

FCC and ISED Canada Evaluation of the
Resideo USA LLC. / Ademco Inc.
ERM4010 Equipment Remote Module

FCC ID: HS9-ERM4010R01
IC: 573R-ERM4010R01

In accordance with:
FCC 47 CFR part 15.247 and ISED Canada's
Radio Standards Specifications RSS-247

Prepared for: Resideo USA LLC.
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Bhagyashree Chaudhary	Senior Wireless Engineer TUV SUD America, Inc.	Authorized Signatory	June 10, 2026

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD America, Inc. document control rules.

FCC Accreditation Designation Number US1148 New Brighton, MN Test Laboratory	Innovation, Science, and Economic Development Canada Accreditation Site Number 4512A New Brighton, MN Test Laboratory
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EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with the standards listed above and the tests shown in Table 1.4-1 of this report.



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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Table 1.1-1 – Modification Record

Issue	Description of Change	Date of Issue
1	First Issue	June 2, 2026
2	Revised the model number	June 10, 2026

1.2 Introduction

The purpose of this report is to demonstrate compliance with Part 15 Subpart C of the FCC's Code of Federal Regulations Section 15.247 and Innovation Science and Economic Development Canada's Radio Standards Specification RSS-247 for the tests documented herein.

FCC Applicant	Resideo USA LLC.
ISED Canada Applicant	Ademco Inc.
Manufacturer	Resideo USA LLC.
Applicant's Email Address	sean.sellergren@resideo.com
Model Number(s)	ERM4010
Serial Number(s)	53450010005272 (Radiated and Power Line Conducted Emissions, "#2"), 53450010005273 (RF Conducted Measurements, "#3")
FCC ID	HS9-ERM4010R01
IC ID	573R-ERM4010R01
Hardware Version(s)	N/A
Software Version(s)	Rev. A
Number of Samples Tested	2
Test Specification/Issue/Date	US Code of Federal Regulations (CFR): Title 47, Part 15, Subpart C: Radio Frequency Devices, Intentional Radiators, 2025 Innovation, Science and Economic Development Canada Radio Standards Specification: RSS-247 — Digital Transmission Systems, Frequency Hopping Systems

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(FHSs) and Licence-Exempt Local Area Network Devices in 902-928 MHz, 2400-2483.5 MHz, and 5470-5895 MHz bands, Issue 4, July 24, 2025

Order Number	721019950
Date of Receipt of EUT	5 May 2026
Start of Test	5 May 2026
Finish of Test	7 May 2026
Name of Engineer(s)	Thierry Jean-Charles Duranta K. Barua
Related Document(s)	ANSI C63.10-2020: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices US Code of Federal Regulations (CFR): Title 47, Part 2, Subpart J: Equipment Authorization Procedures, 2025 FCC OET KDB Publication 558074 D01 15.247 Meas Guidance v05r02: Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under Section 15.247 of the FCC Rules, April 2, 2019 Innovation, Science and Economic Development Canada Radio Standards Specification: RSS-GEN - General Requirements for Compliance of Radio Apparatus, Issue 5, April 2018, Amendment 1, March 2019, Amendment 2, February 2021.



1.3 Scope of Testing

The purpose of this report is to demonstrate compliance with Part 15 Subpart C of the FCC's Code of Federal Regulations Section 15.247 and Innovation Science and Economic Development Canada's Radio Standards Specification RSS-247 of the ERM4010 for the tests documented herein.

1.4 Summary of Results

A summary of the tests carried out in accordance with the specifications shown below.

Table 1.4-1 – Summary of Test Results

Report Section	Specification Clause		Test Description	Base Standard	Test Engineer	Test Results
	FCC 47 CFR Rule Part	ISED Canada's RSS				
2.1	15.203, 15.204	RSS-GEN	Antenna Requirements	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.2	15.247(a)(1)	RSS-247 6.2.2.1	20dB / 99% Bandwidth	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.3	15.247(a)(1)	RSS-247 6.2.1	Hopping Channel Separation	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.4	15.247(a)(1)(i)	RSS-247 6.2.2.1	Number of Hopping Channels	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.5	15.247(a)(1)(i)	RSS-247 6.2.2.1	Average Occupancy Period	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.6	15.247(b)(2)	RSS-247 6.2.2.2	Peak Conducted Output Power	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.7	15.247(d)	RSS-247 6.6	Conducted Spurious Emissions	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.8	15.247(d)	RSS-247 6.6	Conducted Band-Edge	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.9	15.207	RSS-GEN	Conducted Emissions	ANSI C63.10:2020	Thierry Jean-Charles	Pass
2.10	15.247(d), 15.205	RSS-GEN	Radiated Spurious Emissions into Restricted Frequency Bands	ANSI C63.10:2020	Duranta K. Barua Thierry Jean-Charles	Pass



1.5 Product Information

1.5.1 Technical Description

The EUT is a wall mounted Equipment Remote Module which connects a condensing unit or boiler to control devices without wires. The EUT includes a Sub-gig FHSS radio to reduce interference from other RF Devices.

Technical Details

Mode of Operation: REDLINK™ 900MHz FHSS
 Frequency Range: 902.99973 - 926.39401 MHz
 Number of Channels: 50
 Channel Separation: 400 kHz
 Data Rate: 38.4 kbaud
 Modulations: GFSK
 Antenna Type/Gain: Two Printed PCB Antennas:
 Antenna A (Top) / 1.62 dBi, Antenna B (Side) / 1.62 dBi
 ERM Input Power: 24VAC - 60Hz

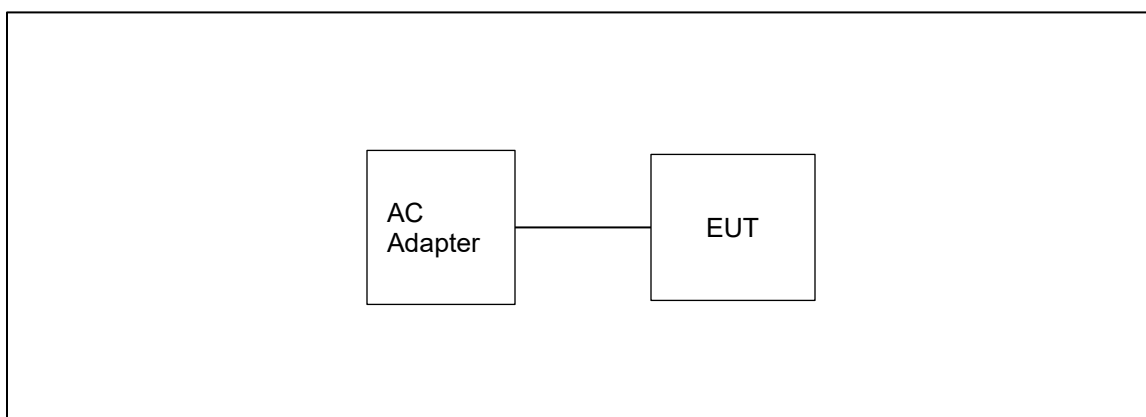


Figure 1.5.1-1 – Test Setup Block Diagram

Table 1.5-1 – Cable Descriptions

Cable/Port	Description
Power Cable	1.83 m, AC Adapter to EUT

**Table 1.5-2 – Support Equipment Descriptions**

Make/Model	Description
Jameco® ReliaPro® Model# ADU240100	24 V Plug In Class 2 AC to AC Wall Adapter Transformer

1.5.2 Modes of Operation

Table 1.5-3 – Test Frequencies & Modes of Operation

The EUT was evaluated in two different test modes: Low, Mid, and High Channel on Top PCB Antenna, and Low, Mid, and High Channel on Side PCB Antenna.

The EUT was configured to operate at the maximum output power as permitted by test firmware, 12 dBm.

Channel	Channel Number	Frequency (MHz)
Low Channel	0	902.99973
Middle Channel	25	914.59689
High Channel	49	926.39401

1.6 Deviations from the Standard

No deviations from the applicable test standard were made during testing.

1.7 EUT Modification Record

The table below details modifications made to the EUT during the test program. The modifications incorporated during each test are recorded on the appropriate test pages.

Table 1.7-1 – Modification Record

Modification State	Description of Modification fitted to EUT	Modification Fitted By	Date Modification Fitted
0	Initial State	N/A	N/A

1.8 Test Location

TÜV SÜD conducted the following tests at our New Brighton, MN Test Laboratory.

Office address:

TÜV SÜD America, Inc.
141 14th Street NW
New Brighton, MN 55112 USA



2 Test Details

2.1 Antenna Requirements

2.1.1 Specification Reference

FCC: Section 15.203, 15.204;
ISED Canada RSS-Gen 6.8.

2.1.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.1.3 Antenna Requirement

Limit Clause FCC Sections: 15.203, 15.204

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Table 2.1-1 – Antenna Used In EUT

Antenna Type	Connection Type	Antenna Gain
Top PCB Trace Antenna	Integral to PCB	1.62 dBi
Side PCB Trace Antenna	Integral to PCB	1.62 dBi

Note: The antenna and antenna connector are fully contained within the EUT and are inaccessible to the end user.



Test Summary:

The EUT uses two internal printed antennas which are integral to the main PCB of the device. The antennas are not removable and therefore meet the requirements of FCC Section 15.203.

Test Result: Pass

2.1.4 Test Location and Test Equipment Used

This test was carried out in TÜV SÜD America, Inc., 141 14th Street NW, New Brighton, MN 55112, USA.

As this is a visual inspection, no test equipment was used.



2.2 20dB / 99% Bandwidth

2.2.1 Specification Reference

FCC 47 CFR Part 15.247(a)(1)(ii)
RSS-247 6.2.2.1

2.2.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.2.3 Date of Test

May 6, 2026 to May 7, 2026

2.2.4 Test Method

The 20dB bandwidth was measured in accordance with the FCC KDB 558074 D01 15.247 Meas Guidance. The Resolution Bandwidth (RBW) of the spectrum analyzer was set to 1% to 5% of the Occupied Bandwidth and the Video Bandwidth (VBW) was set to ≥ 3 times the RBW. The trace was set to max hold using a peak detector. The marker-delta function of the spectrum analyzer was utilized to determine the 20dB bandwidth of the emission.

The occupied bandwidth measurement function of the spectrum analyzer was used to measure the 99% bandwidth value. The span of the analyzer was set to capture all products of the modulation process, including the emission sidebands. The RBW to 1-5% of the occupied bandwidth and the VBW set to ≥ 3 times the RBW.

2.2.5 Environmental Conditions

The EUT was evaluated within the climatic range of the EUT as specified by the manufacturer. When the manufacturer does not specify climatic parameters for the EUT, all tests are performed within the ambient climatic conditions of the laboratory.

Temperature: 23.3 C
Humidity: 14 %
Pressure: 983 mBar



2.2.6 Test Results

Table 2.2-1 – 20dB / 99% Bandwidth Results - Side Antenna

Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
902.99973	76.277	76.696
914.59689	77.355	78.355
926.39401	77.897	78.967

Table 2.2-2 – 20dB / 99% Bandwidth Results - Top Antenna

Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
902.99973	76.557	77.549
914.59689	76.589	79.359
926.39401	77.852	80.484

Test Summary: The EUT 20-dB and 99% Bandwidth are less than 500 kHz.

Test Result: Pass

See data below for detailed results.

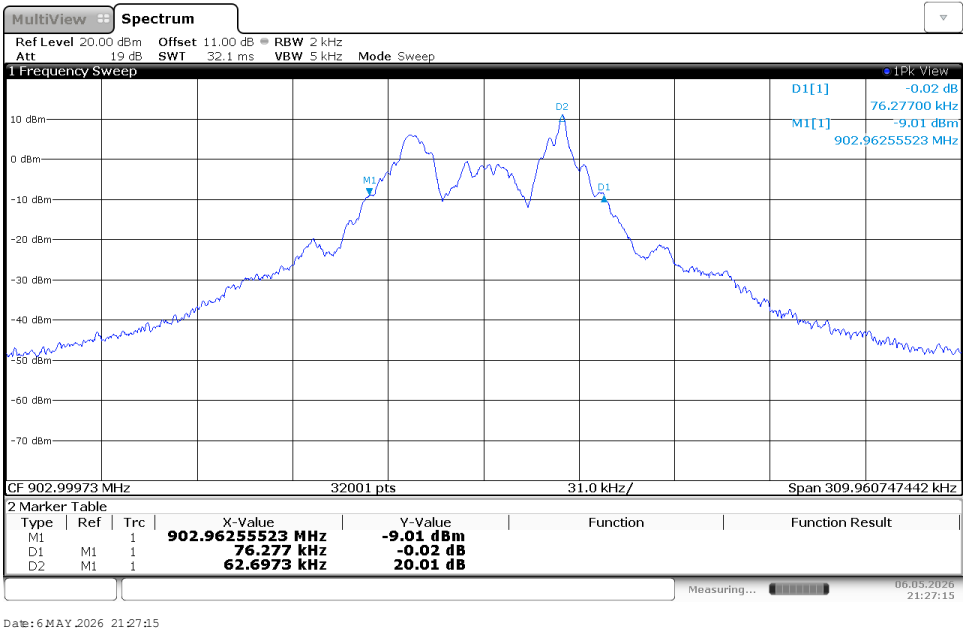


Figure 2.2.6-1 – 20dB Bandwidth – Low Channel - Side Antenna

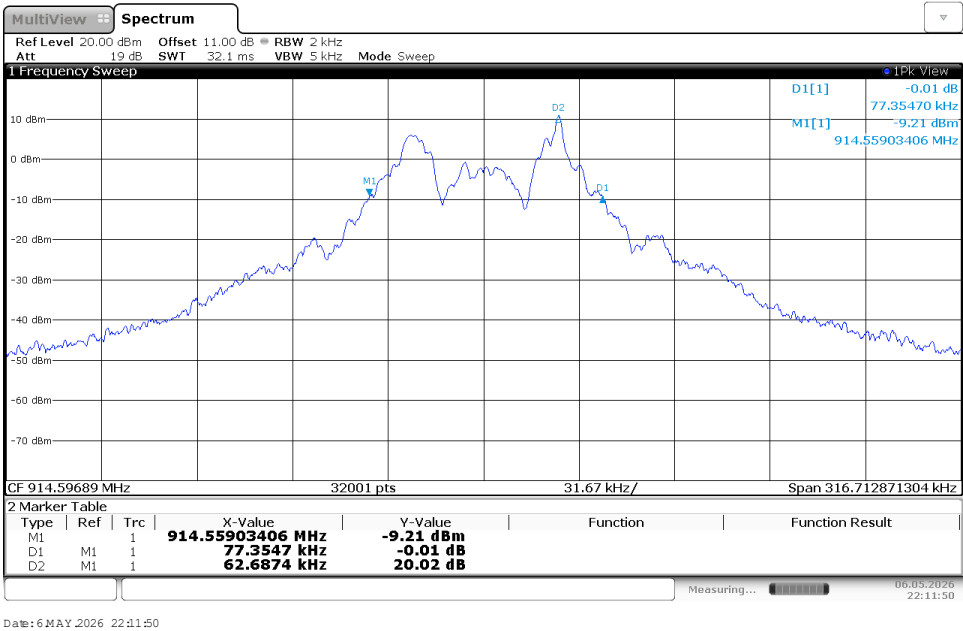


Figure 2.2.6-2 – 20dB Bandwidth – Middle Channel - Side Antenna

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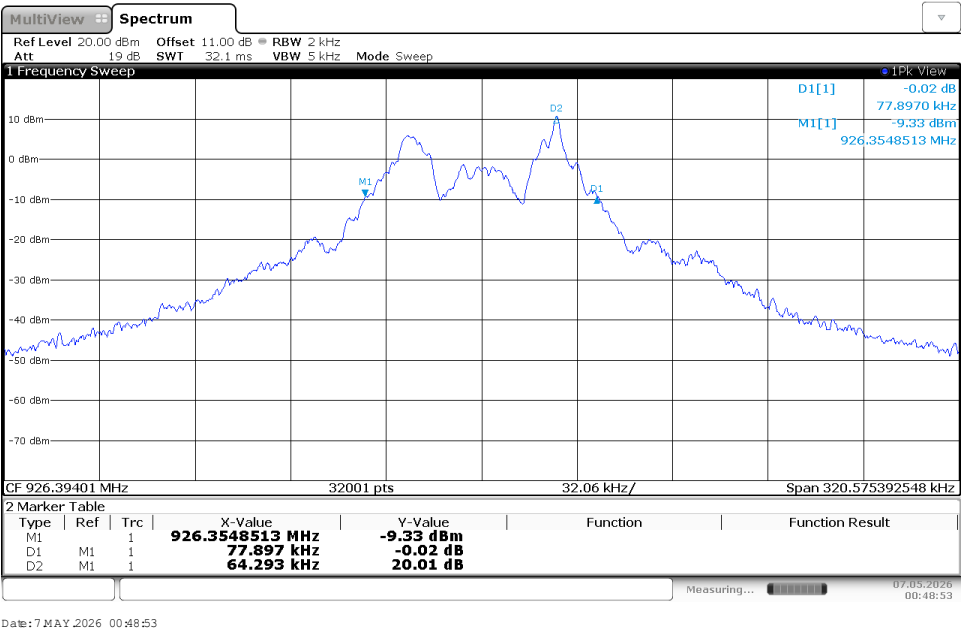


