SENSUS METERING SYSTEMS INC.

TEST REPORT

SCOPE OF WORK
RADIO TESTING – COMMANDLINK II (CL202)

REPORT NUMBER
106487294ATL-001

ISSUE DATE
27 February 2026

REVISED DATE
05 March 2026

PAGES
68

DOCUMENT CONTROL NUMBER
Non-Specific Radio Report Shell Rev. January 2025

RADIO TEST REPORT

Report Number:	**106487294ATL-001**
Project Number:	**G106487294**
Report Revised Date:	**05 March 2026**
Model(s) Tested:	**CL202**
FCC ID:	**SDBCL202**
IC:	**2220A-CL202**
Standards:	**47 CFR Part 24 Subpart D** **47 CFR Part 90 Subpart I** **47 CFR Part 101 Subpart C** **RSS-119, Issue 12** **RSS-134, Issue 2** **ANSI C63.26-2015** **RSS-GEN, Issue 5**

Test Location

Intertek
1950 Evergreen Blvd., Suite 100
Duluth, GA 30096 USA
FCC Designation: US1046
ISED CAB Designator: US0128

Client

Sensus Metering Systems Inc.
639 Davis Drive
Morrisville, NC 27560 USA

Report prepared by

Jeremy Pickens / Senior Staff Engineer

Report reviewed by

Michael Carlson / Staff Engineer

Table of Contents

1 Introduction and Conclusion

The tests indicated in Section 2 were performed on the product constructed as described in Section 4. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

2 Test Summary

Section	Test Description	Test Specification		Result
		FCC Rule Part	ISED RSS	
6	RF Output Power	2.1046 24.132 90.204 101.113(a)	RSS-GEN S6.12 RSS-119 S5.4 RSS-134 S4.3(a),(b)	Compliant
7	Out of Band Unwanted Emissions	2.1051 24.133(a)(1),(2) 90.210(i) 101.111(a)(5) 101.111(a)(6)	RSS-Gen S6.13 RSS-119 S5.8.3 RSS-119 S5.8.6 RSS-134 S4.4	Compliant
8	Occupied Bandwidth	2.1049 24.131 90.209(b)(5) 101.109	RSS-GEN S6.7 RSS-119 S5.5 RSS-134 S4.1	Compliant
9	Spurious Emissions at Antenna Terminals	2.1051 24.133(a)(1),(2) 90.210(i) 101.111(a)(5) 101.111(a)(6)	RSS-Gen S6.13 RSS-119 S5.8.3 RSS-119 S5.8.6 RSS-134 S4.4	Compliant
10	Field Strength of Spurious Emissions	2.1053 24.133(a)(1),(2) 90.210(i) 101.111(a)(5) 101.111(a)(6)	RSS-Gen S6.13 RSS-119 S5.8.3 RSS-119 S5.8.6 RSS-134 S4.4	Compliant
11	Frequency Stability	2.1055 24.135 90.213 101.107	RSS-GEN S6.11 RSS-119 S5.3 RSS-134 S4.5	Compliant

3 Client Information

This evaluation was performed at the request of:

Client: Sensus Metering Systems Inc.
639 Davis Drive
Morrisville, NC 27560 USA

Contact: Randle Sherian

Email: Randle.Sherian@xylem.com

4 Description of Equipment Under Test and Variant Models

Manufacturer: Sensus Metering Systems Inc.
639 Davis Drive
Morrisville, NC 27560 USA

Equipment Under Test			
Description	**Manufacturer**	**Model Number (HVIN)**	**Serial Number**
CommandLink II	Sensus Metering Systems Inc.	CL202	50300980[1] 50300979[2]

1) Antenna port conducted measurements
2) Radiated spurious emissions measurements

Receive Date:	06 February 2026
Received Condition:	Good
Type:	Production

Description of Equipment Under Test
The CommandLink® II wireless interface provides access to a complete suite of functional controls within a gas, water, or electric SmartPoint® transceiver. This Bluetooth® enabled device, coupled with a handheld, can perform activations, deactivation, meter read, on demand reads and audits of the SmartPoint module.

Certification Purpose
New certification.

Equipment Under Test Power Configuration			
Rated Voltage	**Rated Current**	**Rated Frequency**	**Number of Phases**
5.9Vdc	0.5A	NA	NA

Operating modes of the EUT

No.	Descriptions of EUT Exercising
1	Using CommandLink II Utility software, commands were sent over a USB adapter. The EUT was configured to transmit modulated signals at max power at the following defined test channels (per 47CFR 2.1046 – 2.1057).

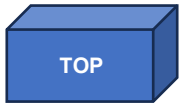
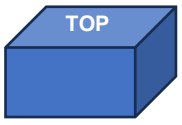
Test Channels				
FCC Rule Part	**ISED RSS**	**Frequency Band (MHz)**	**Channel Location**	**Test Frequency (MHz)**
90	RSS-119	896.0 – 901.0	One near top and one near bottom	896.0125
24D	RSS-134	901.0 – 902.0		901.9875
101	RSS-119	928.85 – 929.0	Middle	928.925
24D	RSS-134	930.0 – 931.0	Middle	930.5
101	RSS-119	932.0 – 932.5	Middle	932.25
90	RSS-119	935.0 – 940.0	One near bottom	935.0125
24D	RSS-134	940.0 – 941.0	One near bottom	940.0125
101	RSS-119	941.0 – 941.5	One near top	941.4875
NA	RSS-119	952.0 – 953.0	Middle	952.5
101	NA	959.85 – 960.0	Middle	959.925

Software used by the EUT

No.	Description of Control Software
1	CommandLink II Utility v1.0.3.2

Radio/Receiver Characteristics	
Frequency Range	896-960MHz
Modulation Type(s)	2-GFSK, ASK
Maximum Output Power (Conducted):	20.61dBm (0.115W)
Power Setting	Max
MIMO Information (# of Transmit and Receive antenna ports)	1 (SISO)
Equipment Type	Full Device
Antenna Type and Gain	PIFA (2dBi)

Note: The worst-case modulation for radiated and conducted spurious emissions was determined to be mPass 5k. The worst-case orientation for radiated field strength measurements was the Z-Axis.

X-Axis	Y-Axis	Z-Axis
		

Emissions Designators				
Frequency (MHz)	**Rule Part / RSS**	**Mode**	**Designator**	**Modulation**
896.0-901.0 901.0-902.0 928.85-929.0 930.0-931.0 932.0-932.5 935.0-940.0 940.0-941.0 941.0-941.5 952.0-953.0 959.85-960.0	90 / RSS-119 24D / RSS-134 101 / RSS-119 24D / RSS-134 101 / RSS-119 90 / RSS-119 24D / RSS-134 101 / RSS-119 RSS-119 101	MPass (5kbps)	5K90F1D	2-GFSK
		MPass (10kbps)[1]	11K8F1D	2-GFSK
		MPass (12.5k)	14K8F1D	2-GFSK
		Amplitude Shift Keying[1]	10K3F2D	ASK

1) Note: MPass 10kbps and ASK modulations are not used in the frequency band 935-940MHz and ASK modulation is also not used the frequency band 896-901MHz.

5 System Setup and Method

Cables					
ID	**Description**	**Length (m)**	**Shielding**	**Ferrites**	**Termination**
1	DC Power	1.2	None	None	AC/DC Adapter

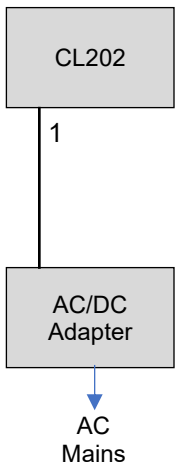
System Configuration			
Description	**Manufacturer**	**Model Number**	**Serial Number**
CommandLink II	Sensus Metering Systems Inc.	CL202	50300980[1] 50300979[2]
AC/DC Adapter	Wall Industries, Inc.	GPSU15U-1	Not Labeled
DC Power Supply	Kikusui	PAS60-18	ML000349

1) Antenna port conducted measurements
2) Radiated spurious emissions measurements

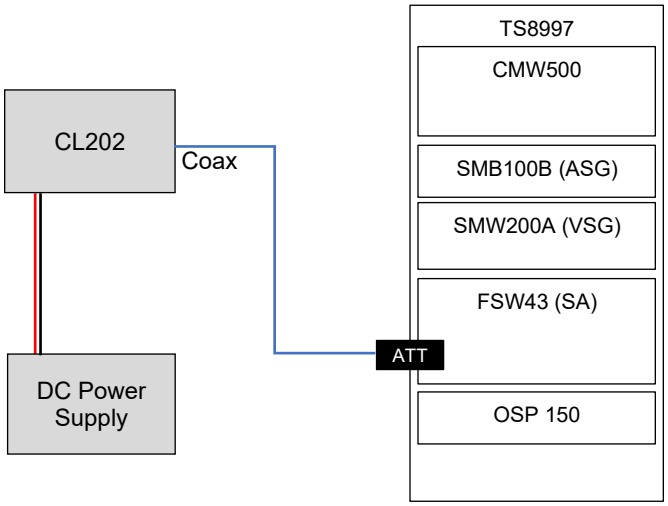
5.1 Method

Configuration as required by ANSI C63.26.

5.2 EUT Block Diagram – Radiated Measurements



5.3 EUT Block Diagram – Conducted Measurements



6 RF Output Power

6.1 Method

The methods defined in ANSI C63.26, Section 5.2.4.3 were applied for measuring the average output power. The antenna port was connected directly to a spectrum analyzer through a cable and attenuator. The attenuation was accounted for by applying an offset to the spectrum analyzer. For ASK measurements, IF triggering was enabled to ensure measurements were only applied across the maximum on time of the transmission.

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. Where applicable, 2.4 and 5GHz radio measurements are automated using the Rohde & Schwarz EMC32 test software. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

6.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
212165	Temperature/Humidity/Pressure Sensor	Extech	SD700	110344	04/29/2025	04/29/2026
213500	Analog Signal Generator (8kHz-40GHz)	Rohde & Schwarz	SMB100B	106096	05/08/2025	05/08/2027
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213506-01	RF Test Cable	Huber+Suhner	Enviroflex 400	213506-01	VBU	VBU
213507-20	20dB SMA Attenuator	Tojoin	20dB	241123	VBU	VBU

Software Utilized

Name	Manufacturer	Version
RSCommander	Rohde & Schwarz	2.4.2 64-bit (2023)

6.3 Results

The sample tested was found to Comply. The manufacturer's tune up tolerance is 19.75dBm +/- 1dB for FSK modulation and 18.75dBm +/-1dB for ASK modulation.

6.4 Test Data - FSK

FCC Rule Part / RSS	Frequency (MHz)	AVG Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	FCC ERP/EIRP Limit (dBm)	ISED ERP Limit (dBm)
90 / RSS-119	896.0125	20.61	2	22.61	20.46	50.00	47.78
24D / RSS-134	901.9875	20.36	2	22.36	20.21	38.45	38.45
101 / RSS-119	928.925	19.91	2	21.91	19.76	47.00	44.77
24D / RSS-134	930.5	19.90	2	21.90	19.75	38.45	38.45
101 / RSS-119	932.25	19.84	2	21.84	19.69	47.00	44.77
90 / RSS-119	935.0125	19.83	2	21.83	19.68	50.00	47.78
24D / RSS-134	940.0125	19.77	2	21.77	19.62	38.45	38.45
101 / RSS-119	941.4875	19.76	2	21.76	19.61	44.00	44.77
RSS-119	952.5	19.63	2	21.63	19.48	--	44.77
101	959.925	19.54	2	21.54	19.39	44.00	--

Calculation: P_{EIRP} = AVG Power + Antenna Gain (dBi) (Part 101)
P_{ERP} = AVG Power + Antenna Gain (dBi) - 2.15 (Parts 24/90 / RSS-119/134)
2.15 is the conversion from EIRP to ERP

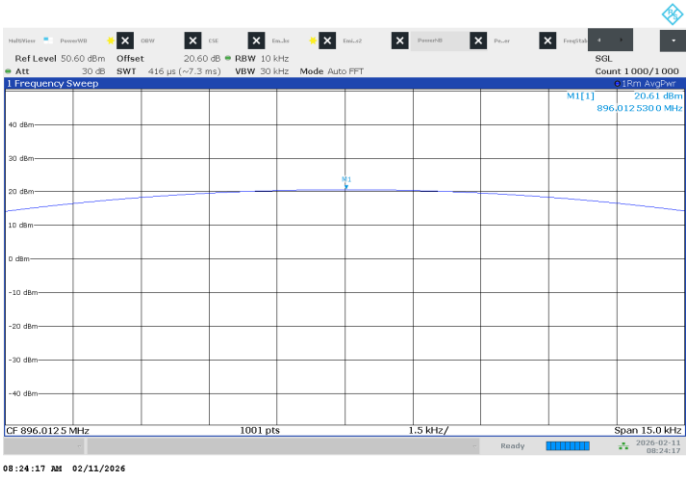
6.5 Test Data – ASK

FCC Rule Part / RSS	Frequency (MHz)	AVG Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	ERP (dBm)	FCC ERP/EIRP Limit (dBm)	ISED ERP Limit (dBm)
24D / RSS-134	901.9875	19.28	2	21.28	19.13	38.45	38.45
101 / RSS-119	928.925	18.97	2	20.97	18.82	47.00	44.77
24D / RSS-134	930.5	18.95	2	20.95	18.80	38.45	38.45
101 / RSS-119	932.25	18.91	2	20.91	18.76	47.00	44.77
24D / RSS-134	940.0125	18.80	2	20.80	18.65	38.45	38.45
101 / RSS-119	941.4875	18.79	2	20.79	18.64	44.00	44.77
RSS-119	952.5	18.63	2	20.63	18.48	--	44.77
101	959.925	18.55	2	20.55	18.40	44.00	--

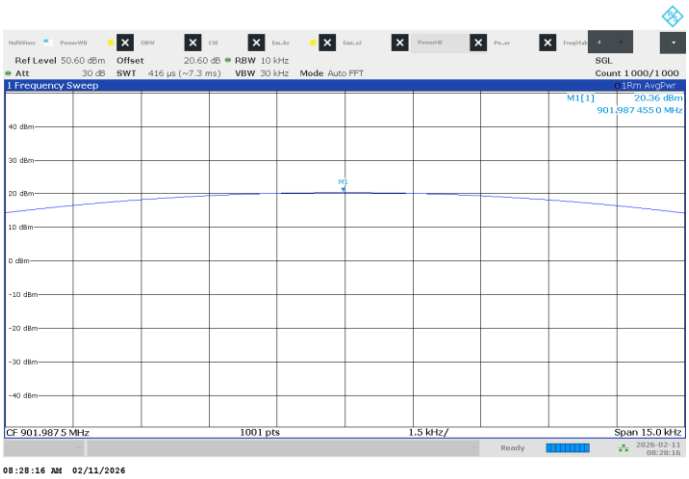
Calculation: P_{EIRP} = AVG Power + Antenna Gain (dBi) (Part 101)
P_{ERP} = AVG Power + Antenna Gain (dBi) - 2.15 (Parts 24/90)
2.15 is the conversion from EIRP to ERP

Worst-Case Sample Plots

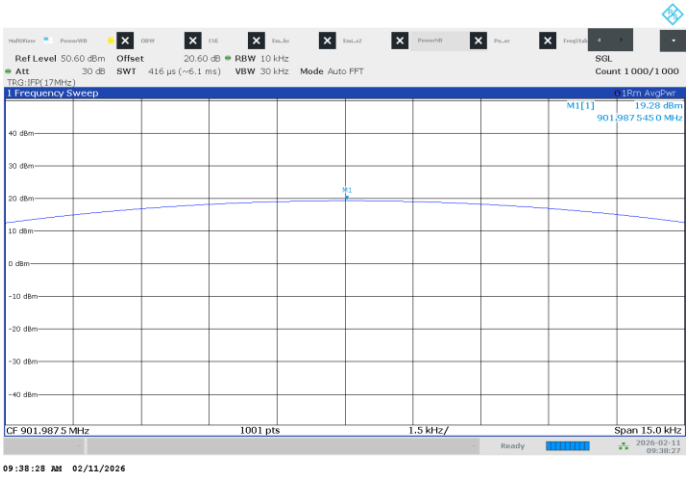
mPass 5k - FCC Part 90 / RSS-119



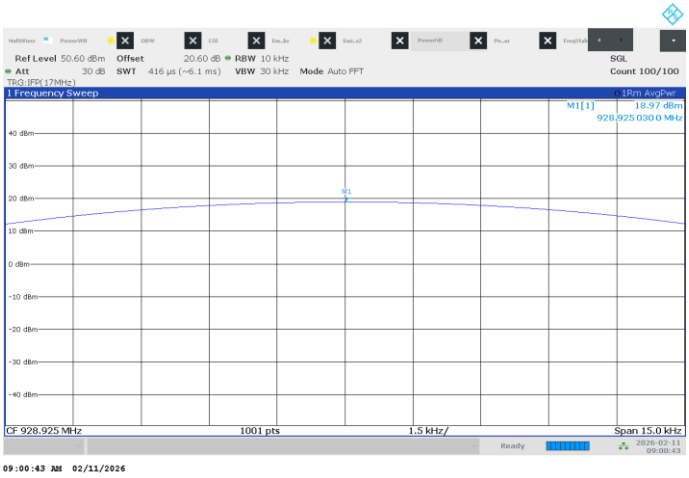
mPass 5k - FCC Part 24 / RSS-134



ASK - FCC Part 24 / RSS-134



ASK - FCC Part 101 / RSS-119



Test Personnel: Jeremy Pickens

Test Date: 11 February 2026

Ambient Temperature: 19.6ºC

Reference Standard: ANSI C63.26

Relative Humidity: 38.6%

Atmospheric Pressure: 98.3kPa

7 Out of Band Unwanted Emissions

7.1 Method

The methods defined in ANSI C63.26, Section 5.7.3 were applied for measuring the out of band emissions. The antenna port was connected directly to a spectrum analyzer through a cable and attenuator. The attenuation was accounted for by applying an offset to the spectrum analyzer. For FCC, RSS-119 Mask G, and RSS-134 testing, the spectrum analyzer was configured with a 300Hz Resolution Bandwidth (RBW). For RSS-119 Mask D measurements, the spectrum analyzer was configured with a 100Hz RBW. For all masks, the Video Bandwidth (VBW) was configured to at least 3 times the RBW.

For modulations/bands where the channel spacing may be 12.5kHz or 25kHz, only the plots for 12.5kHz spacing were tested as worst-case.

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. Where applicable, 2.4 and 5GHz radio measurements are automated using the Rohde & Schwarz EMC32 test software. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

7.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
212165	Temperature/Humidity/Pressure Sensor	Extech	SD700	110344	04/29/2025	04/29/2026
213500	Analog Signal Generator (8kHz-40GHz)	Rohde & Schwarz	SMB100B	106096	05/08/2025	05/08/2027
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213506-01	RF Test Cable	Huber+Suhner	Enviroflex 400	213506-01	VBU	VBU
213507-20	20dB SMA Attenuator	Tojoin	20dB	241123	VBU	VBU

Software Utilized

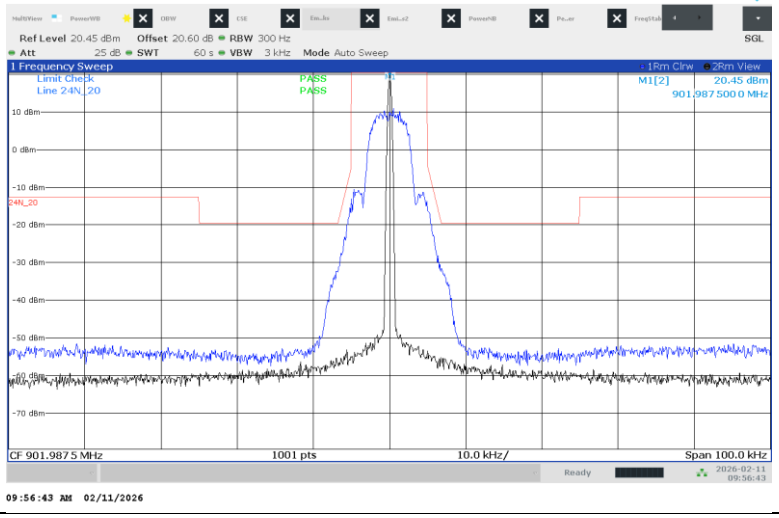
Name	Manufacturer	Version
RSCommander	Rohde & Schwarz	2.4.2 64-bit (2023)

7.3 Results

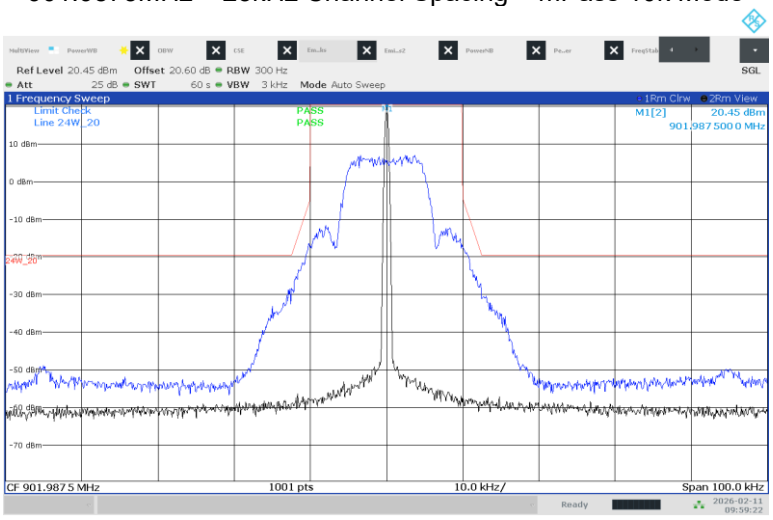
The sample tested was found to Comply.

