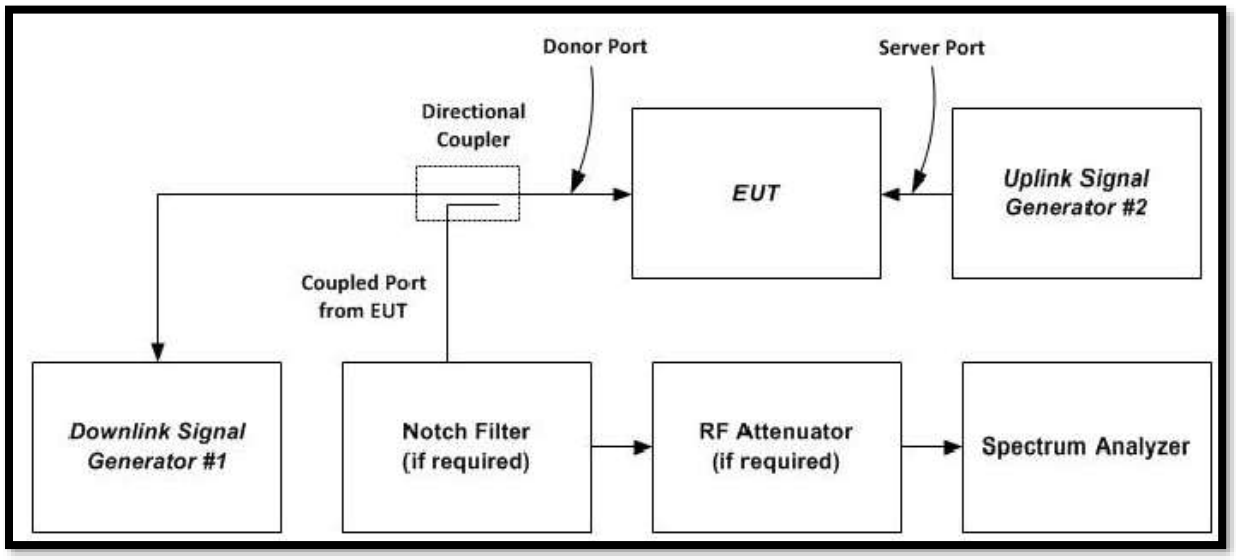


Figure 5 – Variable Gain

Detector Setting	Resolution Bandwidth	Video Bandwidth	Sweep Time
RMS	100 kHz	300 kHz	Auto

Table 23 – Analyzer Settings

Statement: Device when operating in shutoff mode it complies with uplink and downlink gain limits of transmit power off mode.

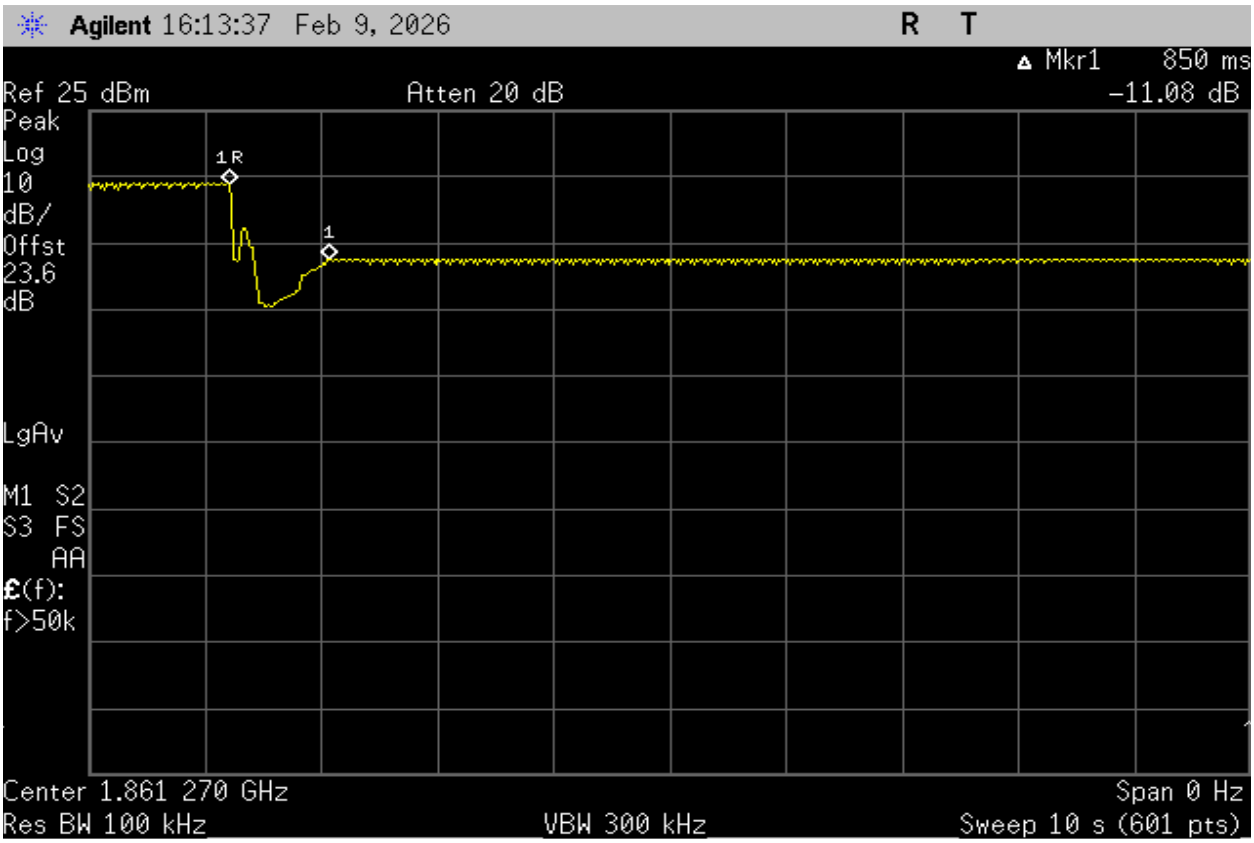
Note: All bands were tested with an MSCL value of 29.9 dBm.

RSSI (dBm)	P(in) (dBm)	P(out) dBm	Gain (dB)	Gain Limit (dBm)	Margin (dB)
-50	-25.9	19.82	45.72	45.9	-0.18
-49	-25.9	18.88	44.78	44.9	-0.12
-45	-25.9	14.54	40.44	40.9	-0.46
-40	-25.9	8.64	34.54	35.9	-1.36
-38	-25.9	6.74	32.64	33.9	-1.26
-36	-25.9	4.71	30.61	31.9	-1.29

Table 24 – 1850-1915MHz Band – Uplink Data

Frequency Band (MHz)	Measured Timing (Seconds)	Limit (Seconds)	Margin (Seconds)
1850-1915	0.850	1.0	-0.150

Table 25 – Variable Uplink Gain Timing Summary



Plot 33 – 1850-1915MHz Band – Uplink Gain Timing

9. Occupied Bandwidth

Test Requirement(s):	§2.1049 and RSS-Gen §6.7	**Test Engineer(s):**	Sean E.
Test Results:	Pass	**Test Date(s):**	February 10, 2026

Test Procedures: As required by CFR47 §2.1049 and RSS-Gen §6.7, Occupied Bandwidth were made at the RF antenna output terminals of the EUT. Measurements were made as per the FCC KDB 935210 D03 procedures defined in §7.10

The EUT output was connected directly to a spectrum analyzer through an attenuator. A signal generator was connected to the EUT to produce GSM, CDMA & LTE signals to show the input and output signals were similar.

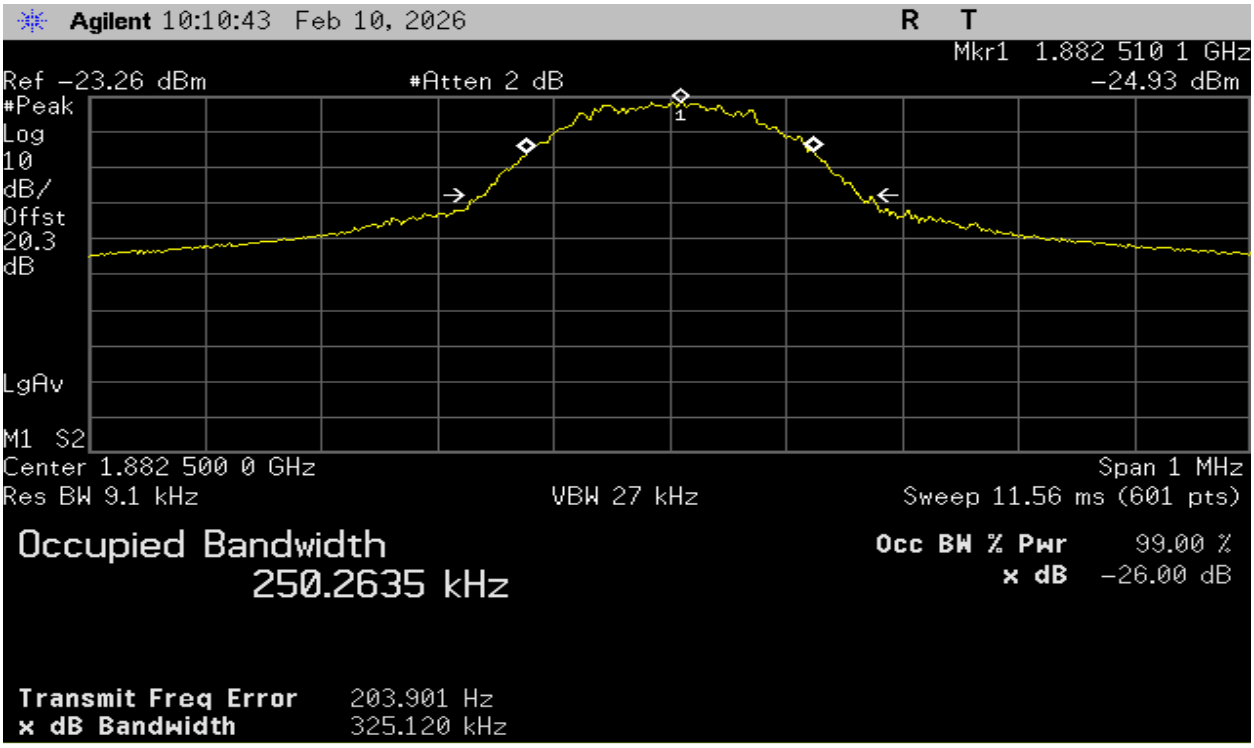
The following pages show measurements of Occupied Bandwidth plots:

Detector Setting	Resolution Bandwidth	Video Bandwidth	Sweep Time	Span
Peak	1% - 5%	≥3 x RBW	Auto	As per Modulation Type

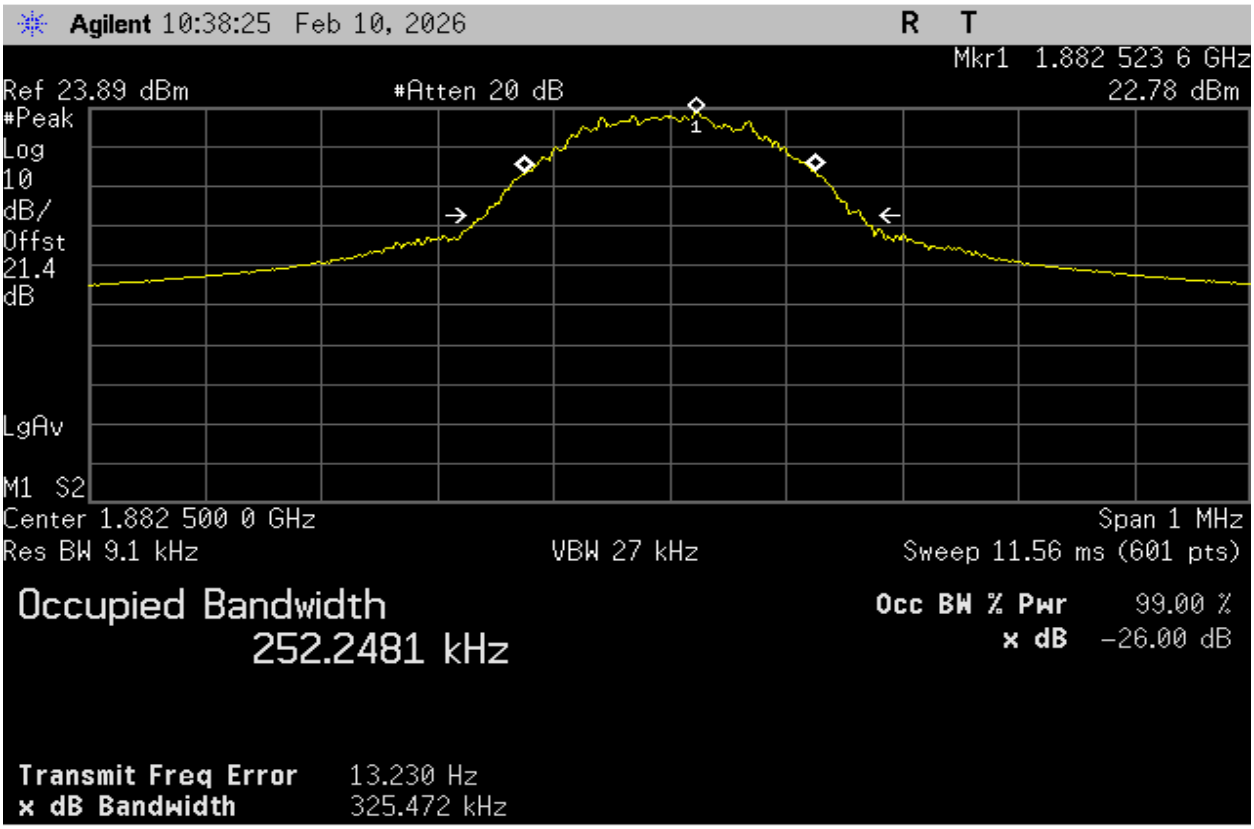
Table 26 – Analyzer Settings

Test Setup:

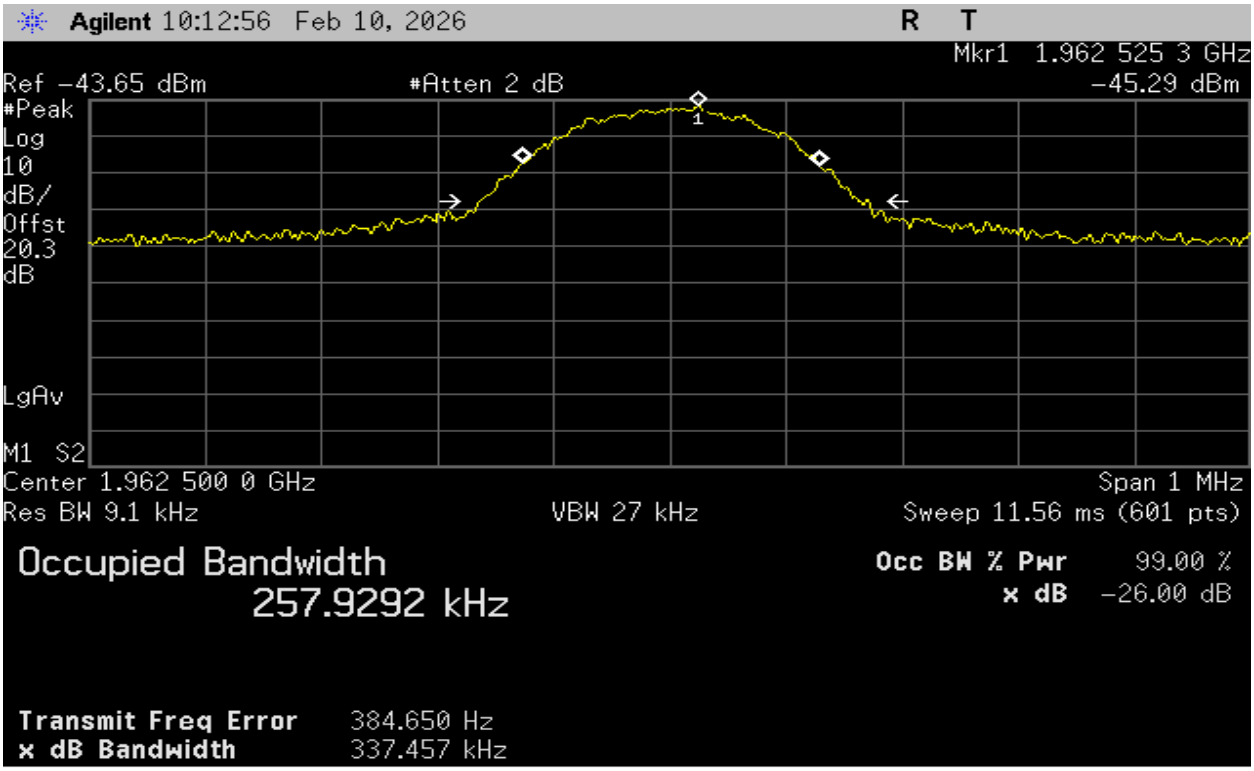
Figure 6 – Characteristics of test signals used for subsequent EUT