Figure 2.2.6-3 – 20dB Bandwidth – High Channel - Side Antenna

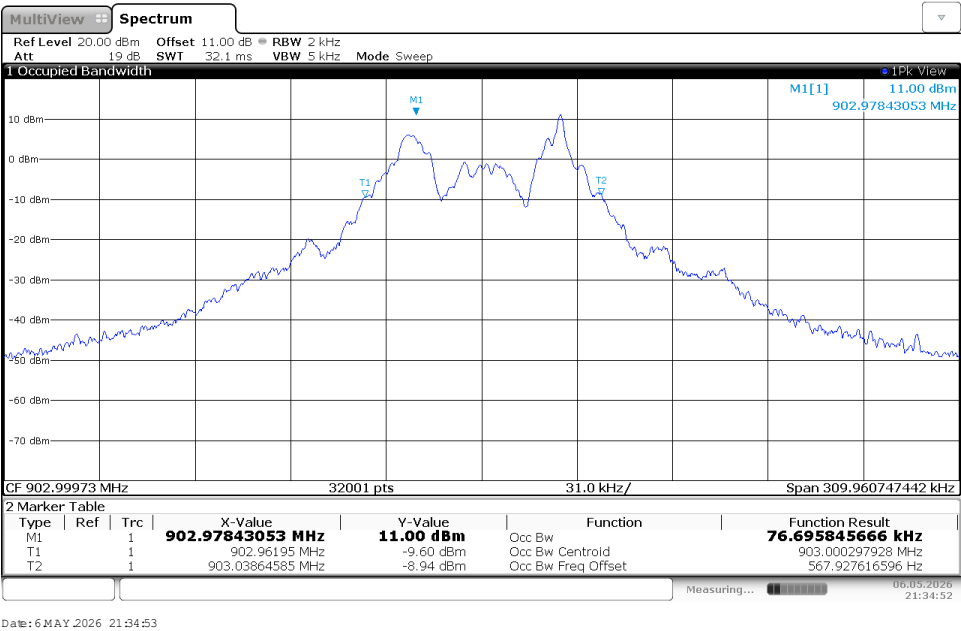


Figure 2.2.6-4 – 99% Bandwidth – Low Channel - Side Antenna

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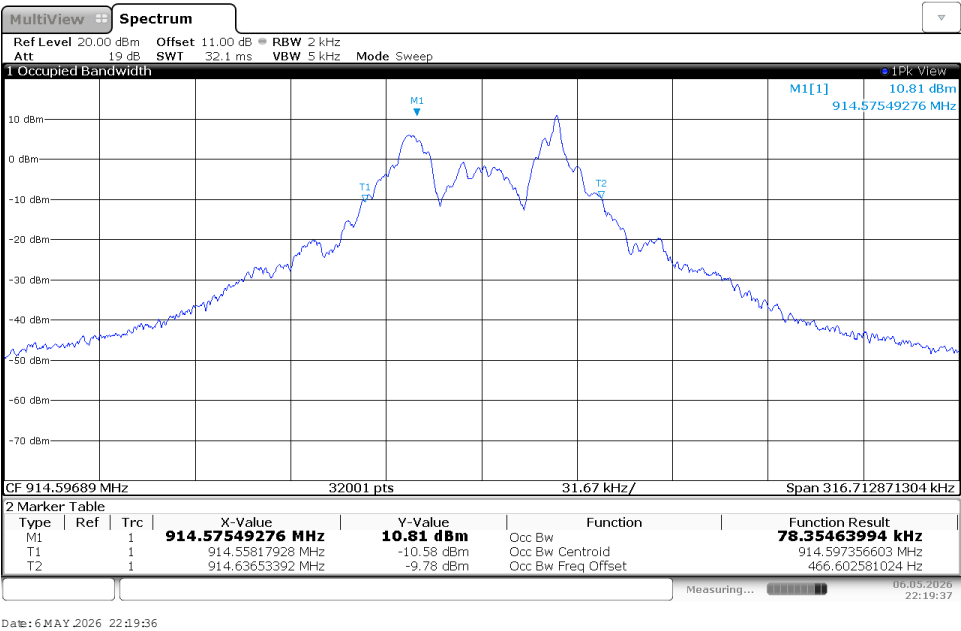


Figure 2.2.6-5 – 99% Bandwidth – Middle Channel - Side Antenna

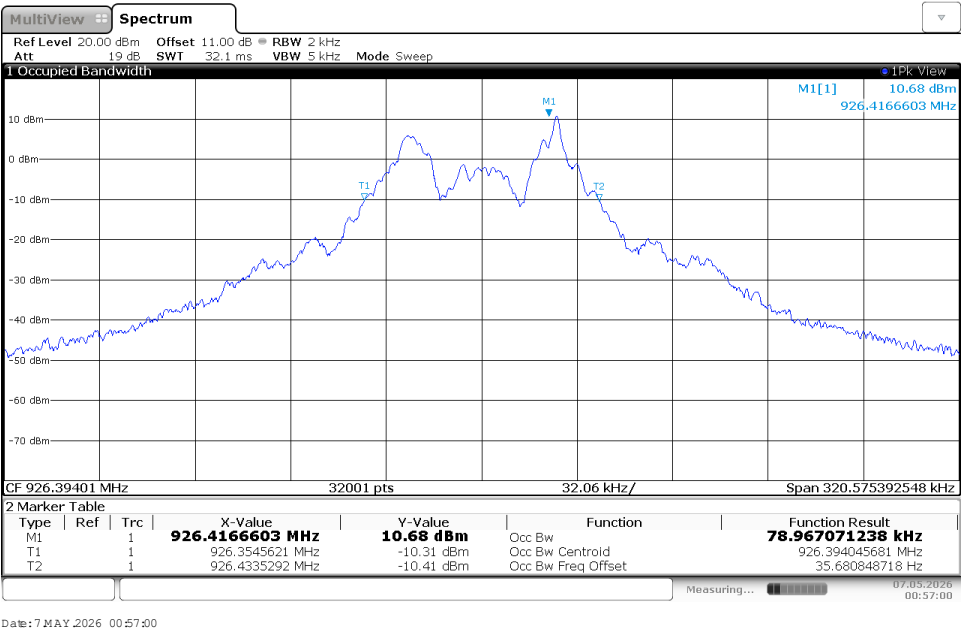


Figure 2.2.6-6 – 99% Bandwidth – High Channel - Side Antenna

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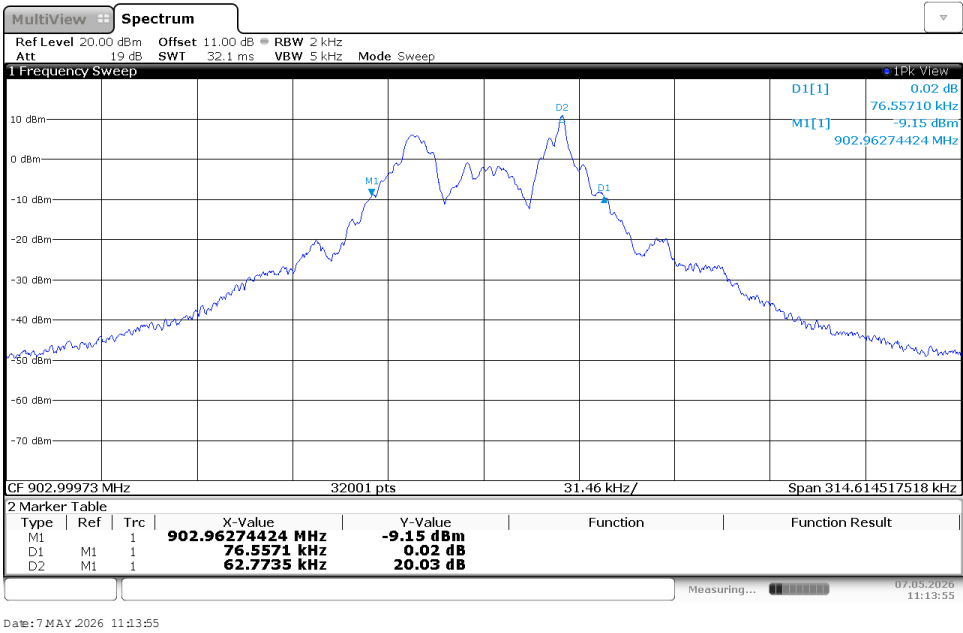


Figure 2.2.6-7 – 20dB Bandwidth – Low Channel - Top Antenna

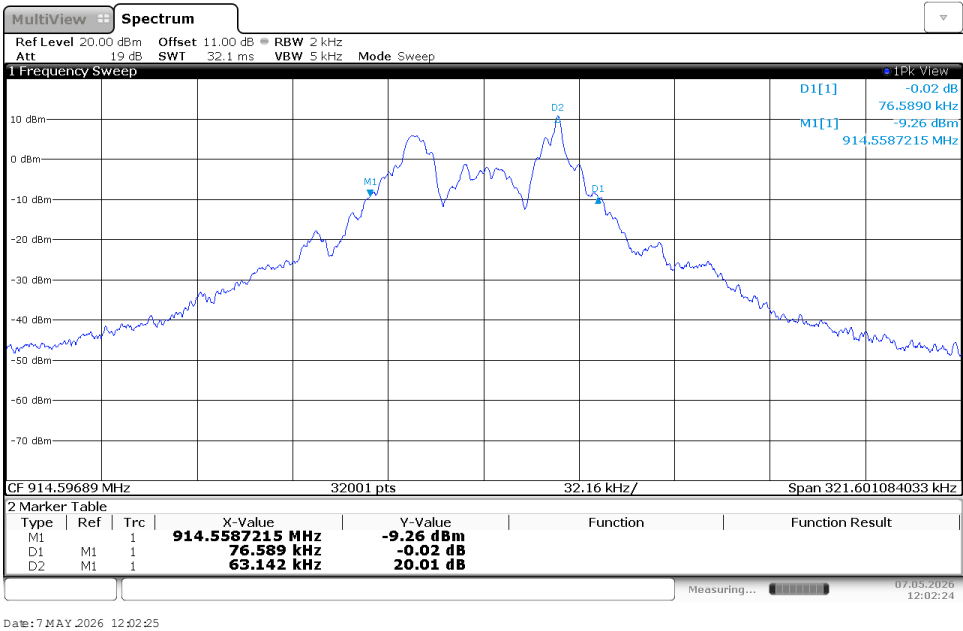


Figure 2.2.6-8 – 20dB Bandwidth – Middle Channel - Top Antenna

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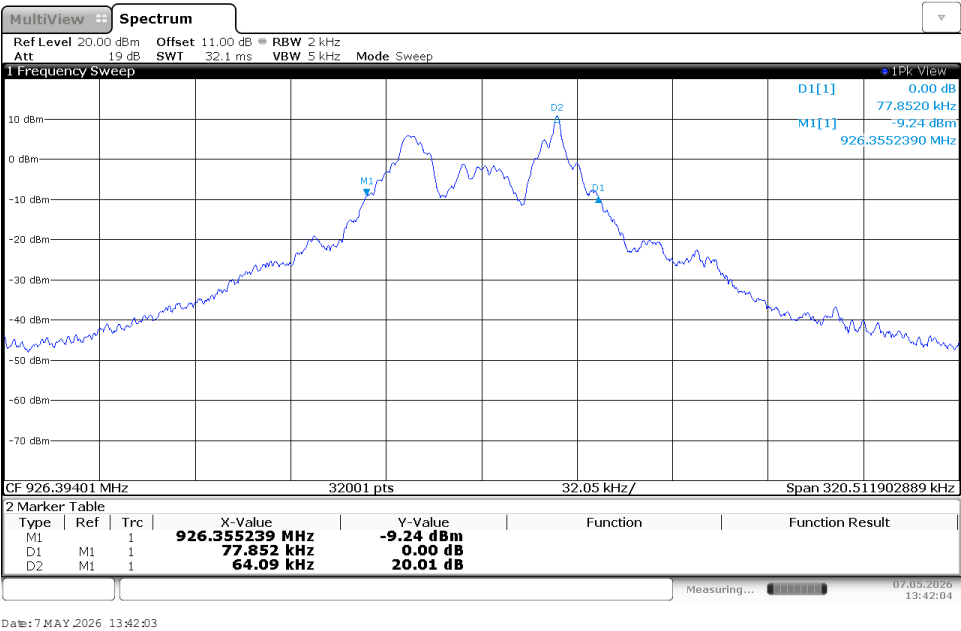


Figure 2.2.6-9 – 20dB Bandwidth – High Channel - Top Antenna

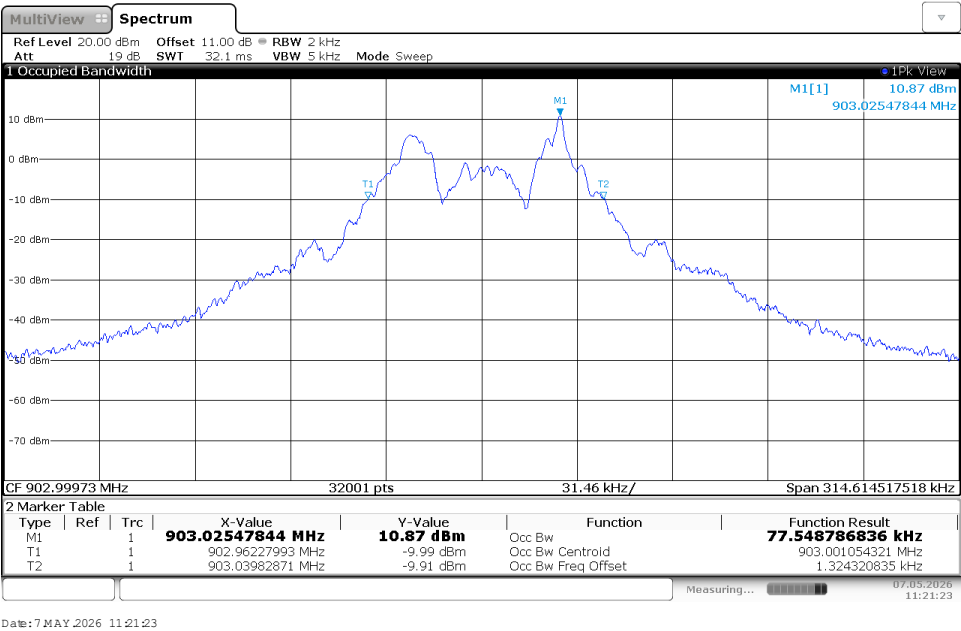


Figure 2.2.6-10 – 99% Bandwidth – Low Channel - Top Antenna

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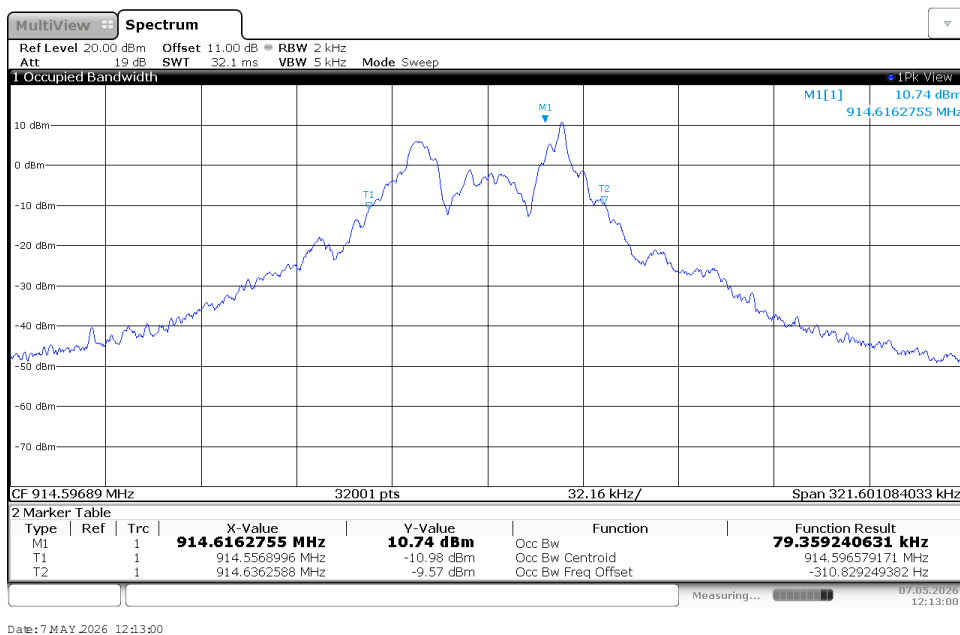