7.4 Test Data – Part 24.133(a)(1)/(a)(2) and RSS-134 S4.4.1(a)/(b), S4.4.2(a)/(b)

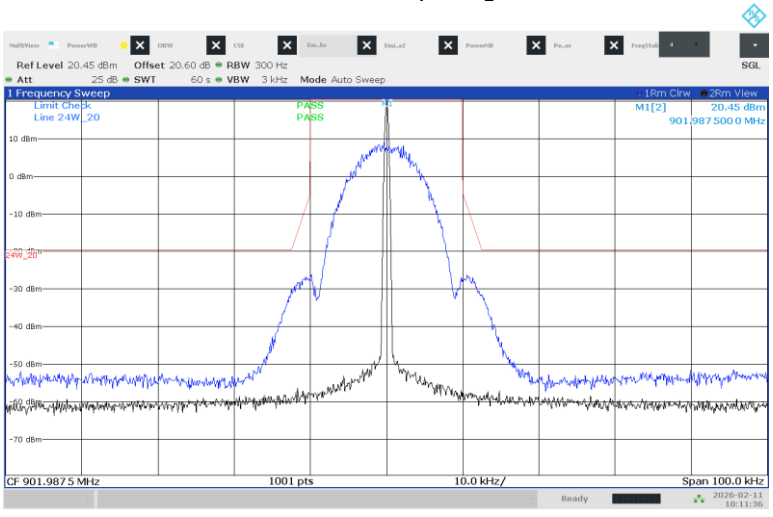
901.9875MHz – 12.5kHz Channel Spacing – mPass 5k Mode



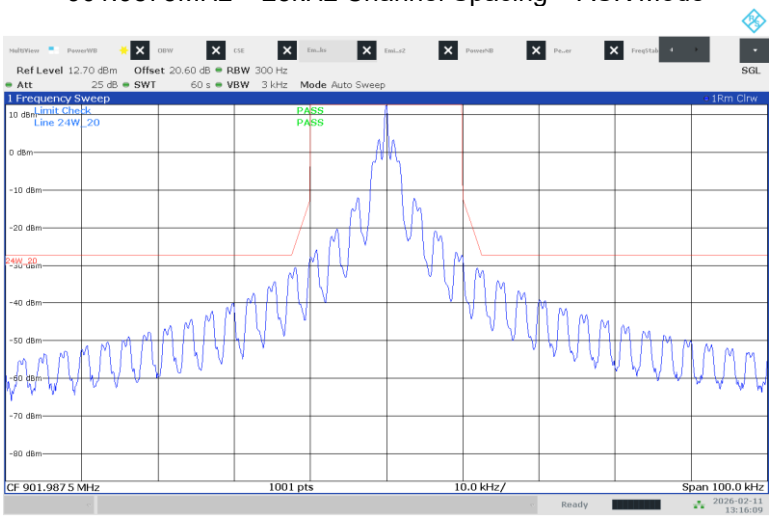
901.9875MHz – 25kHz Channel Spacing – mPass 10k Mode



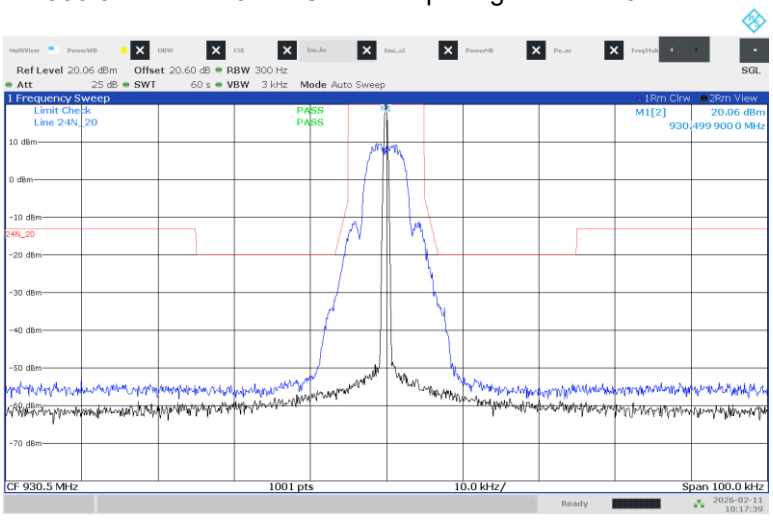
901.9875MHz – 25kHz Channel Spacing – mPass 12.5k Mode



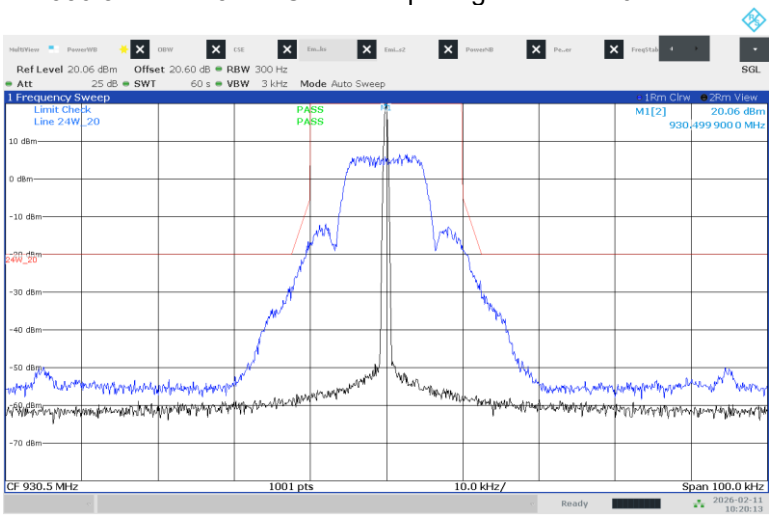
901.9875MHz – 25kHz Channel Spacing – ASK Mode



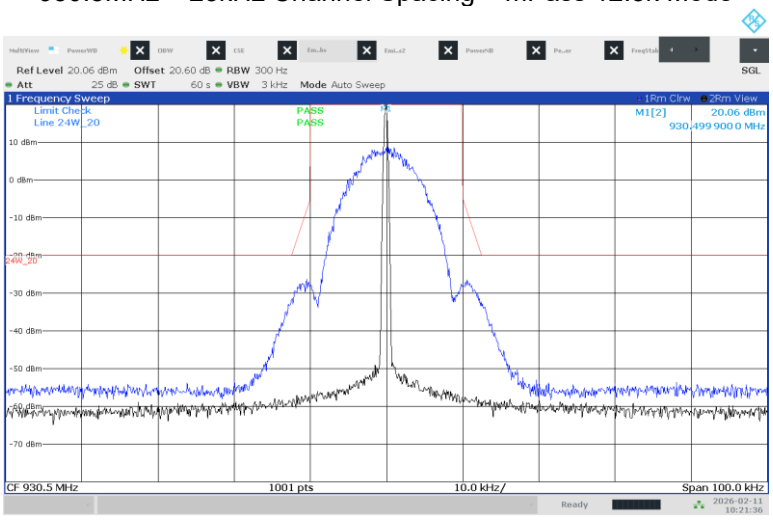
930.5MHz – 12.5kHz Channel Spacing – mPass 5k Mode



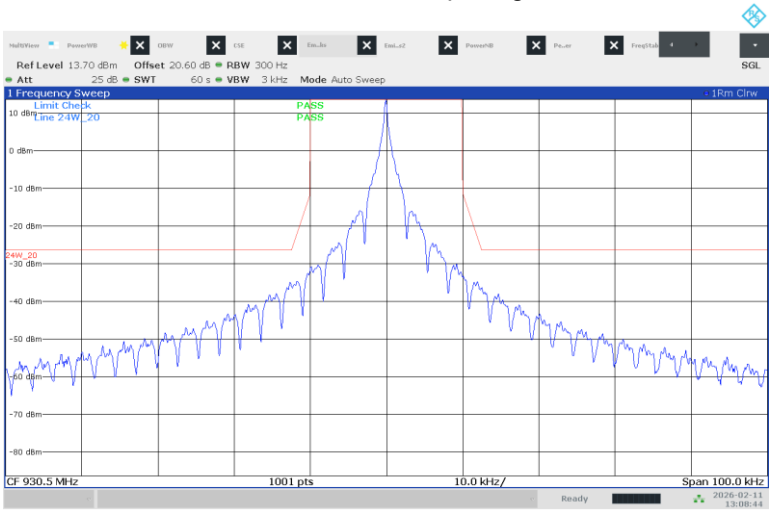
930.5MHz – 25kHz Channel Spacing – mPass 10k Mode



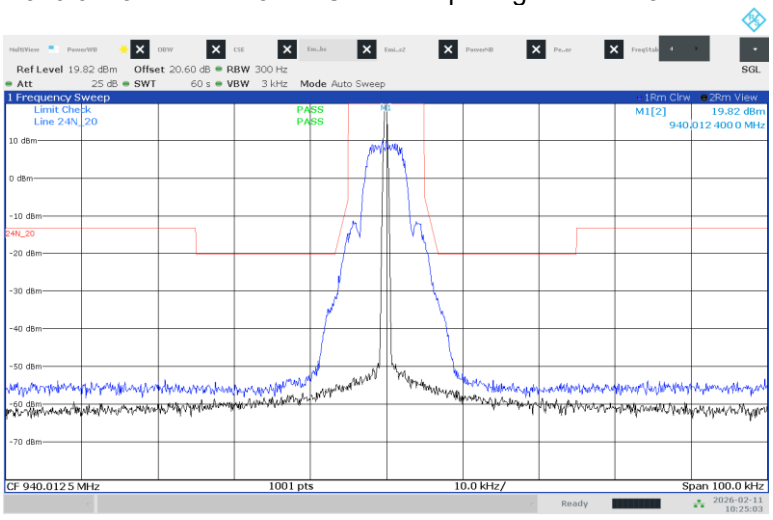
930.5MHz – 25kHz Channel Spacing – mPass 12.5k Mode



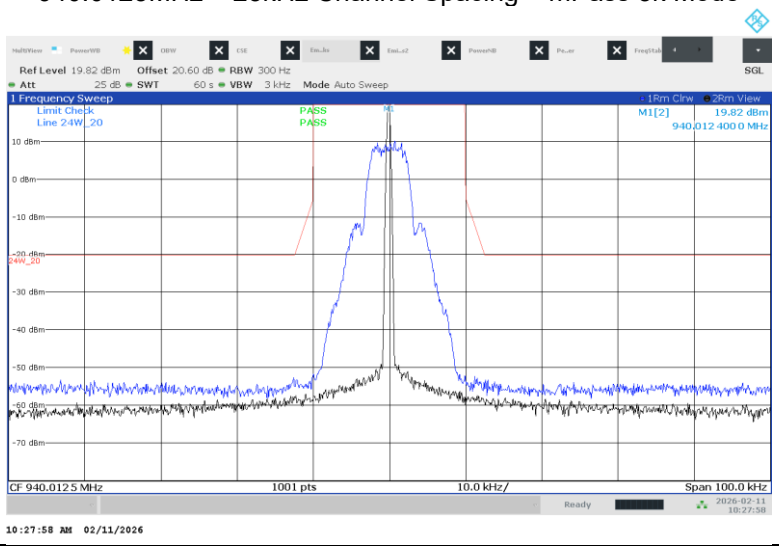
930.5MHz – 25kHz Channel Spacing – ASK Mode



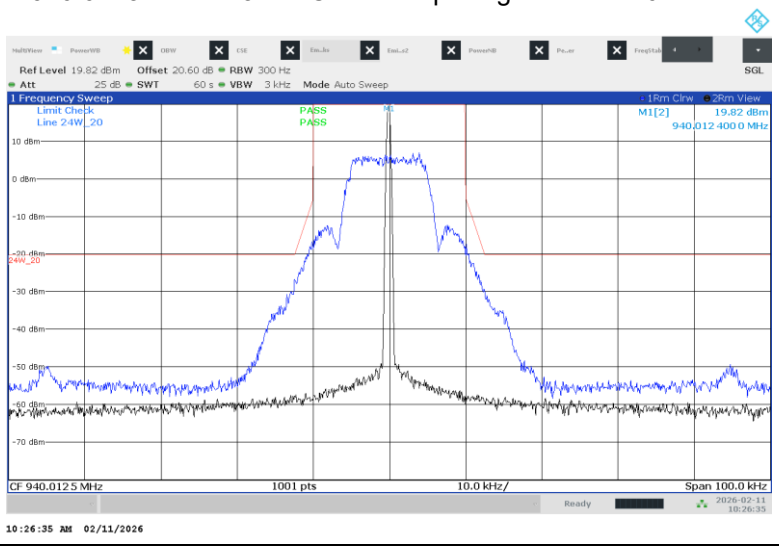
940.0125MHz – 12.5kHz Channel Spacing – mPass 5k Mode



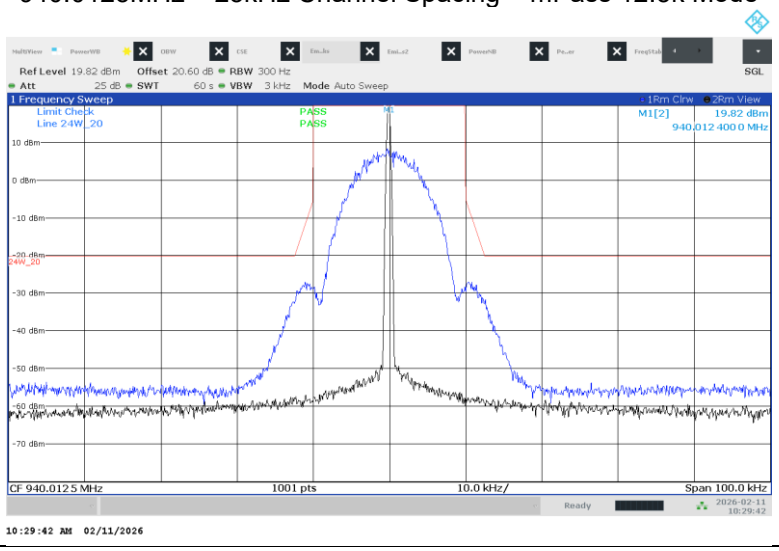
940.0125MHz – 25kHz Channel Spacing – mPass 5k Mode



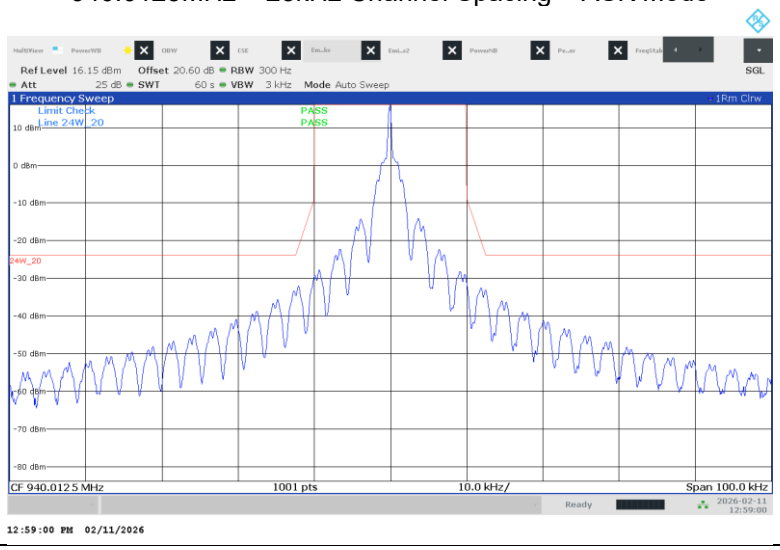
940.0125MHz – 25kHz Channel Spacing – mPass 10k Mode



940.0125MHz – 25kHz Channel Spacing – mPass 12.5k Mode

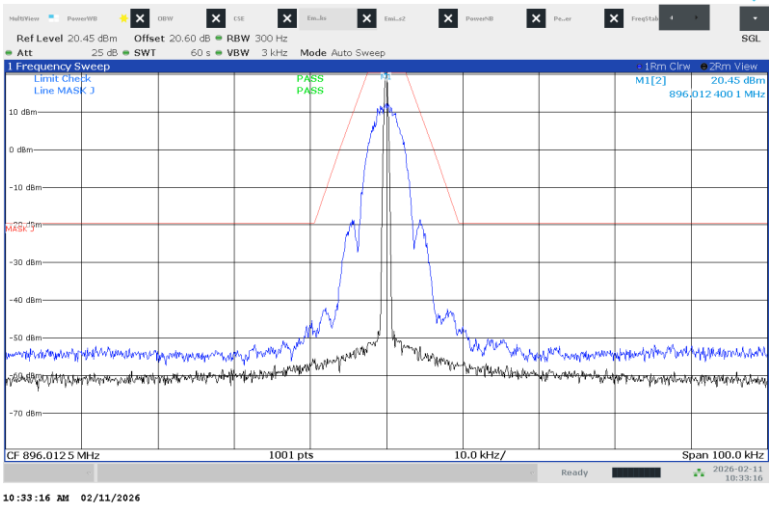


940.0125MHz – 25kHz Channel Spacing – ASK Mode

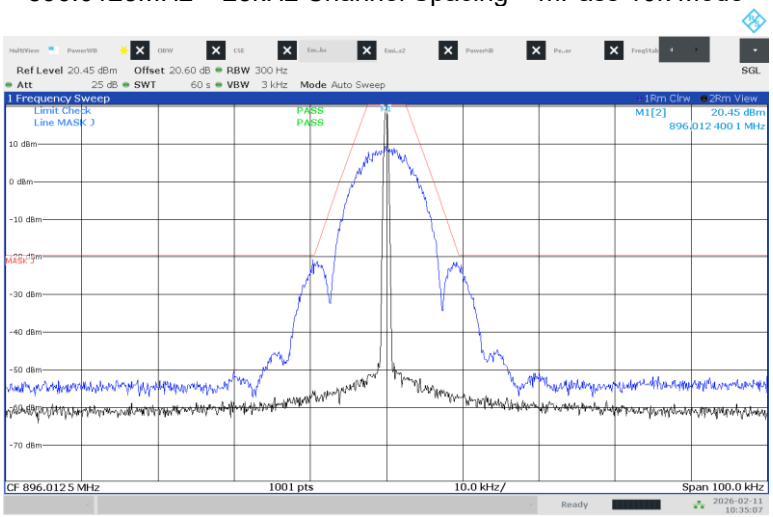


7.5 Test Data – Part 90.210(i) and RSS-119 S5.8.8

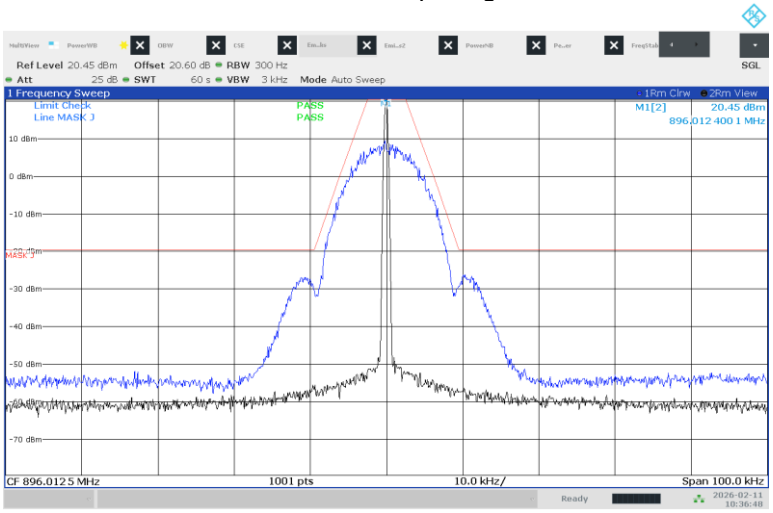
896.0125MHz – 25kHz Channel Spacing – mPass 5k Mode



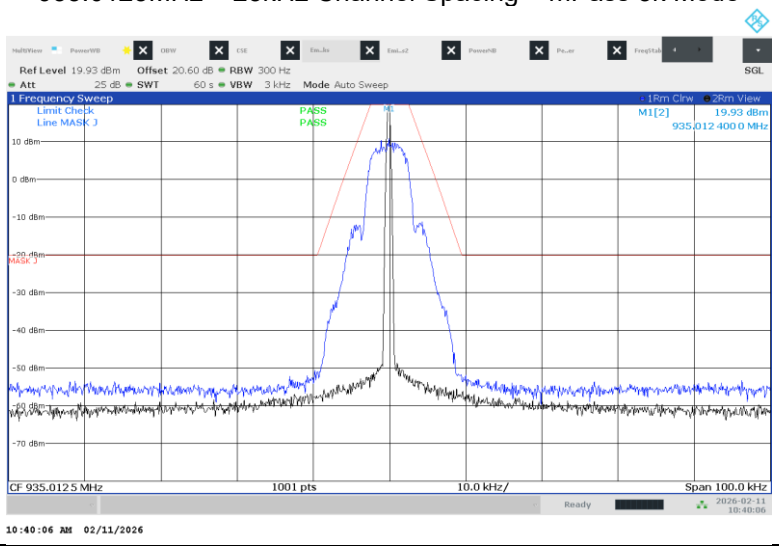
896.0125MHz – 25kHz Channel Spacing – mPass 10k Mode



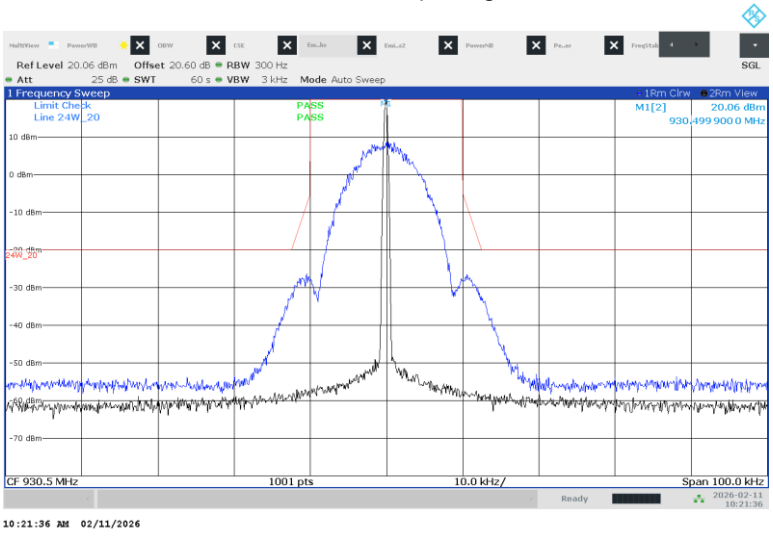
896.0125MHz – 25kHz Channel Spacing – mPass 12.5k Mode



935.0125MHz – 25kHz Channel Spacing – mPass 5k Mode

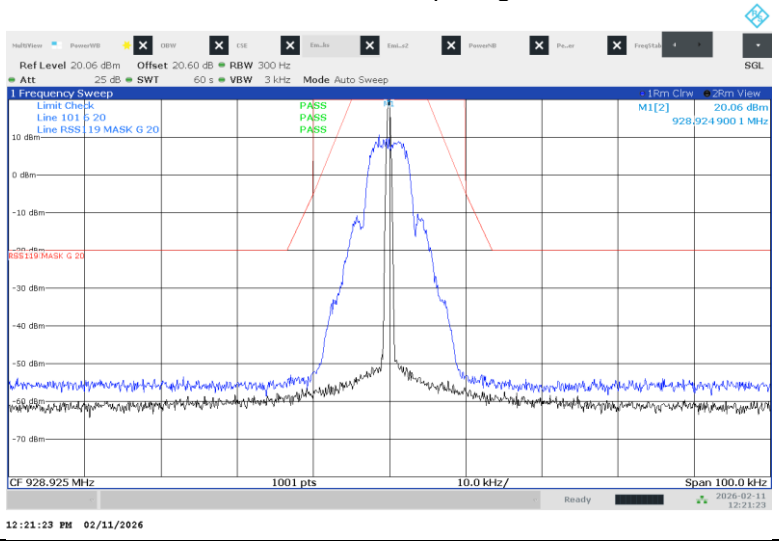


935.0125MHz – 25kHz Channel Spacing – mPass 12.5k Mode

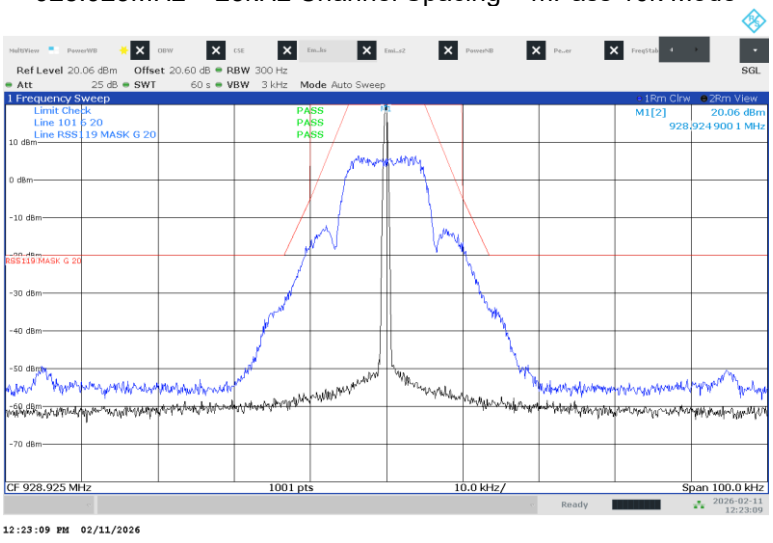


7.6 Test Data – Parts 101.111(a)(5)/101.111(a)(6) and RSS-119 S5.8.6 (Mask G)

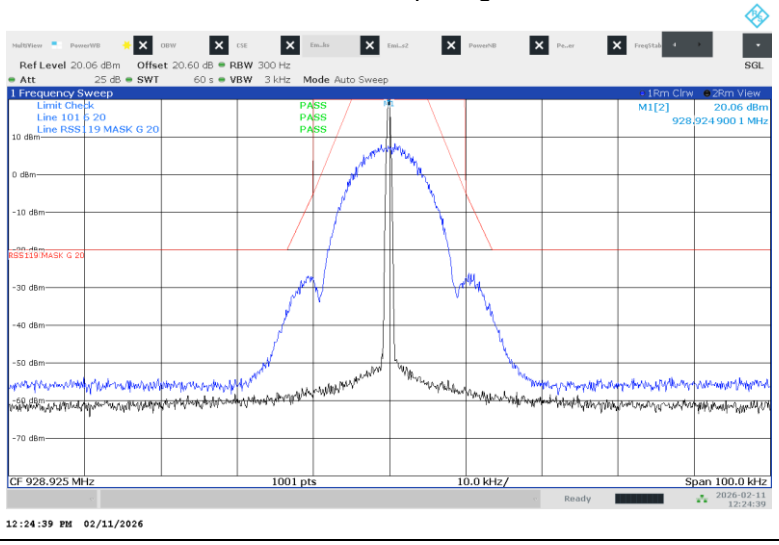
928.925MHz – 25kHz Channel Spacing – mPass 5k Mode



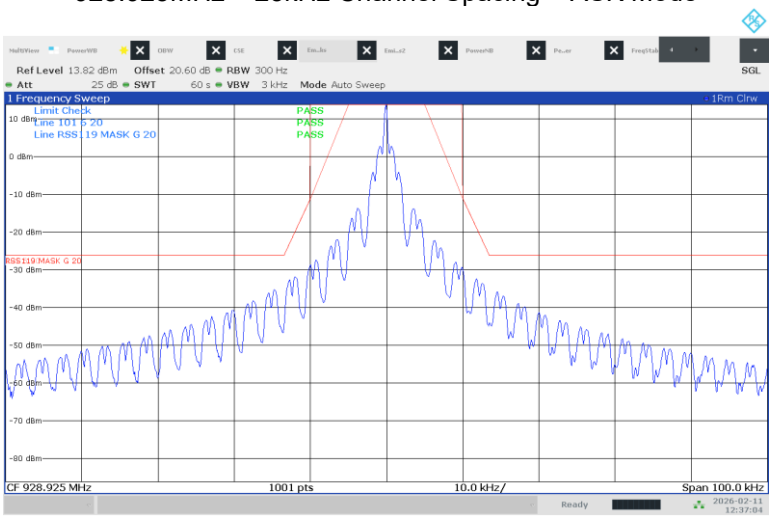
928.925MHz – 25kHz Channel Spacing – mPass 10k Mode