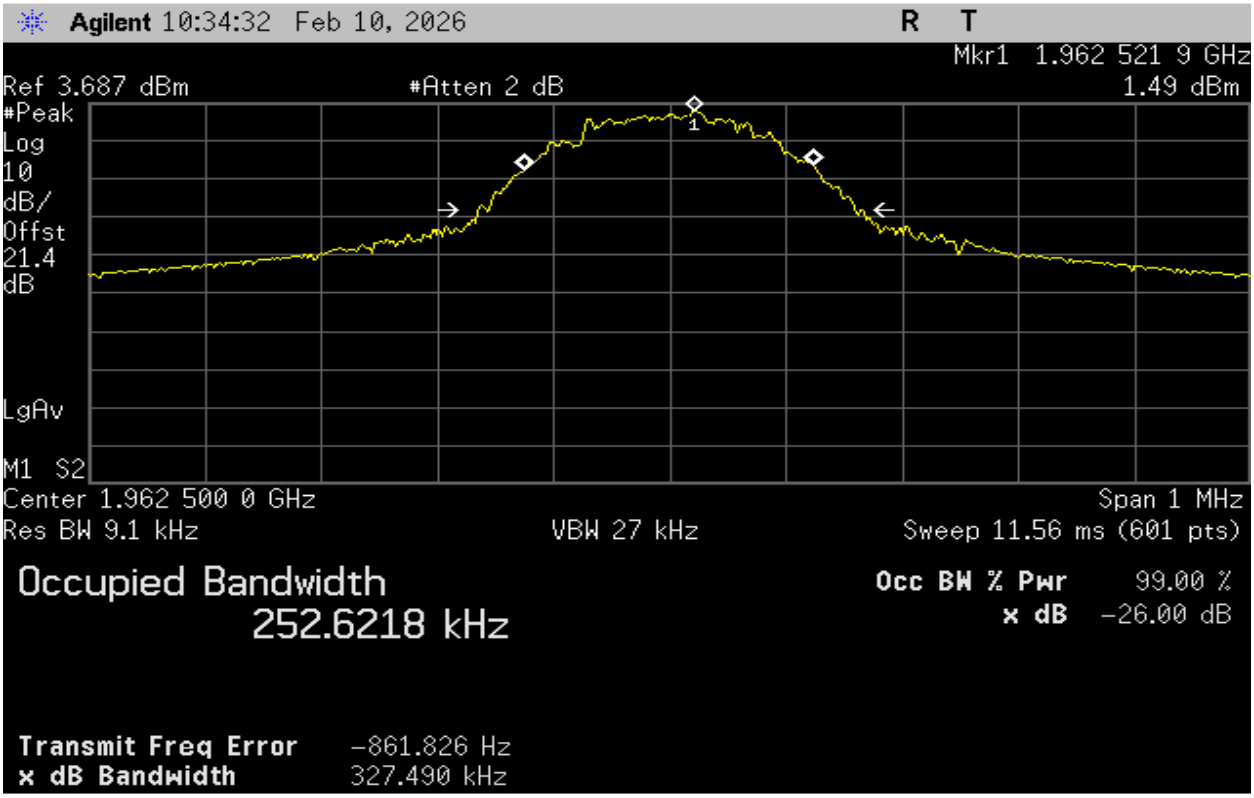
Plot 34 – 1850-1915MHz Band – Uplink Input – GSM



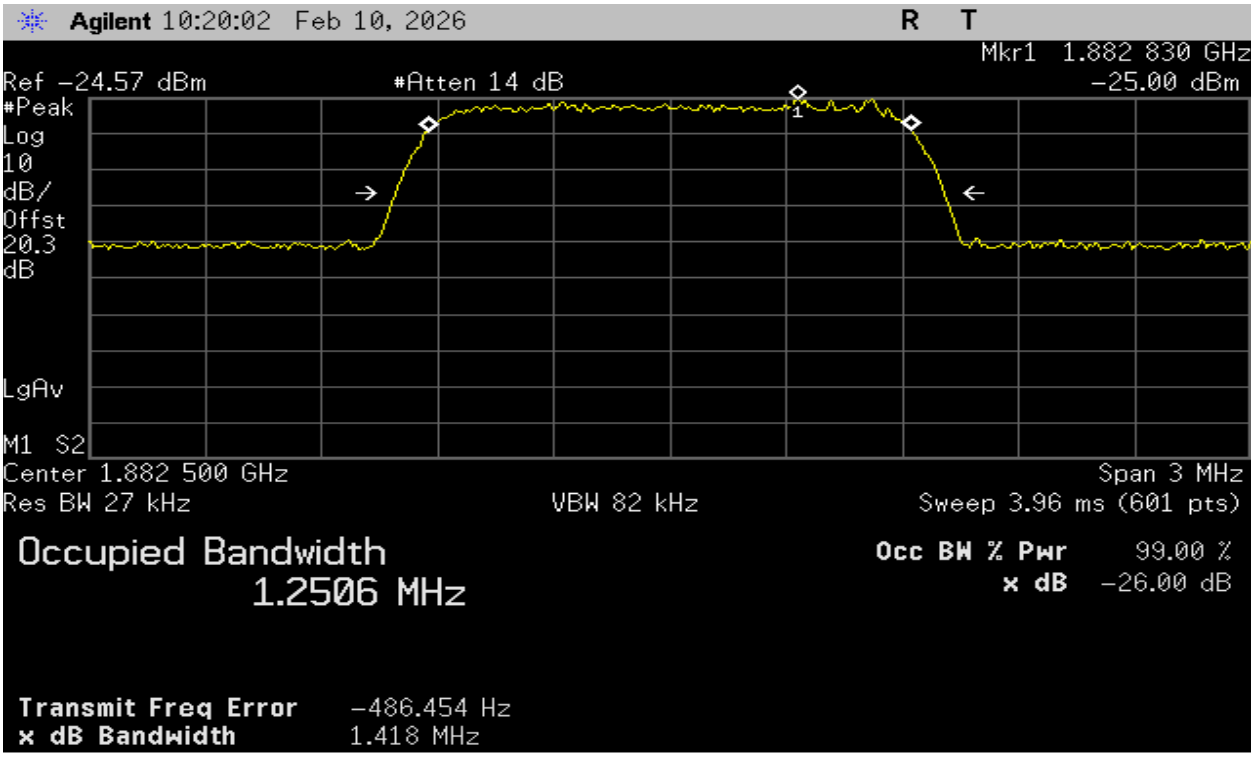
Plot 35 – 1850-1915MHz Band – Uplink Output – GSM



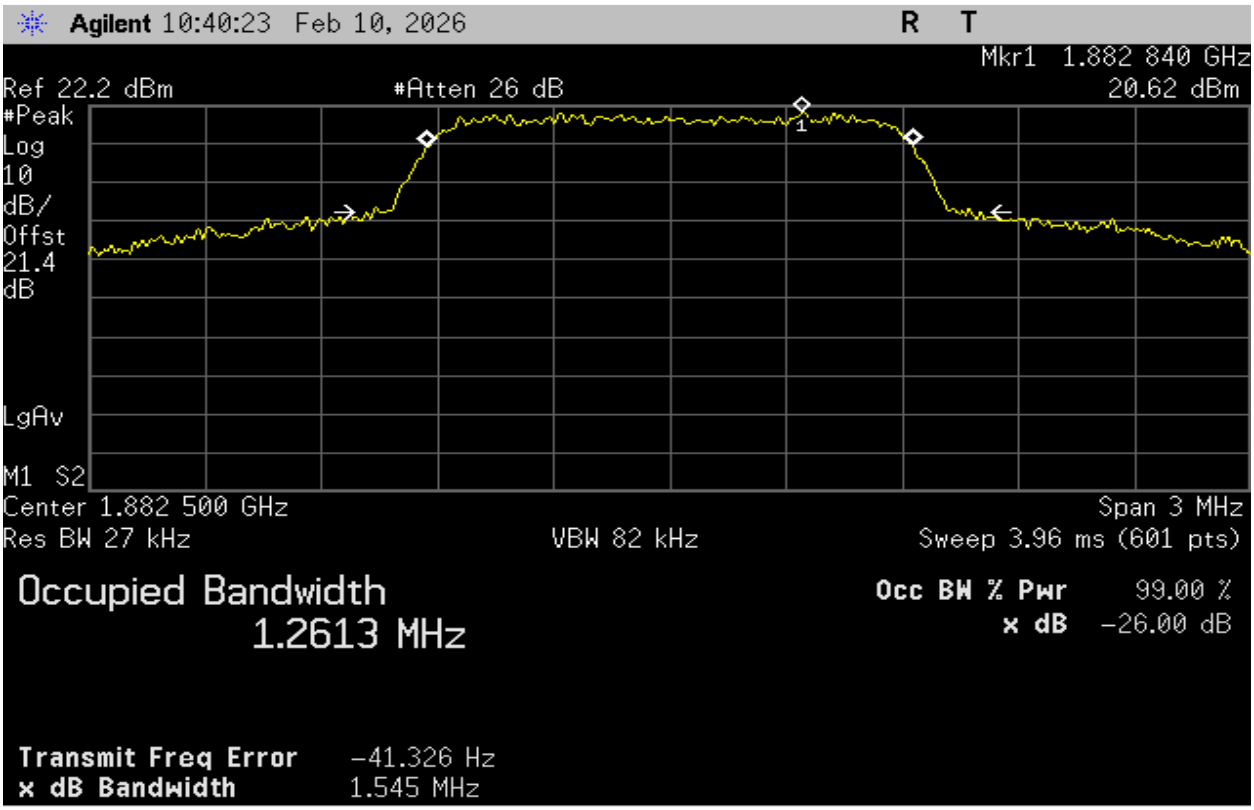
Plot 36 – 1930-1995MHz Band – Downlink Input – GSM