Figure 2.2.6-11 – 99% Bandwidth – Middle Channel - Top Antenna

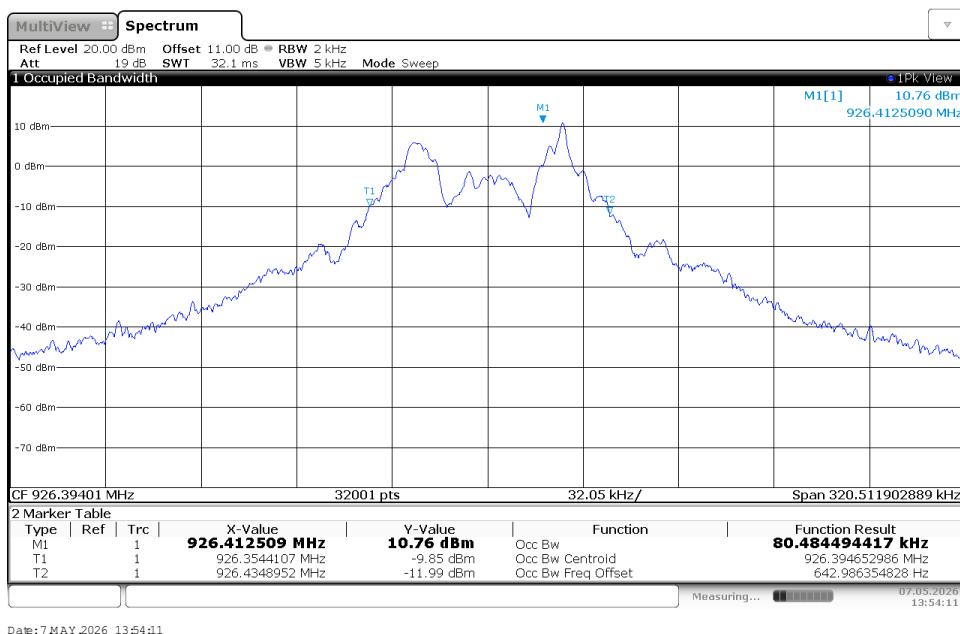


Figure 2.2.6-12 – 99% Bandwidth – High Channel - Top Antenna

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2.2.7 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.
Test Area: REVERB

Table 2.2-3 – 20dB / 99% Bandwidth Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
DEMC3046	Aeroflex Inmet	Atten 10dB 2.9mm-M/F, DC-26.5GHz, 2W	26AH-10	1443	B	05/27/2025	05/27/2026
DEMC3085	Rohde & Schwarz	Signal & Spectrum Analyzer	FSW43	103997	G	08/29/2025	08/29/2026
BEMC02112	Teledyne Storm Products	Duratest 175 Cable 26.5GHz	921-0101-036	12-06-698	B	01/12/2026	01/12/2027

Cal Code G = Calibration performed by an accredited outside source.

Cal Code B = Calibration verification performed internally.

Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.



2.3 Hopping Channel Separation

2.3.1 Specification Reference

FCC 47 CFR Part 15.247(a)(1)
RSS-247 6.2.1

2.3.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.3.3 Date of Test

May 6, 2026 to May 7, 2026

2.3.4 Test Method

The Hopping Channel Separation was measured in accordance with ANSI C63.10-2020 Section 7.8.2. The Resolution Bandwidth (RBW) of the spectrum analyzer was set to 30% of the channel spacing and the Video Bandwidth (VBW) was set to ≥ 3 times the RBW. The trace was set to max hold using a peak detector. The marker-delta function of the spectrum analyzer was utilized to determine the channel separation of the adjacent channels.

2.3.5 Environmental Conditions

The EUT was evaluated within the climatic range of the EUT as specified by the manufacturer. When the manufacturer does not specify climatic parameters for the EUT, all tests are performed within the ambient climatic conditions of the laboratory.

Temperature: 23.3 C
Humidity: 14 %
Pressure: 983 mBar

2.3.6 Test Results

Table 2.3-1 – Hopping Channel Separation Results - Side Antenna

Frequency 1 (MHz)	Frequency 2 (MHz)	Separation (kHz)	20dB Bandwidth (kHz)
914.197255	914.597538	400.283	77.897



Table 2.3-2 – Hopping Channel Separation Results - Top Antenna

Frequency 1 (MHz)	Frequency 2 (MHz)	Separation (kHz)	20dB Bandwidth (kHz)
914.198435	914.598376	399.941	77.852

Test Summary: The EUT minimum channel separation is greater than the measured 20-dB Bandwidth.

Test Result: Pass

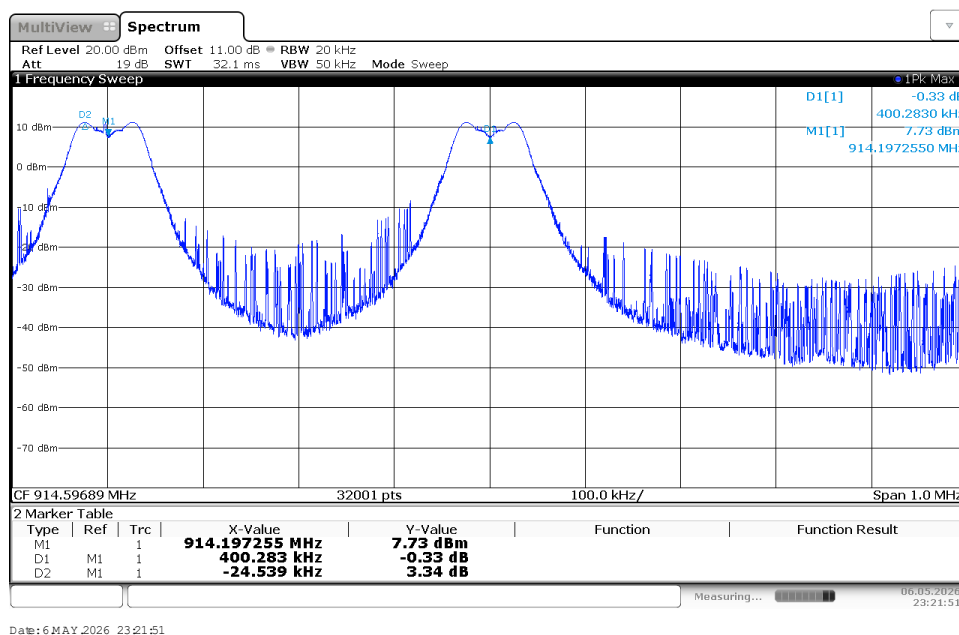


Figure 2.3.6-1 – Hopping Channel Separation - Side Antenna

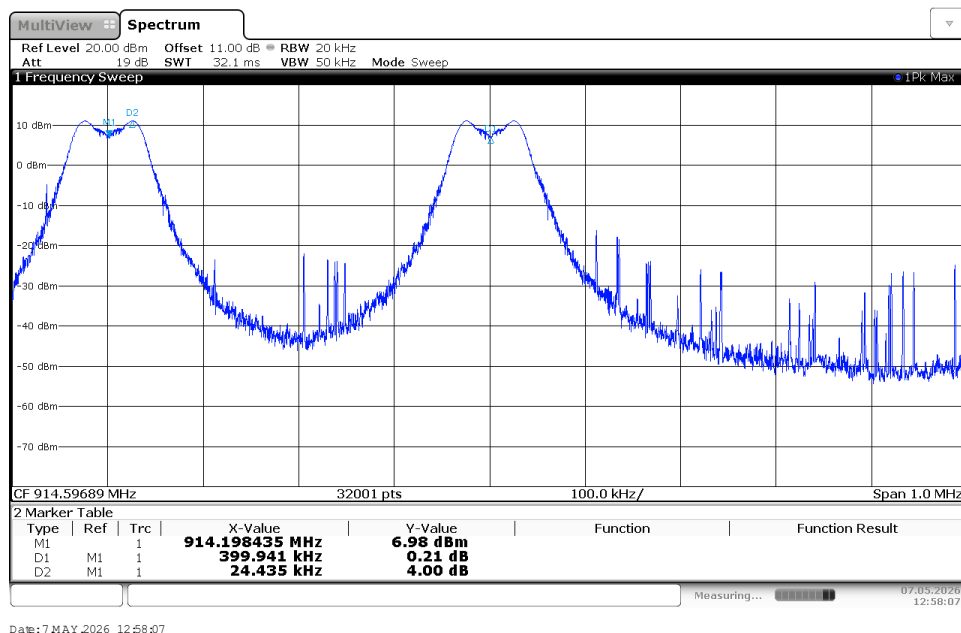


Figure 2.3.6-2 – Hopping Channel Separation - Top Antenna

2.3.7 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.
Test Area: REVERB

Table 2.3-3 – Hopping Channel Separation Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
DEMC3046	Aeroflex Inmet	Atten 10dB 2.9mm-M/F, DC-26.5GHz, 2W	26AH-10	1443	B	05/27/2025	05/27/2026
DEMC3085	Rohde & Schwarz	Signal & Spectrum Analyzer	FSW43	103997	G	08/29/2025	08/29/2026
BEMC02112	Teledyne Storm Products	Duratest 175 Cable 26.5GHz	921-0101-036	12-06-698	B	01/12/2026	01/12/2027

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Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.

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2.4 Number of Hopping Channels

2.4.1 Specification Reference

FCC 47 CFR Part 15.247(a)(1)(i)
RSS-247 6.2.2.1

2.4.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.4.3 Date of Test

May 6, 2026 to May 7, 2026

2.4.4 Test Method

The Number of Hopping Channels was measured in accordance with ANSI C63.10-2020 Section 7.8.3. The Resolution Bandwidth (RBW) of the spectrum analyzer was set to $\leq 30\%$ of the channel spacing or the 20dB Bandwidth, and the Video Bandwidth (VBW) was set to ≥ 3 times the RBW. The trace was set to max hold using a peak detector. The spectrum analyzer automatic peak list function was utilized to determine the number of channels.

2.4.5 Environmental Conditions

The EUT was evaluated within the climatic range of the EUT as specified by the manufacturer. When the manufacturer does not specify climatic parameters for the EUT, all tests are performed within the ambient climatic conditions of the laboratory.

Temperature: 23.3 C
Humidity: 14 %
Pressure: 983 mBar

2.4.6 Test Results

Table 2.4-1 – Number of Hopping Channel Results

Number of Hopping Channels
50

Test Summary: The EUT uses 50 hopping channels.

Test Result: Pass

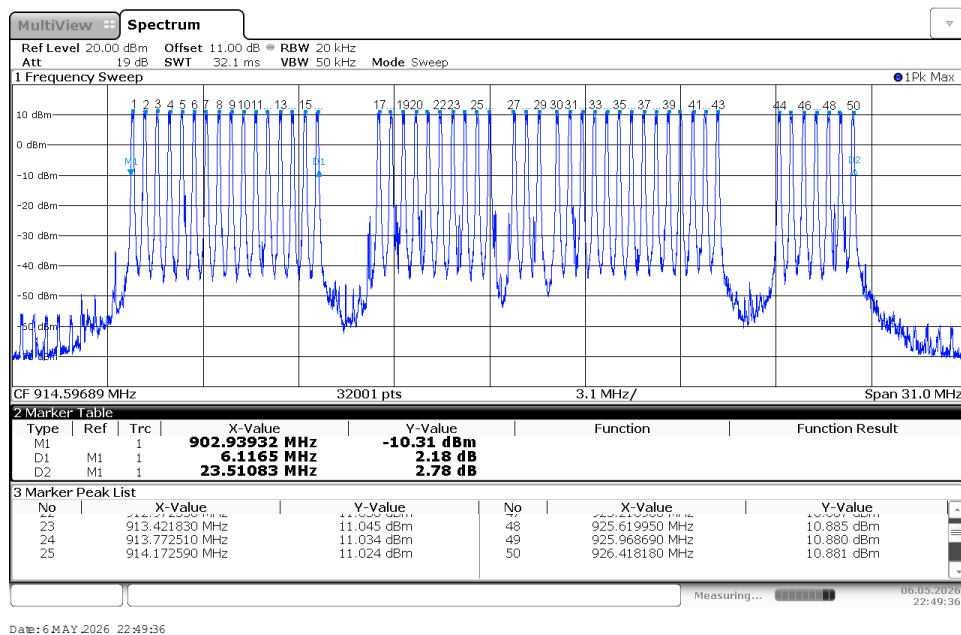


Figure 2.4.6-1 – Number of Hopping Channels - Side Antenna

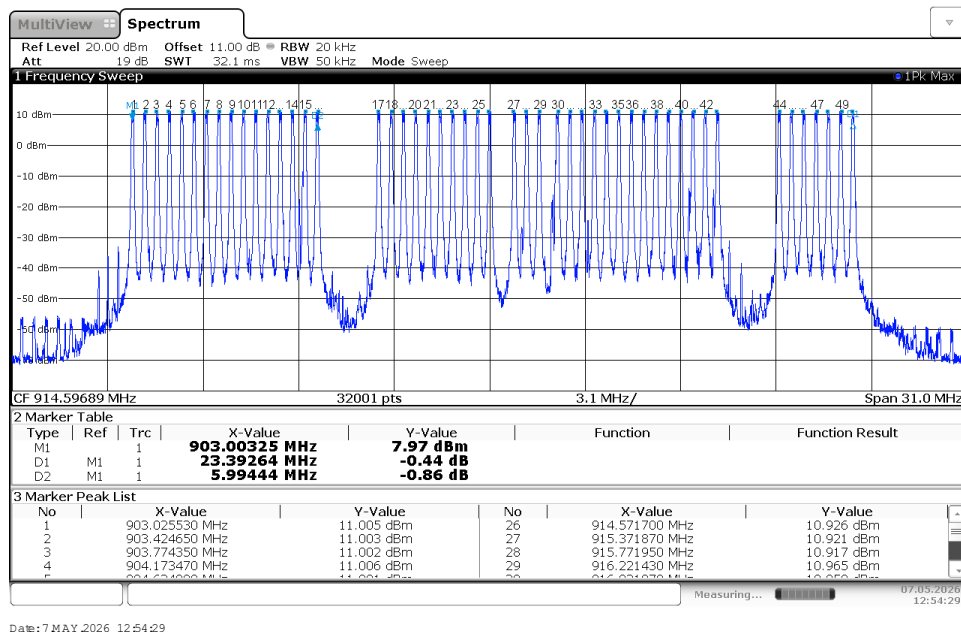


Figure 2.4.6-2 – Number of Hopping Channels - Top Antenna

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2.4.7 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.

Test Area: REVERB

Table 2.4-2 – Number of Hopping Channels Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
DEMC3046	Aeroflex Inmet	Atten 10dB 2.9mm-M/F, DC-26.5GHz, 2W	26AH-10	1443	B	05/27/2025	05/27/2026
DEMC3085	Rohde & Schwarz	Signal & Spectrum Analyzer	FSW43	103997	G	08/29/2025	08/29/2026
BEMC02112	Teledyne Storm Products	Duratest 175 Cable 26.5GHz	921-0101-036	12-06-698	B	01/12/2026	01/12/2027

Cal Code G = Calibration performed by an accredited outside source.

Cal Code B = Calibration verification performed internally.

Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.



2.5 Average Occupancy Period

2.5.1 Specification Reference

FCC 47 CFR Part 15.247(a)(1)(i)
RSS-247 6.2.2.1

2.5.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.5.3 Date of Test

May 6, 2026 to May 7, 2026

2.5.4 Test Method

The Average Occupancy Period (Dwell Time) was measured in accordance with ANSI C63.10-2020 Section 7.8.4. The spectrum analyzer was put into a 0 Hz Span (time domain) measurement mode, and the Resolution Bandwidth (RBW) of the spectrum analyzer was set less than or equal to the channel spacing and where possible was set $> 1/T$, where T is the dwell time. The sweep time was set high enough to encompass the entire time on the channel. Triggering was set to video trigger at a level high enough to negate interference from adjacent channels. The trace was set to max hold using a peak detector. The marker-delta function of the spectrum analyzer was utilized to determine the occupancy time on the channel. The test was then repeated (if necessary) to measure the period until returning to the channel.

The Total Dwell Time is calculated with the following formula:

$$\text{Total Dwell Time} = (\text{Number of Hops Observed during Requirement Time Period}) * (\text{Dwell Time per Hop})$$

2.5.5 Environmental Conditions

The EUT was evaluated within the climatic range of the EUT as specified by the manufacturer. When the manufacturer does not specify climatic parameters for the EUT, all tests are performed within the ambient climatic conditions of the laboratory.