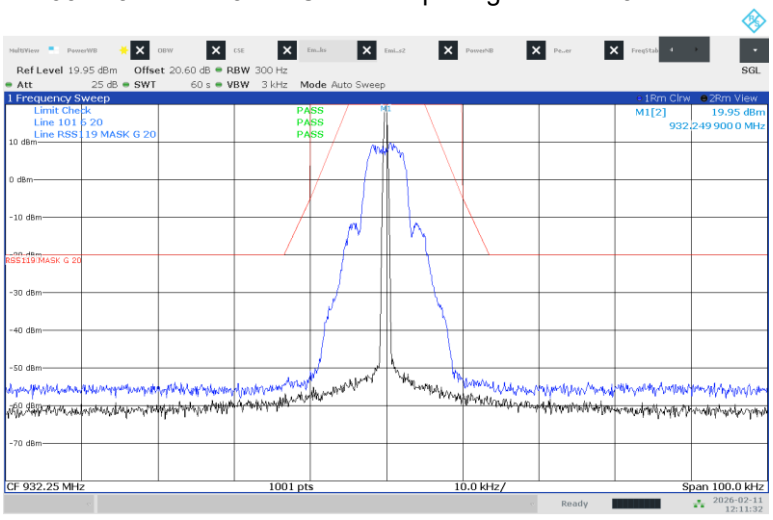
928.925MHz – 25kHz Channel Spacing – mPass 12.5k Mode



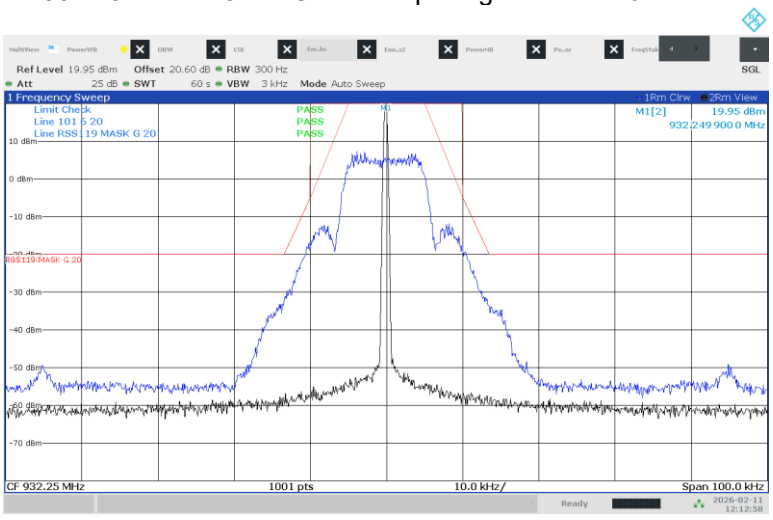
928.925MHz – 25kHz Channel Spacing – ASK Mode



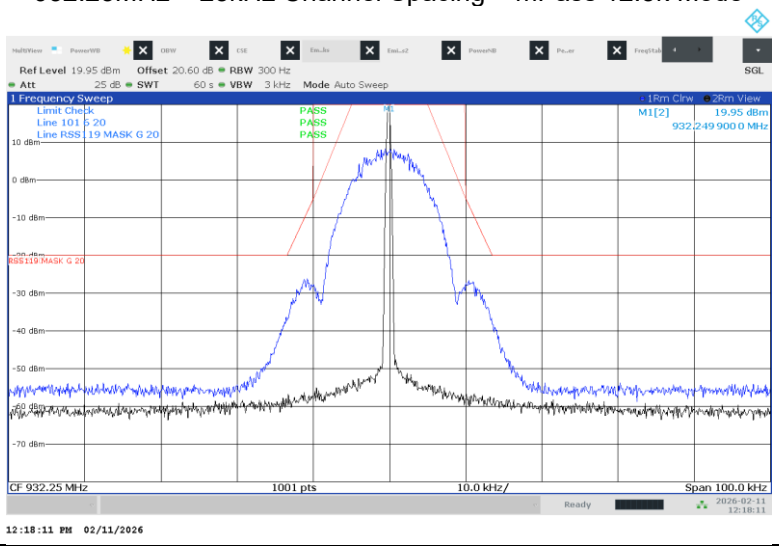
932.25MHz – 25kHz Channel Spacing – mPass 5k Mode



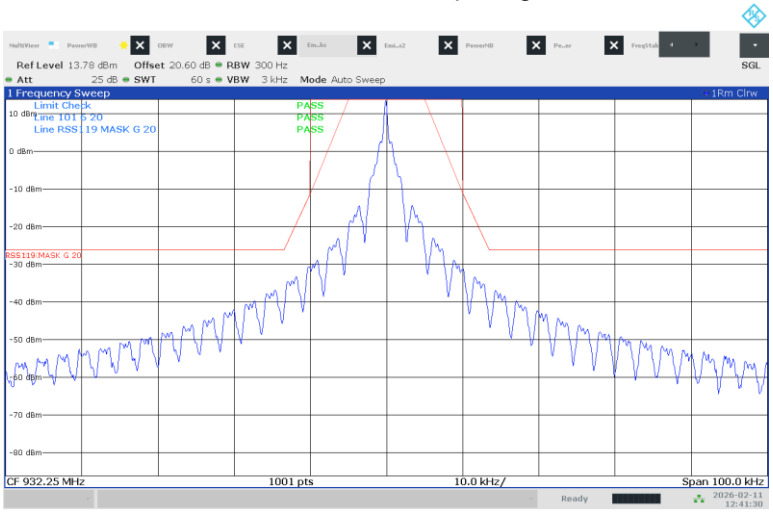
932.25MHz – 25kHz Channel Spacing – mPass 10k Mode



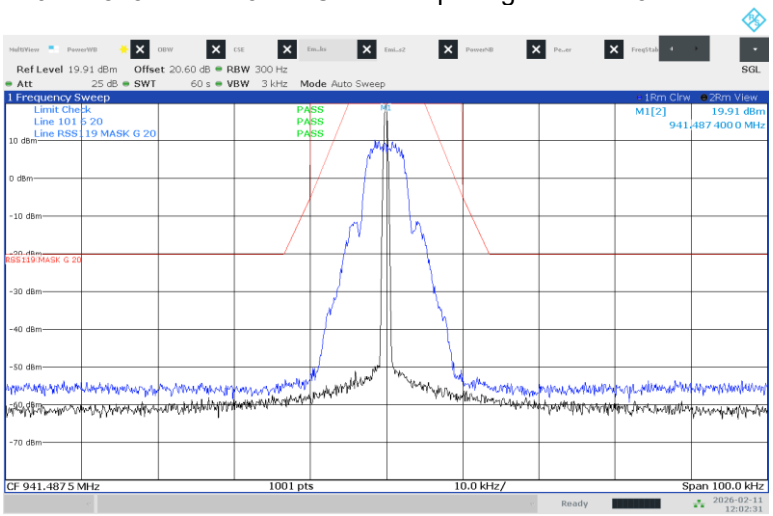
932.25MHz – 25kHz Channel Spacing – mPass 12.5k Mode



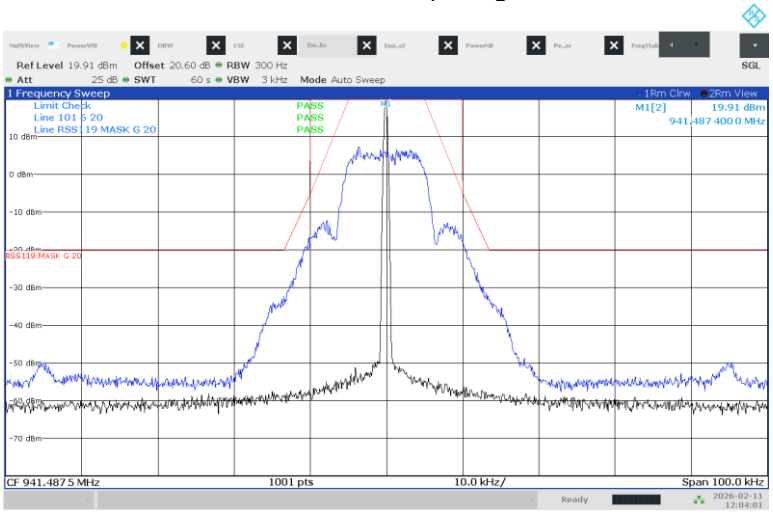
932.25MHz – 25kHz Channel Spacing – ASK Mode



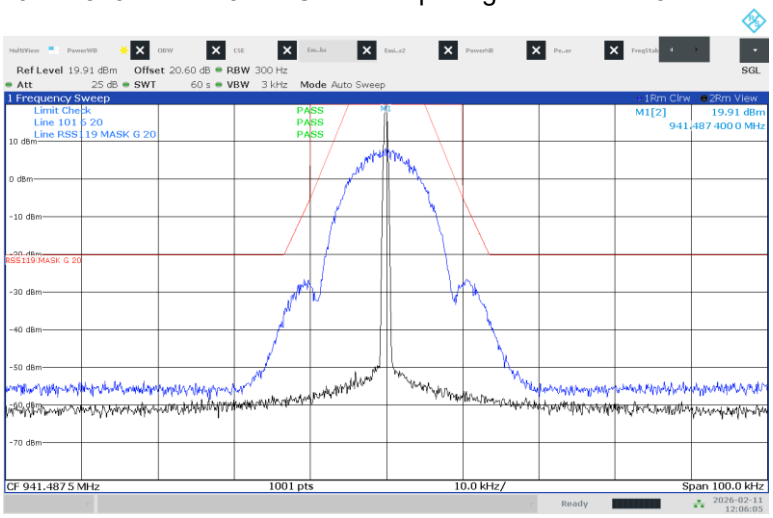
941.4875MHz – 25kHz Channel Spacing – mPass 5k Mode



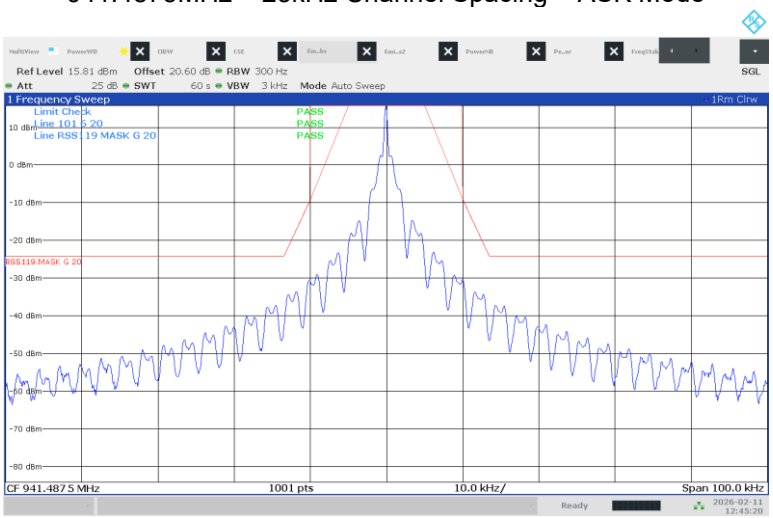
941.4875MHz – 25kHz Channel Spacing – mPass 10k Mode



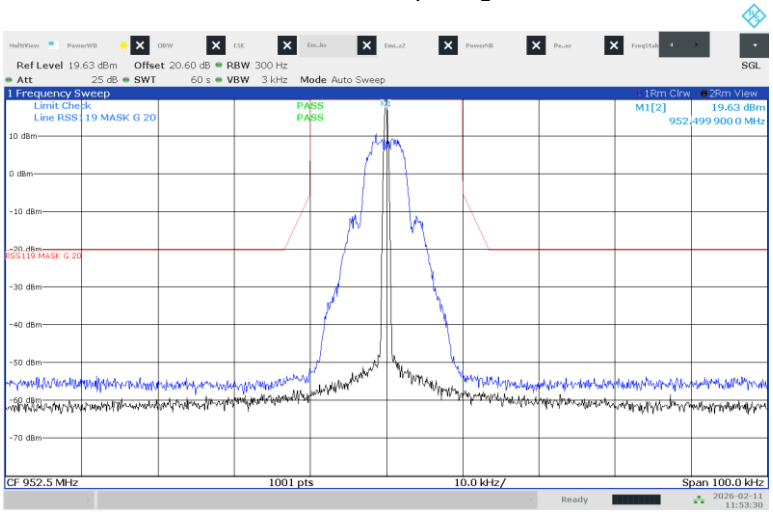
941.4875MHz – 25kHz Channel Spacing – mPass 12.5k Mode



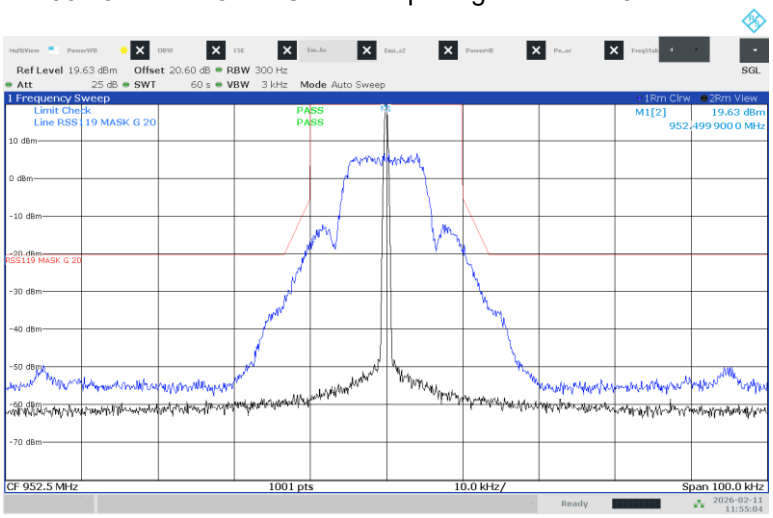
941.4875MHz – 25kHz Channel Spacing – ASK Mode



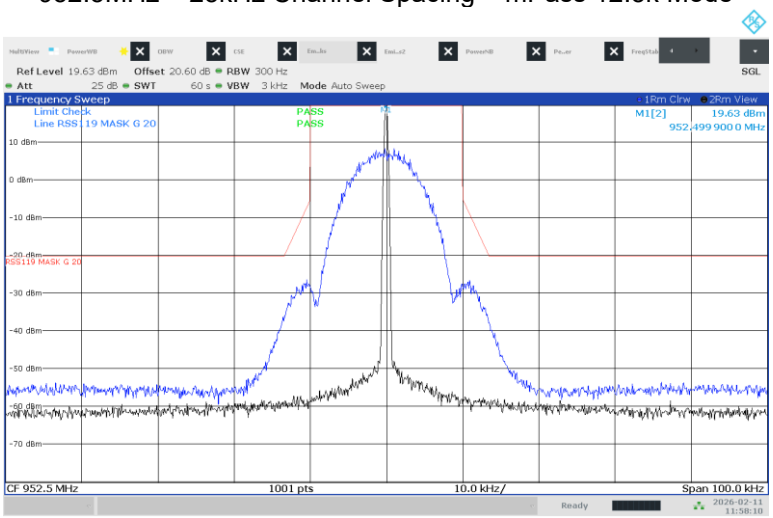
952.5MHz – 25kHz Channel Spacing – mPass 5k Mode



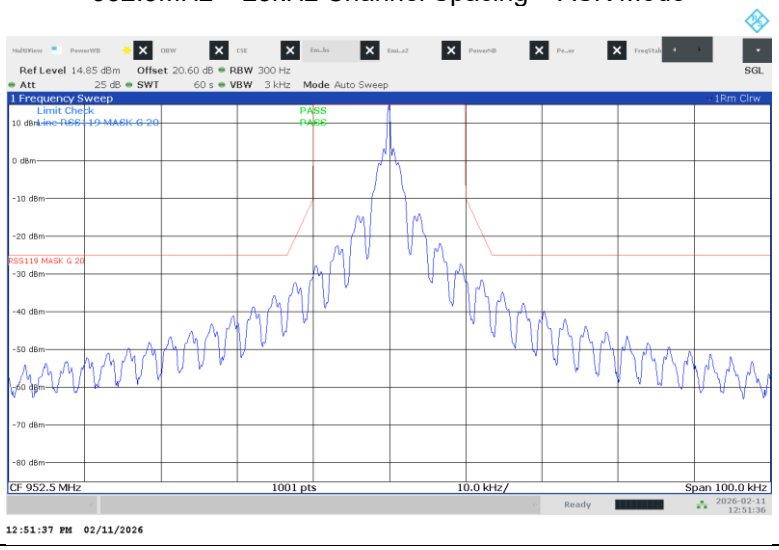
952.5MHz – 25kHz Channel Spacing – mPass 10k Mode



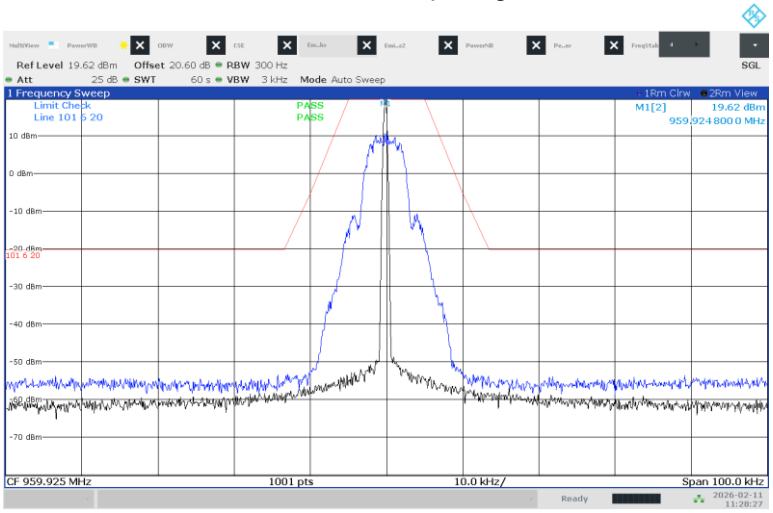
952.5MHz – 25kHz Channel Spacing – mPass 12.5k Mode



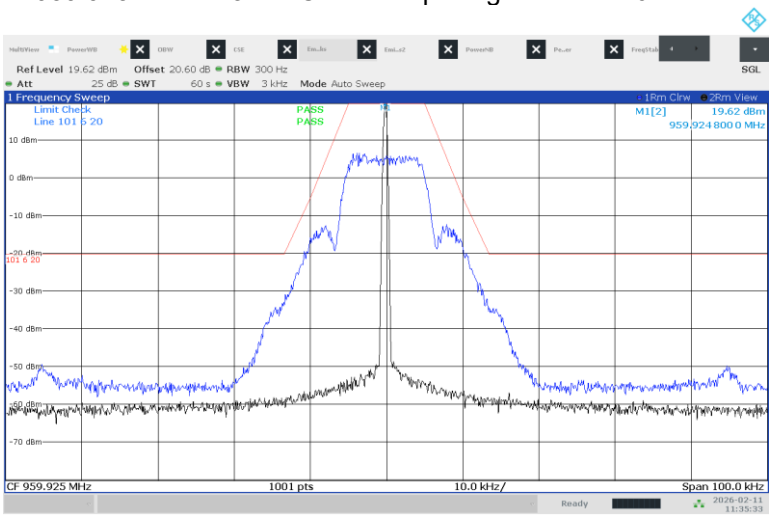
952.5MHz – 25kHz Channel Spacing – ASK Mode



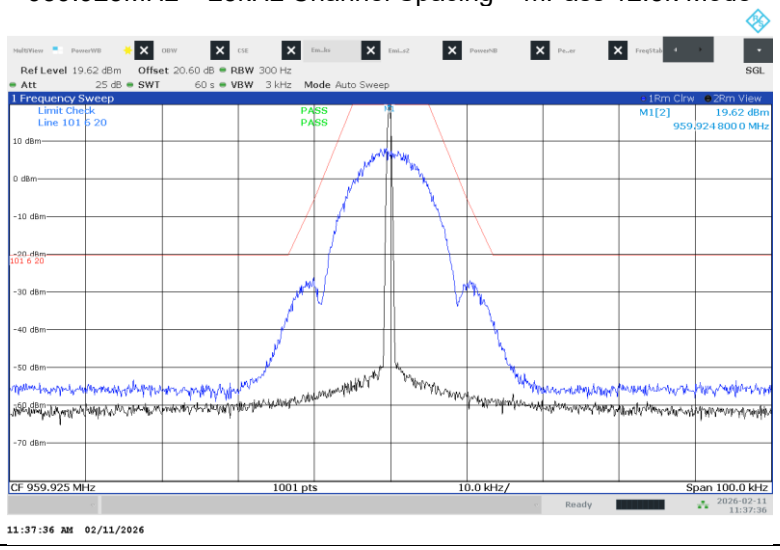
959.925MHz – 25kHz Channel Spacing – mPass 5k Mode



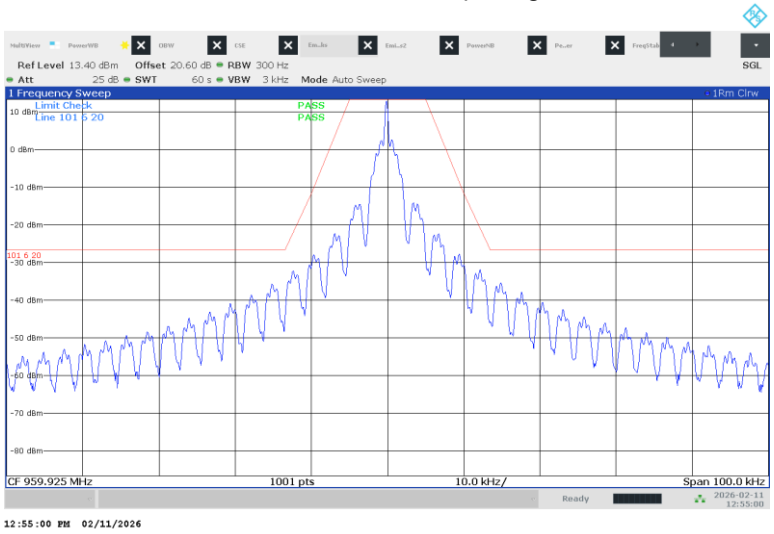
959.925MHz – 25kHz Channel Spacing – mPass 10k Mode



959.925MHz – 25kHz Channel Spacing – mPass 12.5k Mode



959.925MHz – 25kHz Channel Spacing – ASK Mode



Test Personnel: Jeremy Pickens

Reference Standard: ANSI C63.26

Test Date: 11 February 2026

Ambient Temperature: 19.6ºC

Relative Humidity: 38.6%

Atmospheric Pressure: 98.3kPa

8 Occupied Bandwidth

8.1 Method

The methods defined in ANSI C63.26, Section 5.4.4 were applied for measuring the 99% Occupied (Power) Bandwidth (OBW). The antenna port was connected directly to a spectrum analyzer through a cable and attenuator. The attenuation was accounted for by applying an offset to the spectrum analyzer. The spectrum analyzer was configured with a 3dB Resolution Bandwidth (RBW) between 1% and 5% of the anticipated occupied bandwidth, the Video Bandwidth (VBW) was set to at least 3 x RBW, and the span was configured to at least 1.5 times the OBW. The 99% OBW function of the spectrum analyzer was used to take the measurements.

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. Where applicable, 2.4 and 5GHz radio measurements are automated using the Rohde & Schwarz EMC32 test software. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

8.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
212165	Temperature/Humidity/Pressure Sensor	Extech	SD700	110344	04/29/2025	04/29/2026
213500	Analog Signal Generator (8kHz-40GHz)	Rohde & Schwarz	SMB100B	106096	05/08/2025	05/08/2027
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213506-01	RF Test Cable	Huber+Suhner	Enviroflex 400	213506-01	VBU	VBU
213507-20	20dB SMA Attenuator	Tojoin	20dB	241123	VBU	VBU

Software Utilized

Name	Manufacturer	Version
EMC32	Rohde & Schwarz	11.70.00

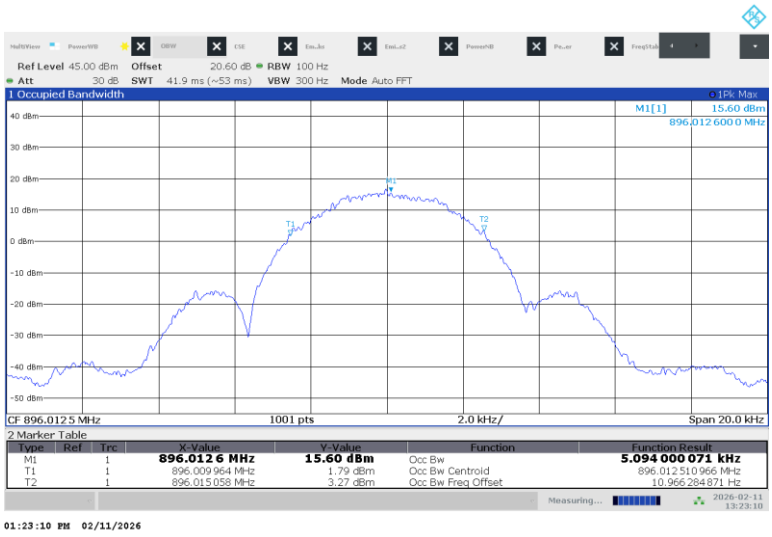
8.3 Results

The sample tested was found to Comply.