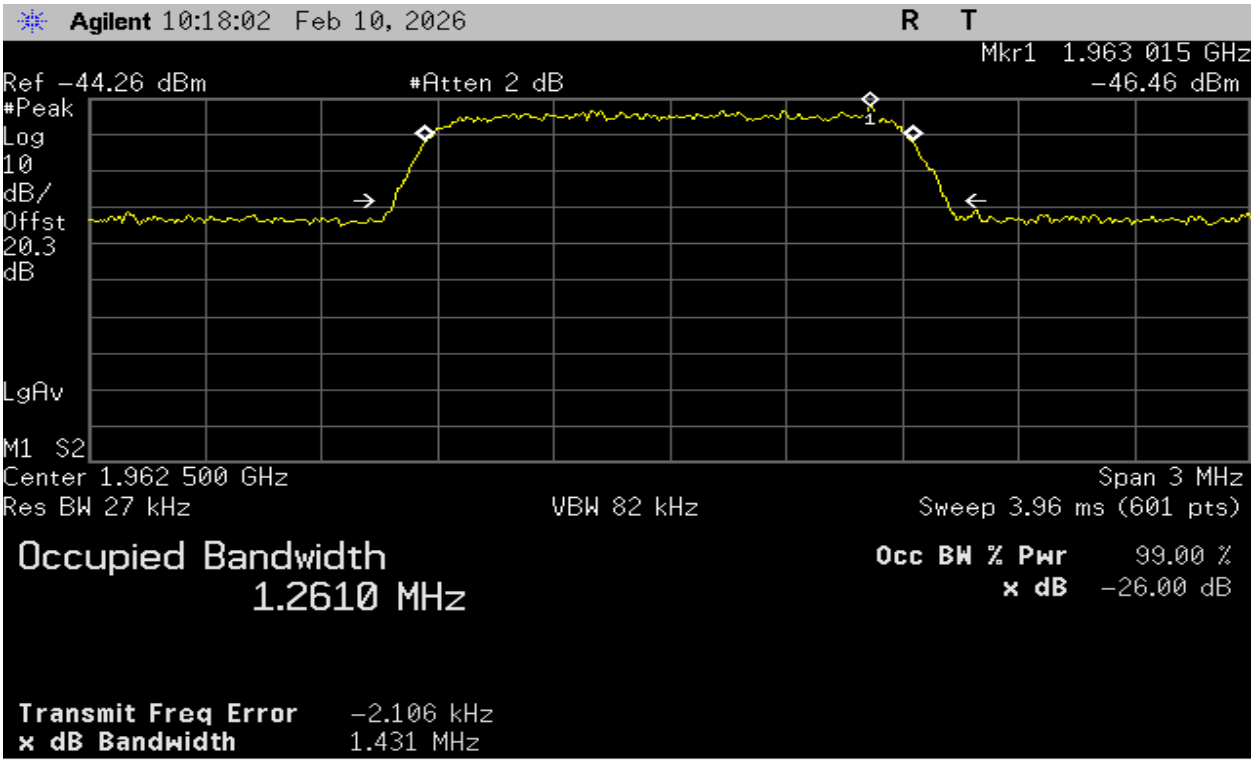
Plot 37 – 1930-1995MHz Band – Downlink Output – GSM



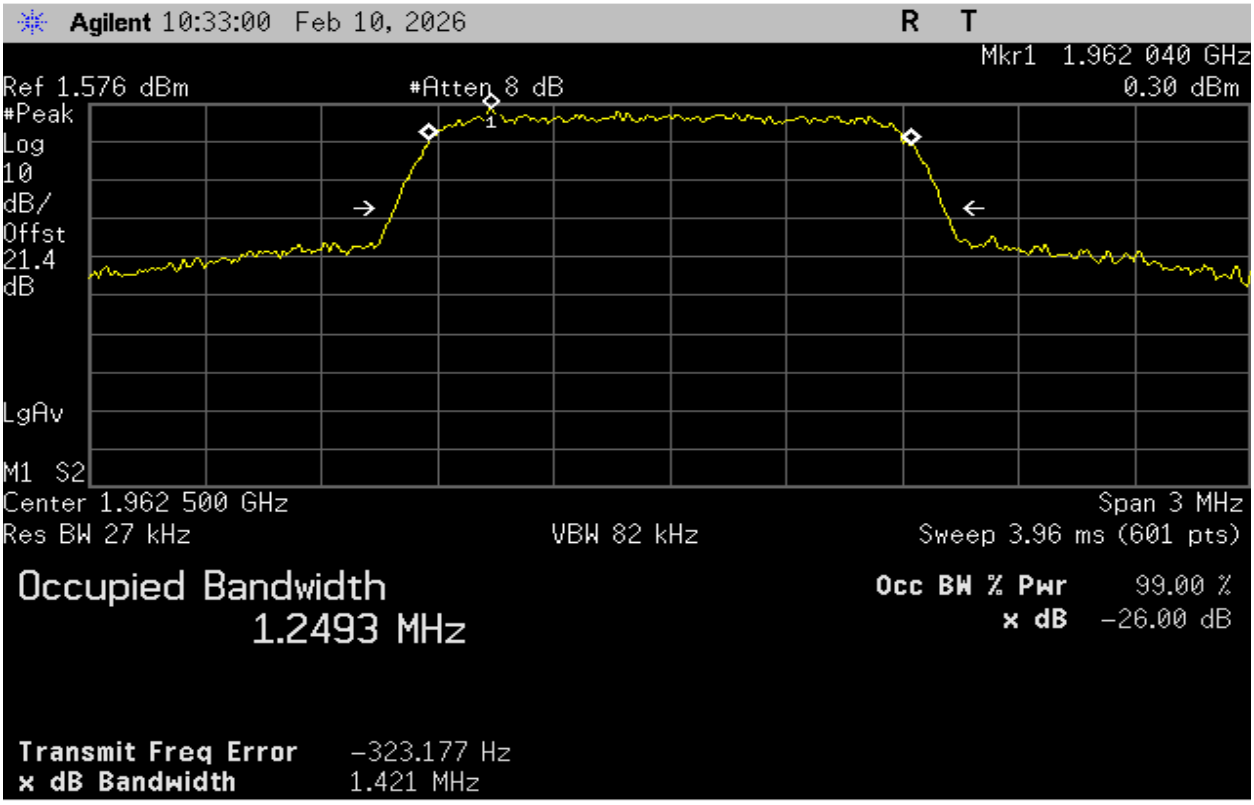
Plot 38 – 1850-1915MHz Band – Uplink Input – CDMA



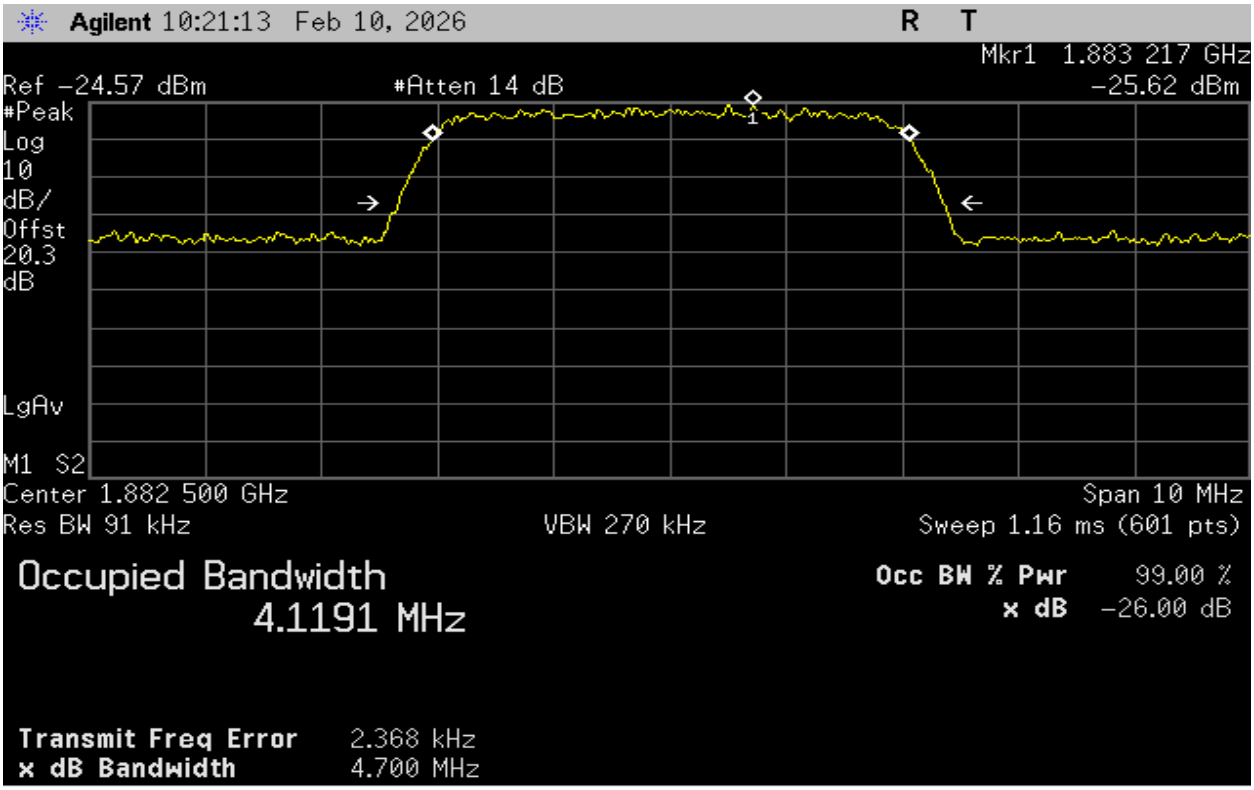
Plot 39 – 1850-1915MHz Band – Uplink Output – CDMA