Temperature: 23.3 C
Humidity: 14 %
Pressure: 983 mBar



2.5.6 Test Results

Table 2.5-1 – Average Occupancy Period Results - Side Antenna

Frequency (MHz)	Analyzer Sweep Time (s)	Number of Hops Observed	Requirement Time Period (s)	Number of Hops Within Requirement Period	Dwell Time per Hop (ms)	Total Dwell Time (ms)	Limit (ms)
914.59689	25	2	20	1	179.919	179.919	400

Table 2.5-2 – Average Occupancy Period Results - Top Antenna

Frequency (MHz)	Analyzer Sweep Time (s)	Number of Hops Observed	Requirement Time Period (s)	Number of Hops Within Requirement Period	Dwell Time per Hop (ms)	Total Dwell Time (ms)	Limit (ms)
914.59689	25	2	20	1	179.922	179.922	400

Test Summary: The EUT maximum dwell time is less than 400 ms in a 20s observation period.

Test Result: Pass

See data below for detailed results.

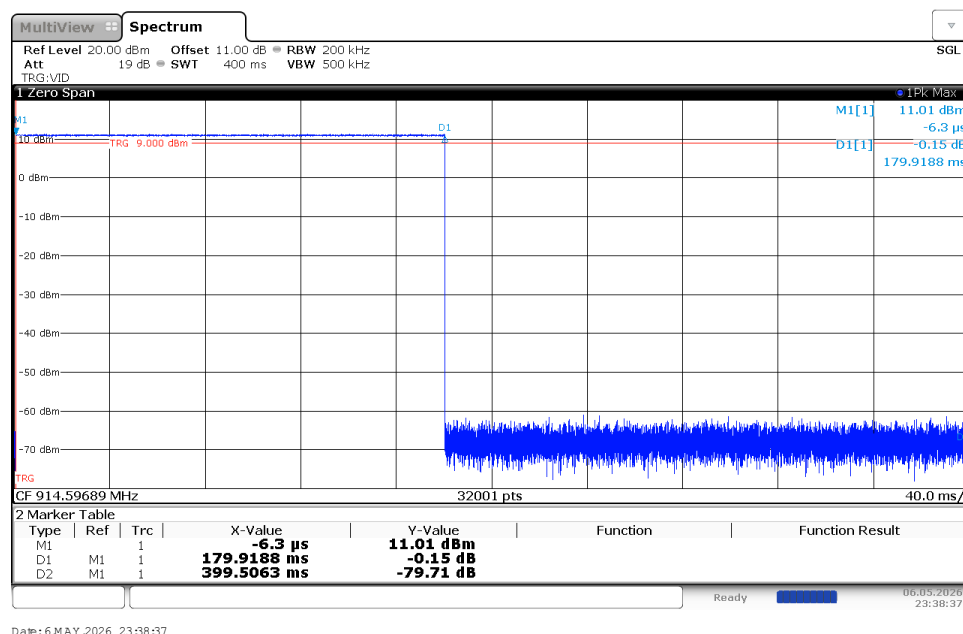


Figure 2.5.6-1 – Dwell Time of Hop - Side Antenna

TÜV SÜD America Inc
141 14th Street NW
New Brighton, MN 55112

Phone: 651-631-2487
www.tuv-sud-america.com

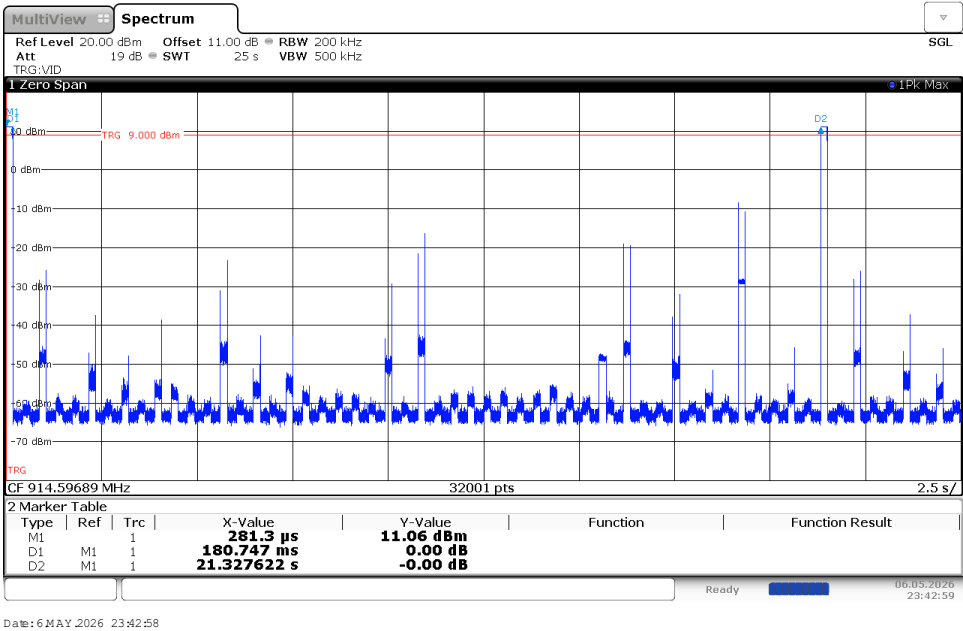


Figure 2.5.6-2 – Number of Hops in 20 s - Side Antenna

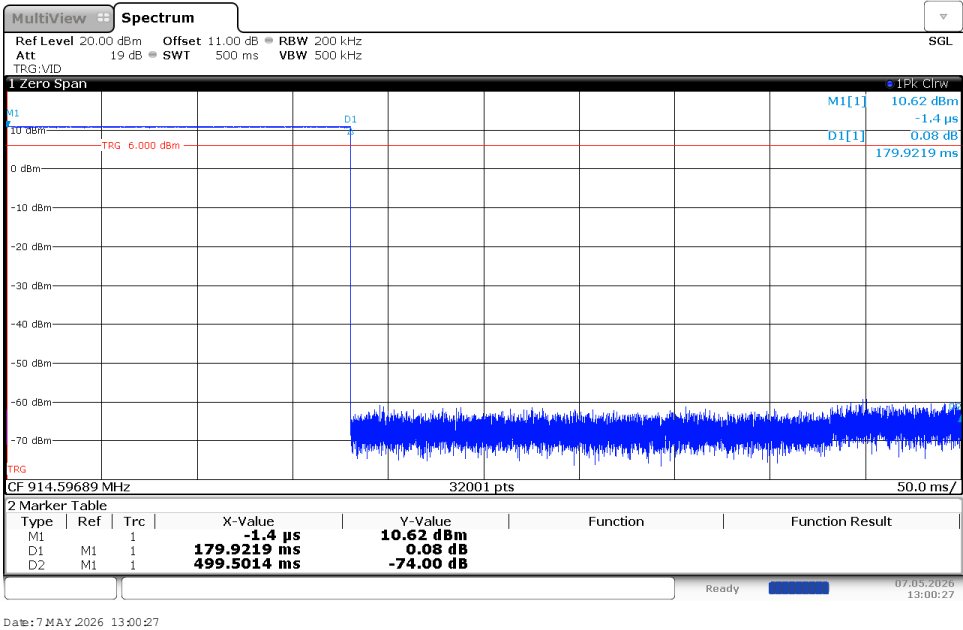


Figure 2.5.6-3 – Dwell Time of Hop - Top Antenna

TÜV SÜD America Inc
141 14th Street NW
New Brighton, MN 55112

Phone: 651-631-2487
www.tuv-sud-america.com

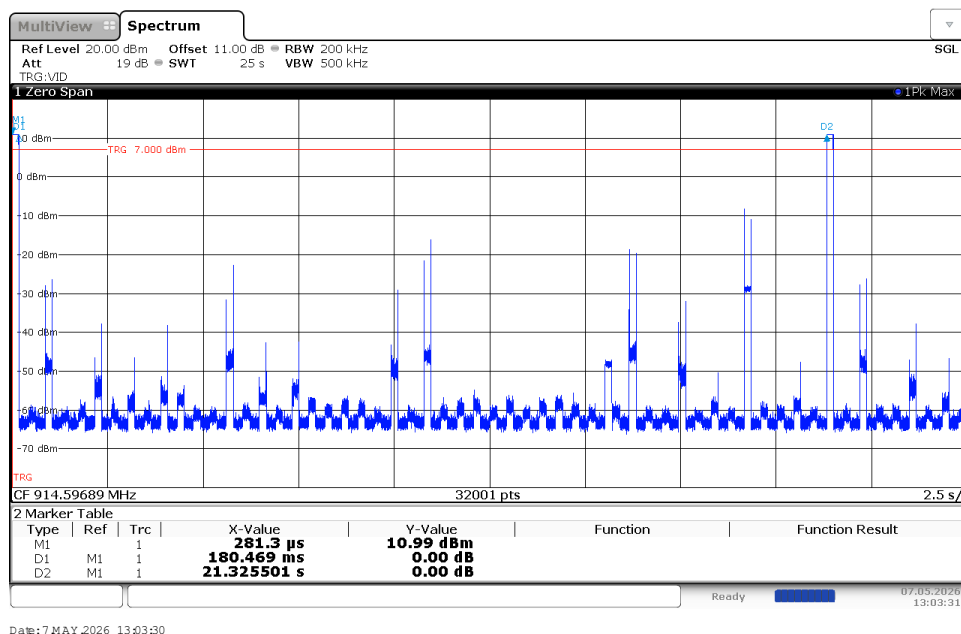


Figure 2.5.6-4 – Number of Hops in 20 s - Top Antenna

2.5.7 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.
Test Area: REVERB

Table 2.5-3 – Average Channel Occupancy Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
DEMC3046	Aeroflex Inmet	Atten 10dB 2.9mm-M/F, DC-26.5GHz, 2W	26AH-10	1443	B	05/27/2025	05/27/2026
DEMC3085	Rohde & Schwarz	Signal & Spectrum Analyzer	FSW43	103997	G	08/29/2025	08/29/2026
BEMC02112	Teledyne Storm Products	Duratest 175 Cable 26.5GHz	921-0101-036	12-06-698	B	01/12/2026	01/12/2027

Cal Code G = Calibration performed by an accredited outside source.

Cal Code B = Calibration verification performed internally.

Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.

TÜV SÜD America Inc
141 14th Street NW
New Brighton, MN 55112

Phone: 651-631-2487
www.tuv-sud-america.com



2.6 Peak Conducted Output Power

2.6.1 Specification Reference

FCC 47 CFR Part 15.247(b)(2)
RSS-247 6.2.2.2

2.6.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.6.3 Date of Test

May 6, 2026 to May 7, 2026

2.6.4 Test Method

The maximum peak conducted output power was measured in accordance with ANSI C63.10-2020 Section 7.8.5. The RF output of the EUT was directly connected to the input of the spectrum analyzer along with a suitable external attenuator. The Resolution Bandwidth (RBW) was > 20dB of the emission and the VBW was set to ≥ 3 times the RBW. The trace was set to max hold using a peak detector. The marker-to-peak function of the spectrum analyzer was utilized to determine the peak level of the emission.

2.6.5 Environmental Conditions

The EUT was evaluated within the climatic range of the EUT as specified by the manufacturer. When the manufacturer does not specify climatic parameters for the EUT, all tests are performed within the ambient climatic conditions of the laboratory.

Temperature: 23.3 C
Humidity: 14 %
Pressure: 983 mBar

2.6.6 Test Results

Table 2.6-1 – Peak Conducted Output Power Results - Side Antenna

Frequency (MHz)	Measured Output Power (dBm)	Output Power Limit (dBm)	Margin (dB)
902.99973	11.175	30	-18.825
914.59689	11.037	30	-18.963
926.39401	10.897	30	-19.103

**Table 2.6-2 – Peak Conducted Output Power E.I.R.P Results - Side Antenna**

Frequency (MHz)	Measured Output Power (dBm)	Antenna Gain (dB)	Calculated Radiated Power (E.I.R.P) (dBm)	Output Power Limit (dBm)	Margin (dB)
902.99973	11.175	1.62	36	12.795	-23.205
914.59689	11.037	1.62	36	12.657	-23.343
926.39401	10.897	1.62	36	12.517	-23.483

Note: Output Power EIRP is used to assess the EUT for compliance against EIRP limits only.

Table 2.6-3 – Peak Conducted Output Power Results - Top Antenna

Frequency (MHz)	Measured Output Power (dBm)	Output Power Limit (dBm)	Margin (dB)
902.99973	11.051	30	-18.949
914.59689	10.974	30	-19.026
926.39401	10.983	30	-19.017

Table 2.6-4 – Peak Conducted Output Power E.I.R.P Results - Top Antenna

Frequency (MHz)	Measured Output Power (dBm)	Antenna Gain (dB)	Calculated Radiated Power (E.I.R.P) (dBm)	Output Power Limit (dBm)	Margin (dB)
902.99973	11.051	1.62	36	12.671	-23.329
914.59689	10.974	1.62	36	12.594	-23.406
926.39401	10.983	1.62	36	12.603	-23.397

Note: Output Power EIRP is used to assess the EUT for compliance against EIRP limits only.

Test Summary: The EUT meets the maximum conducted and radiated output power requirements as documented above.

Test Result: Pass

See data below for detailed results.