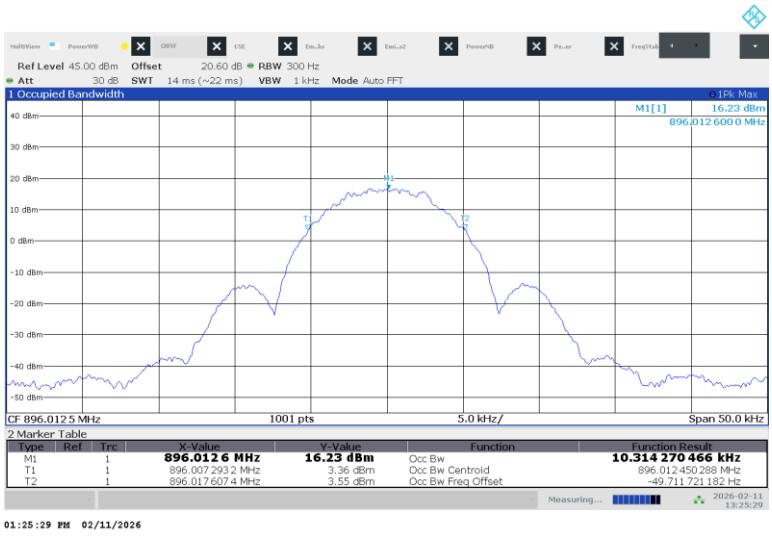
8.4 Test Data

Frequency (MHz)	Mode	99% Bandwidth (kHz)
896.0125	mPass 5k	5.09
896.0125	mPass 10k	10.31
896.0125	mPass 12.5k	11.92
901.9875	mPass 5k	5.79
901.9875	mPass 10k	11.88
901.9875	mPass 12.5k	11.89
901.9875	ASK	6.94
928.925	mPass 5k	5.80
928.925	mPass 10k	11.83
928.925	mPass 12.5k	12.02
928.925	ASK	5.91
930.5	mPass 5k	5.78
930.5	mPass 10k	11.85
930.5	mPass 12.5k	11.97
930.5	ASK	6.36
932.25	mPass 5k	5.78
932.25	mPass 10k	11.90
932.25	mPass 12.5k	11.89
932.25	ASK	6.70
935.0125	mPass 5k	5.80
935.0125	mPass 12.5k	11.85
941.4875	mPass 5k	5.80
941.4875	mPass 10k	11.78
941.4875	mPass 12.5k	11.91
941.4875	ASK	7.04
952.5	mPass 5k	5.78
952.5	mPass 10k	11.87
952.5	mPass 12.5k	11.87
952.5	ASK	6.73
959.925	mPass 5k	5.75
959.925	mPass 10k	11.87
959.925	mPass 12.5k	11.92
959.925	ASK	6.65

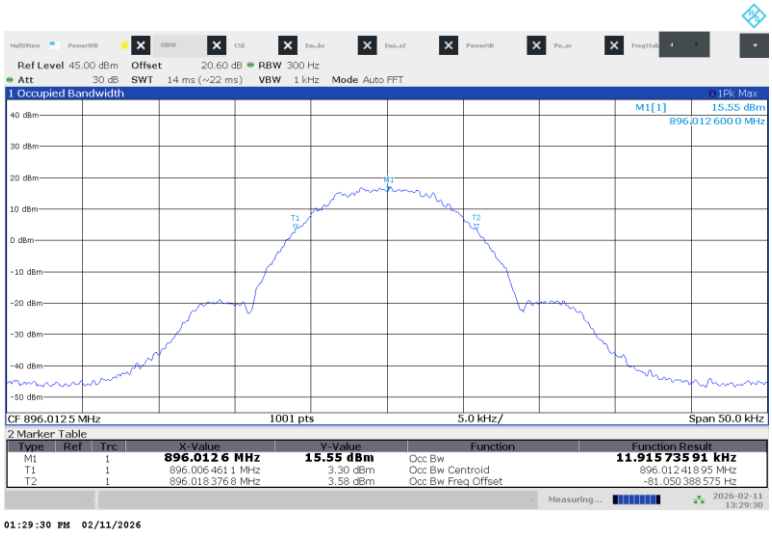
896.0125 - mPass 5k



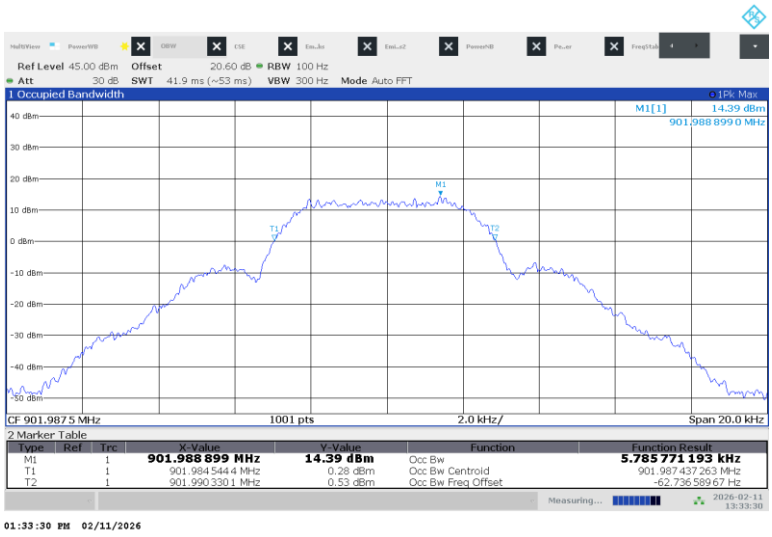
896.0125 - mPass 10k



896.0125 - mPass 12.5k

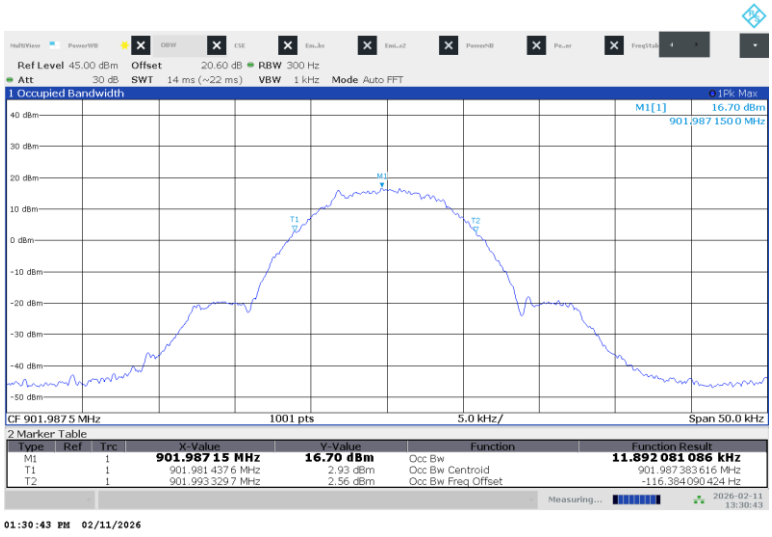


901.9875 - mPass 5k



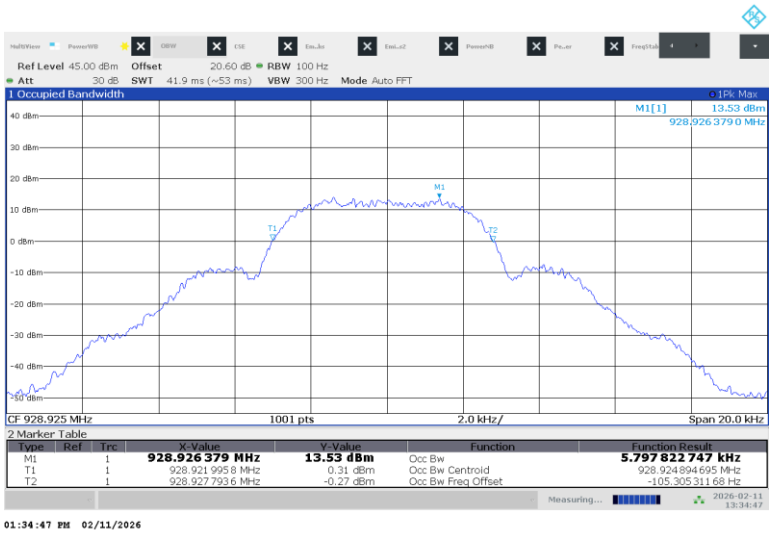
901.9875 - mPass 10k

901.9875 - mPass 12.5k



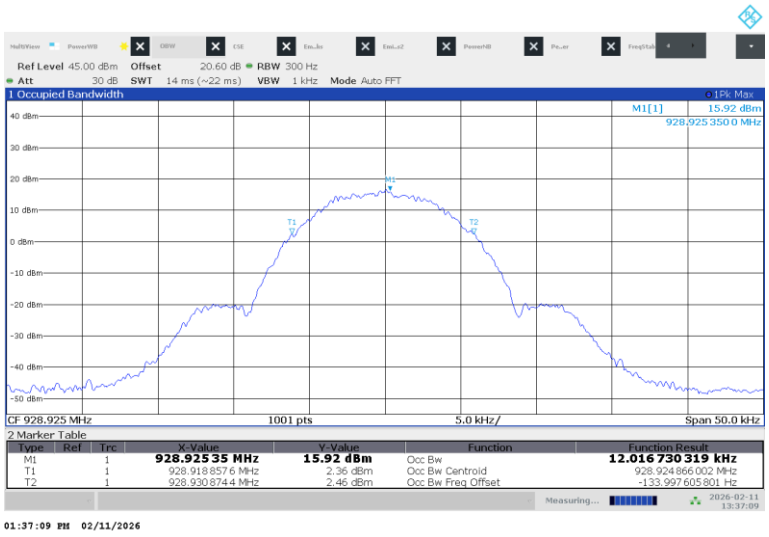
901.9875 - ASK

928.925 - mPass 5k



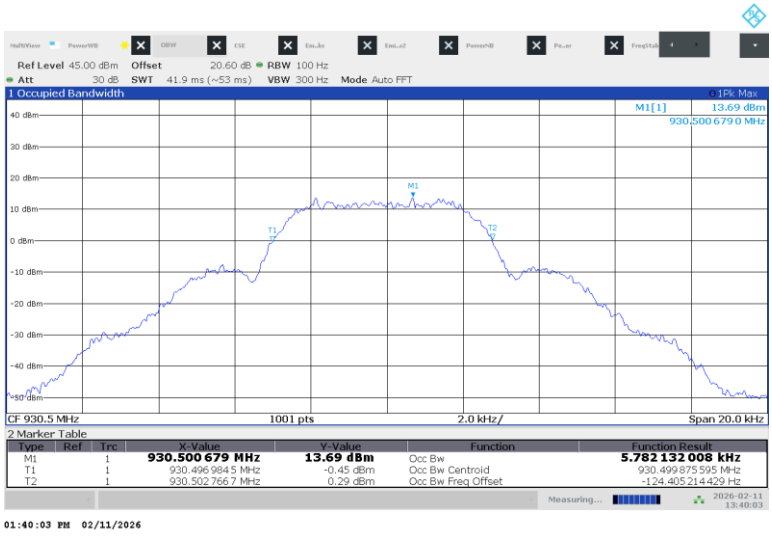
928.925 - mPass 10k

928.925 - mPass 12.5k



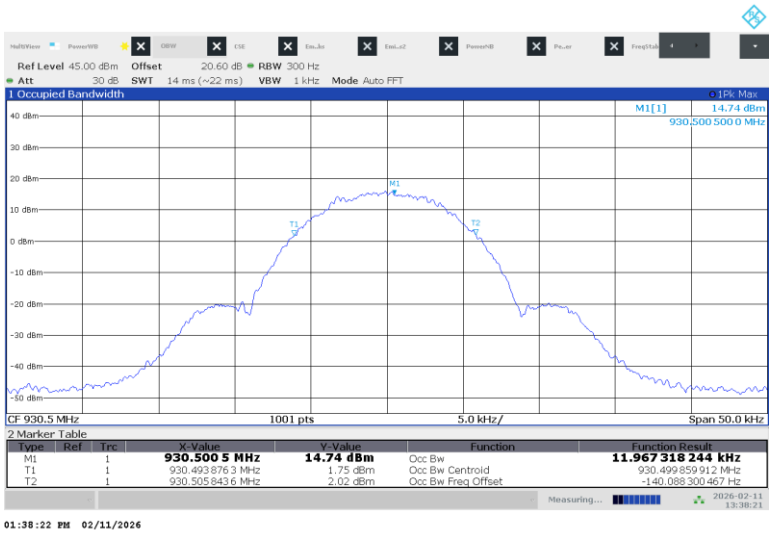
928.925 - ASK

930.5 - mPass 5k

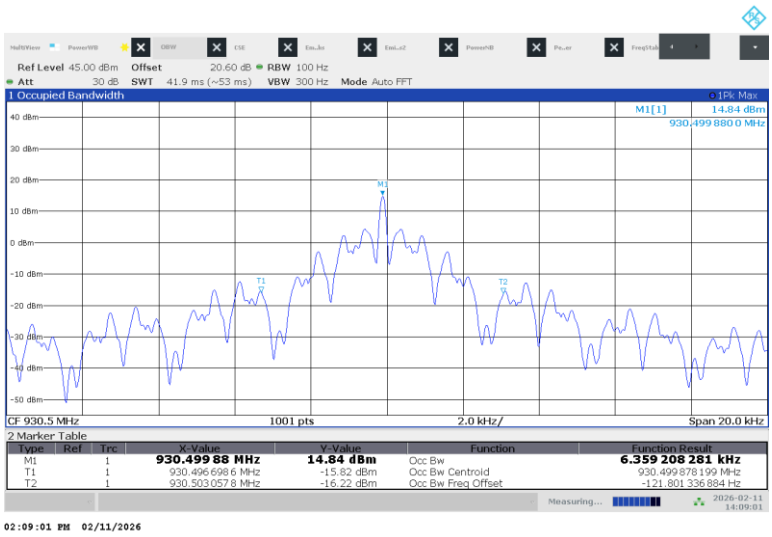


930.5 - mPass 10k

930.5 - mPass 12.5k



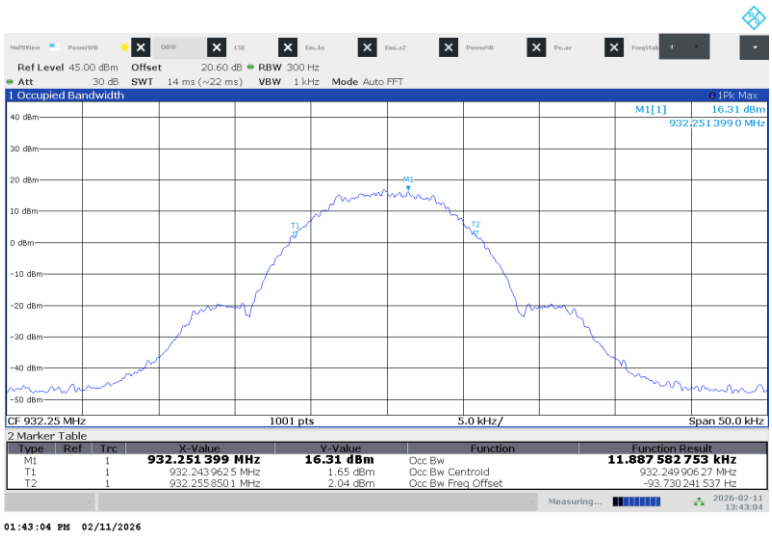
930.5 - ASK



932.25 - mPass 5k

932.25 - mPass 10k

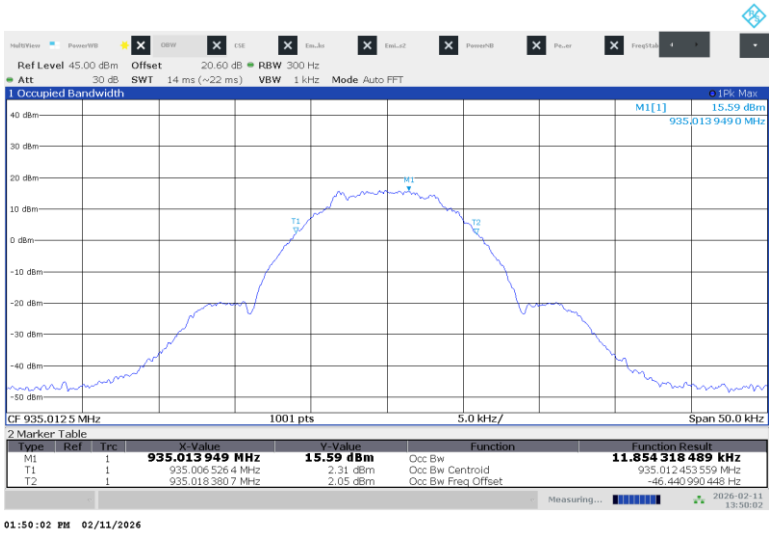
932.25 - mPass 12.5k



932.25 - ASK

935.0125 - mPass 5k

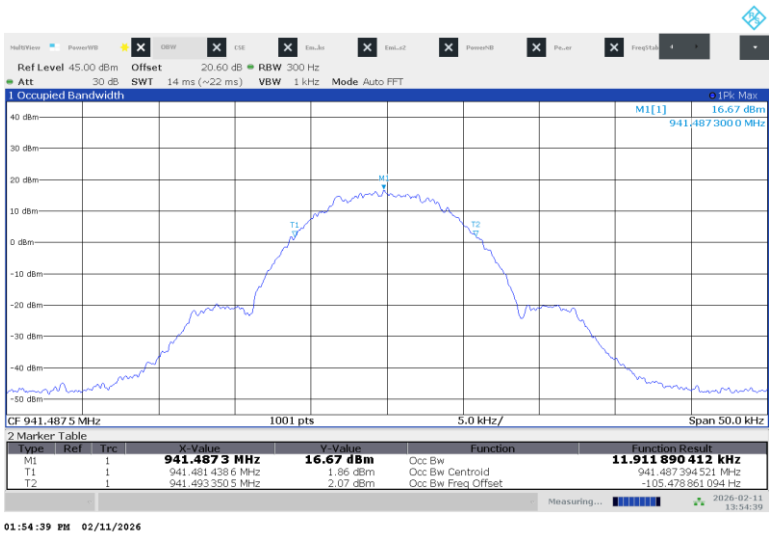
935.0125 - mPass 12.5k



941.4875 - mPass 5k

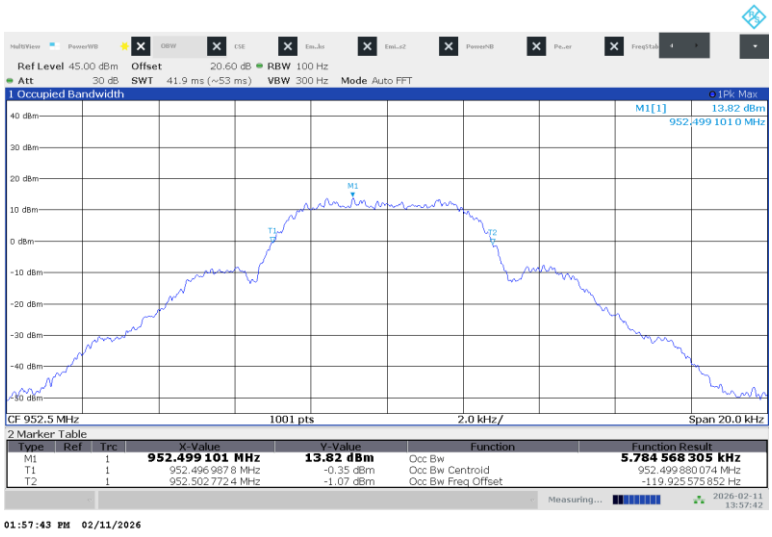
941.4875 - mPass 10k

941.4875 - mPass 12.5k



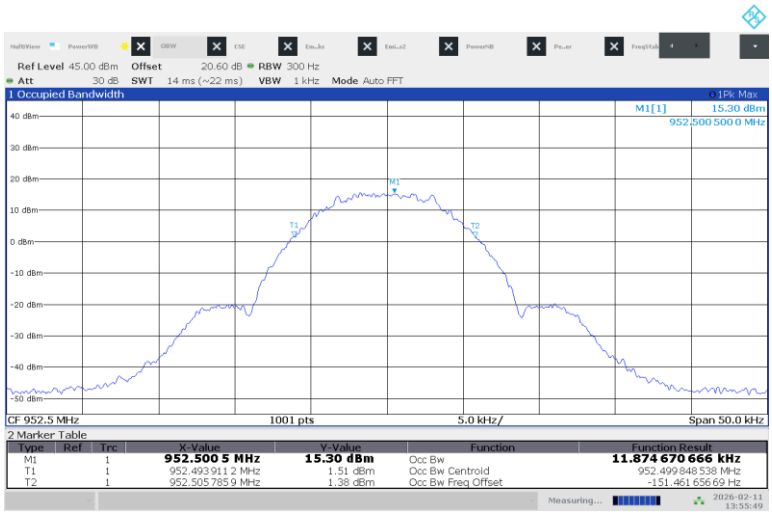
941.4875 - ASK

952.5 - mPass 5k



952.5 - mPass 10k

952.5 - mPass 12.5k

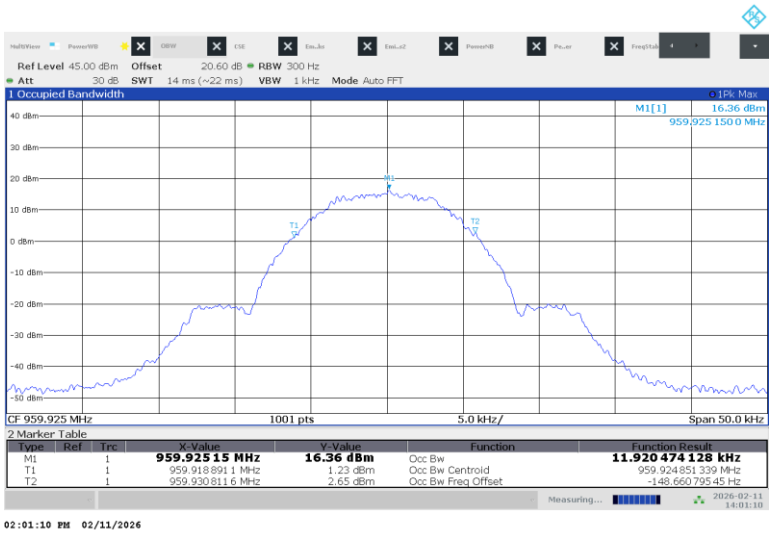


952.5 - ASK

959.925 - mPass 5k

959.925 - mPass 10k

959.925 - mPass 12.5k



959.925 - ASK

Test Personnel:	Jeremy Pickens	Test Date:	11 February 2026
		Ambient Temperature:	19.6ºC
Reference Standard:	ANSI C63.26	Relative Humidity:	38.6%
		Atmospheric Pressure:	98.3kPa

9 Spurious Emissions at Antenna Terminals

9.1 Method

The methods defined in ANSI C63.26, Section 5.7.4 were applied for measuring the out of band emissions. The antenna port was connected directly to a spectrum analyzer through a cable and attenuator. The total attenuation was accounted for by applying an offset to the spectrum analyzer for the attenuator and a transducer function for the cable loss. The spectrum analyzer was configured with the following Resolution Bandwidth (RBW) settings:

Frequency Range (MHz)	RBW
0.009 – 0.150	1 kHz
0.150 – 30	10 kHz
30 – 1000	100 kHz
1000 – 10000	1 MHz

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. Where applicable, 2.4 and 5GHz radio measurements are automated using the Rohde & Schwarz EMC32 test software. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