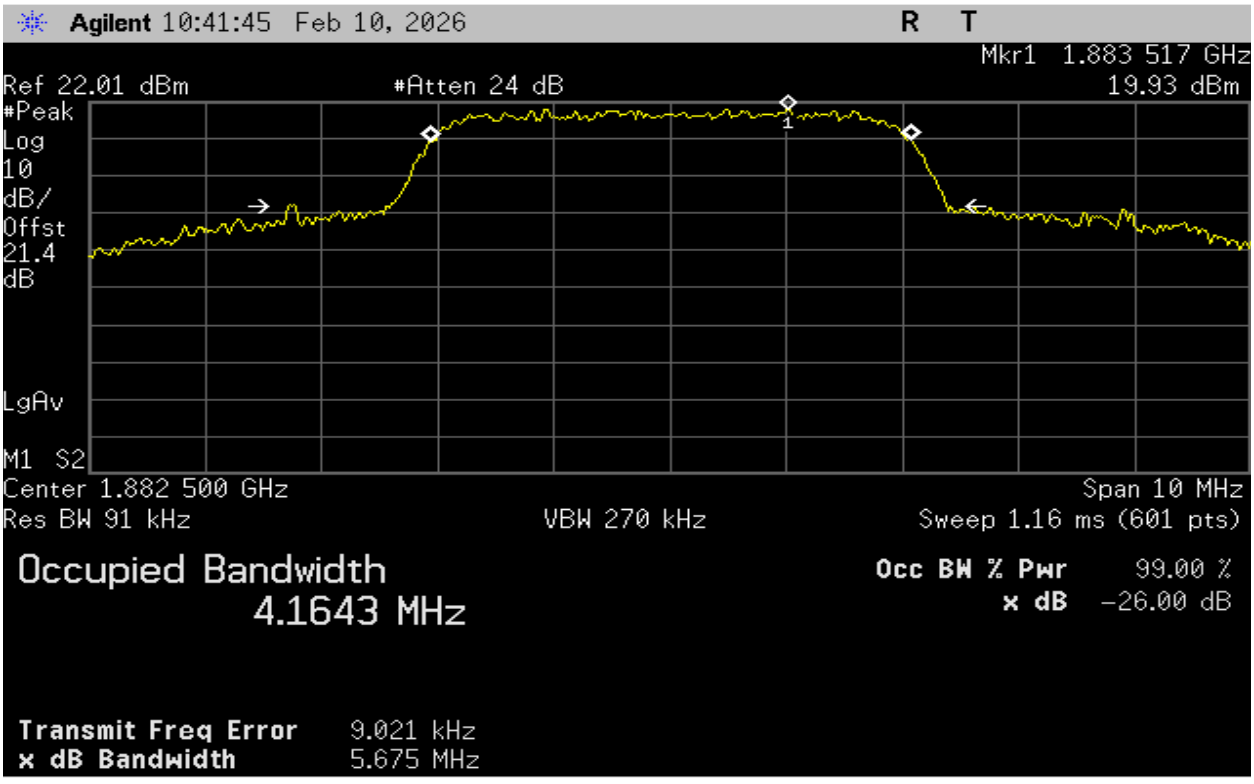
Plot 40 – 1930-1995MHz Band – Downlink Input – CDMA



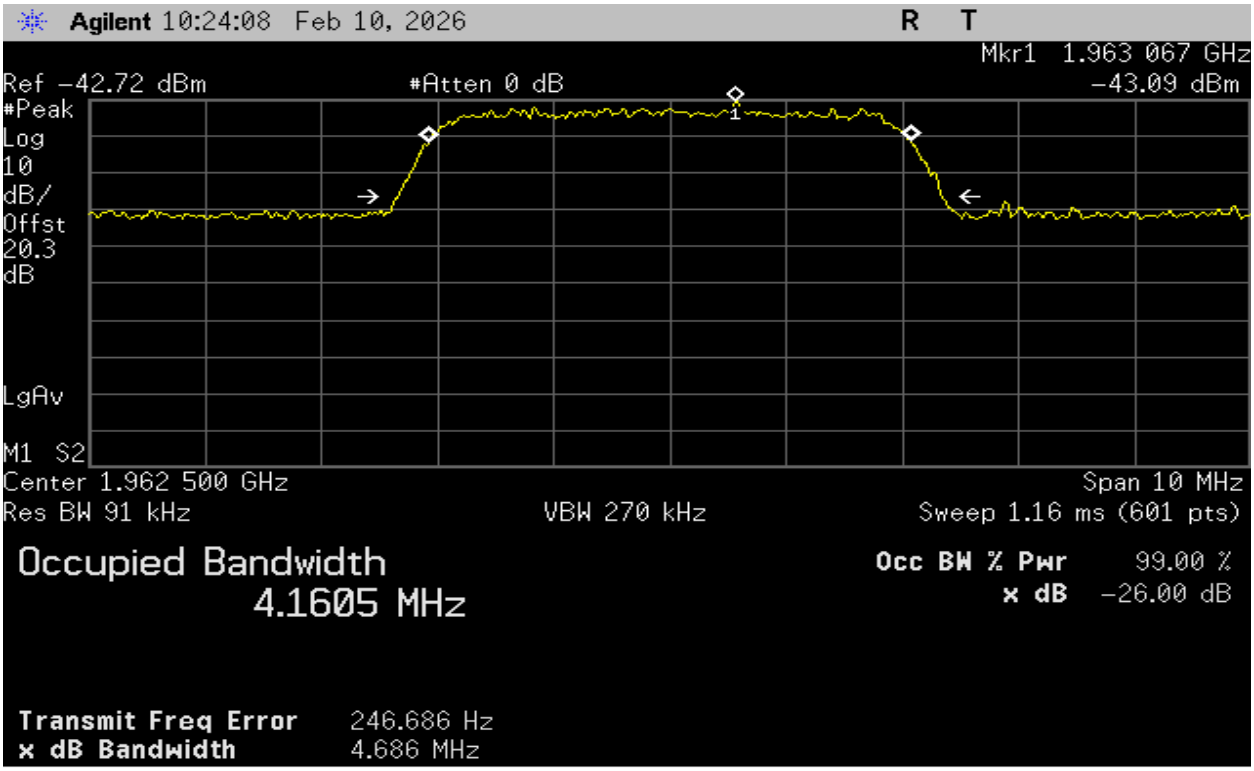
Plot 41 – 1930-1995MHz Band – Downlink Output – CDMA



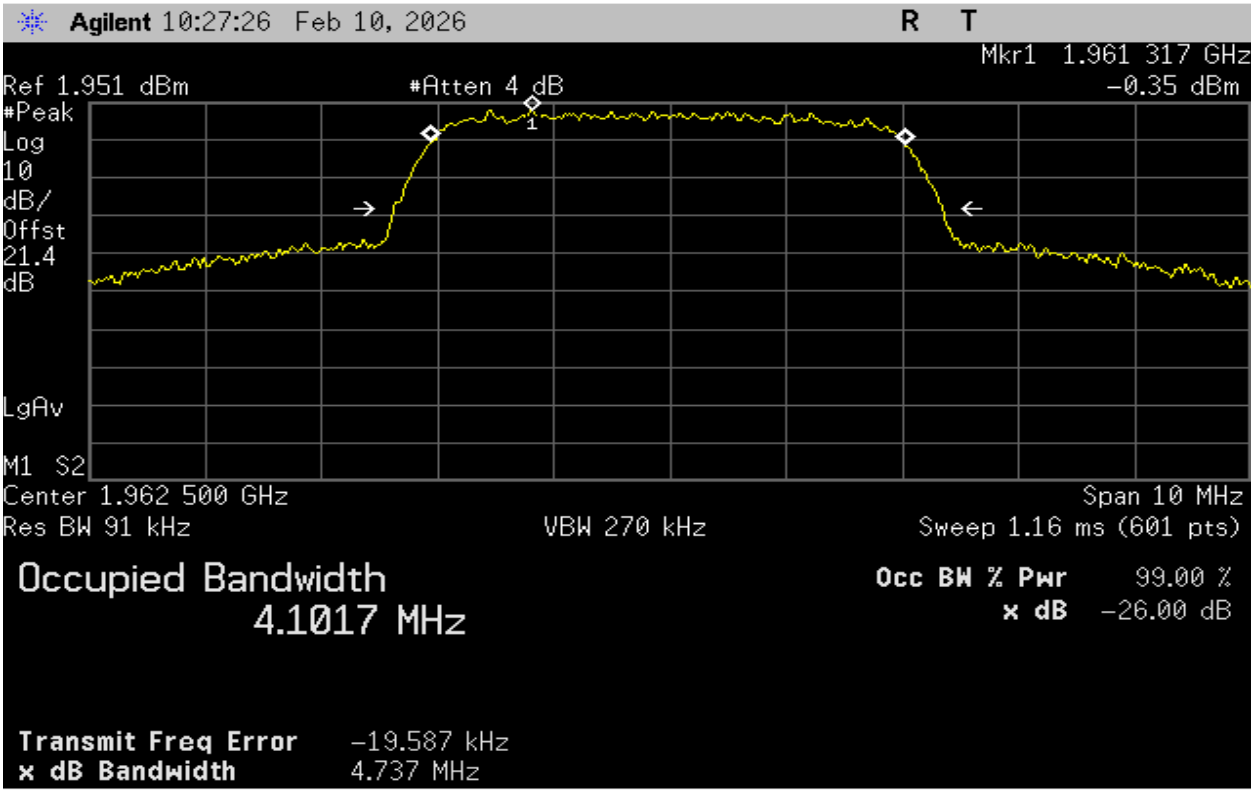
Plot 42 – 1850-1915MHz Band – Uplink Input – LTE



Plot 43 – 1850-1915MHz Band – Uplink Output – LTE



Plot 44 – 1930-1995MHz Band – Downlink Input – LTE



Plot 45 – 1930-1995MHz Band – Downlink Output – LTE

10. Oscillation Detection

Test Requirement(s):	§20.21(e)(8)(ii)(A) and RSS-131 §6.1.1	Test Engineer(s):	Sean E.
Test Results:	Pass	Test Date(s):	February 10, 2026

Test Procedures: As required by 47 §20.21(e)(8)(ii)(A) and RSS-131 §6.1.1, Oscillation detection measurements were made at the RF antenna output terminals of the EUT.