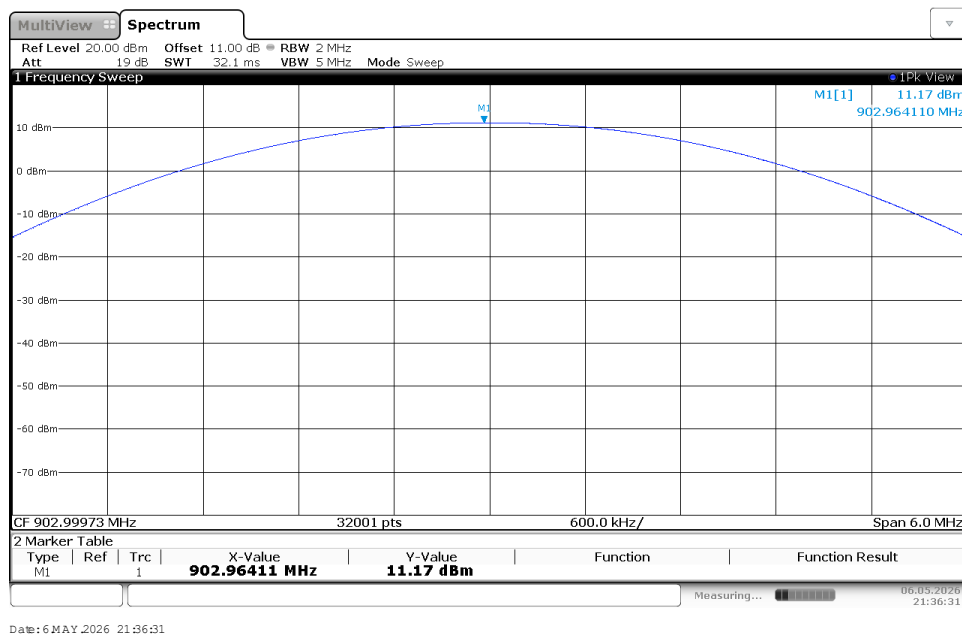


Figure 2.6.6-1 – Peak Conducted Output Power – Low Channel - Side Antenna

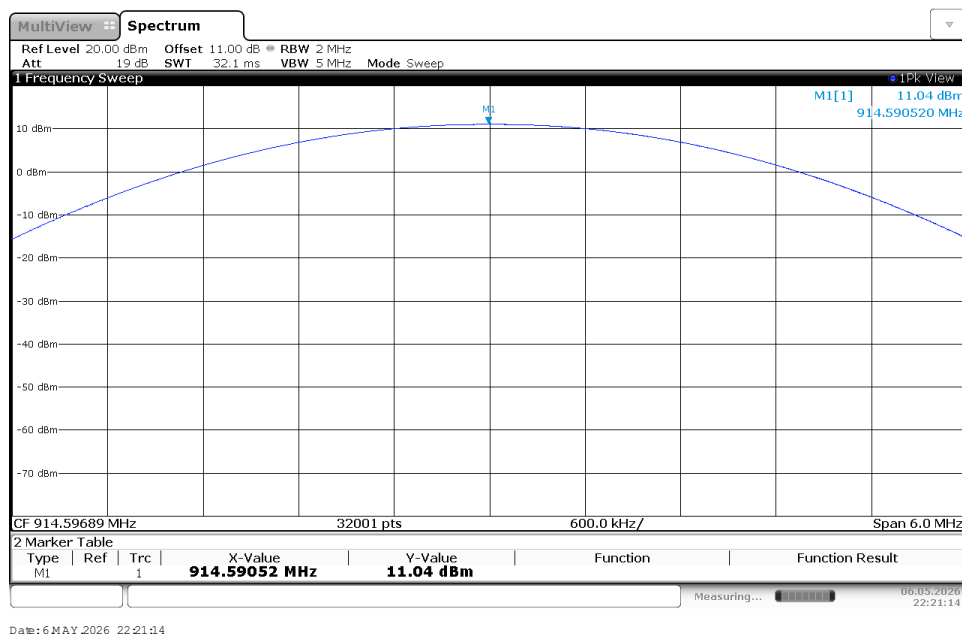


Figure 2.6.6-2 – Peak Conducted Output Power – Middle Channel - Side Antenna

TÜV SÜD America Inc
141 14th Street NW
New Brighton, MN 55112

Phone: 651-631-2487
www.tuv-sud-america.com

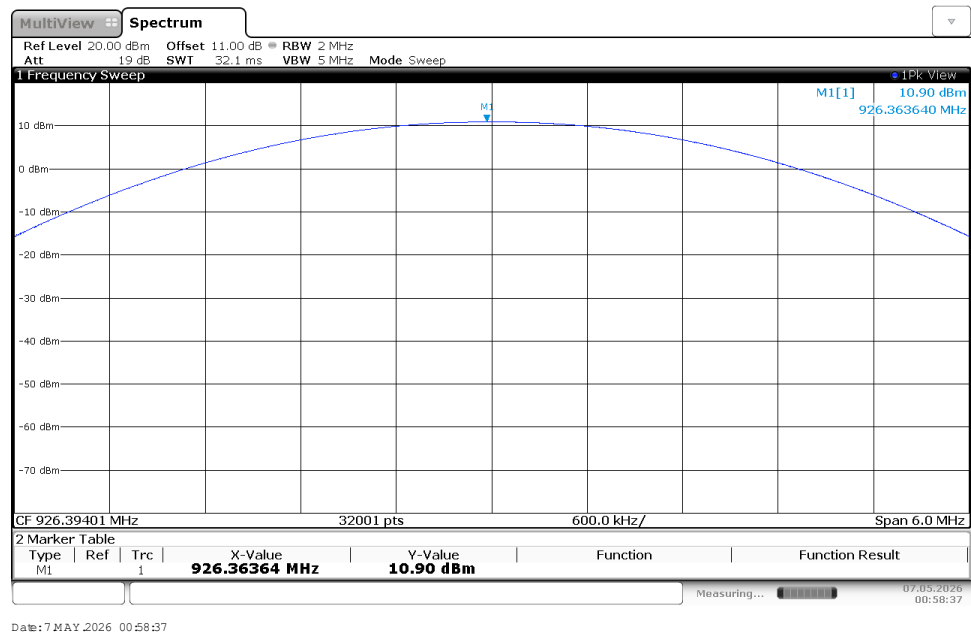


Figure 2.6.6-3 – Peak Conducted Output Power – High Channel - Side Antenna

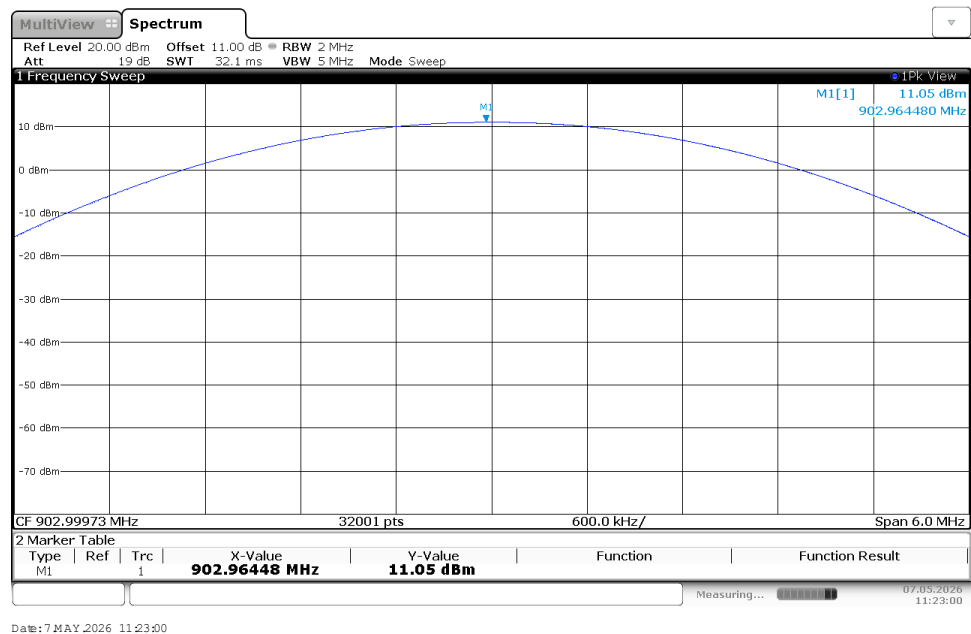


Figure 2.6.6-4 – Peak Conducted Output Power – Low Channel - Top Antenna

TÜV SÜD America Inc
141 14th Street NW
New Brighton, MN 55112

Phone: 651-631-2487
www.tuv-sud-america.com

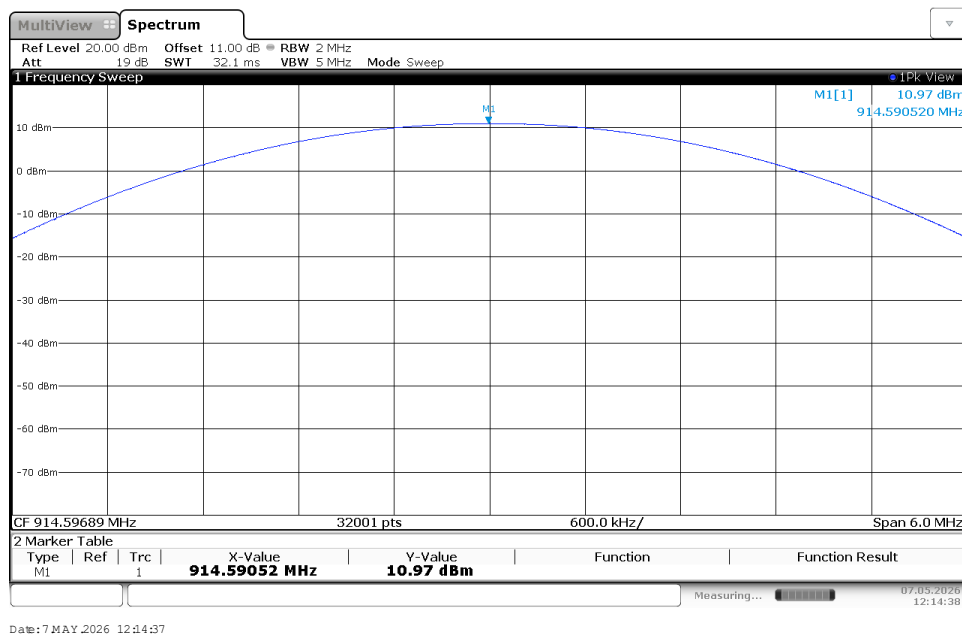


Figure 2.6.6-5 – Peak Conducted Output Power – Middle Channel - Top Antenna

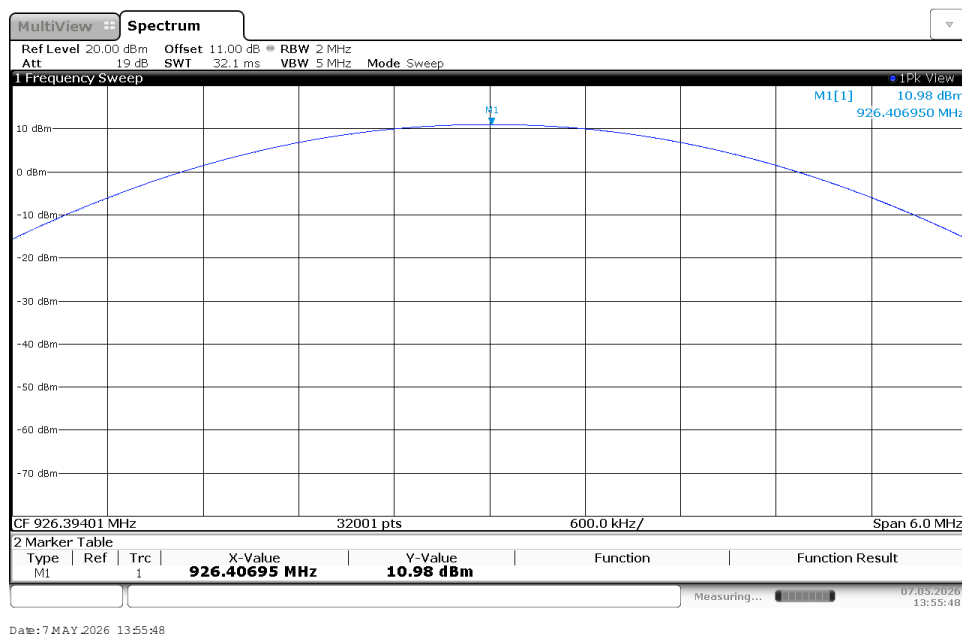


Figure 2.6.6-6 – Peak Conducted Output Power – High Channel - Top Antenna

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New Brighton, MN 55112

Phone: 651-631-2487
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2.6.7 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.

Test Area: REVERB

Table 2.6-5 –Peak Conducted Output Power Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
DEMC3046	Aeroflex Inmet	Atten 10dB 2.9mm-M/F, DC-26.5GHz, 2W	26AH-10	1443	B	05/27/2025	05/27/2026
DEMC3085	Rohde & Schwarz	Signal & Spectrum Analyzer	FSW43	103997	G	08/29/2025	08/29/2026
BEMC02112	Teledyne Storm Products	Duratest 175 Cable 26.5GHz	921-0101-036	12-06-698	B	01/12/2026	01/12/2027

Cal Code G = Calibration performed by an accredited outside source.

Cal Code B = Calibration verification performed internally.

Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.



2.7 Conducted Spurious Emissions

2.7.1 Specification Reference

FCC 47 CFR Part 15.247(d)
RSS-247 6.6

2.7.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.7.3 Date of Test

May 6, 2026 to May 7, 2026

2.7.4 Test Method

The maximum peak conducted output power was measured in accordance with ANSI C63.10-2020 Section 7.8.8. The RF output of the EUT was directly connected to the input of the spectrum analyzer along with a suitable external attenuator. The RBW of the spectrum analyzer was set to 100kHz and the VBW was set to ≥ 3 times the RBW. The spectrum analyzer span was set to cover the entire frequency range of 30MHz to 5 times the highest intentional radiator and the trace was set to max hold using the peak detector.

2.7.5 Environmental Conditions

The EUT was evaluated within the climatic range of the EUT as specified by the manufacturer. When the manufacturer does not specify climatic parameters for the EUT, all tests are performed within the ambient climatic conditions of the laboratory.

2.7.6 Test Results

Test Summary: All spurious emissions were attenuated by at least 20 dB with respect to the fundamental.

Test Result: Pass

See data below for detailed results.

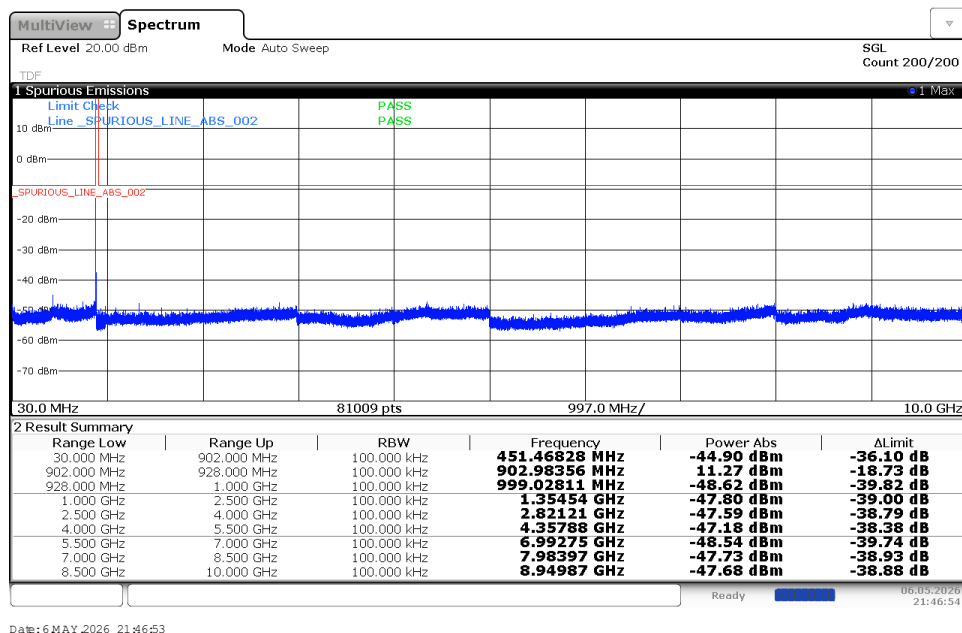


Figure 2.7.6-1 – Conducted Spurious Emissions 30 MHz – 10 GHz – Low Channel - Side Antenna

Table 2.7-1 – Conducted Spurious Emissions 30 MHz – 10 GHz Results – Low Channel - Side Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
451.4683	-44.9	-8.8	-36.1
764.4815	-47.17	-8.8	-38.37
884.4166	-47	-8.8	-38.2
928.4679	-49.97	-8.8	-41.17
951.0254	-49.52	-8.8	-40.72
999.0281	-48.62	-8.8	-39.82
1113.404	-49.22	-8.8	-40.42
1354.544	-47.8	-8.8	-39
2821.214	-47.59	-8.8	-38.79
3995.584	-49.1	-8.8	-40.3
4357.877	-47.18	-8.8	-38.38
6992.751	-48.54	-8.8	-39.74
7983.974	-47.73	-8.8	-38.93
8949.867	-47.68	-8.8	-38.88

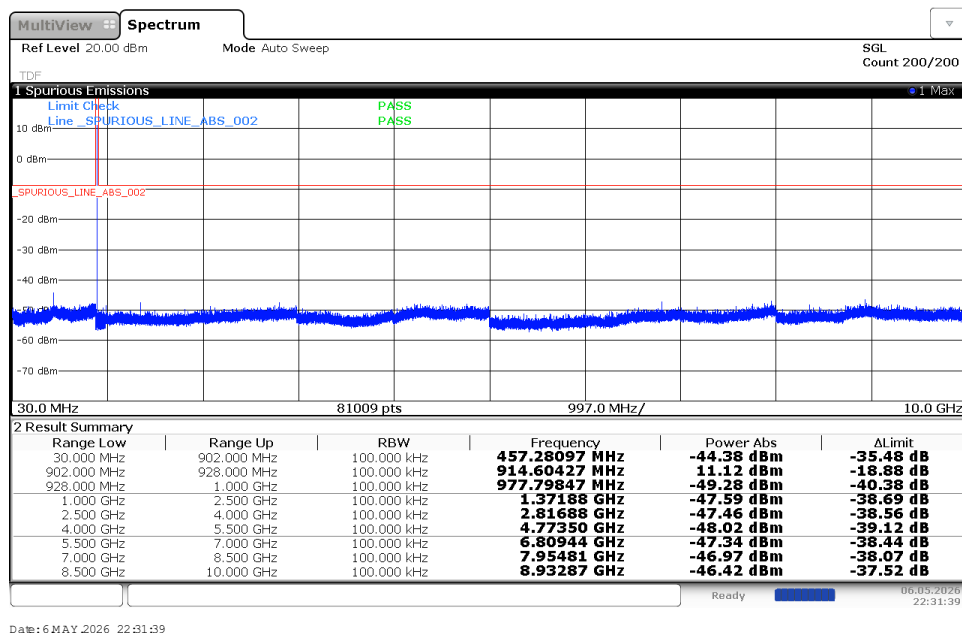


Figure 2.7.6-2 – Conducted Spurious Emissions 30 MHz – 10 GHz – Mid Channel - Side Antenna

Table 2.7-2 – Conducted Spurious Emissions 30 MHz – 10 GHz Results – Mid Channel - Side Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
193.4818	-48.73	-8.9	-39.83
457.281	-44.38	-8.9	-35.48
870.2724	-47.68	-8.9	-38.78
943.8982	-50.5	-8.9	-41.6
962.5922	-50.26	-8.9	-41.36
977.7985	-49.28	-8.9	-40.38
1010.582	-48.55	-8.9	-39.65
1371.875	-47.59	-8.9	-38.69
2098.461	-48.84	-8.9	-39.94
2816.881	-47.46	-8.9	-38.56
3992.418	-49.81	-8.9	-40.91
4773.497	-48.02	-8.9	-39.12
6809.438	-47.34	-8.9	-38.44
7954.811	-46.97	-8.9	-38.07
8358.932	-48.2	-8.9	-39.3
8932.869	-46.42	-8.9	-37.52