9.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
212165	Temperature/Humidity/Pressure Sensor	Extech	SD700	110344	04/29/2025	04/29/2026
213500	Analog Signal Generator (8kHz-40GHz)	Rohde & Schwarz	SMB100B	106096	05/08/2025	05/08/2027
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213506-01	RF Test Cable	Huber+Suhner	Enviroflex 400	213506-01	VBU	VBU
213507-20	20dB SMA Attenuator	Tojoin	20dB	241123	VBU	VBU

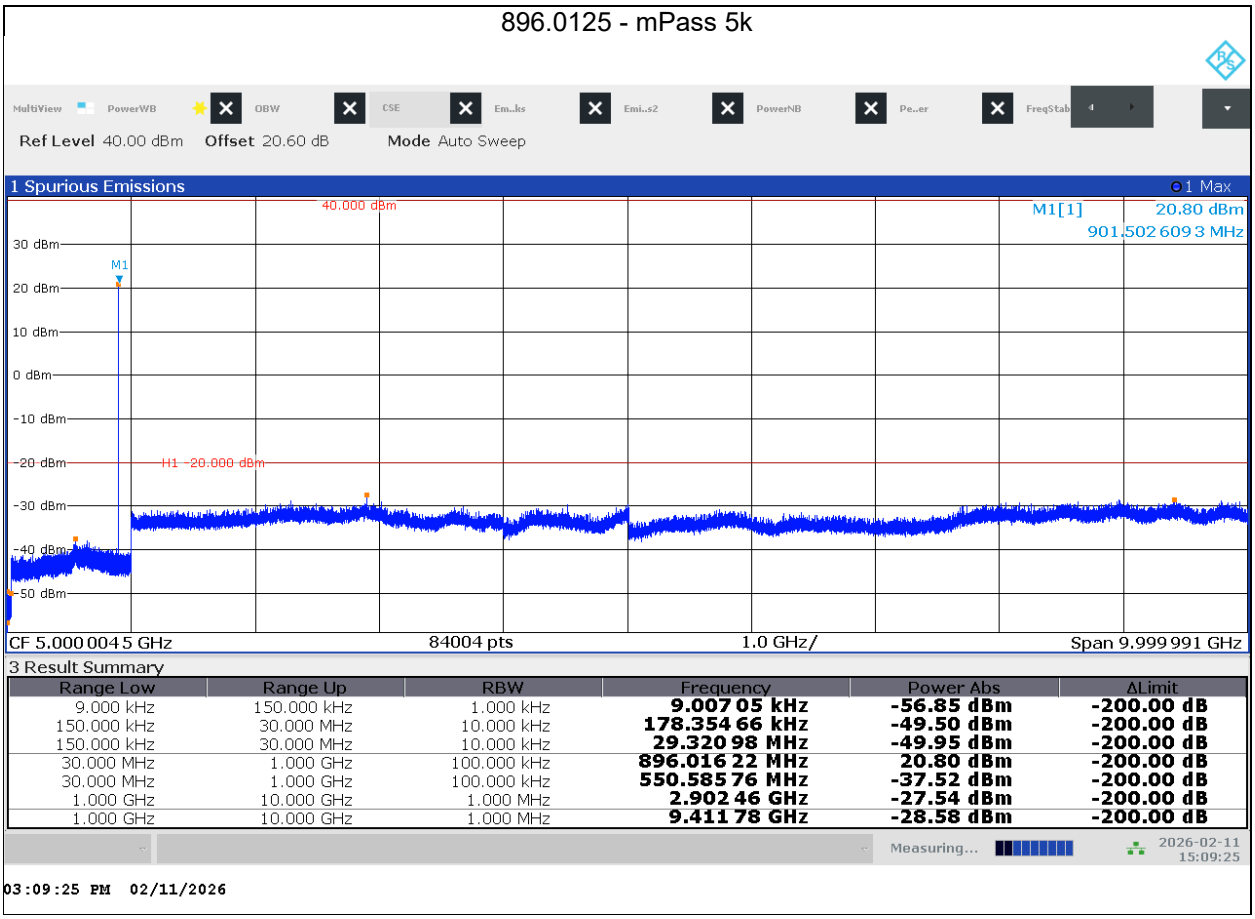
Software Utilized

Name	Manufacturer	Version
RSCommander	Rohde & Schwarz	2.4.2 64-bit (2023)

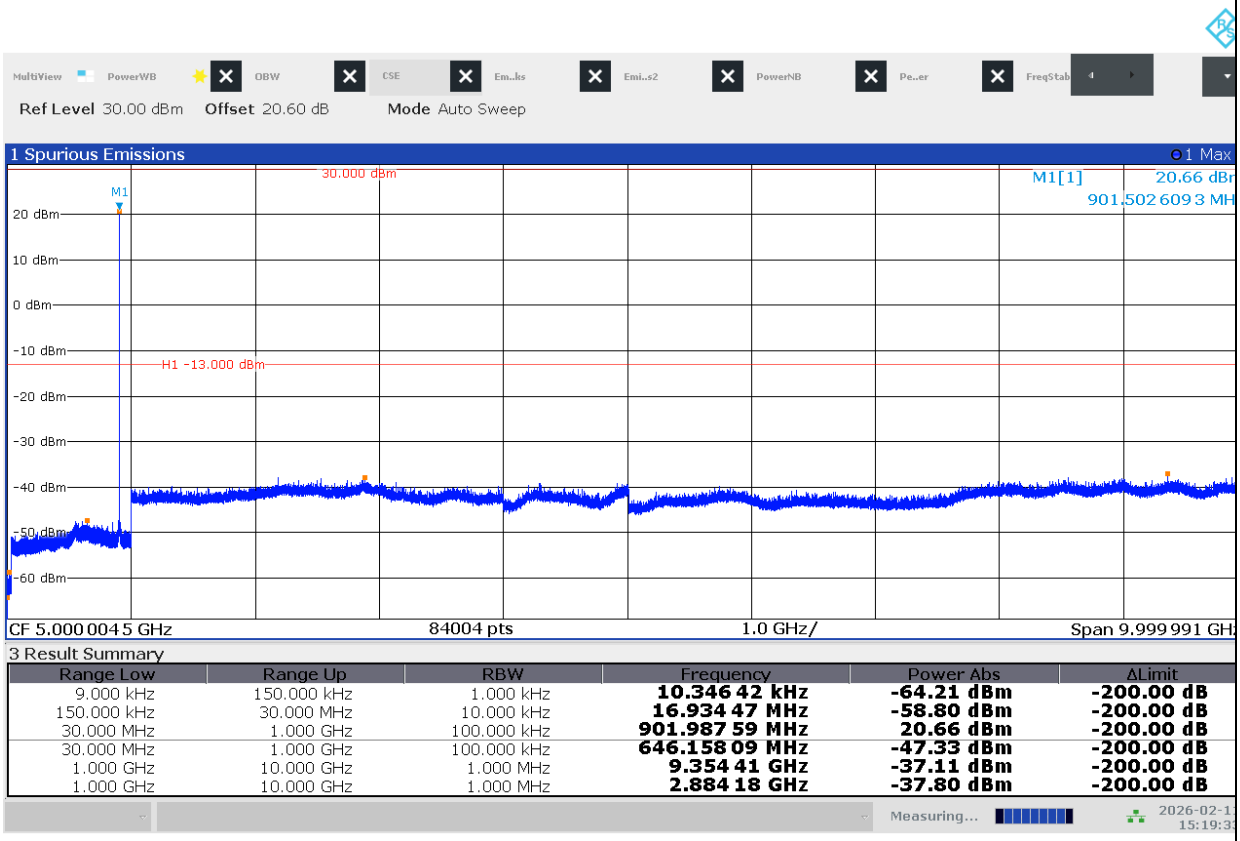
9.3 Results

The sample tested was found to Comply.

9.4 Test Data

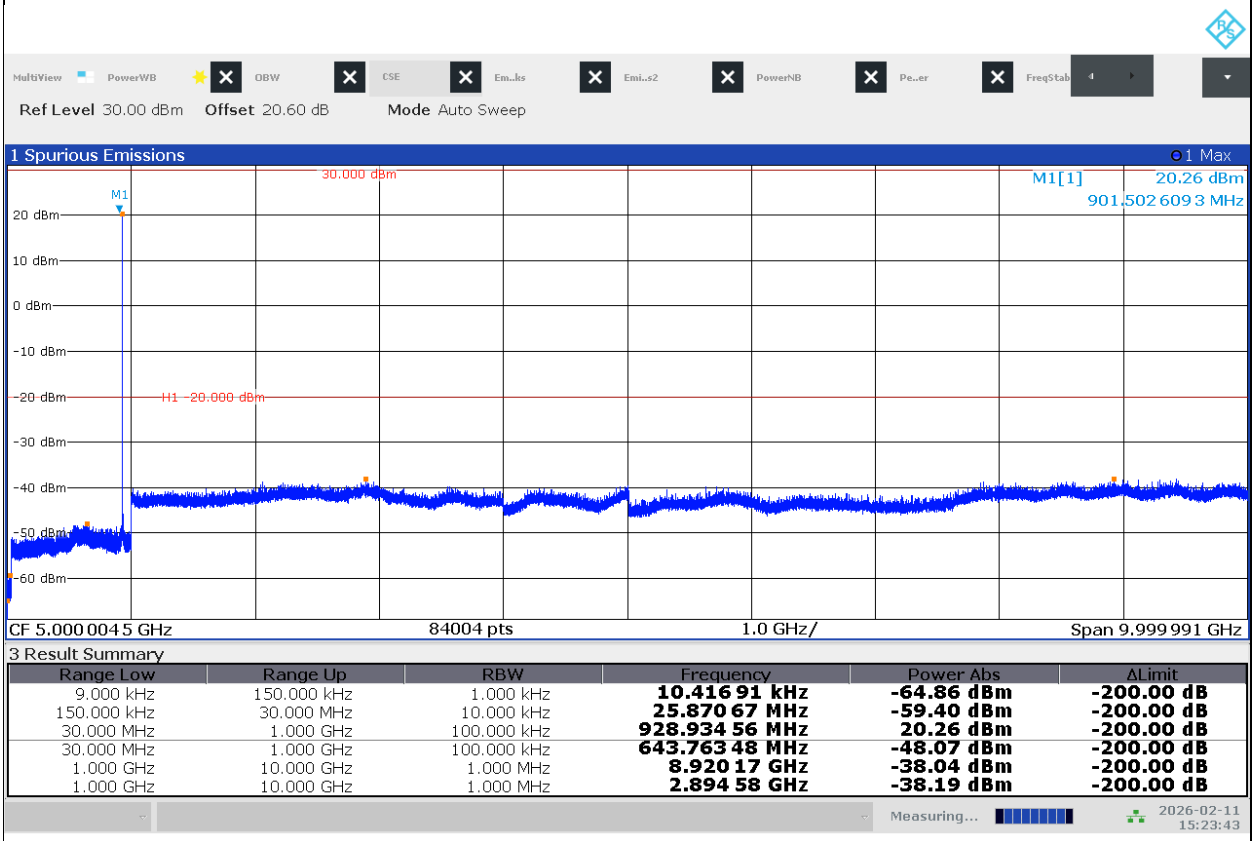

896.0125 - mPass 5k
Ref Level 40.00 dBm Offset 20.60 dB Mode Auto Sweep
1 Spurious Emissions
1 Max
40.000 dBm
M1[1] 20.80 dBm
901.502 609 3 MHz
30 dBm
20 dBm
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
M1
H1 -20.000 dBm
CF 5.000 004 5 GHz
84004 pts
1.0 GHz/
Span 9.999 991 GHz
3 Result Summary
Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit
9.000 kHz | 150.000 kHz | 1.000 kHz | 9.007 05 kHz | -56.85 dBm | -200.00 dB
150.000 kHz | 30.000 MHz | 10.000 kHz | 178.354 66 kHz | -49.50 dBm | -200.00 dB
150.000 kHz | 30.000 MHz | 10.000 kHz | 29.320 98 MHz | -49.95 dBm | -200.00 dB
30.000 MHz | 1.000 GHz | 100.000 kHz | 896.016 22 MHz | 20.80 dBm | -200.00 dB
30.000 MHz | 1.000 GHz | 100.000 kHz | 550.585 76 MHz | -37.52 dBm | -200.00 dB
1.000 GHz | 10.000 GHz | 1.000 MHz | 2.902 46 GHz | -27.54 dBm | -200.00 dB
1.000 GHz | 10.000 GHz | 1.000 MHz | 9.411 78 GHz | -28.58 dBm | -200.00 dB
Measuring...
2026-02-11 15:09:25
03:09:25 PM 02/11/2026

901.9875 - mPass 5k



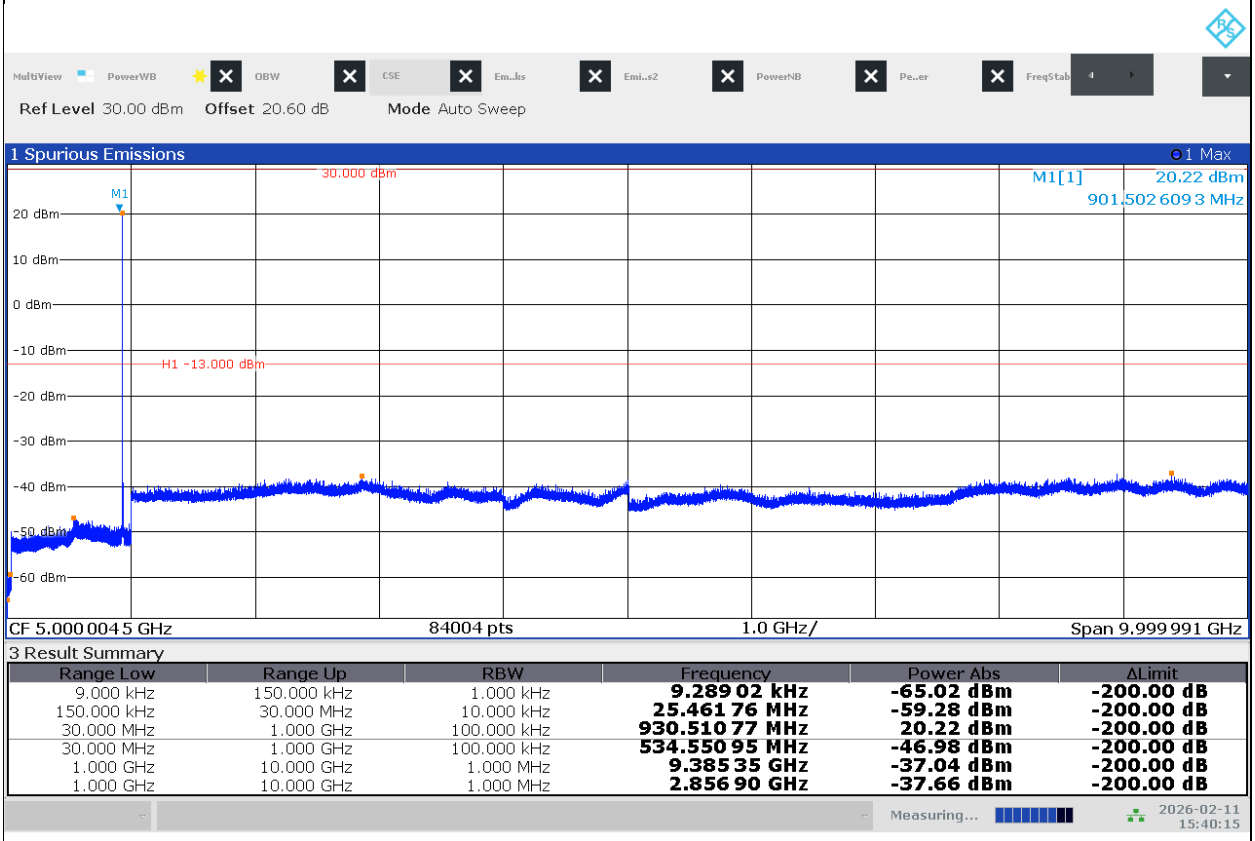
03:19:33 PM 02/11/2026

928.925 - mPass 5k



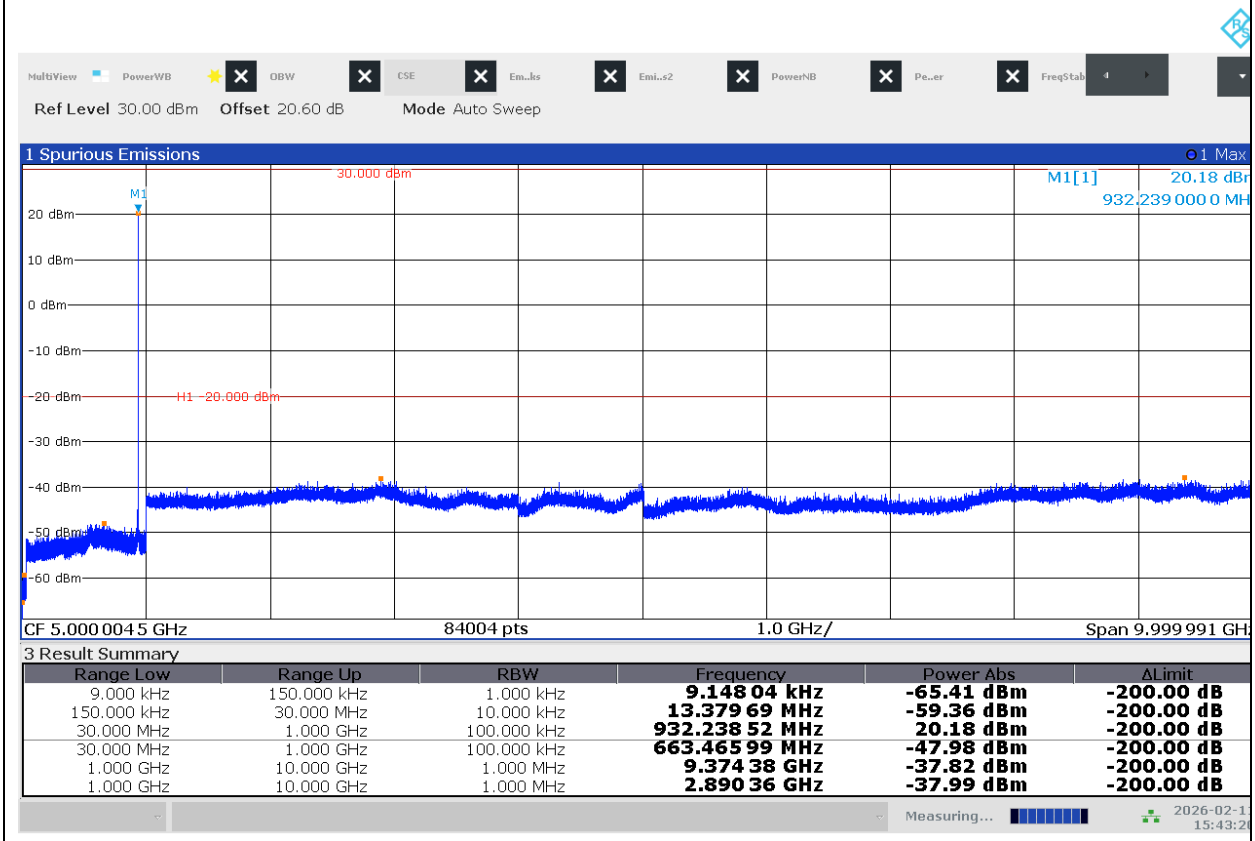
03:23:44 PM 02/11/2026

930.5 - mPass 5k



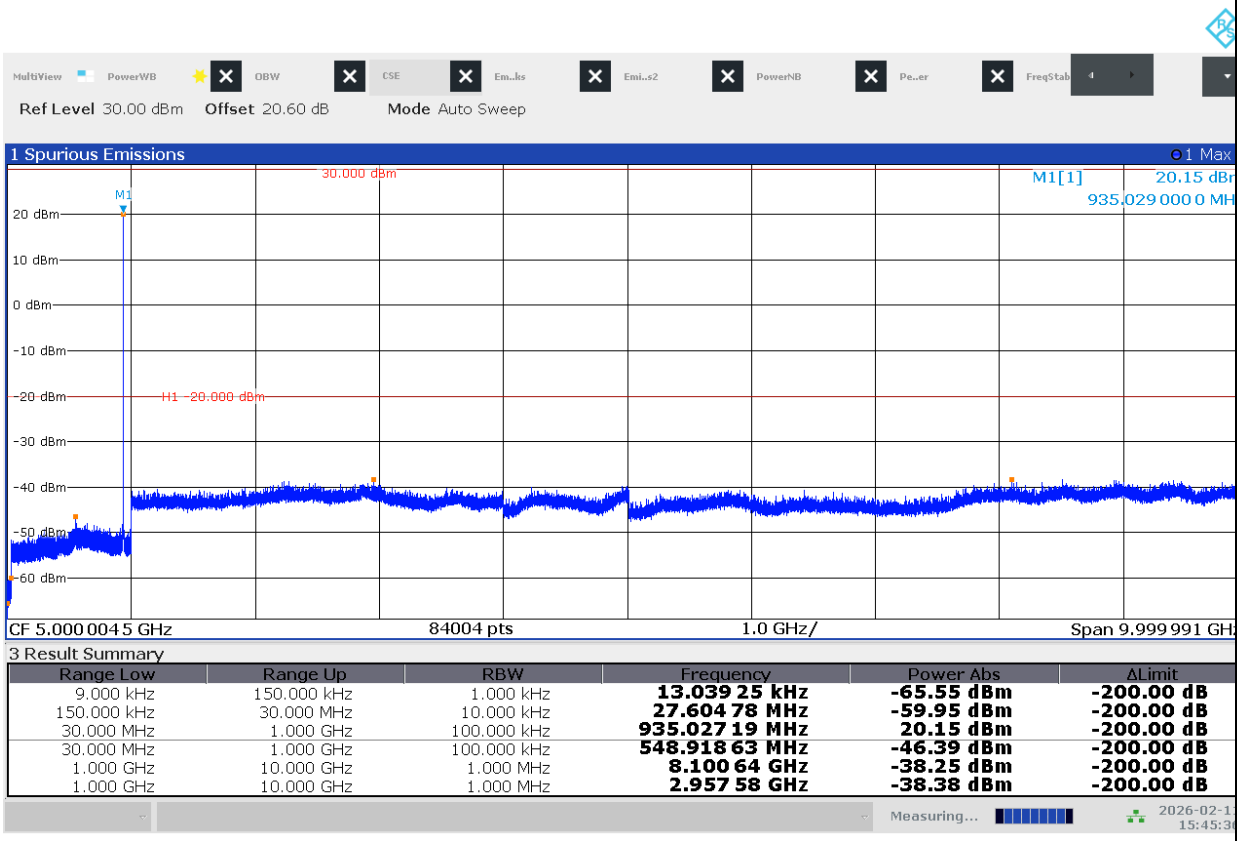
03:40:16 PM 02/11/2026

932.25 - mPass 5k



03:43:20 PM 02/11/2026

935.0125 - mPass 5k

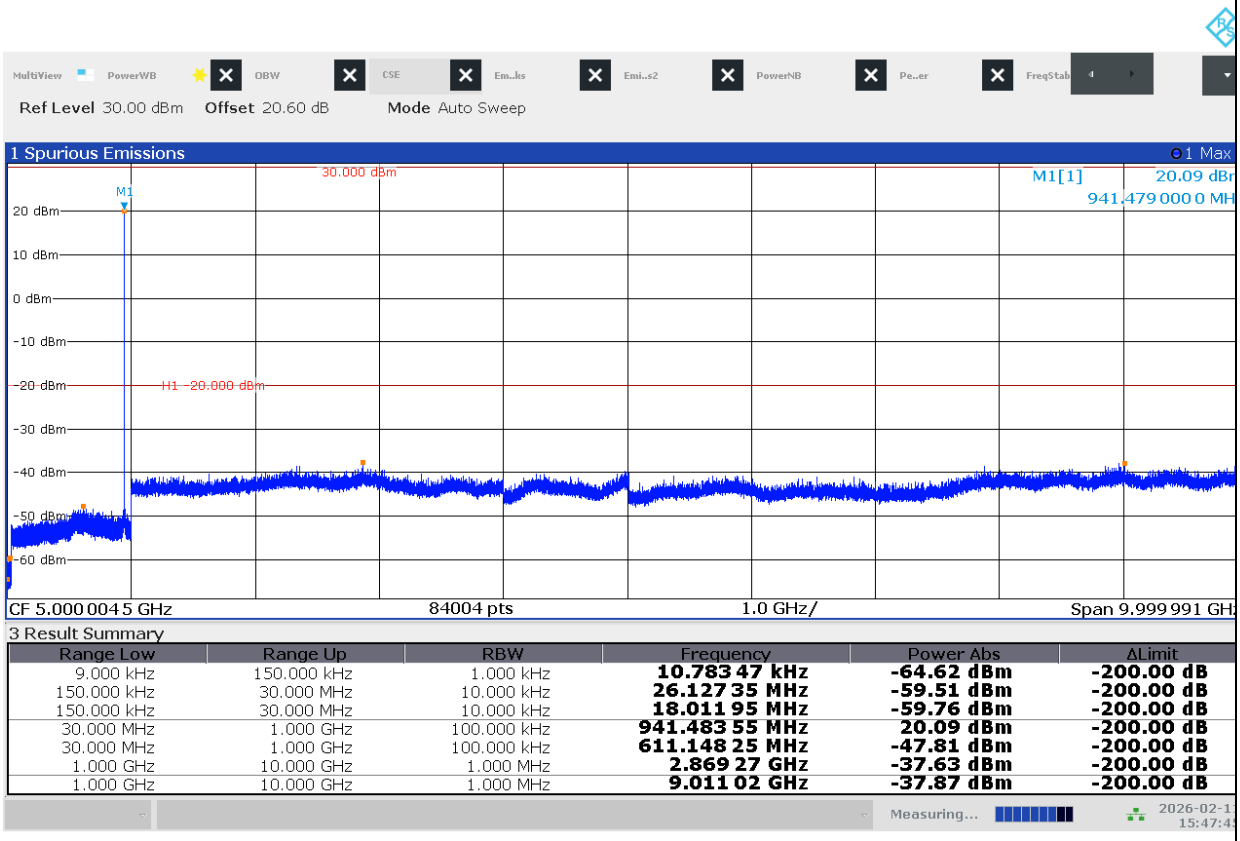


3 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 kHz	150.000 kHz	1.000 kHz	**13.039 25 kHz**	**-65.55 dBm**	**-200.00 dB**
150.000 kHz	30.000 MHz	10.000 kHz	**27.604 78 MHz**	**-59.95 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**935.027 19 MHz**	**20.15 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**548.918 63 MHz**	**-46.39 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**8.100 64 GHz**	**-38.25 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.957 58 GHz**	**-38.38 dBm**	**-200.00 dB**