The EUT output was connected to the spectrum analyzer through a 30dB coupled directional coupler. The measurements were made as per procedure defined in KDB 935210 D03 §7.11.

Detector Setting	Resolution Bandwidth	Video Bandwidth	Sweep Time
Peak	≥1 MHz	>3X RBW	Auto

Table 27 – Analyzer settings – Oscillation Detection

Test Setup:

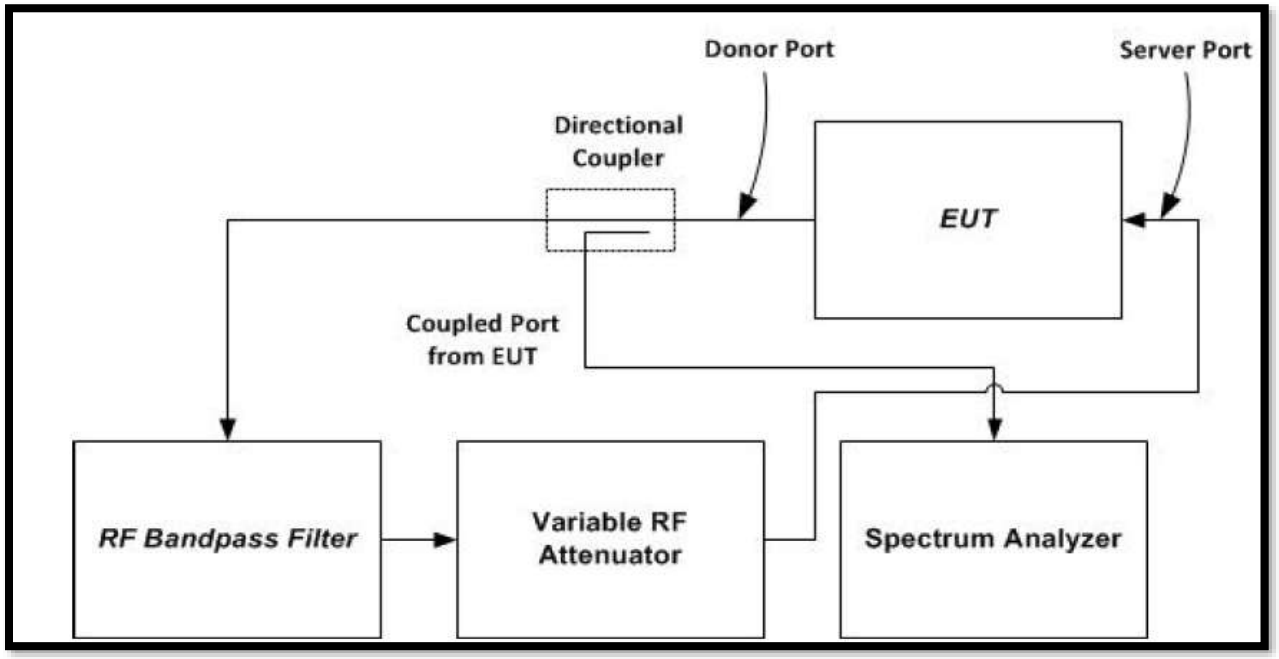


Figure 7 – Oscillation detection

Note:

The device does not restart without manual power cycling after detecting oscillations. Plots of 90 seconds including initial oscillation are provided to show compliance with the >60 second restart time.

Frequency Band (MHz)	Measured Time (mS)	Limit (mS)
1850-1915	150.0	300

Table 28 –Uplink Detection Time – Summary

Frequency Band (MHz)	Measured Time (mS)	Limit (Second)
1930-1995	183.3	1.0

Table 29 –Downlink Detection Time – Summary

Frequency Band (MHz)	Measured Time (Second)	Limit (Second)
1850-1915	Does not Restart	≥60

Table 30 –Uplink Restart Time – Summary

Frequency Band (MHz)	Measured Time (Second)	Limit (Second)
1930-1995	Does not Restart	≥60

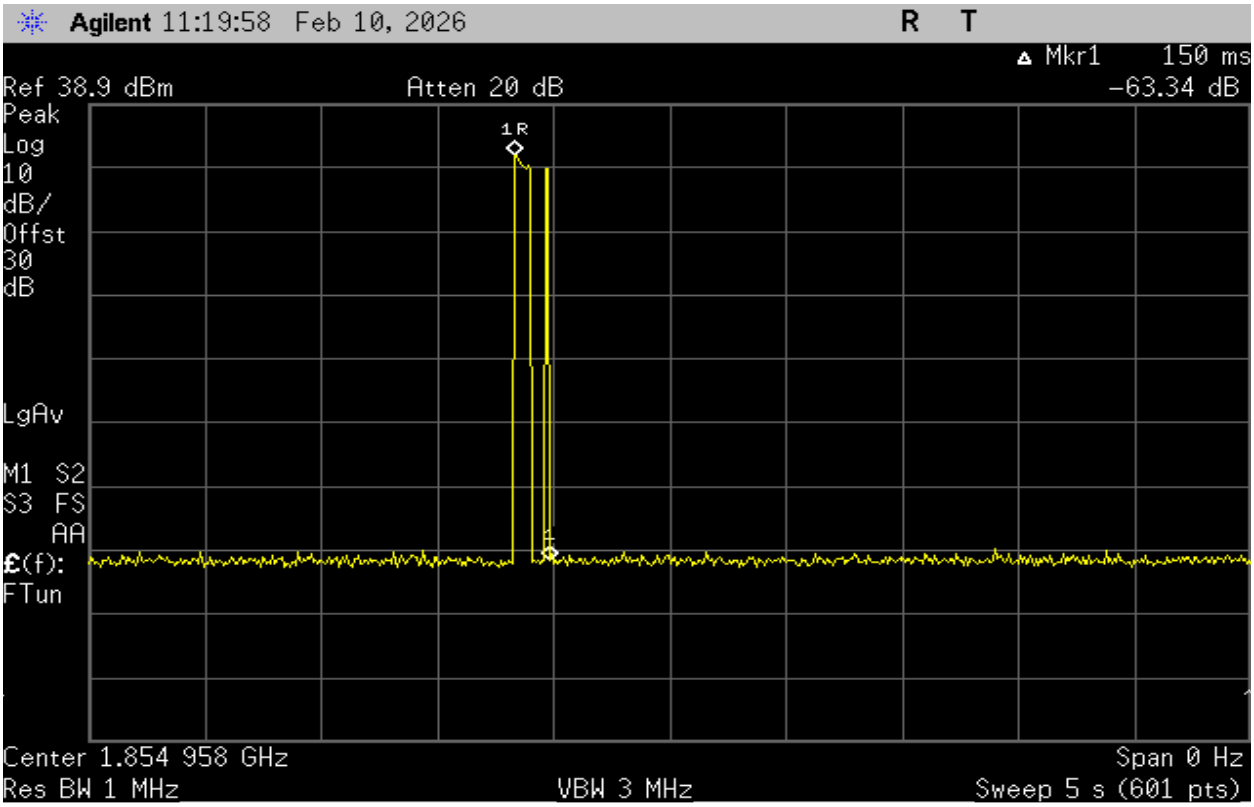
Table 31 –Downlink Restart Time – Summary