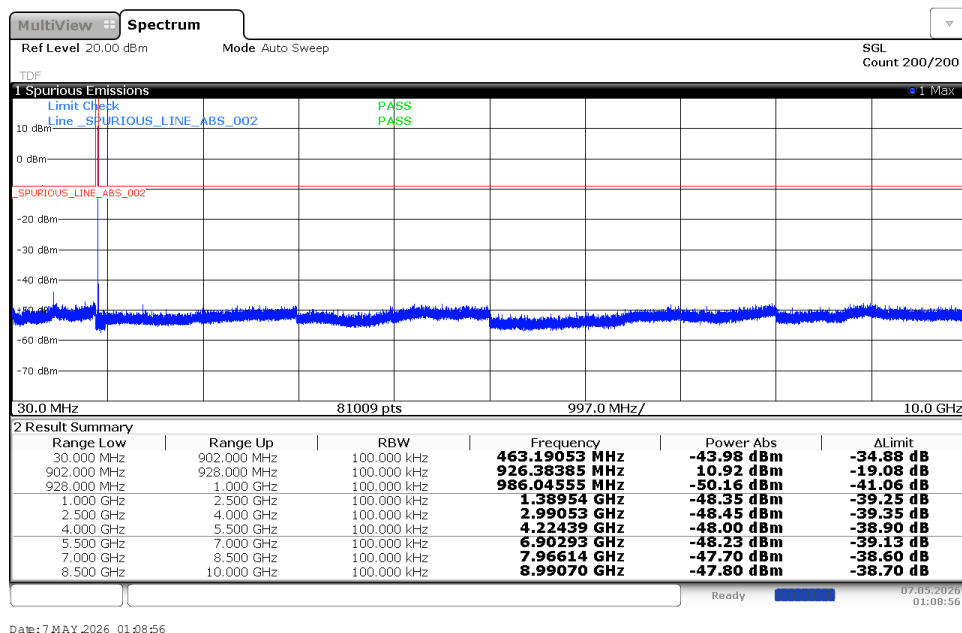


Figure 2.7.6-3 – Conducted Spurious Emissions 30 MHz – 10 GHz – High Channel - Side Antenna

Table 2.7-3 – Conducted Spurious Emissions 30 MHz – 10 GHz Results – High Channel - Side Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
463.1905	-43.98	-9.1	-34.88
787.6354	-47.16	-9.1	-38.06
878.3133	-47.19	-9.1	-38.09
932.3555	-50.51	-9.1	-41.41
974.3508	-50.18	-9.1	-41.08
986.0456	-50.16	-9.1	-41.06
1389.54	-48.35	-9.1	-39.25
2378.93	-48.45	-9.1	-39.35
2990.529	-48.45	-9.1	-39.35
3978.419	-48.8	-9.1	-39.7
4224.392	-48	-9.1	-38.9
6902.927	-48.23	-9.1	-39.13
7285.885	-48.74	-9.1	-39.64
7966.143	-47.7	-9.1	-38.6
8990.695	-47.8	-9.1	-38.7

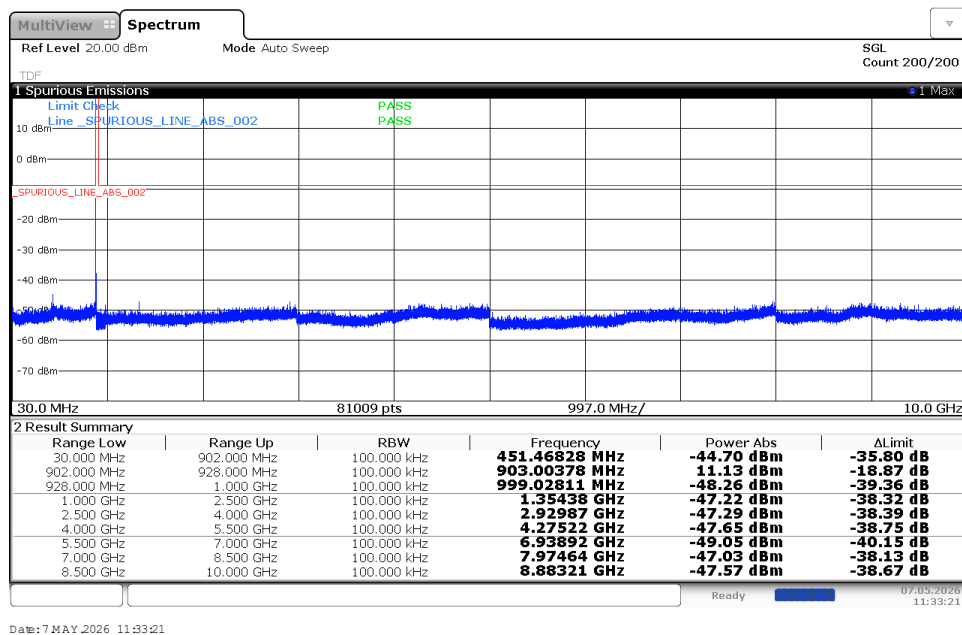


Figure 2.7.6-4 – Conducted Spurious Emissions 30 MHz – 10 GHz – Low Channel - Top Antenna

Table 2.7-4 – Conducted Spurious Emissions 30 MHz – 10 GHz Results - Top Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
34.40795	-49.17	-8.9	-40.27
451.4683	-44.7	-8.9	-35.8
901.9516	-47.07	-8.9	-38.17
951.0414	-49.42	-8.9	-40.52
994.5646	-49.88	-8.9	-40.98
999.0281	-48.26	-8.9	-39.36
1354.377	-47.22	-8.9	-38.32
2402.428	-48.98	-8.9	-40.08
2929.869	-47.29	-8.9	-38.39
3990.251	-49.8	-8.9	-40.9
4275.219	-47.65	-8.9	-38.75
6938.923	-49.05	-8.9	-40.15
7974.642	-47.03	-8.9	-38.13
8438.424	-48.82	-8.9	-39.92
8538.246	-48.56	-8.9	-39.66
8883.207	-47.57	-8.9	-38.67
9299.661	-47.68	-8.9	-38.78

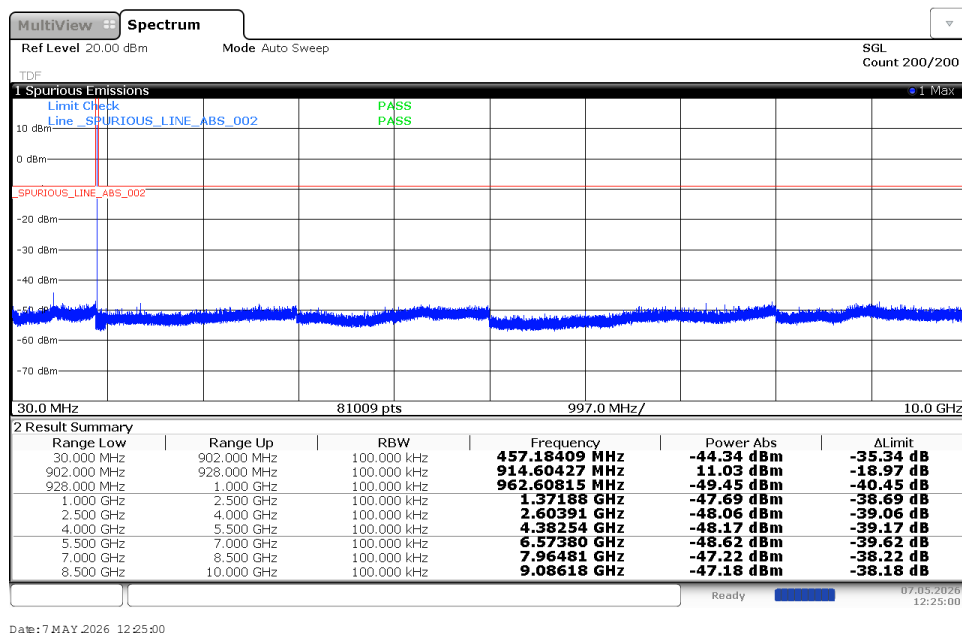


Figure 2.7.6-5 – Conducted Spurious Emissions 30 MHz – 10 GHz – Mid Channel - Top Antenna

Table 2.7-5 – Conducted Spurious Emissions 30 MHz – 10 GHz Results - Top Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
37.41118	-48.84	-9	-39.84
457.1841	-44.34	-9	-35.34
899.4327	-47	-9	-38
944.7701	-49.69	-9	-40.69
962.6082	-49.45	-9	-40.45
1371.875	-47.69	-9	-38.69
2303.938	-48.87	-9	-39.87
2603.905	-48.06	-9	-39.06
3924.592	-48.92	-9	-39.92
4382.541	-48.17	-9	-39.17
6573.797	-48.62	-9	-39.62
7273.22	-47.71	-9	-38.71
7470.031	-48.24	-9	-39.24
7964.809	-47.22	-9	-38.22
9086.185	-47.18	-9	-38.18

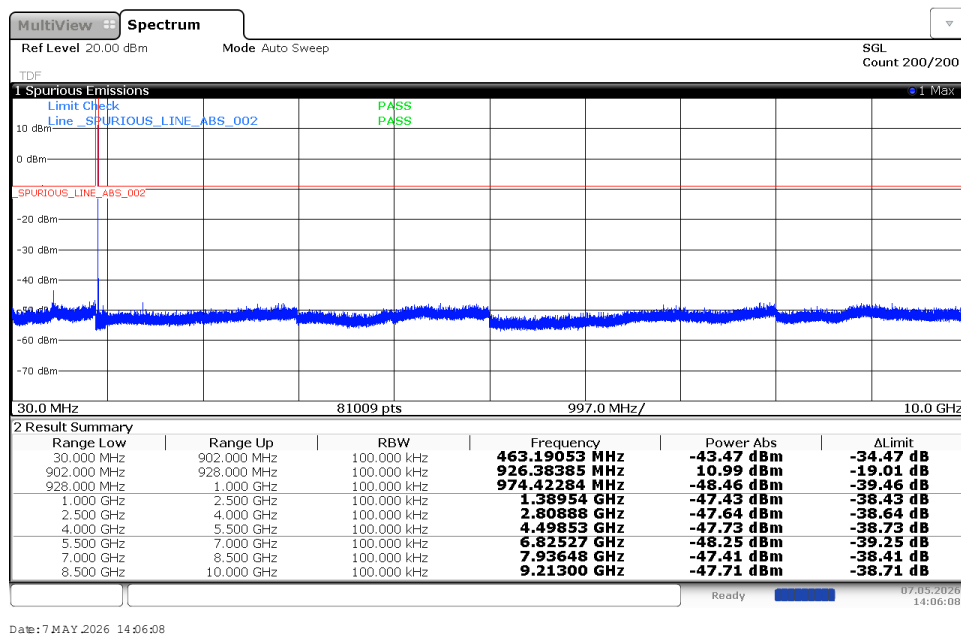


Figure 2.7.6-6 – Conducted Spurious Emissions 30 MHz – 10 GHz – High Channel - Top Antenna

Table 2.7-6 – Conducted Spurious Emissions 30 MHz – 10 GHz Results - Top Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
463.1905	-43.47	-9	-34.47
893.4263	-46.76	-9	-37.76
935.4432	-50.51	-9	-41.51
966.7197	-49.91	-9	-40.91
974.4228	-48.46	-9	-39.46
1389.54	-47.43	-9	-38.43
2475.086	-48.83	-9	-39.83
2808.882	-47.64	-9	-38.64
3906.927	-49.39	-9	-40.39
4498.528	-47.73	-9	-38.73
6825.269	-48.25	-9	-39.25
7056.744	-48.94	-9	-39.94
7936.479	-47.41	-9	-38.41
9213.004	-47.71	-9	-38.71



2.7.7 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.
Test Area: REVERB

Table 2.7-7 – Conducted Spurious Emissions Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
DEMC3046	Aeroflex Inmet	Atten 10dB 2.9mm-M/F, DC-26.5GHz, 2W	26AH-10	1443	B	05/27/2025	05/27/2026
DEMC3085	Rohde & Schwarz	Signal & Spectrum Analyzer	FSW43	103997	G	08/29/2025	08/29/2026
BEMC02112	Teledyne Storm Products	Duratest 175 Cable 26.5GHz	921-0101-036	12-06-698	B	01/12/2026	01/12/2027

Cal Code G = Calibration performed by an accredited outside source.

Cal Code B = Calibration verification performed internally.

Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.



2.8 Conducted Band-Edge

2.8.1 Specification Reference

FCC 47 CFR Part 15.247(d)
RSS-247 6.6

2.8.2 Equipment Under Test and Modification State

As shown in §1.5 with modification state “0”, as noted in §1.7.

2.8.3 Date of Test

May 6, 2026 to May 7, 2026

2.8.4 Test Method

The maximum peak conducted output power was measured in accordance with ANSI C63.10-2020 Section 7.8.8. The RF output of the EUT was directly connected to the input of the spectrum analyzer along with a suitable external attenuator. The RBW of the spectrum analyzer was set to 100kHz and the VBW was set to ≥ 3 times the RBW. The spectrum analyzer span was set to cover the entire frequency range of 30MHz to 5 times the highest intentional radiator and the trace was set to max hold using the peak detector and was repeated using an average detector.

2.8.5 Environmental Conditions

The EUT was evaluated within the climatic range of the EUT as specified by the manufacturer. When the manufacturer does not specify climatic parameters for the EUT, all tests are performed within the ambient climatic conditions of the laboratory.

2.8.6 Test Results

Test Summary: All emissions at the band edge were attenuated by at least 20 dB with respect to the fundamental.

Test Result: Pass

See data below for detailed results.

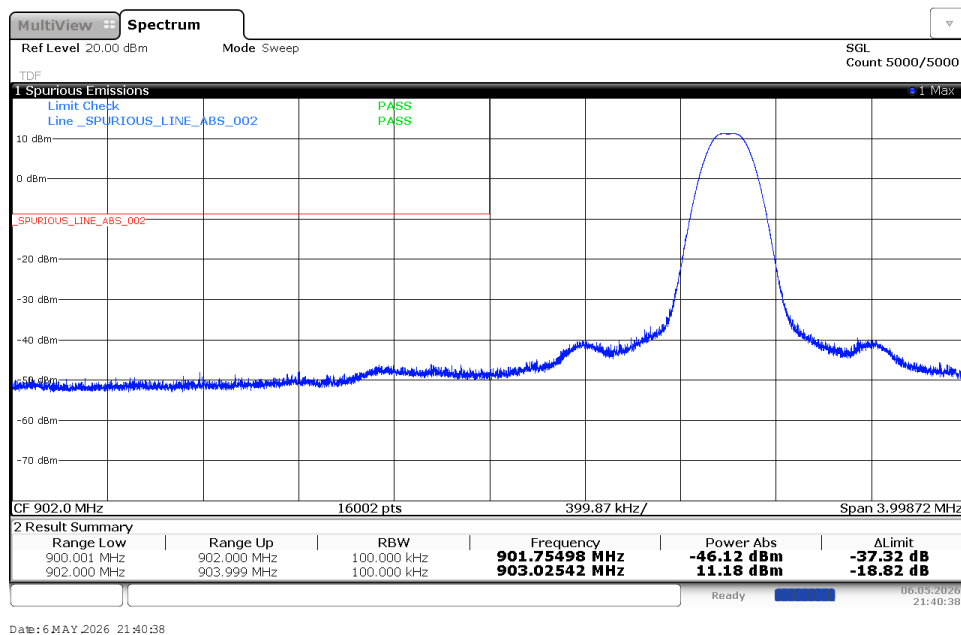


Figure 2.8.6-1 – Conducted Band-Edge – Low Channel - Side Antenna

Table 2.8-1 – Conducted Band-Edge Results – Low Channel - Side Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
901.755	-46.12	-8.8	-37.32

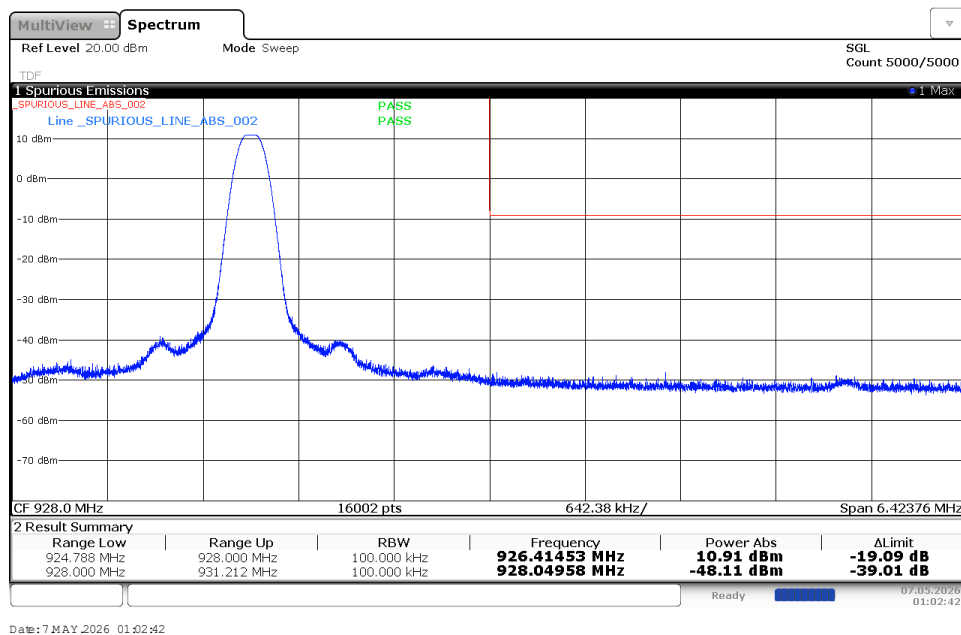


Figure 2.8.6-2 – Conducted Band-Edge – High Channel - Side Antenna

Table 2.8-2 – Conducted Band-Edge Results – High Channel - Side Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
928.0495772	-48.11	-9.1	-39.01