03:45:36 PM 02/11/2026

941.4875 - mPass 5k

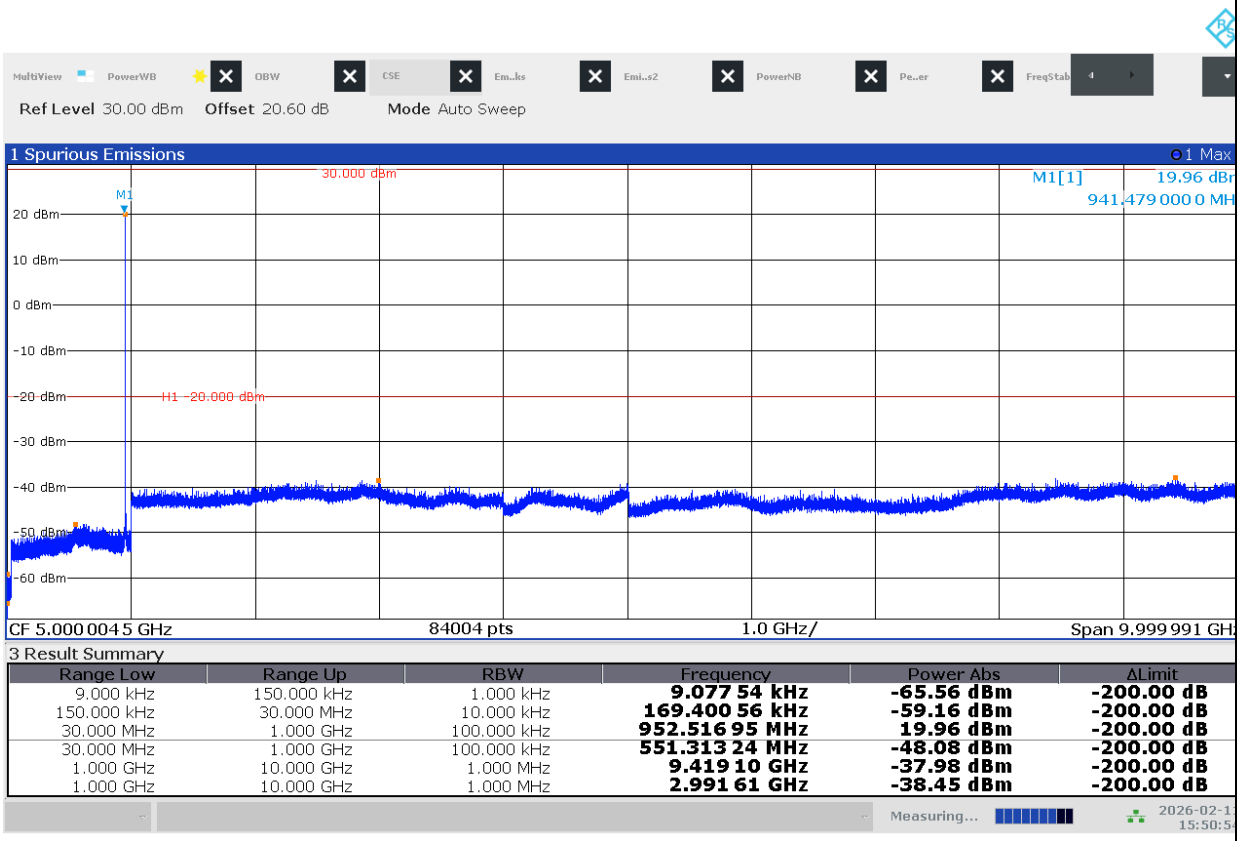


3 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 kHz	150.000 kHz	1.000 kHz	**10.783 47 kHz**	**-64.62 dBm**	**-200.00 dB**
150.000 kHz	30.000 MHz	10.000 kHz	**26.127 35 MHz**	**-59.51 dBm**	**-200.00 dB**
150.000 kHz	30.000 MHz	10.000 kHz	**18.011 95 MHz**	**-59.76 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**941.483 55 MHz**	**20.09 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**611.148 25 MHz**	**-47.81 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.869 27 GHz**	**-37.63 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**9.011 02 GHz**	**-37.87 dBm**	**-200.00 dB**

03:47:45 PM 02/11/2026

952.5 - mPass 5k

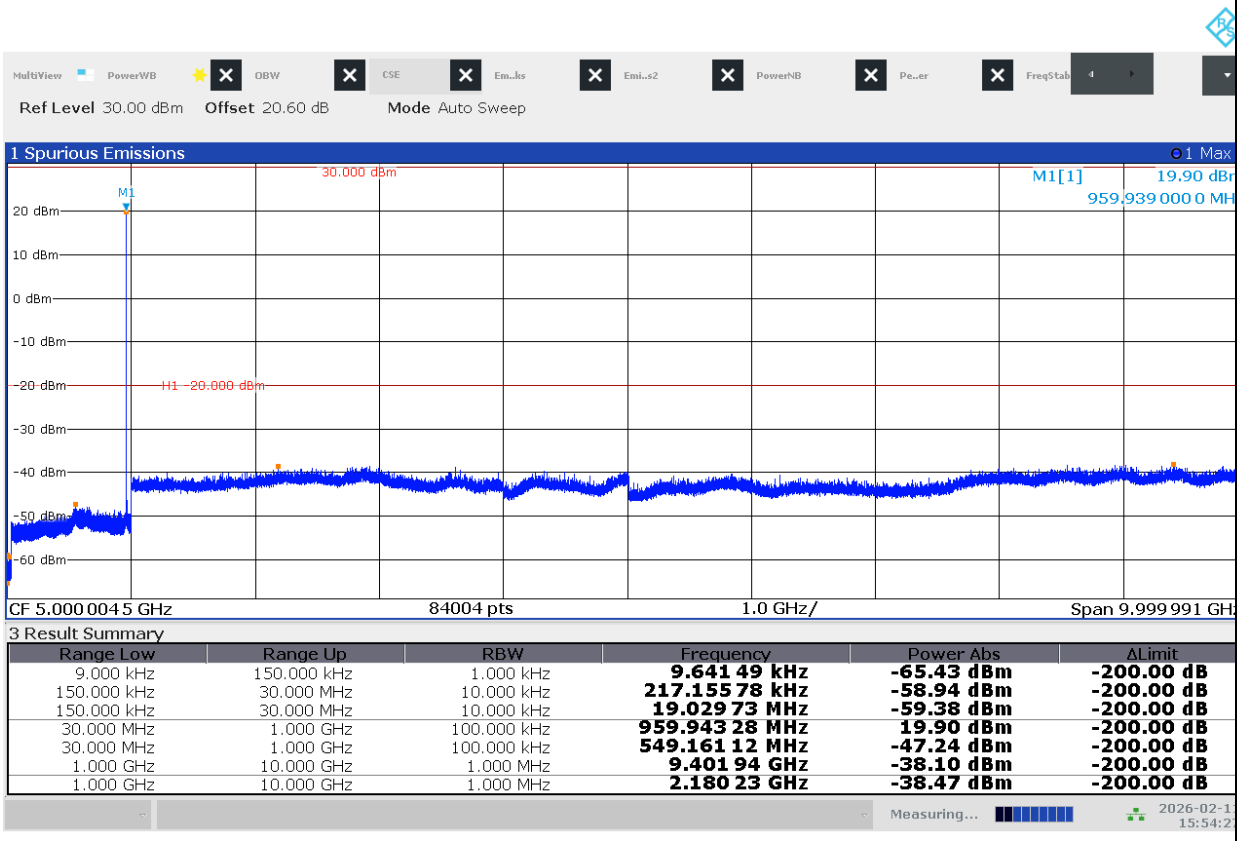


3 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 kHz	150.000 kHz	1.000 kHz	**9.077 54 kHz**	**-65.56 dBm**	**-200.00 dB**
150.000 kHz	30.000 MHz	10.000 kHz	**169.400 56 kHz**	**-59.16 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**952.516 95 MHz**	**19.96 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**551.313 24 MHz**	**-48.08 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**9.419 10 GHz**	**-37.98 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.991 61 GHz**	**-38.45 dBm**	**-200.00 dB**

03:50:54 PM 02/11/2026

959.925 - mPass 5k



3 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 kHz	150.000 kHz	1.000 kHz	**9.641 49 kHz**	**-65.43 dBm**	**-200.00 dB**
150.000 kHz	30.000 MHz	10.000 kHz	**217.155 78 kHz**	**-58.94 dBm**	**-200.00 dB**
150.000 kHz	30.000 MHz	10.000 kHz	**19.029 73 MHz**	**-59.38 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**959.943 28 MHz**	**19.90 dBm**	**-200.00 dB**
30.000 MHz	1.000 GHz	100.000 kHz	**549.161 12 MHz**	**-47.24 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**9.401 94 GHz**	**-38.10 dBm**	**-200.00 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.180 23 GHz**	**-38.47 dBm**	**-200.00 dB**

03:54:27 PM 02/11/2026

Test Personnel:	Jeremy Pickens	Test Date:	11 February 2026
		Ambient Temperature:	19.6ºC
Reference Standard:	ANSI C63.26	Relative Humidity:	38.6%
		Atmospheric Pressure:	98.3kPa

Note: Only the worst-case modulation was evaluated for each band.

10 Field Strength of Spurious Emissions

10.1 Method

The field strength methods defined in ANSI C63.26, Section 5.5.4 were applied for measuring the radiated spurious emissions. The EUT was tested at a height of 0.8m for measurements below 1GHz and at 1.5 meters for measurements above 1GHz. Radiated field strength pre-scans were performed at a distance of 3 meters using a bandwidth of 200Hz (9kHz to 150kHz), 10kHz (15kHz-30MHz), 100kHz (30MHz-1GHz), and 1MHz above 1GHz. The video bandwidth (VBW) was set to at least 3 times the RBW. . The results were compared to the EIRP limits by applying a 95.2dB conversion to the applicable limit (e.g. -13dBm + 95.2 = 82.2dBµV/m at 3 meters). For tabular data, the resulting field strength measurements were converted to EIRP using the same 95.2dB correction and compared to the applicable EIRP limit.

TEST SITE: 10 Meter Chamber

10 Meter Semi-Anechoic Chamber The test site for radiated emissions is located at 1950 Evergreen Blvd, Suite 100, Duluth, Georgia 30096. It is a 10-meter semi-anechoic chamber manufactured by Panashield. Embedded in the floor is a 3-meter diameter turntable.

Sample Calculation

The field strength was calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

Correction = AF + CF - AG
FS = RA + Correction

Where FS = Field Strength in dBµV/m
RA = Receiver Amplitude (including preamplifier) in dBµV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows.
Assume a receiver reading of 66.41 dBµV is obtained. The correction factor is calculated by adding the antenna factor of 26.26 dB and cable factor of 1.9 dB. The amplifier gain of 40.11 dB is subtracted, giving a correction factor of -11.95 dB/m. The correction factor is then added to the receiver amplitude resulting a field strength of 54.46dBµV/m.

RA = 66.41 dBµV
Correction = -11.95 dB/m
FS = 54.46 dBµV/m

To convert from field strength to EIRP, the following equations were used

$EIRP = (E \times d)^2 / 30$

Where: E = field strength in V/m
d = measurement distance in m
EIRP = equivalent isotropically radiated power in W

Working in dB units:

$EIRP_{dBm} = E_{dB\mu V/m} + 20\log(d_m) - 104.77$

For d = 3:

$EIRP_{dBm} = E_{dB\mu V/m} - 95.2$

Example

FS = 54.46 dBµV/m
$EIRP_{dBm}$ = 54.46 – 95.2 = --40.74 dBm

10.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
200074	Preamplifier, 10 MHz to 2000 MHz	Mini-Circuits	ZKL-2	D011105	08/04/2025	08/04/2026
200162	EMI Receiver (20Hz-40GHz)	Rohde & Schwarz	ESU 40	100314	10/07/2025	10/07/2026
211262	Controller - Turntable and Mast	Sunol	SC99V	SC99V-1	VBU	VBU
211264	Mast - Antenna	Sunol	TWR95	NNN2	VBU	VBU
211386	Antenna, BiLog, 20-2000MHz	Chase	CBL6112B	2622	06/30/2025	06/30/2026
212166	Temperature/Pressure/Humidity Sensor	Extech	SD700	110392	04/02/2025	04/02/2026
213103	1GHz High Pass Filter	Micro-Tronics	HPM50108	140	06/18/2025	06/18/2026
213451	Omni -directional Comb Generator	Com-Power	CGO-520	281266	VBU	VBU
213453	Preamplifier 500MHz-18GHz	Com-Power	PAM-118A	18040030	10/20/2025	10/20/2026
BOX-HORN1	Antenna, Horn, <18 GHz	EMCO	3115	9512-4632	06/25/2025	06/25/2026
MM5	RF cable (9kHz to 18GHz)	Maury Microwave	UC-N-MM-118	163203	04/01/2025	04/01/2026
MM12	RF cable (9kHz to 18GHz)	Fairview Microwave	SCE18110505-600CM	MM12	09/11/2025	09/11/2026
MM36	RF cable (9kHz to 18GHz)	Maury Microwave	UC-N-NM-36	16 32 10	06/18/2025	06/18/2026
MP10	RF cable (9kHz to 18GHz)	Fairview Microwave	FMCA1282-394	MP10	06/18/2025	06/18/2026
MP14	RF cable (9kHz to 18GHz)	Megaphase	EC29-N1N1-276-H	20938802	09/19/2025	09/19/2026

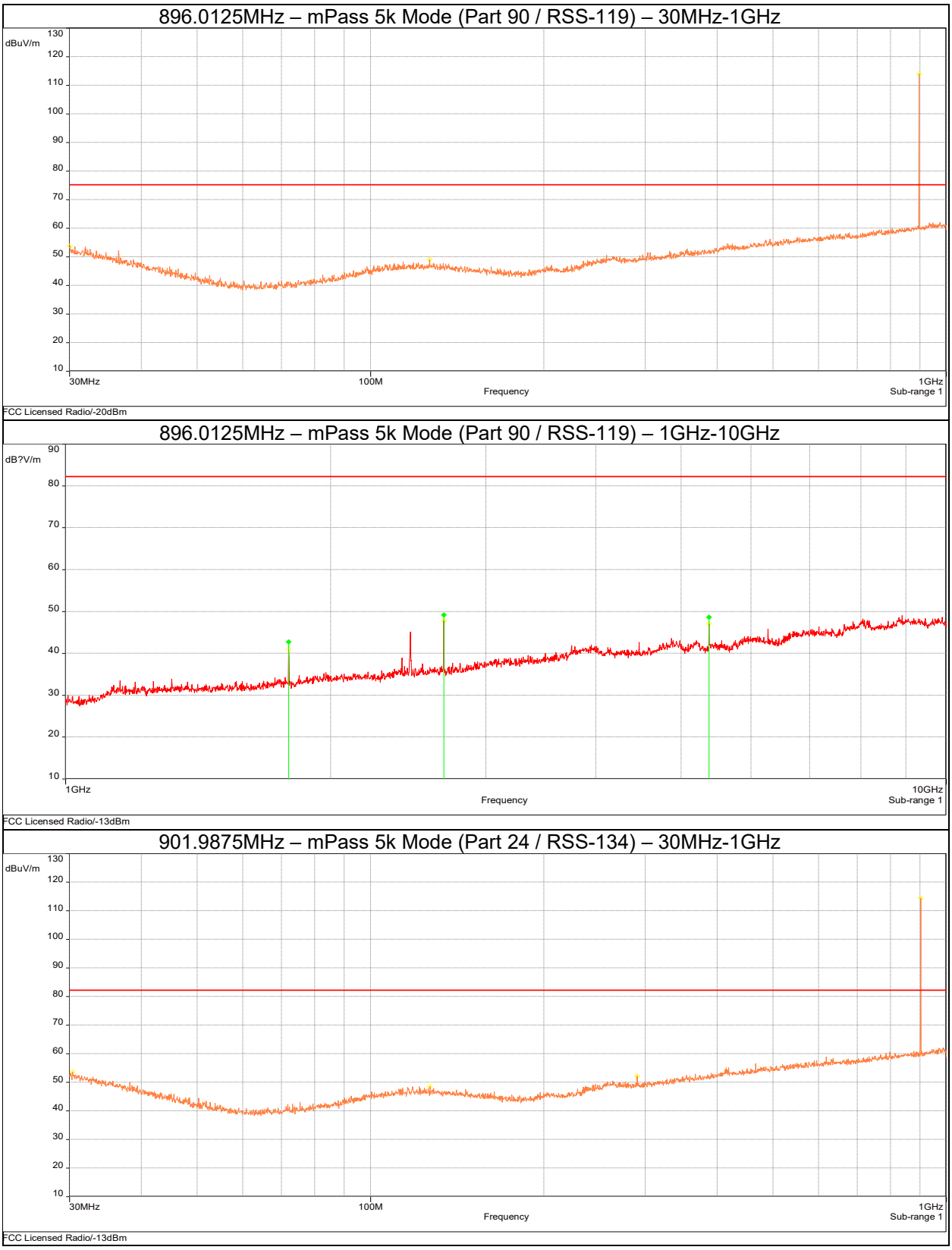
Software Utilized

Name	Manufacturer	Version
BAT EMC	NEXIO	3.19.1.18

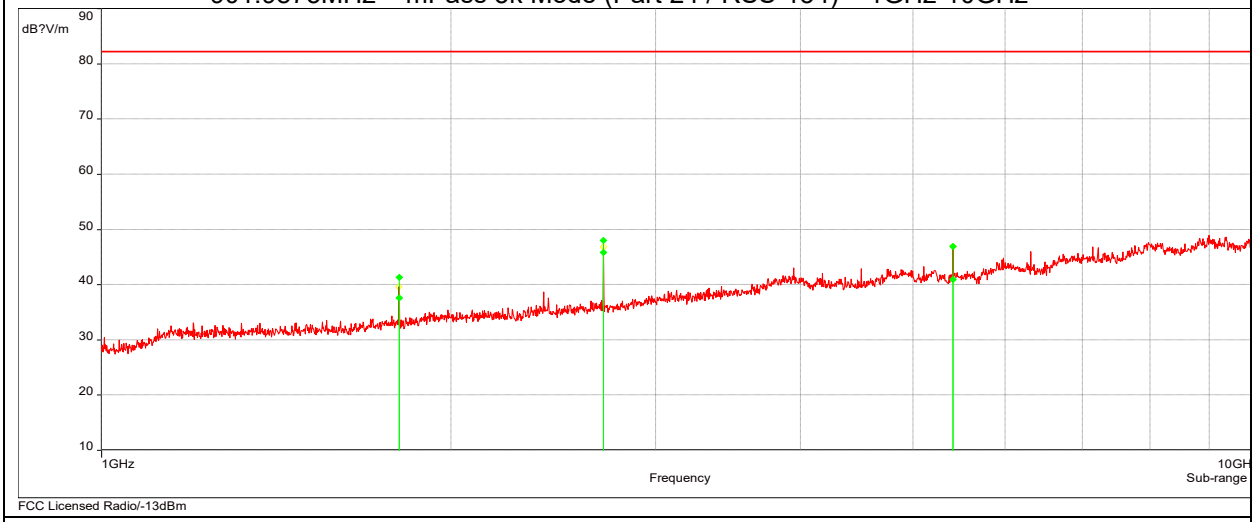
10.3 Results

The sample tested was found to Comply.

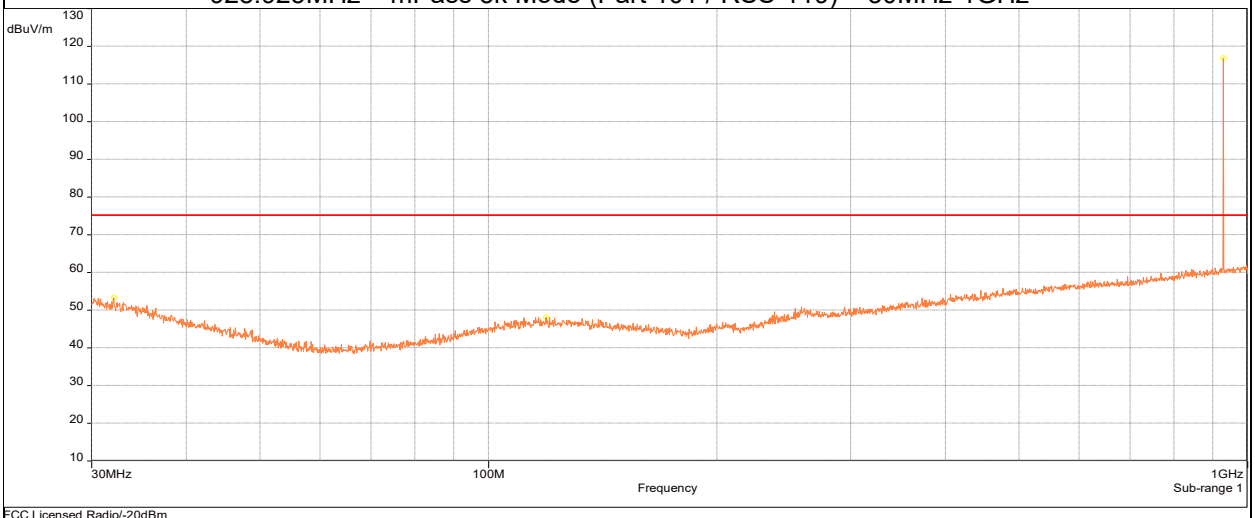
10.4 Plots/Data



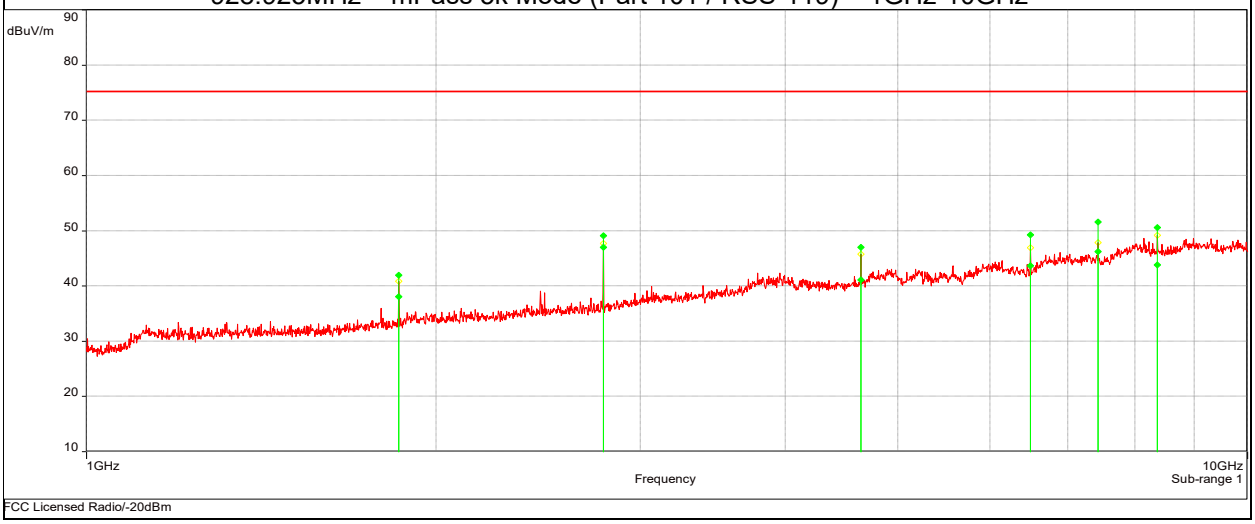
901.9875MHz – mPass 5k Mode (Part 24 / RSS-134) – 1GHz-10GHz