Frequency Band (MHz)	Restart	Limit
1850-1915	0	≤5

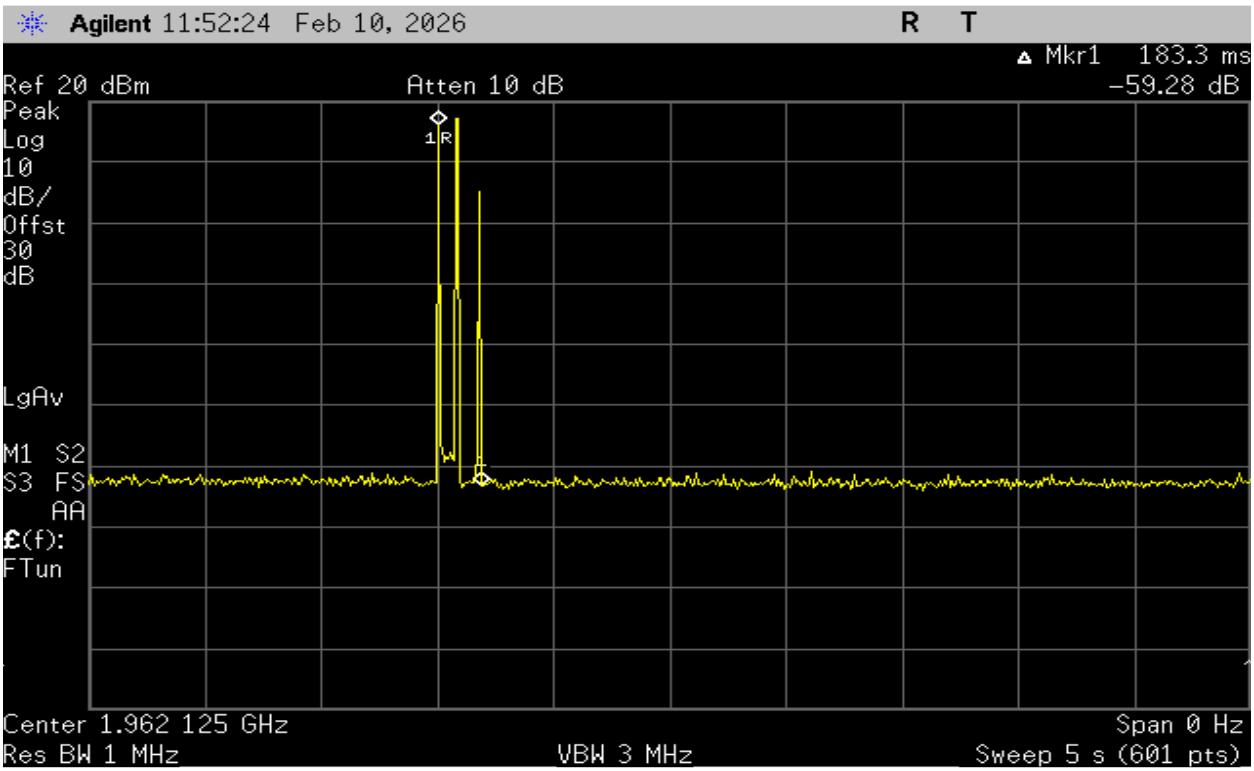
Table 32 –Uplink Restart Count – Summary

Frequency Band (MHz)	Restart	Limit
1930-1995	0	≤5

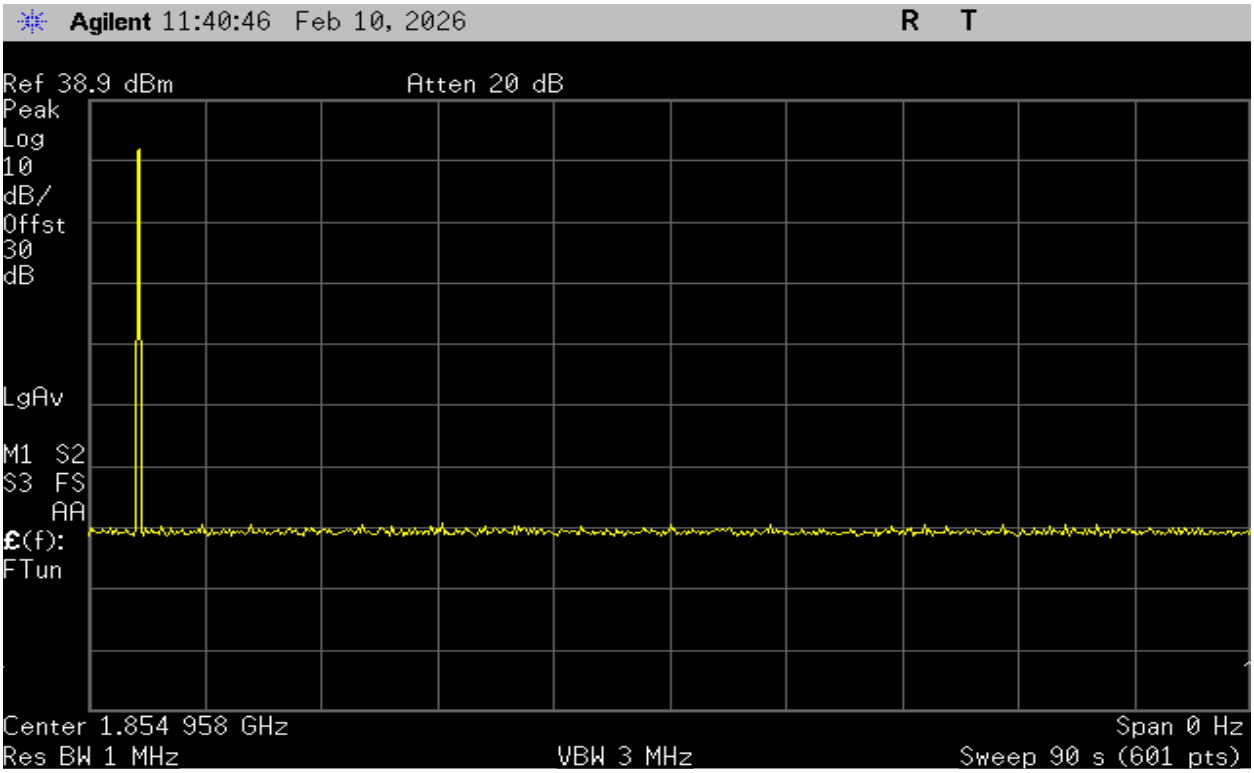
Table 33 –Downlink Restart Count – Summary



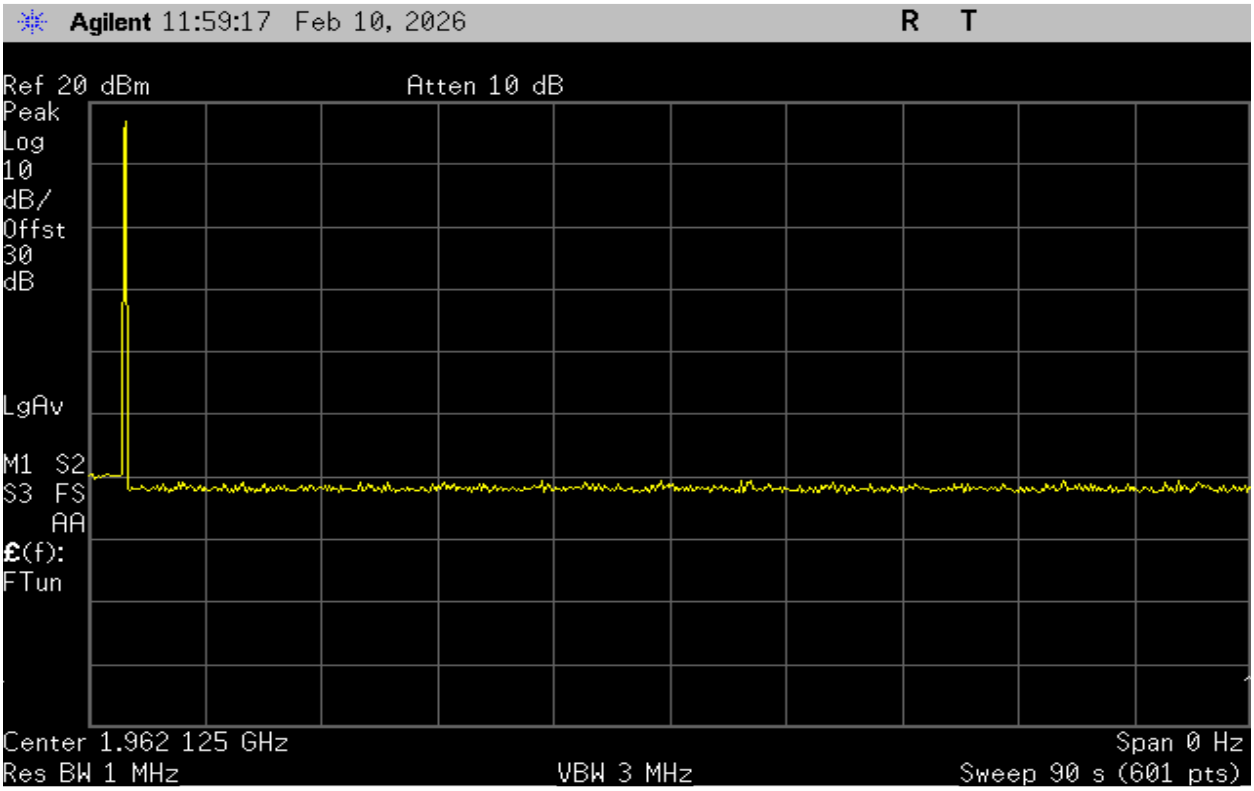
Plot 46 – 1850-1915MHz Band – Uplink Oscillation Detection Time



Plot 47 – 1930-1995MHz Band – Downlink Oscillation Detection Time



Plot 48 – 1850-1915MHz Band –Uplink Restart Time



Plot 49 – 1930-1995MHz Band –Downlink Restart Time

Oscillation Mitigation / Shutdown

Note: Input levels marked with * denote an immediate shutdown of the EUT

Max Gain (dB)	Peak (dBm)	Min (dBm)	Difference (dB)	Limit (dB)
+5*	Shutdown	-	-	12
+4*	Shutdown	-	-	12
+3*	Shutdown	-	-	12
+2*	Shutdown	-	-	12
+1*	Shutdown	-	-	12
0*	Shutdown	-	-	12
-1*	Shutdown	-	-	12
-2*	Shutdown	-	-	12
-3*	Shutdown	-	-	12
-4*	Shutdown	-	-	12
-5*	Shutdown	-	-	12

Table 34 – 1850-1915MHz Uplink Band – Mitigation/Shutdown Test Data

Max Gain (dB)	Peak (dBm)	Min (dBm)	Difference (dB)	Limit (dB)
+5*	Shutdown	-	-	12
+4*	Shutdown	-	-	12
+3*	Shutdown	-	-	12
+2*	Shutdown	-	-	12
+1*	Shutdown	-	-	12
0*	Shutdown	-	-	12
-1*	Shutdown	-	-	12
-2*	Shutdown	-	-	12
-3*	Shutdown	-	-	12
-4*	Shutdown	-	-	12
-5*	Shutdown	-	-	12

Table 35 – 1930-1995MHz Downlink Band – Mitigation/Shutdown Test Data

11. Radiated Spurious Emissions

Test Requirement(s):	§2.1053	**Test Engineer(s):**	Sean E.
Test Results:	Pass	**Test Date(s):**	February 10, 2026

Test Procedures:

As required by 47 §2.1053, Radiated Spurious Emissions measurement were made in accordance with the procedures of ANSI C63.26-2015 and KDB 935210 D03 §7.12.