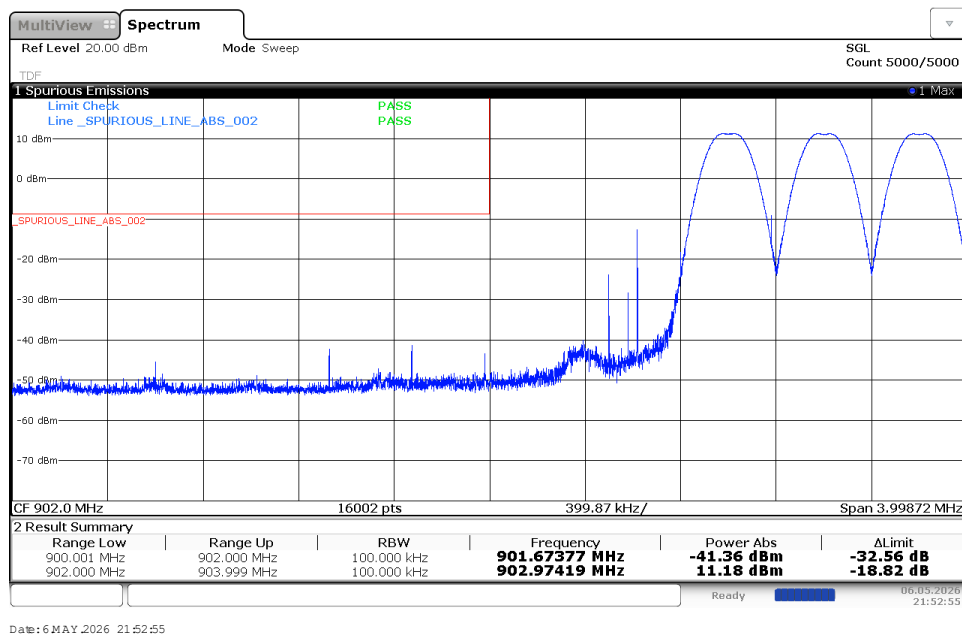


Figure 2.8.6-3 – Conducted Band-Edge – Low Channel – Hopping - Side Antenna

Table 2.8-3 – Conducted Band-Edge Results – Low Channel – Hopping - Side Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
901.3281741	-42.38	-8.8	-33.58
901.6737702	-41.36	-8.8	-32.56
901.9788844	-43.49	-8.8	-34.69

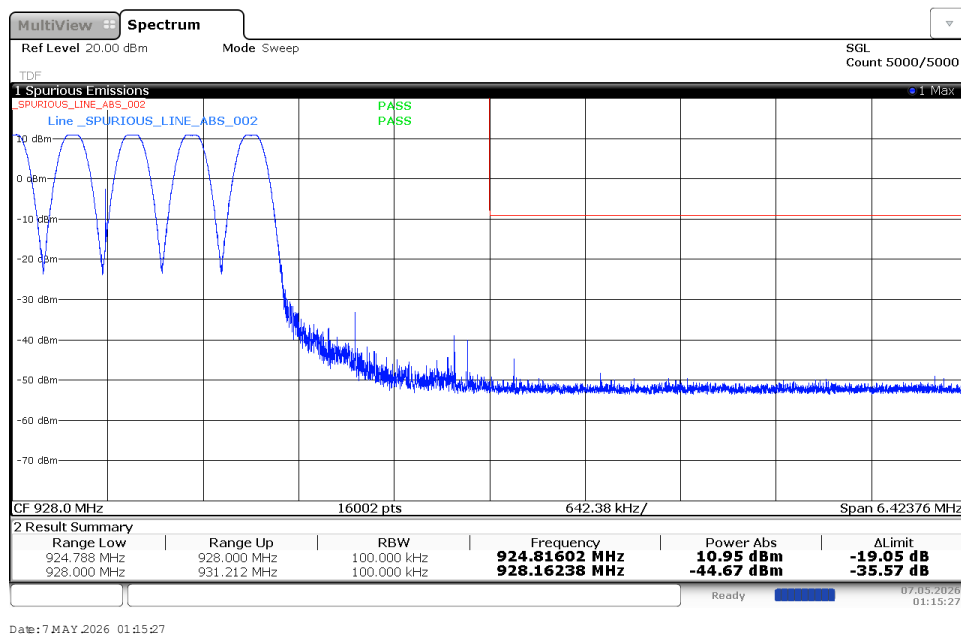


Figure 2.8.6-4 – Conducted Band-Edge – High Channel – Hopping - Side Antenna

Table 2.8-4 – Conducted Band-Edge Results – High Channel – Hopping - Side Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
928.1623804	-44.67	-9.1	-35.57

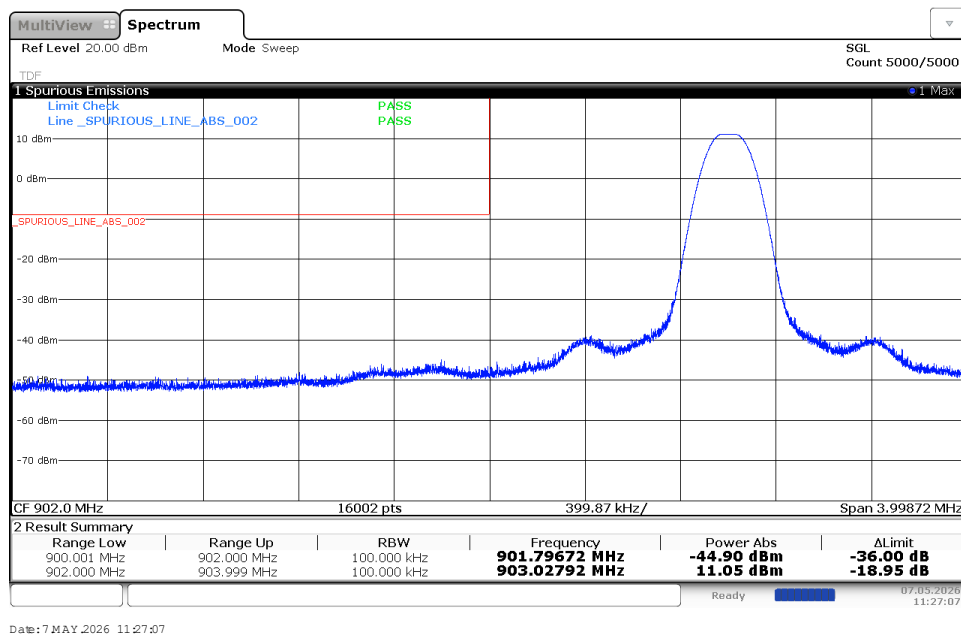


Figure 2.8.6-5 – Conducted Band-Edge – Low Channel - Top Antenna

Table 2.8-5 – Conducted Band-Edge Results – Low Channel - Top Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
901.7967155	-44.9	-8.9	-36

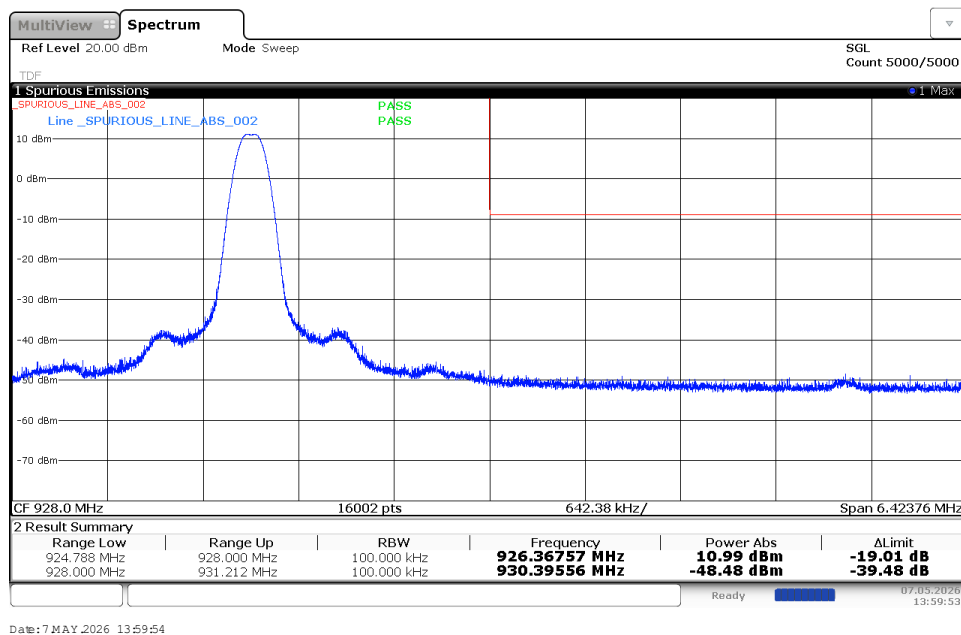


Figure 2.8.6-6 – Conducted Band-Edge – High Channel - Top Antenna

Table 2.8-6 – Conducted Band-Edge Results – High Channel - Top Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
930.3955623	-48.48	-9	-39.48

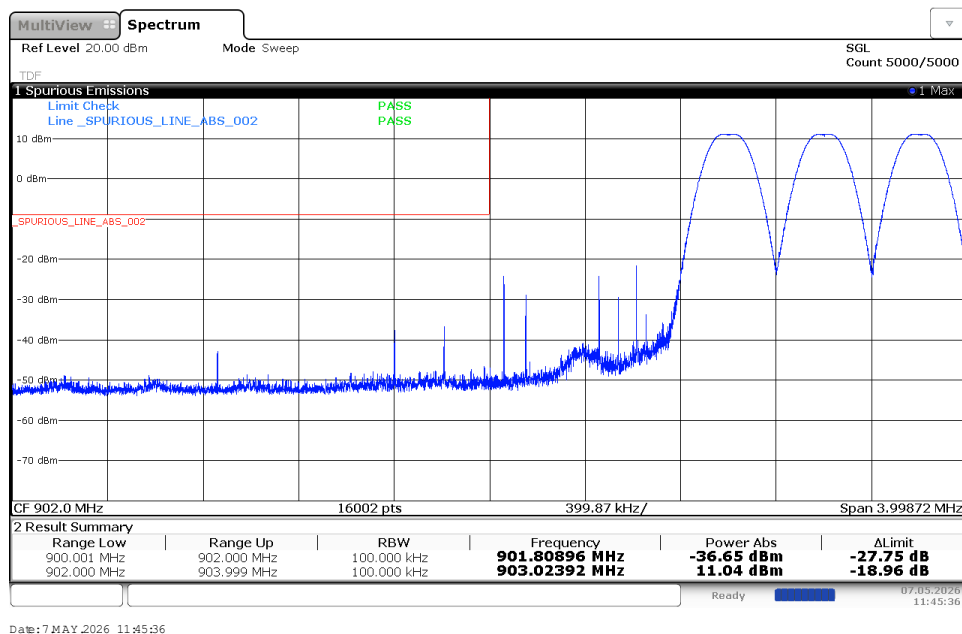


Figure 2.8.6-7 – Conducted Band-Edge – Low Channel – Hopping - Top Antenna

Table 2.8-7 – Conducted Band-Edge Results – Low Channel – Hopping - Top Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
900.8598825	-42.96	-8.9	-34.06
901.6018023	-37.56	-8.9	-28.66
901.80896	-36.65	-8.9	-27.75

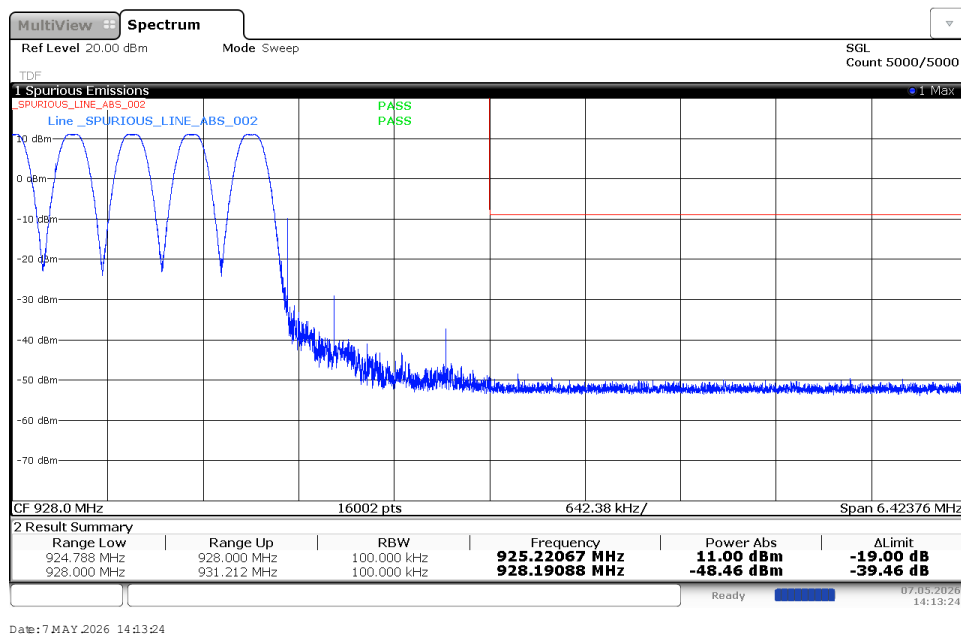


Figure 2.8.6-8 – Conducted Band-Edge – High Channel – Hopping - Top Antenna

Table 2.8-8 – Conducted Band-Edge Results – High Channel – Hopping - Top Antenna

Frequency (MHz)	Measured Level (dBm)	Limit (dBm)	Margin (dB)
928.1908823	-48.46	-9	-39.46



2.8.7 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.
Test Area: REVERB

Table 2.8-9 – Conducted Emissions Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
DEMC3046	Aeroflex Inmet	Atten 10dB 2.9mm-M/F, DC-26.5GHz, 2W	26AH-10	1443	B	05/27/2025	05/27/2026
DEMC3085	Rohde & Schwarz	Signal & Spectrum Analyzer	FSW43	103997	G	08/29/2025	08/29/2026
BEMC02112	Teledyne Storm Products	Duratest 175 Cable 26.5GHz	921-0101-036	12-06-698	B	01/12/2026	01/12/2027

Cal Code G = Calibration performed by an accredited outside source.

Cal Code B = Calibration verification performed internally.

Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.



2.9 Power Line Conducted Emissions

2.9.1 Specification Reference

FCC: Section 15.207
ISED Canada; RSS-GEN 8.8

2.9.2 Equipment Under Test and Modification State

As shown in §1.4 with modification state “0”, as noted in §1.6.

2.9.3 Date of Test

7th May 2026

2.9.4 Test Method

ANSI C63.10 section 6.2 was the guiding document for this evaluation. Conducted emissions were performed from 150 kHz to 30 MHz with the spectrum analyzer’s resolution bandwidth set to 9 kHz and the video bandwidth set to 30 kHz. The calculation for the conducted emissions is as follows:

Corrected Reading = Analyzer Reading + LISN Loss + Cable Loss
Margin = Applicable Limit - Corrected Reading

2.9.5 Environmental Conditions

Ambient Temperature	22.9 °C
Relative Humidity	14 %
Atmospheric Pressure	97.8 kPa

2.9.6 Additional Observations

Measurements were made using BAT-EMC (2024.0.9.5) automated software. The reported level is the actual level with all the correction factors factored in. Correction Factor column is for informational purposes only.



2.9.7 Test Results

Table 2.9.7-1: Conducted Emissions Limits

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

Test Summary: EUT operated as intended before, during, and after testing.