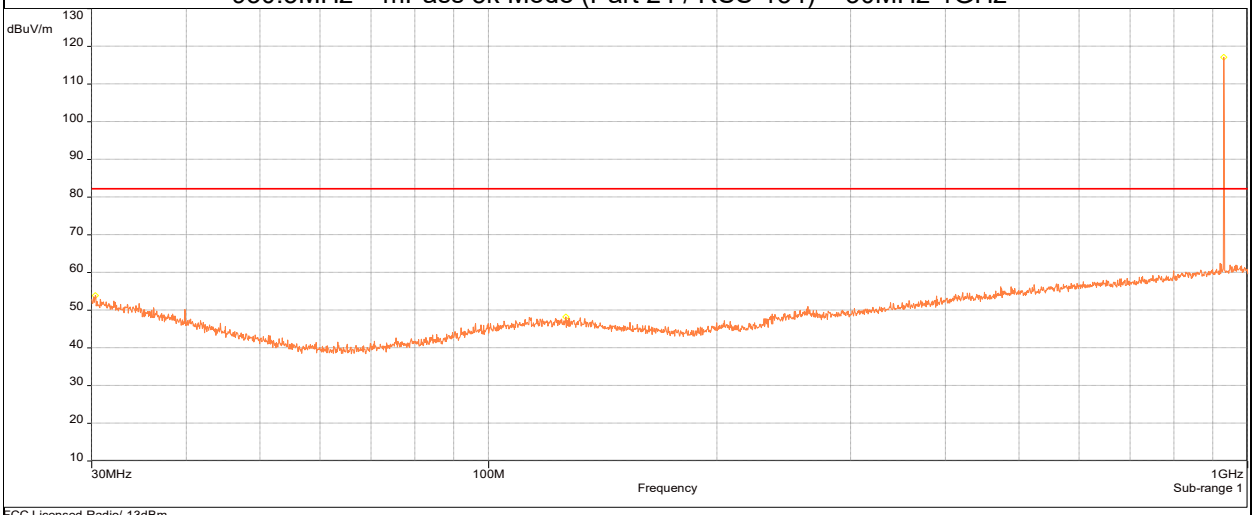
928.925MHz – mPass 5k Mode (Part 101 / RSS-119) – 30MHz-1GHz



928.925MHz – mPass 5k Mode (Part 101 / RSS-119) – 1GHz-10GHz

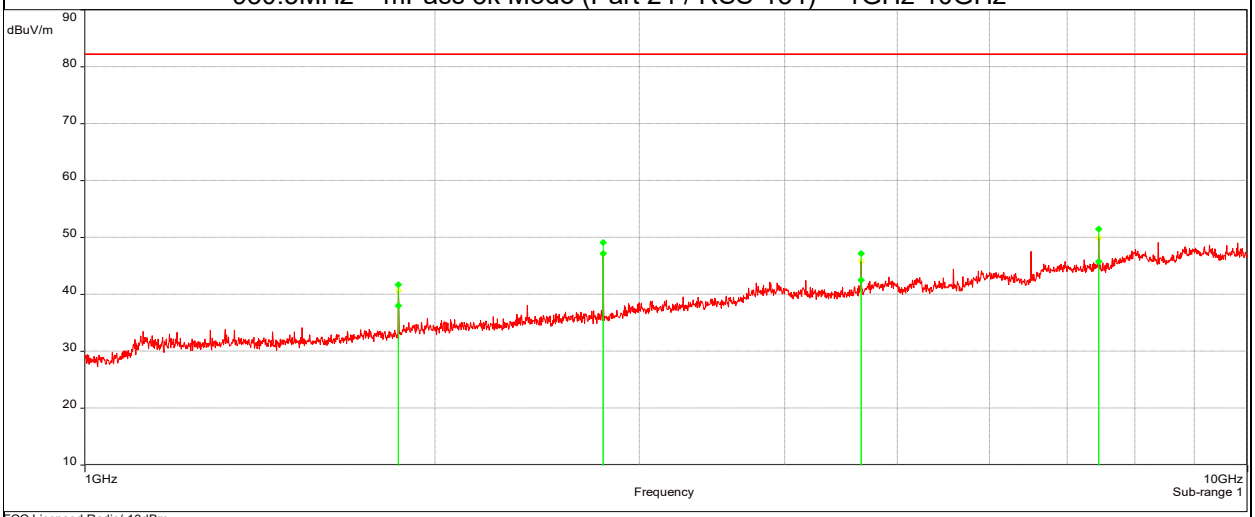


930.5MHz – mPass 5k Mode (Part 24 / RSS-134) – 30MHz-1GHz



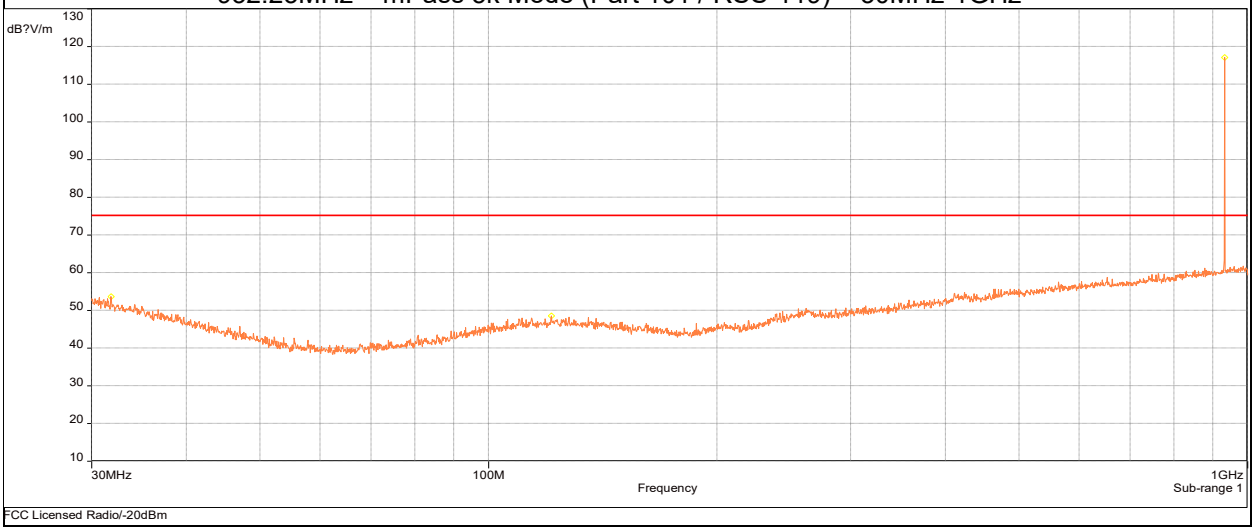
FCC Licensed Radio/-13dBm

930.5MHz – mPass 5k Mode (Part 24 / RSS-134) – 1GHz-10GHz



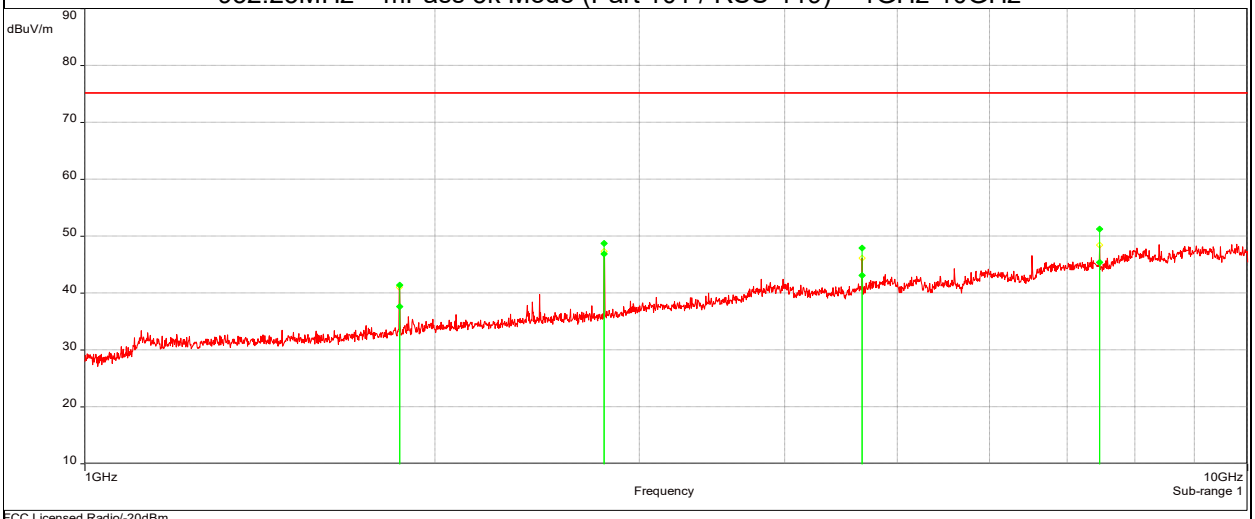
FCC Licensed Radio/-13dBm

932.25MHz – mPass 5k Mode (Part 101 / RSS-119) – 30MHz-1GHz

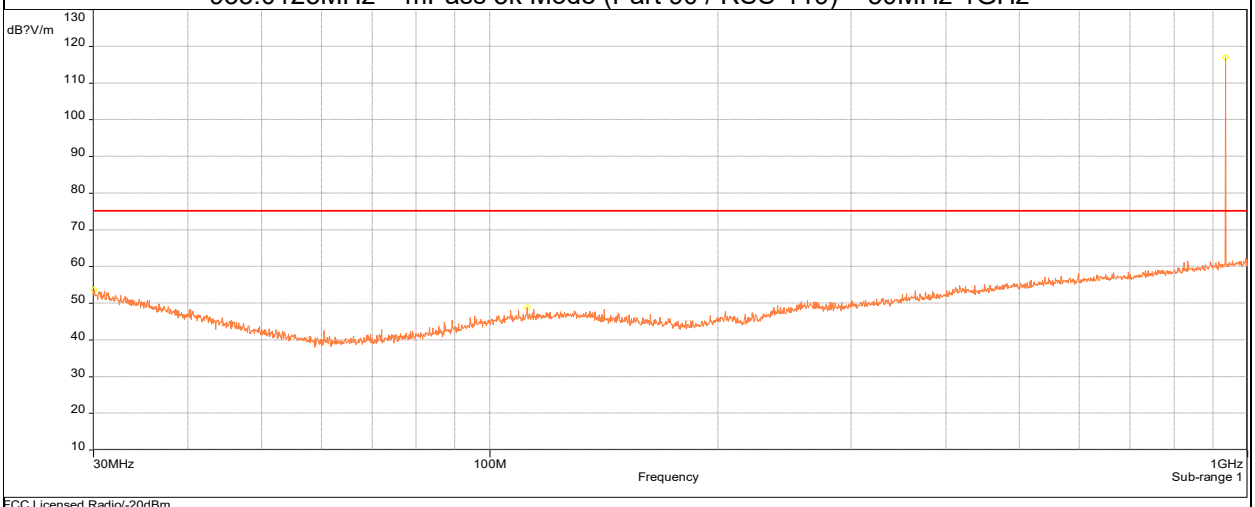


FCC Licensed Radio/-20dBm

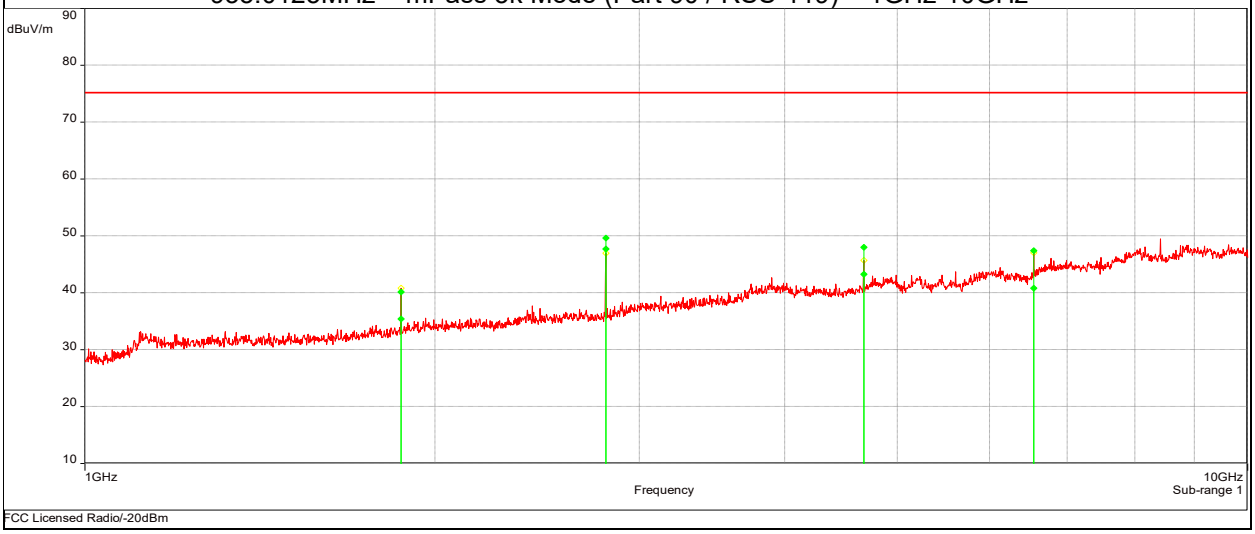
932.25MHz – mPass 5k Mode (Part 101 / RSS-119) – 1GHz-10GHz



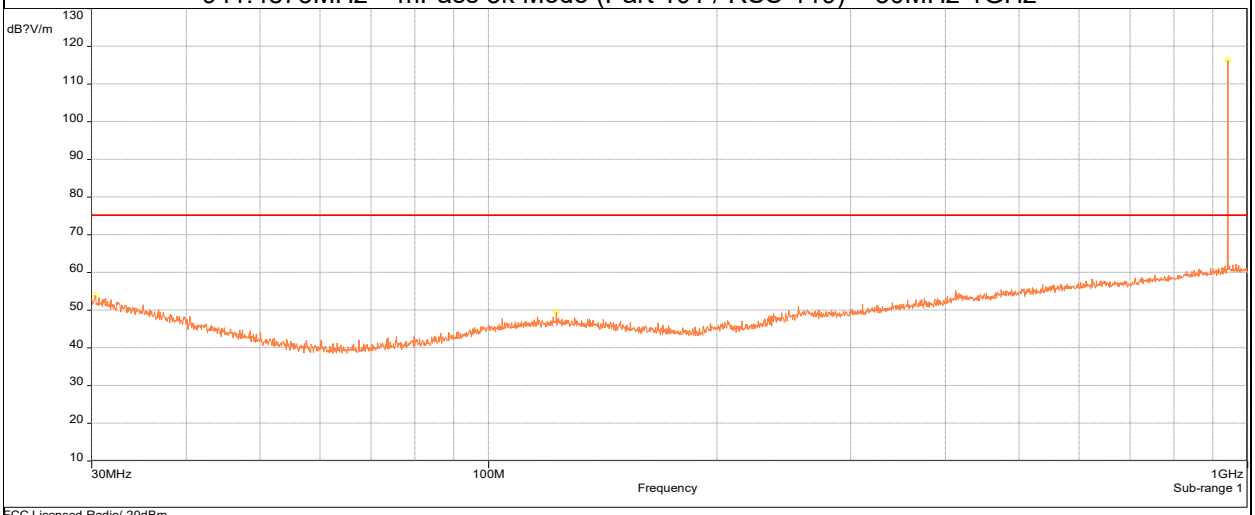
935.0125MHz – mPass 5k Mode (Part 90 / RSS-119) – 30MHz-1GHz