The EUT was placed on a wooden table inside a 3-meter open area alternate test site. The EUT was transmitting into a 50Ω non-radiating load which was directly connected to the EUT antenna port as shown in figure 4.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3 orthogonal axis. The frequency range up to the 10^{th} harmonic was investigated.

Spurious attenuation limit in dB = P1- (43 + 10 $\log_{10}$ (P2) = -13dBm

Where P1 = Transmitter Power in dBm and P2= Power in Watt

Test Setup:

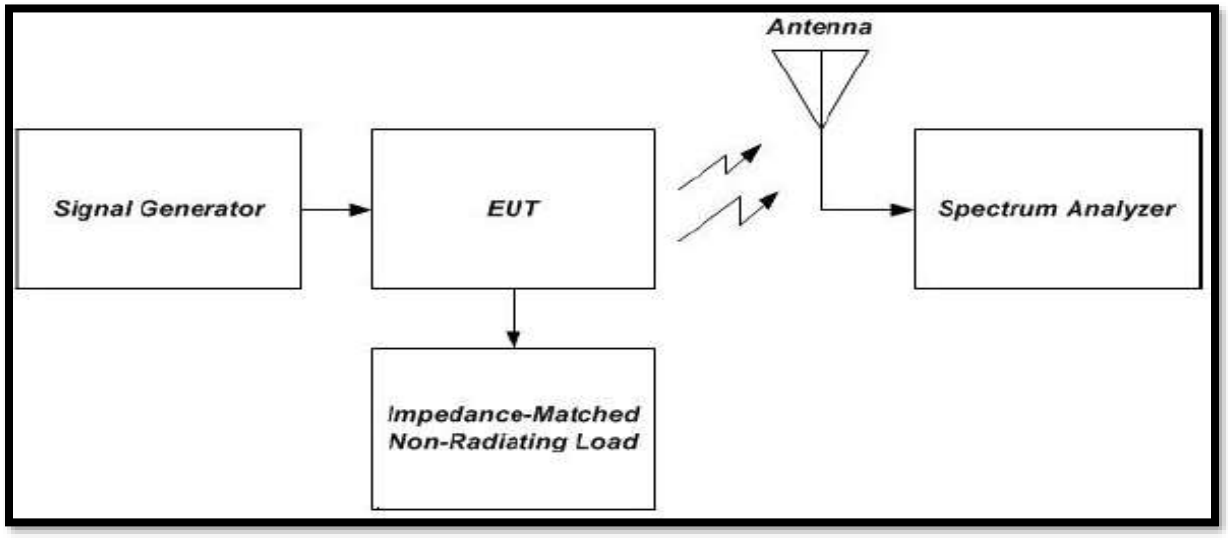
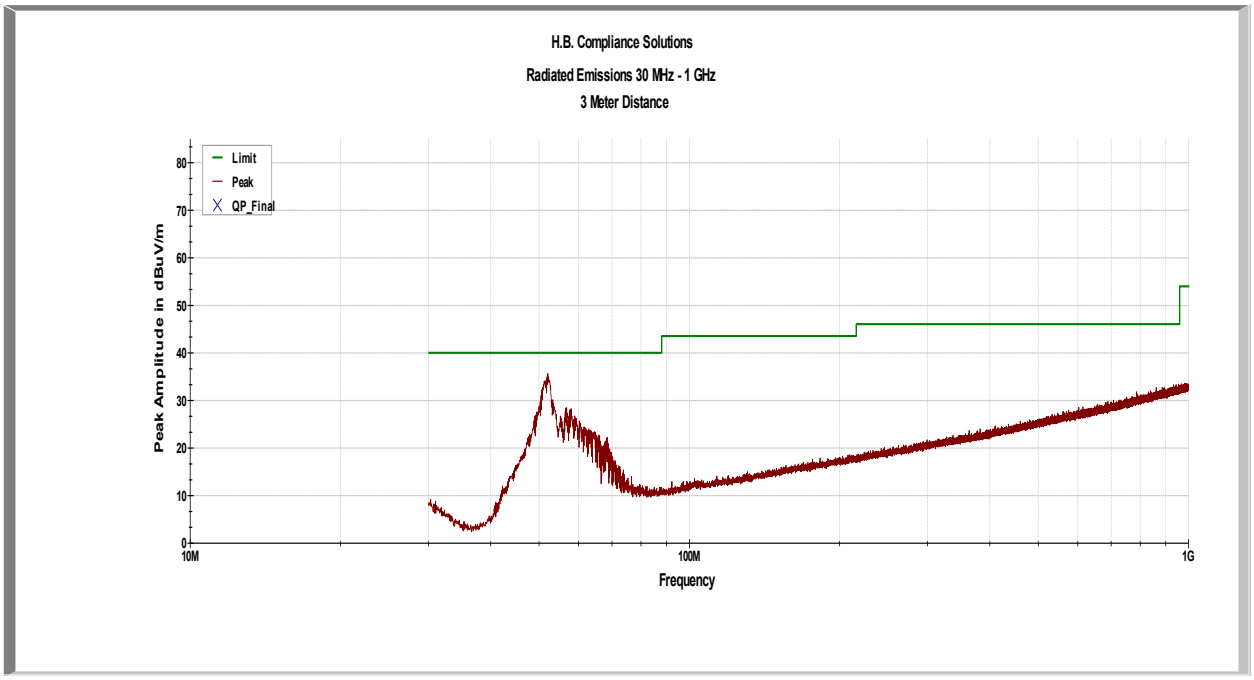


Figure 8 – Radiated Spurious Emission Test Setup



Plot 50 – Radiated Emissions – 30MHz to 1GHz

Frequency Band (MHz)	Measured Level (dBm)	Antenna Polarity (V/H)	Limit (dBm)	Margin (dBm)
3765	-62.98	V	-13	-49.98
5647.5	-67.29	V	-13	-54.29

Table 36 – 1850-1915MHz Uplink Band – Radiated Spurious Test Data

Frequency Band (MHz)	Measured Level (dBm)	Antenna Polarity (V/H)	Limit (dBm)	Margin (dBm)
3925	-66.42	V	-13	-53.42
5887.5	-68.40	V	-13	-55.40

Table 37 – 1930-1995MHz Downlink Band – Radiated Spurious Test Data

NOTE: There were no detectable emissions above the 3rd harmonic. Measurement was made above 2nd harmonic to show the Receiver Noise Floor (N.F).

12. Test Equipment

Equipment	Manufacturer	Model	Serial #	Last Cal Date	Cal Due Date
Spectrum Analyzer	Agilent	E4443A	US41420164	Jul-15-25	Jul-15-26
Directional Coupler	Andrew	C-10-CPUS-N	150503142544	Verified	
Attenuator 20dB	Weinschel	41-20-12	86332	Verified	
Variable Attenuator	JFW	50R-320-SMA	7054221439	Verified	
Signal Generator	Agilent	E4432B	US40053021	Apr-16-25	Apr-16-27
Signal Generator	Agilent	E4432B	US38220446	Verified	
Horn Antenna	Com-Power	AHA-118	071150	Feb-13-25	Feb-13-28
GTEM Antenna	EMCO	5417	1063	Dec-19-25	Dec-19-28
EMI Receiver	Rohde & Schwarz	ESMI26	840607/005	Jan-28-25	Feb-28-26
Spectrum Analyzer	Hewlett Packard	8566B	2747A05264/ 2318A04952	Mar-25-25	Mar-25-26
High Pass Filter	Mini-Circuits	VHF-3800+	2216	Verified	

Table 38 – Test Equipment List

***Statement of Traceability:** Test equipment is maintained and calibrated on a regular basis. All calibrations have been performed by a 17025 accredited test facility, traceable to National Institute of Standards and Technology (NIST)

13. Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. These measurements figures are calculated in accordance with ETSI TR 100 028 Parts 1 and 2. Instrumentation measurement uncertainty has **not** been taken into account to determine compliance.

The following measurement uncertainty values have been calculated as show in the table below:

Measured Parameter	Measurement Unit	Expanded Uncertainty
RF Power, Conducted	dBm	± 1.5dB
Occupied Channel Bandwidth	dBm	±5%
Unwanted Emissions, Antenna Conducted	dBm	± 1.2dB
Conducted Emissions (AC Power) 150kHz-30MHz	dBuV or dBuA	± 4.3dB
Radiated Emissions below 1GHz	dBuV/m	± 5.6dB
Radiated Emissions above 1GHz	dBuV/m	± 4.1dB

The reported expanded uncertainty has been estimated at a 95% confidence level (k=2)

END OF TEST REPORT