Test Result: Pass

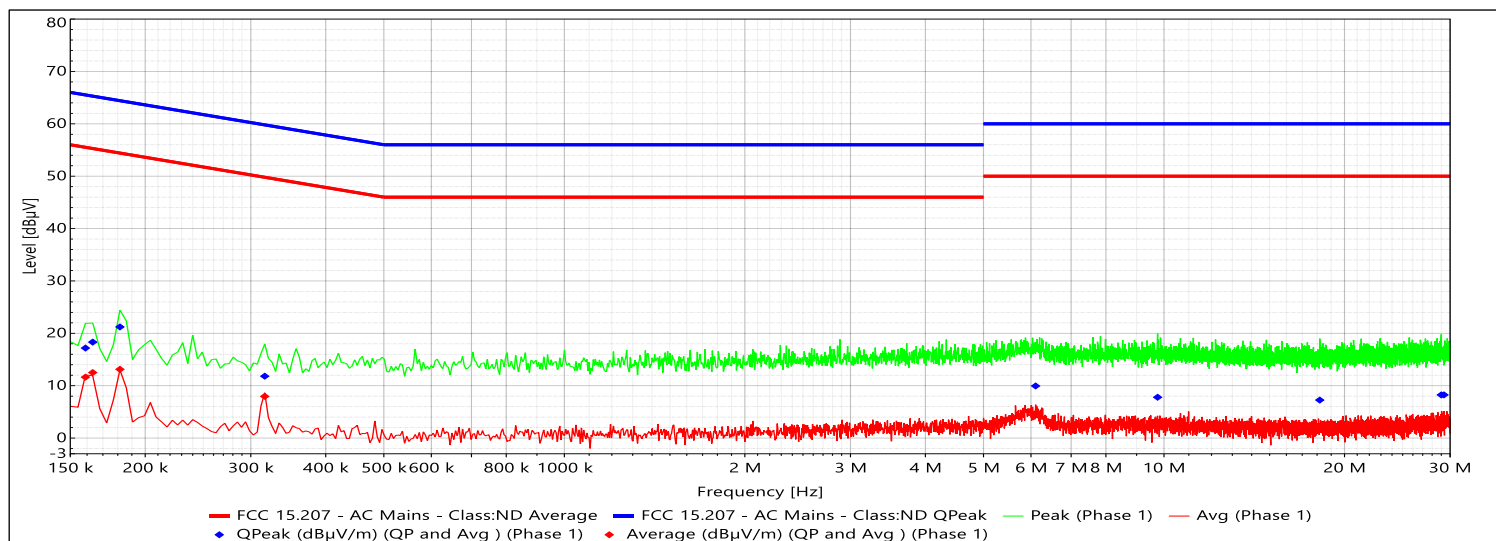
See data below for detailed results.



Power Lines Conducted Emission 9kHz-30MHz – L1 [120VAC/60Hz]

Top PCB Antenna – Channel 25, 914.59689 MHz

Frequency Range	Line Tested	RBW	Step Size	Sweep Time
150 kHz - 30 MHz	L1	9 kHz	4.5 kHz	10 ms/MHz



Limit: FCC Part 15/FCC 15.207 - AC Mains
Test Date: 5/7/2026
Test Results: Pass

Figure 2.9.7-1: Composite Power Line Conducted Emissions Plots – L1

Table 2.9.7-2: Power Line Conducted Emissions Results – L1

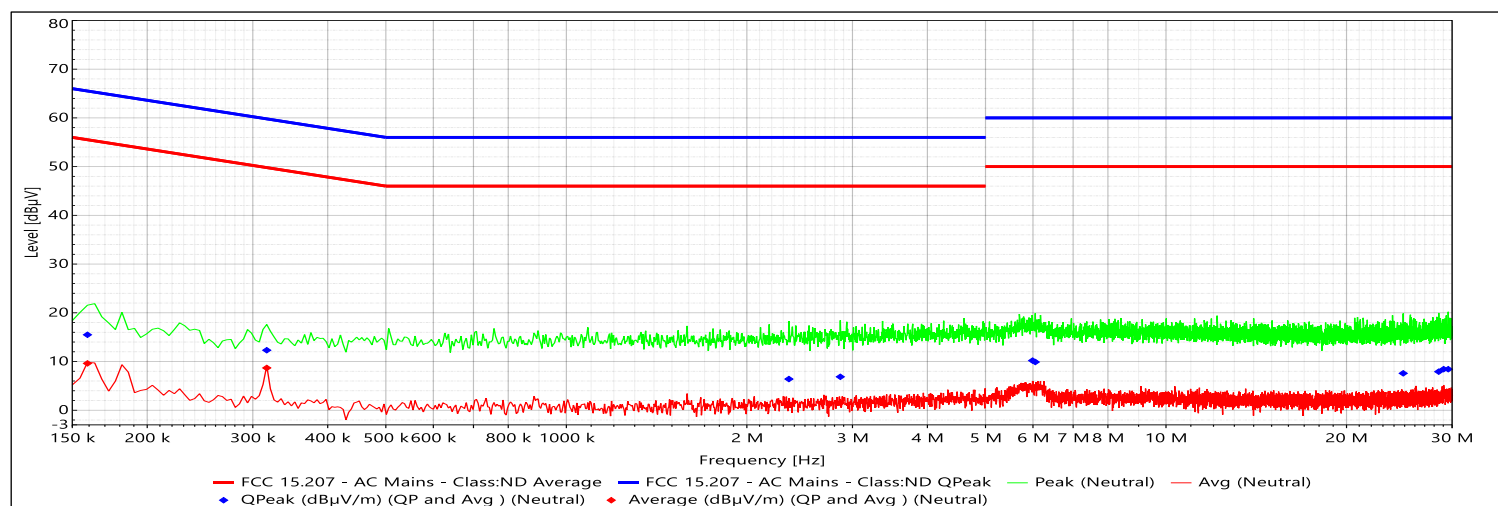
Frequency (MHz)	Average (dBuV)	Average Limit (dBuV)	Average Margin (dB)	QPeak (dBuV)	QPeak Limit (dBuV)	QPeak Margin (dB)	Result
0.159	11.63	55.52	-43.89	17.19	65.52	-48.33	Pass
0.164	12.51	55.28	-42.77	18.32	65.28	-46.96	Pass
0.182	13.13	54.42	-41.29	21.22	64.42	-43.20	Pass
0.317	7.96	49.80	-41.84	11.81	59.80	-47.99	Pass
6.108	4.71	50.00	-45.29	9.95	60.00	-50.05	Pass
9.758	2.41	50.00	-47.59	7.79	60.00	-52.21	Pass
18.186	1.88	50.00	-48.12	7.25	60.00	-52.75	Pass
29.004	2.87	50.00	-47.13	8.24	60.00	-51.76	Pass
29.301	2.98	50.00	-47.02	8.25	60.00	-51.75	Pass



Power Lines Conducted Emission 9kHz-30MHz – L2 [120VAC/60Hz]

Top PCB Antenna – Channel 25, 914.59689 MHz

Frequency Range	Line Tested	RBW	Step Size	Sweep Time
150 kHz - 30 MHz	L2	9 kHz	4.5 kHz	10 ms/MHz



Limit: FCC Part 15/FCC 15.207 - AC Mains
Test Date: 5/7/2026
Test Results: Pass

Figure 2.9.7-2: Composite Power Line Conducted Emissions Plots – L2

Table 2.9.7-3: Power Line Conducted Emissions Results – L2

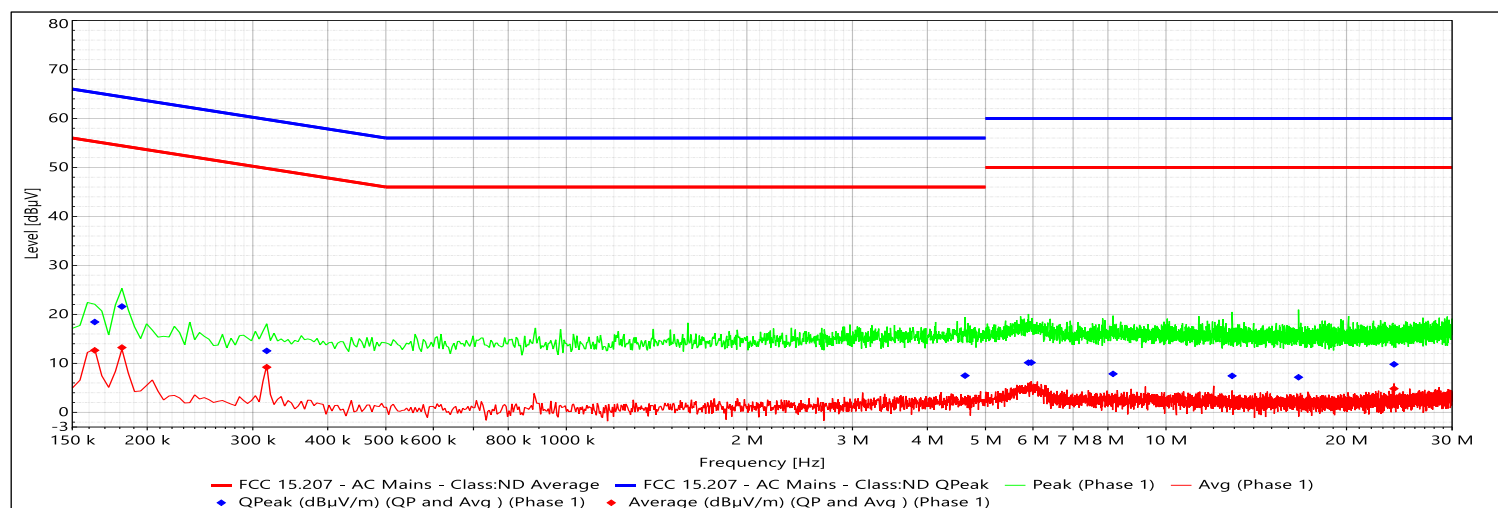
Frequency (MHz)	Average (dBμV)	Average Limit (dBμV)	Average Margin (dB)	QPeak (dBμV)	QPeak Limit (dBμV)	QPeak Margin (dB)	Result
0.159	9.62	55.52	-45.90	15.49	65.52	-50.03	Pass
0.317	8.68	49.80	-41.11	12.32	59.80	-47.48	Pass
2.351	1.19	46.00	-44.81	6.40	56.00	-49.60	Pass
2.864	1.49	46.00	-44.51	6.86	56.00	-49.14	Pass
5.991	4.76	50.00	-45.24	10.19	60.00	-49.81	Pass
6.054	4.59	50.00	-45.41	9.90	60.00	-50.10	Pass
24.864	2.35	50.00	-47.65	7.58	60.00	-52.42	Pass
28.496	2.70	50.00	-47.30	7.92	60.00	-52.08	Pass
29.040	2.90	50.00	-47.10	8.43	60.00	-51.57	Pass
29.558	2.98	50.00	-47.02	8.42	60.00	-51.58	Pass



Power Lines Conducted Emission 9kHz-30MHz – L1 [120VAC/60Hz]

Side PCB Antenna – Channel 25, 914.59689 MHz

Frequency Range	Line Tested	RBW	Step Size	Sweep Time
150 kHz - 30 MHz	L1	9 kHz	4.5 kHz	10 ms/MHz



Limit: FCC Part 15/FCC 15.207 - AC Mains
Test Date: 5/7/2026
Test Results: Pass

Figure 2.9.7-3: Composite Power Line Conducted Emissions Plots – L1

Table 2.9.7-4: Power Line Conducted Emissions Results – L1

Frequency (MHz)	Average (dBμV)	Average Limit (dBμV)	Average Margin (dB)	QPeak (dBμV)	QPeak Limit (dBμV)	QPeak Margin (dB)	Result
0.164	12.66	55.28	-42.62	18.45	65.28	-46.84	Pass
0.182	13.23	54.42	-41.19	21.60	64.42	-42.82	Pass
0.317	9.22	49.80	-40.58	12.55	59.80	-47.25	Pass
4.623	2.30	46.00	-43.70	7.49	56.00	-48.51	Pass
5.897	4.75	50.00	-45.25	10.14	60.00	-49.86	Pass
5.960	4.90	50.00	-45.10	10.16	60.00	-49.84	Pass
8.160	2.45	50.00	-47.55	7.85	60.00	-52.15	Pass
12.890	2.10	50.00	-47.90	7.44	60.00	-52.56	Pass
16.634	1.97	50.00	-48.03	7.16	60.00	-52.84	Pass
24.000	4.83	50.00	-45.17	9.80	60.00	-50.20	Pass

TÜV SÜD America Inc
 141 14th Street NW
 New Brighton, MN 55112

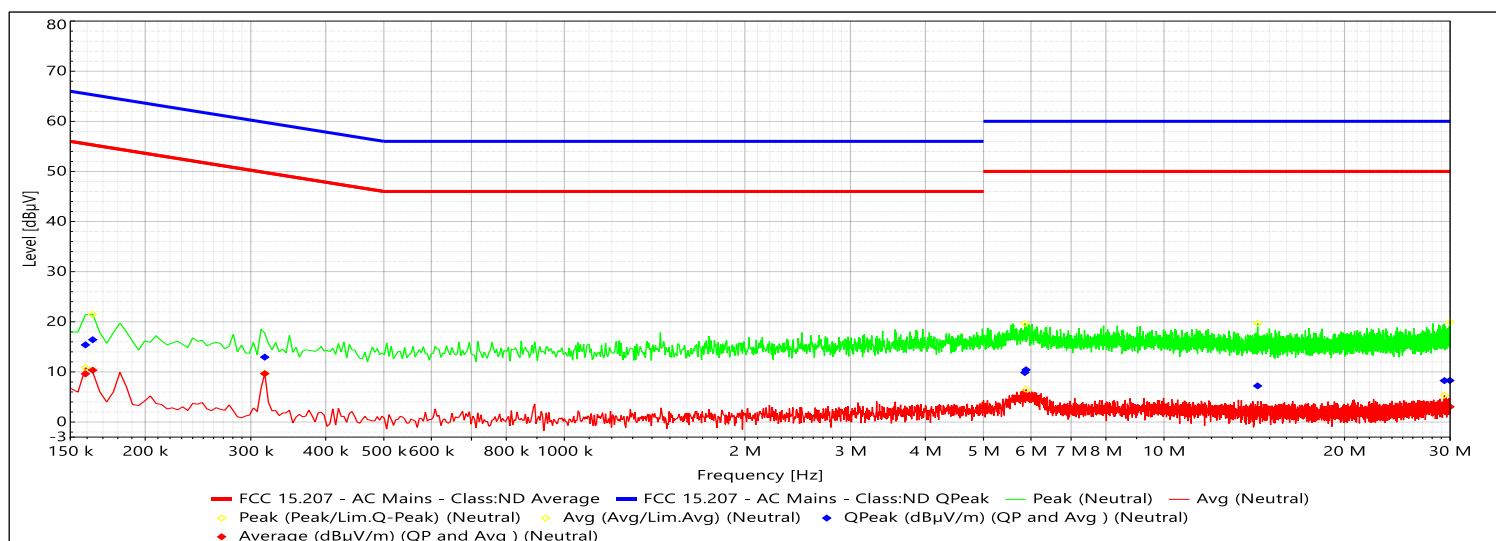
Phone: 651-631-2487
www.tuv-sud-america.com



Power Lines Conducted Emission 9kHz-30MHz – L2 [120VAC/60Hz]

Side PCB Antenna – Channel 25, 914.59689 MHz

Frequency Range	Line Tested	RBW	Step Size	Sweep Time
150 kHz - 30 MHz	L2	9 kHz	4.5 kHz	10 ms/MHz



Limit: FCC Part 15/FCC 15.207 - AC Mains **Test Date:** 5/7/2026 **Test Results:** Pass

Figure 2.9.7-4: Composite Power Line Conducted Emissions Plots – L2

Table 2.9.7-5: Power Line Conducted Emissions Results – L2

Frequency (MHz)	Average (dBμV)	Average Limit (dBμV)	Average Margin (dB)	QPeak (dBμV)	QPeak Limit (dBμV)	QPeak Margin (dB)	Result
0.159	9.61	55.52	-45.91	15.39	65.52	-50.12	Pass
0.164	10.34	55.28	-44.94	16.43	65.28	-48.86	Pass
0.317	9.66	49.80	-40.14	12.95	59.80	-46.85	Pass
5.861	4.67	50.00	-45.33	9.88	60.00	-50.12	Pass
5.888	5.25	50.00	-44.75	10.42	60.00	-49.58	Pass
14.325	1.94	50.00	-48.06	7.22	60.00	-52.78	Pass
29.351	2.96	50.00	-47.04	8.26	60.00	-51.74	Pass
29.972	3.04	50.00	-46.96	8.28	60.00	-51.72	Pass



2.9.8 Test Location and Test Equipment Used

The tests were carried out in New Brighton, MN.

Test Area: GRP1

Table 2.9-6 – Conducted Emissions Test Equipment List

Device #	Manufacturer	Description	Model	Serial #	Cal Code	Cal Date	Cal Due
NBLE10461	Weinschel	Attenuator, 20 dB	34-20-34	BR2623	B	3/27/2026	3/27/2027
NBLE10572	Huber+ Suhner	Cable, BNC 3M	EF142	10572	B	08/07/2025	08/07/2026
WRLE10944	Fischer Custom Comm.	LISN	FCC-LISN-50-25-2-10	120308	G	07/09/2025	07/09/2027
NBLE11592	Rohde & Schwarz	Receiver, 10 Hz-7 GHz	ESR7 (SAP 21006090)	101771	G	06/03/2025	06/03/2026

Cal Code G = Calibration performed by an accredited outside source.

Cal Code B = Calibration verification performed internally.

Cal Code Y = Passive Device, or Calibration not required when used with other calibrated equipment.