935.0125MHz – mPass 5k Mode (Part 90 / RSS-119) – 1GHz-10GHz

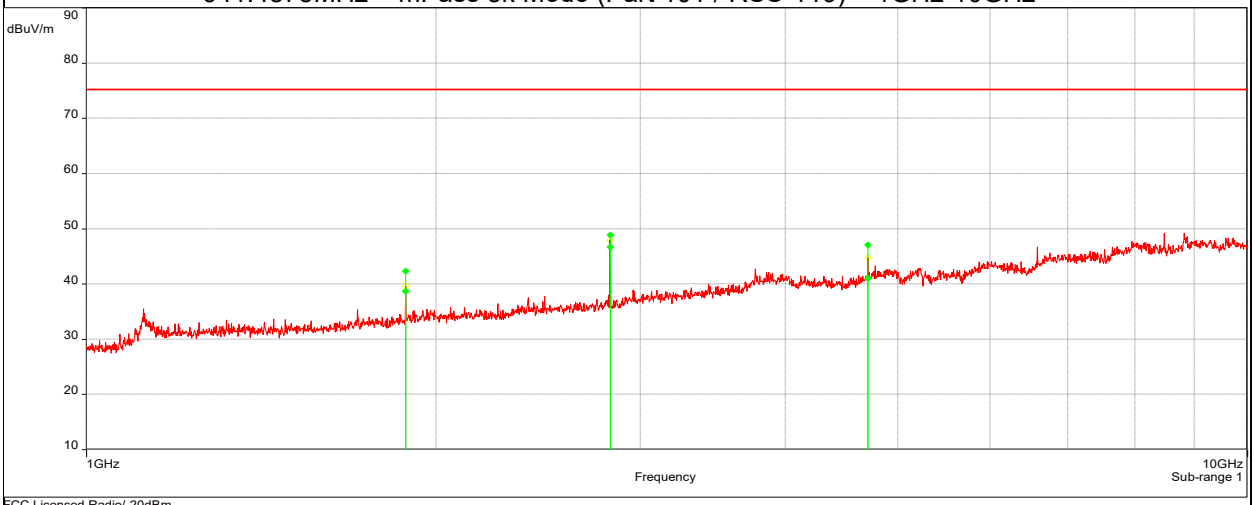


941.4875MHz – mPass 5k Mode (Part 101 / RSS-119) – 30MHz-1GHz



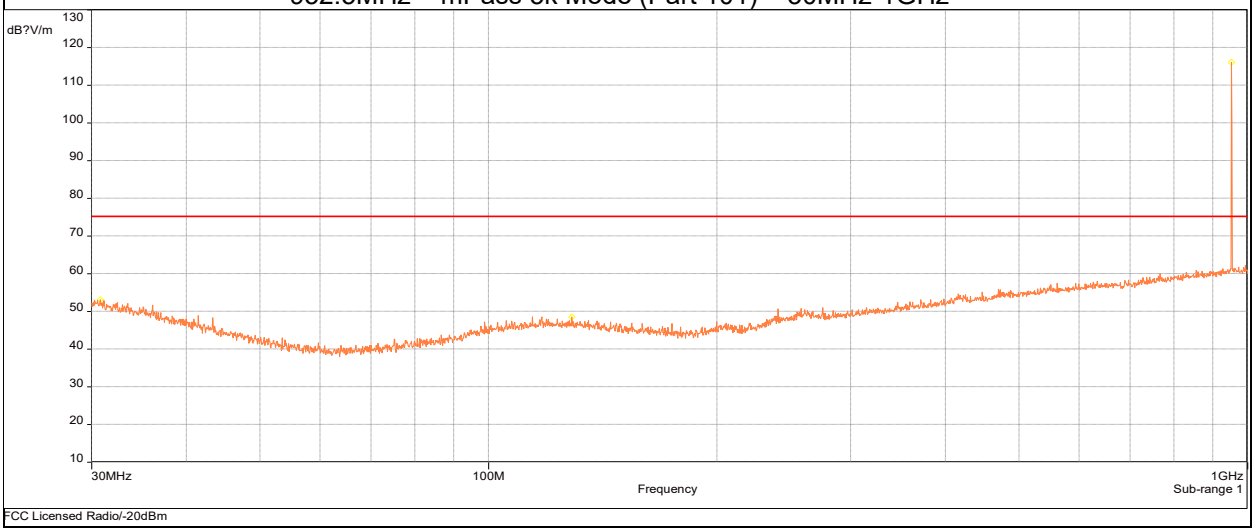
FCC Licensed Radio/-20dBm

941.4875MHz – mPass 5k Mode (Part 101 / RSS-119) – 1GHz-10GHz



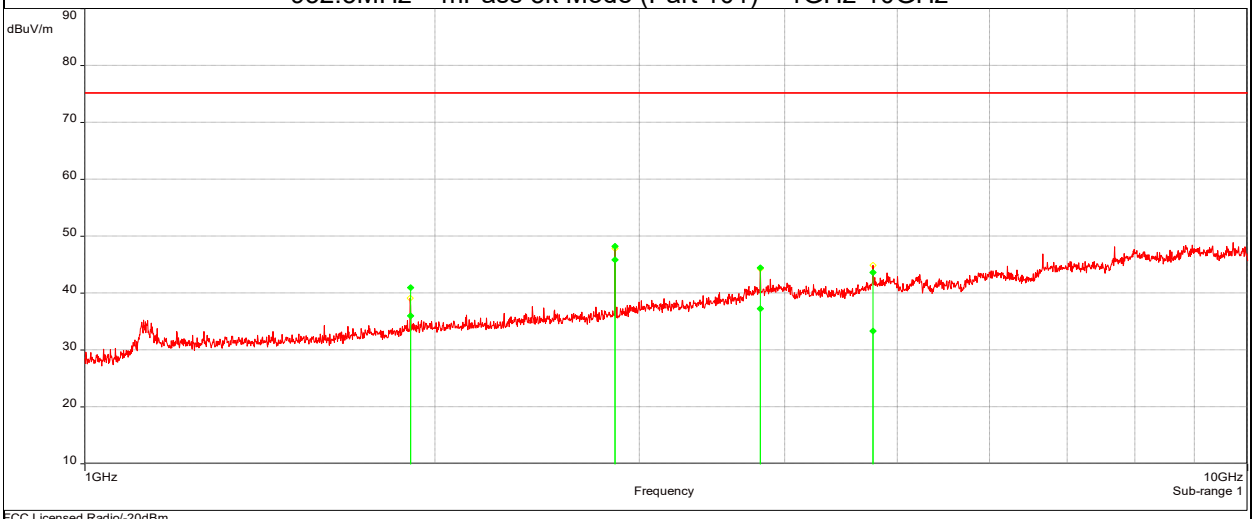
FCC Licensed Radio/-20dBm

952.5MHz – mPass 5k Mode (Part 101) – 30MHz-1GHz



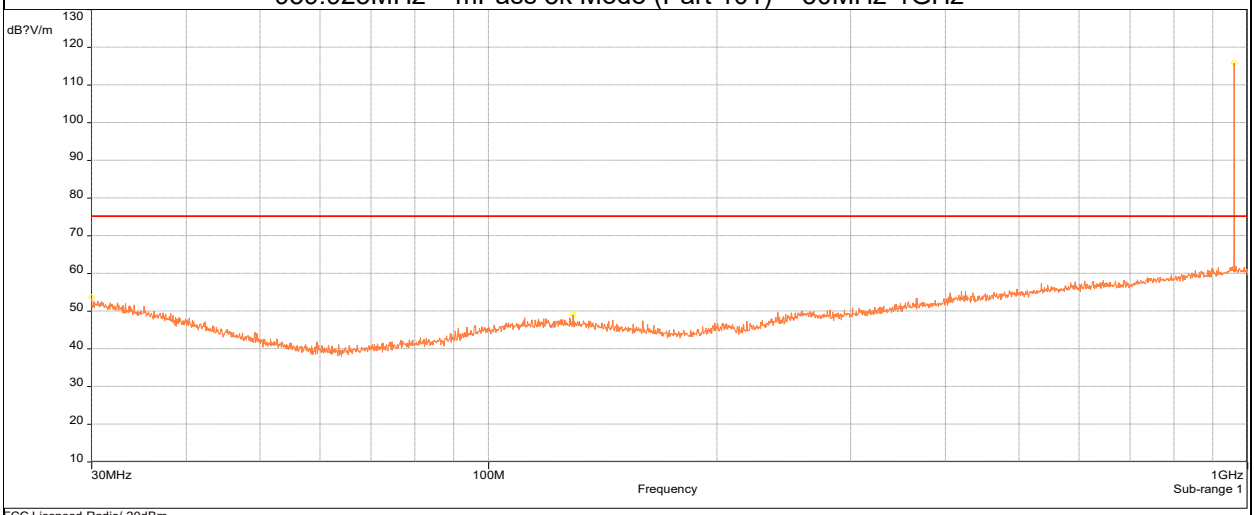
FCC Licensed Radio/-20dBm

952.5MHz – mPass 5k Mode (Part 101) – 1GHz-10GHz



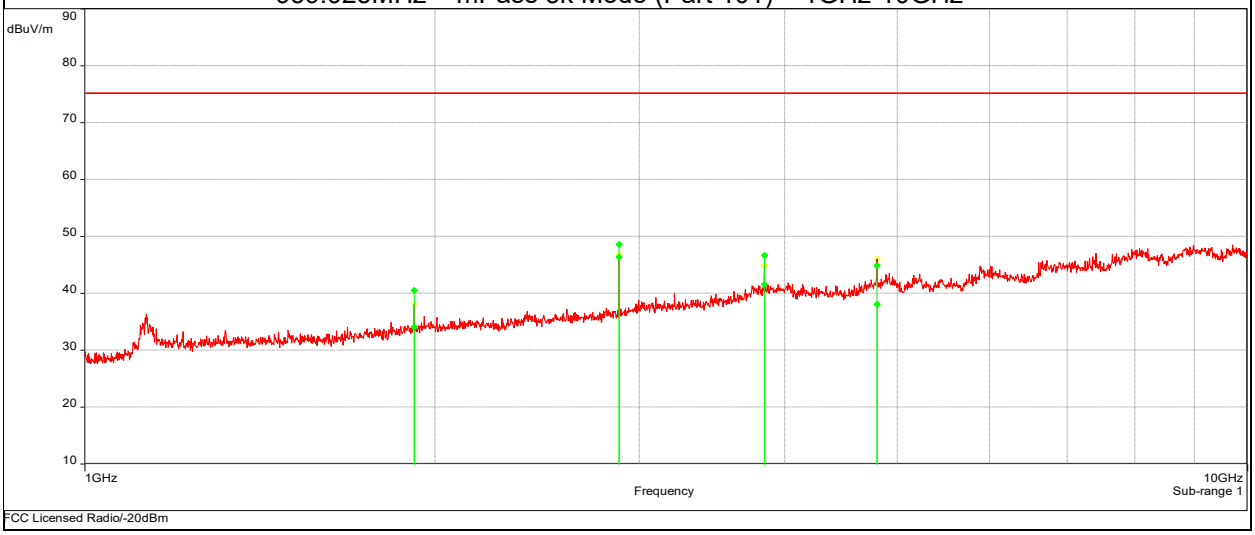
FCC Licensed Radio/-20dBm

959.925MHz – mPass 5k Mode (Part 101) – 30MHz-1GHz



FCC Licensed Radio/-20dBm

959.925MHz – mPass 5k Mode (Part 101) – 1GHz-10GHz



FCC Licensed Radio/-20dBm

Tabular Data									
Mode	TX Frequency (MHz)	Frequency (MHz)	Reading (dBµV)	Correction (dB/m)	Field Strength (dBµV/m)	Free Space Conversion	EIRP (dBm)	Limit (dBm)	Margin (dB)
mPass5k	896.0125	1792.024	54.62	-11.88	42.74	95.2	-52.46	-20	-32.46
mPass5k	896.0125	2688.039	59.08	-9.93	49.15	95.2	-46.05	-20	-26.05
mPass5k	896.0125	5376.071	52.56	-3.88	48.68	95.2	-46.52	-20	-26.52
mPass5k	901.9875	1803.980	53.31	-11.95	41.36	95.2	-53.84	-13	-40.84
mPass5k	901.9875	2705.969	57.91	-9.91	48	95.2	-47.2	-13	-34.2
mPass5k	901.9875	5411.936	50.67	-3.75	46.92	95.2	-48.28	-13	-35.28
mPass5k	928.925	1857.851	53.39	-11.44	41.95	95.2	-53.25	-20	-33.25
mPass5k	928.925	2786.776	58.82	-9.72	49.1	95.2	-46.1	-20	-26.1
mPass5k	928.925	4644.618	52.95	-5.95	47	95.2	-48.2	-20	-28.2
mPass5k	928.925	6502.488	51.89	-2.62	49.27	95.2	-45.93	-20	-25.93
mPass5k	928.925	7431.416	52.12	-0.53	51.59	95.2	-43.61	-20	-23.61
mPass5k	928.925	8360.346	49.39	1.17	50.56	95.2	-44.64	-20	-24.64
mPass5k	930.5	1861.005	53.16	-11.42	41.74	95.2	-53.46	-13	-40.46
mPass5k	930.5	2791.502	58.79	-9.7	49.09	95.2	-46.11	-13	-33.11
mPass5k	930.5	4652.510	53.11	-5.92	47.19	95.2	-48.01	-13	-35.01
mPass5k	930.5	7444.016	52	-0.52	51.48	95.2	-43.72	-13	-30.72
mPass5k	932.25	1864.502	52.83	-11.4	41.43	95.2	-53.77	-20	-33.77
mPass5k	932.25	2796.751	58.43	-9.68	48.75	95.2	-46.45	-20	-26.45
mPass5k	932.25	4661.243	53.79	-5.88	47.91	95.2	-47.29	-20	-27.29
mPass5k	932.25	7458.017	51.77	-0.53	51.24	95.2	-43.96	-20	-23.96
mPass5k	935.0125	1870.027	51.54	-11.36	40.18	95.2	-55.02	-20	-35.02
mPass5k	935.0125	2805.044	59.27	-9.64	49.63	95.2	-45.57	-20	-25.57
mPass5k	935.0125	4675.056	53.83	-5.81	48.02	95.2	-47.18	-20	-27.18
mPass5k	935.0125	6545.078	49.91	-2.48	47.43	95.2	-47.77	-20	-27.77
mPass5k	941.4875	1882.977	53.56	-11.22	42.34	95.2	-52.86	-20	-32.86
mPass5k	941.4875	2824.465	58.45	-9.57	48.88	95.2	-46.32	-20	-26.32
mPass5k	941.4875	4707.446	52.81	-5.7	47.11	95.2	-48.09	-20	-28.09
mPass5k	952.5	1905.002	52	-11.05	40.95	95.2	-54.25	-20	-34.25
mPass5k	952.5	2857.496	57.72	-9.5	48.22	95.2	-46.98	-20	-26.98
mPass5k	952.5	3809.999	50.99	-6.53	44.46	95.2	-50.74	-20	-30.74
mPass5k	952.5	4762.510	49.28	-5.66	43.62	95.2	-51.58	-20	-31.58
mPass5k	959.925	1919.846	51.56	-11.05	40.51	95.2	-54.69	-20	-34.69
mPass5k	959.925	2879.776	58	-9.42	48.58	95.2	-46.62	-20	-26.62
mPass5k	959.925	3839.708	53.06	-6.42	46.64	95.2	-48.56	-20	-28.56
mPass5k	959.925	4799.635	50.49	-5.6	44.89	95.2	-50.31	-20	-30.31

Test Personnel: Jean Rene / Jeremy Pickens
Test Date: 06 - 09 February 2026
Ambient Temperature: 18.2 – 20.3ºC
Reference Standard: ANSI C63.26
Relative Humidity: 18.5 – 22.0%
Atmospheric Pressure: 97.3 – 98.1kPa

Note: Only the worst-case modulation was evaluated for each band.

11 Frequency Stability

11.1 Method

The methods defined in ANSI C63.26, Section 5.6.3 were applied for measuring the Frequency Stability. The DUT was placed within a temperature chamber, and the antenna port was connected directly to a spectrum analyzer through a cable and attenuator. For each band tested, the DUT was configured to transmit a CW signal. Frequency measurements were made over the temperature range -30°C to +50°C. The nominal operating voltage was 5.9Vdc, so frequency was also measured at 85% and 115% of the nominal voltage at +20°C. For each temperature measured, a period of time sufficient to stabilize all components was allowed.

TEST SITE: RF Bench

The RF bench consists of a Rohde & Schwarz TS8997 automated test system coupled with a temperature/humidity environmental chamber. Where applicable, 2.4 and 5GHz radio measurements are automated using the Rohde & Schwarz EMC32 test software. The TS8997 system houses a switch matrix (OSP), along with a spectrum analyzer, vector network analyzer, and analog signal generator.

11.2 Test Equipment

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
211992	Digital thermometer - Two channel.	General Tool	DT80-2	140402566	02/27/2025	02/27/2026
213502	Spectrum Analyzer (2Hz-43.5GHz)	Rohde & Schwarz	FSW43	102972	08/01/2024	08/01/2026
213505	Temperature/Humidity Chamber	Sanwood	SMC-64-LL	10301	VBU	VBU
213503-01	Megaphase	OSP DUT Cable 1	KC12-K1K1-80	20815001 001	VBU	VBU
213507-20	20dB SMA Attenuator	Tojoin	20dB	241123	VBU	VBU

Software Utilized

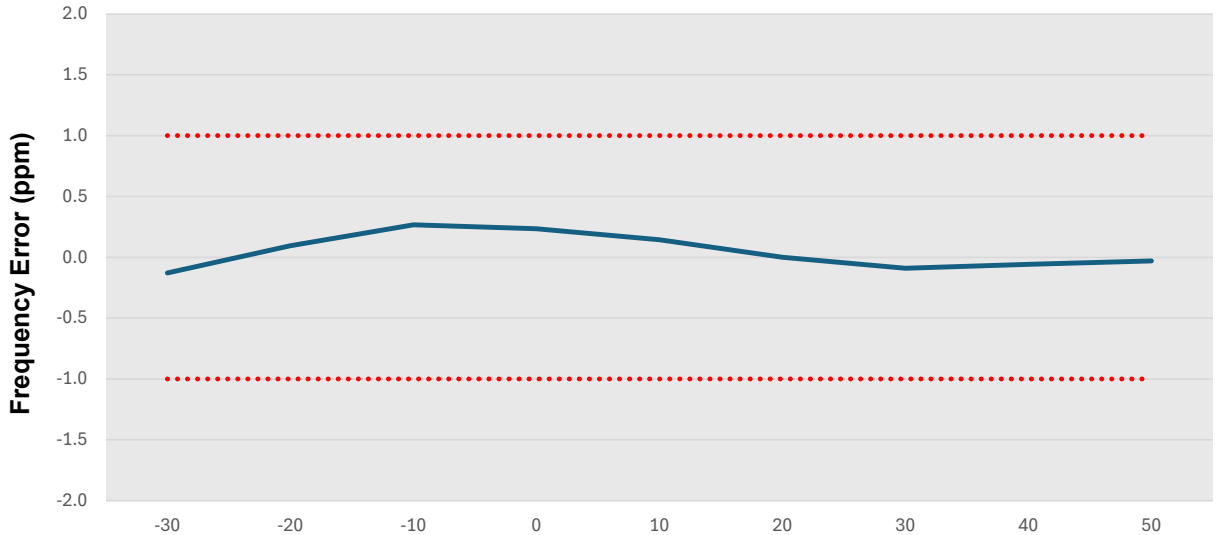
Name	Manufacturer	Version
EMC32	Rohde & Schwarz	11.70.00

11.3 Results

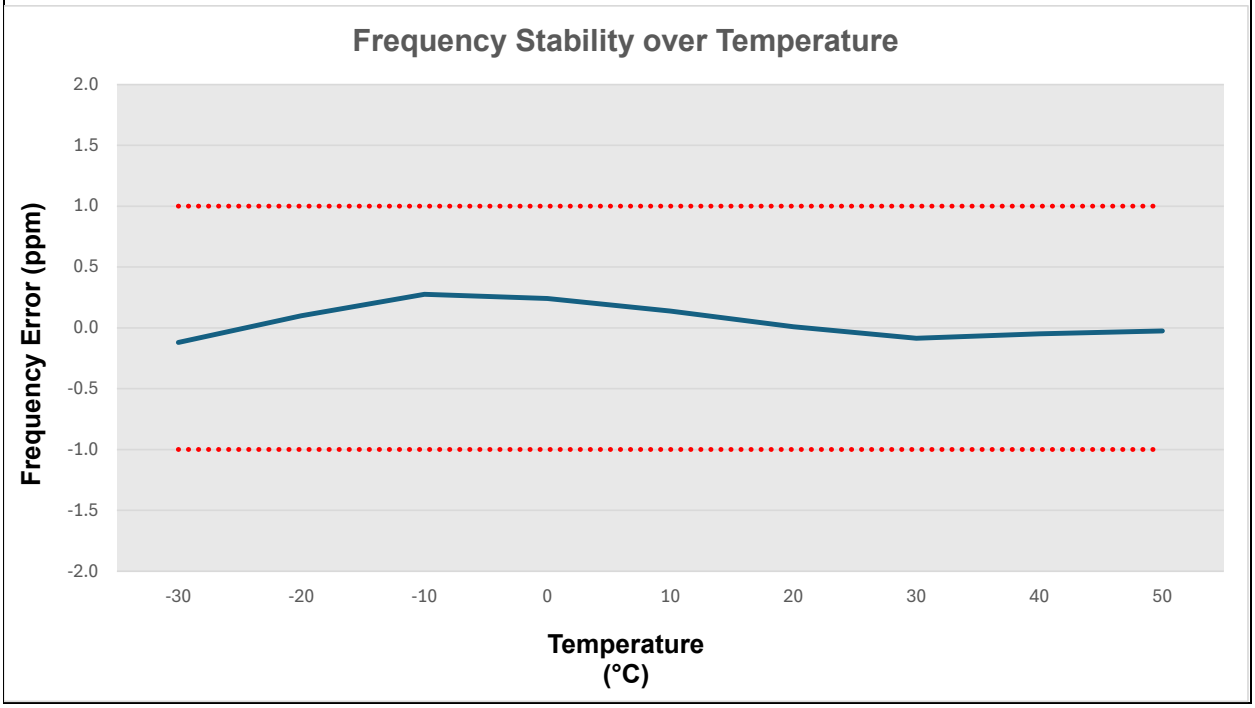
The sample tested was found to Comply.

11.4 Test Data

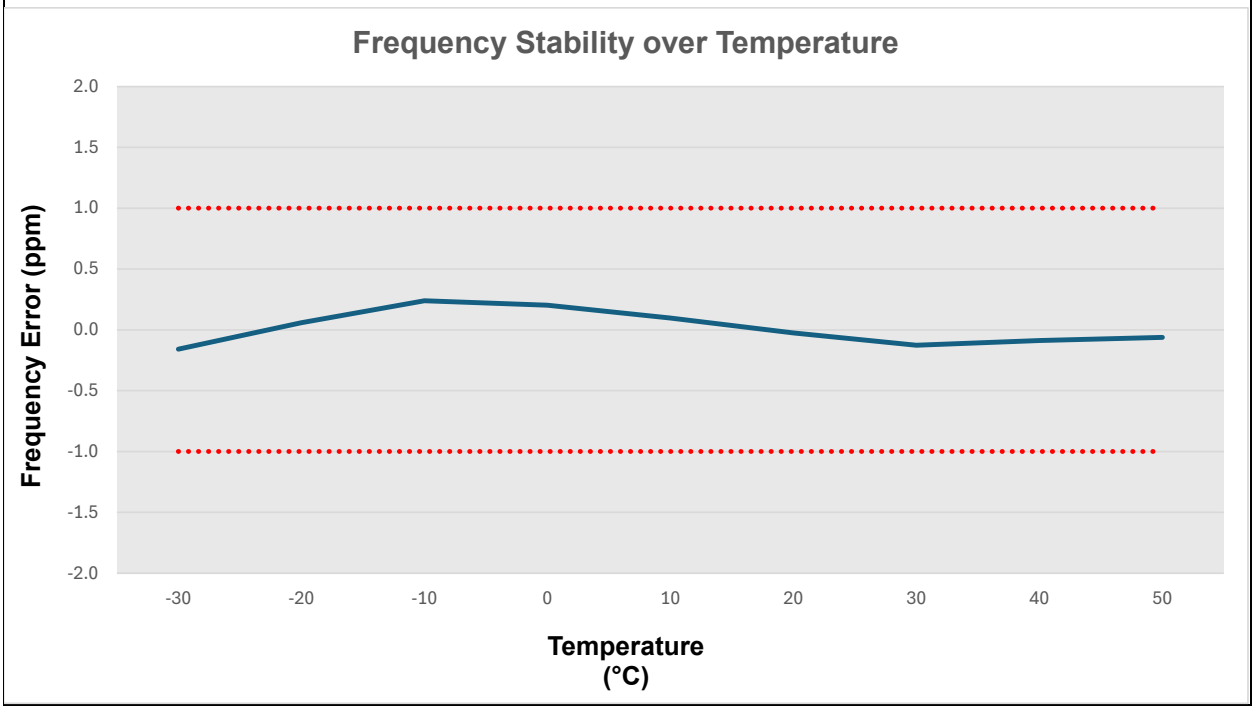
TX Frequency = 896.0125 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	896.012385	-0.1	+/-1	-0.9	Compliant
-20	5.9	896.012586	0.1	+/-1	-0.9	Compliant
-10	5.9	896.012740	0.3	+/-1	-0.7	Compliant
0	5.9	896.012711	0.2	+/-1	-0.8	Compliant
10	5.9	896.012629	0.1	+/-1	-0.9	Compliant
20	5.9	896.012501	0.0	+/-1	-1.0	Compliant
30	5.9	896.012420	-0.1	+/-1	-0.9	Compliant
40	5.9	896.012448	-0.1	+/-1	-0.9	Compliant
50	5.9	896.012474	0.0	+/-1	-1.0	Compliant
20	**5.015**	896.012502	0.0	+/-1	-1.0	Compliant
20	**6.785**	896.012499	0.0	+/-1	-1.0	Compliant



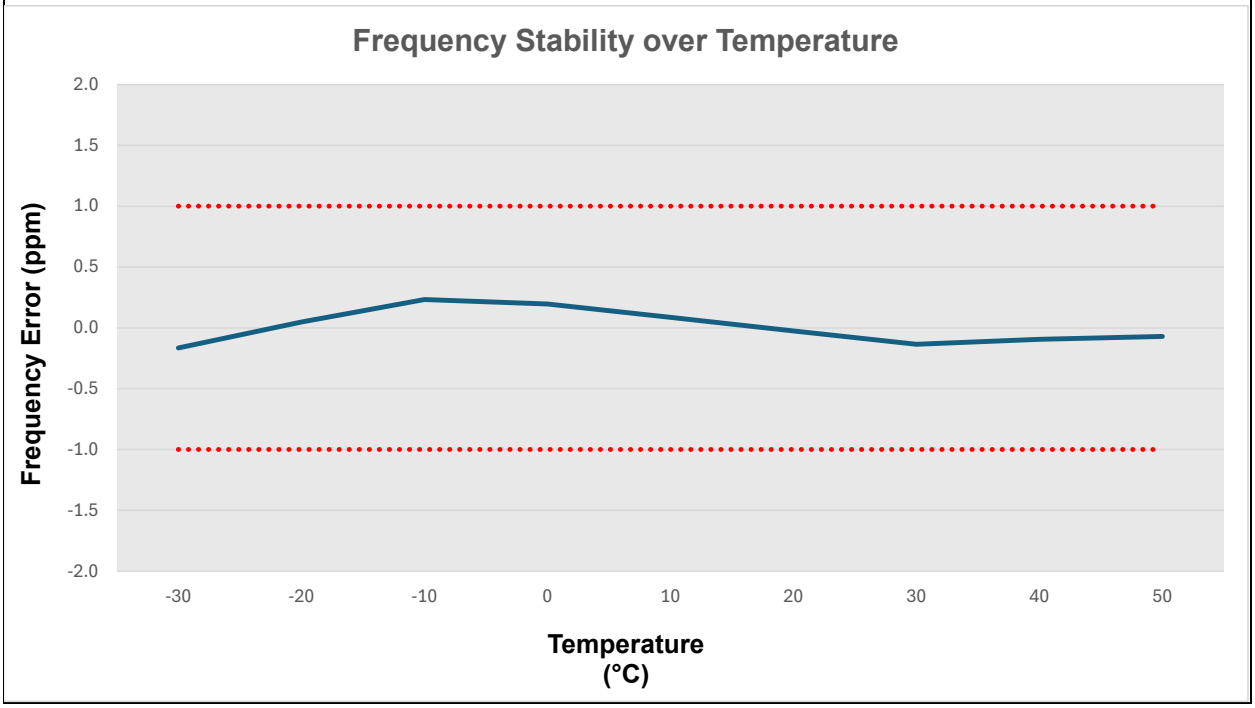
TX Frequency = 901.9875 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	901.987391	-0.1	+/-1	-0.9	Compliant
-20	5.9	901.987590	0.1	+/-1	-0.9	Compliant
-10	5.9	901.987749	0.3	+/-1	-0.7	Compliant
0	5.9	901.987717	0.2	+/-1	-0.8	Compliant
10	5.9	901.987625	0.1	+/-1	-0.9	Compliant
20	5.9	901.987508	0.0	+/-1	-1.0	Compliant
30	5.9	901.987422	-0.1	+/-1	-0.9	Compliant
40	5.9	901.987456	0.0	+/-1	-1.0	Compliant
50	5.9	901.987478	0.0	+/-1	-1.0	Compliant
20	**5.015**	901.987507	0.0	+/-1	-1.0	Compliant
20	**6.785**	901.987512	0.0	+/-1	-1.0	Compliant



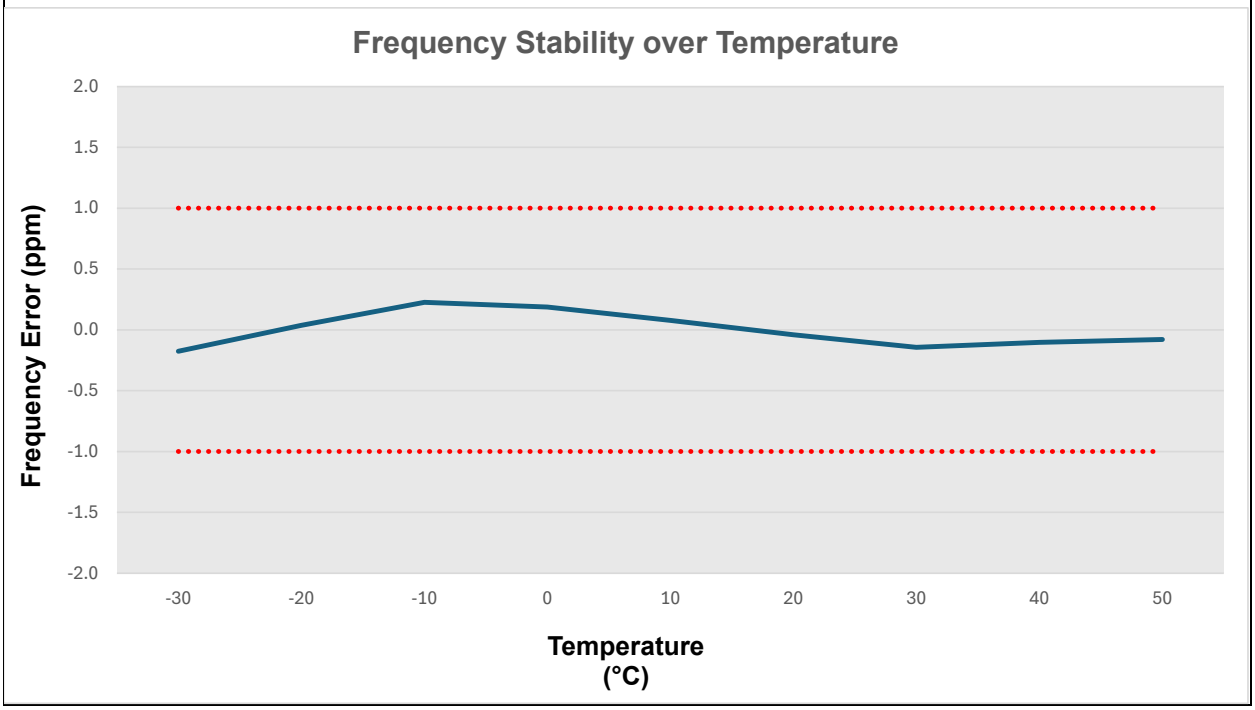
TX Frequency = 928.925 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	928.924852	-0.2	+/-1	-0.8	Compliant
-20	5.9	928.925054	0.1	+/-1	-0.9	Compliant
-10	5.9	928.925223	0.2	+/-1	-0.8	Compliant
0	5.9	928.925189	0.2	+/-1	-0.8	Compliant
10	5.9	928.925090	0.1	+/-1	-0.9	Compliant
20	5.9	928.924976	0.0	+/-1	-1.0	Compliant
30	5.9	928.924883	-0.1	+/-1	-0.9	Compliant
40	5.9	928.924919	-0.1	+/-1	-0.9	Compliant
50	5.9	928.924942	-0.1	+/-1	-0.9	Compliant
20	**5.015**	928.924980	0.0	+/-1	-1.0	Compliant
20	**6.785**	928.924972	0.0	+/-1	-1.0	Compliant



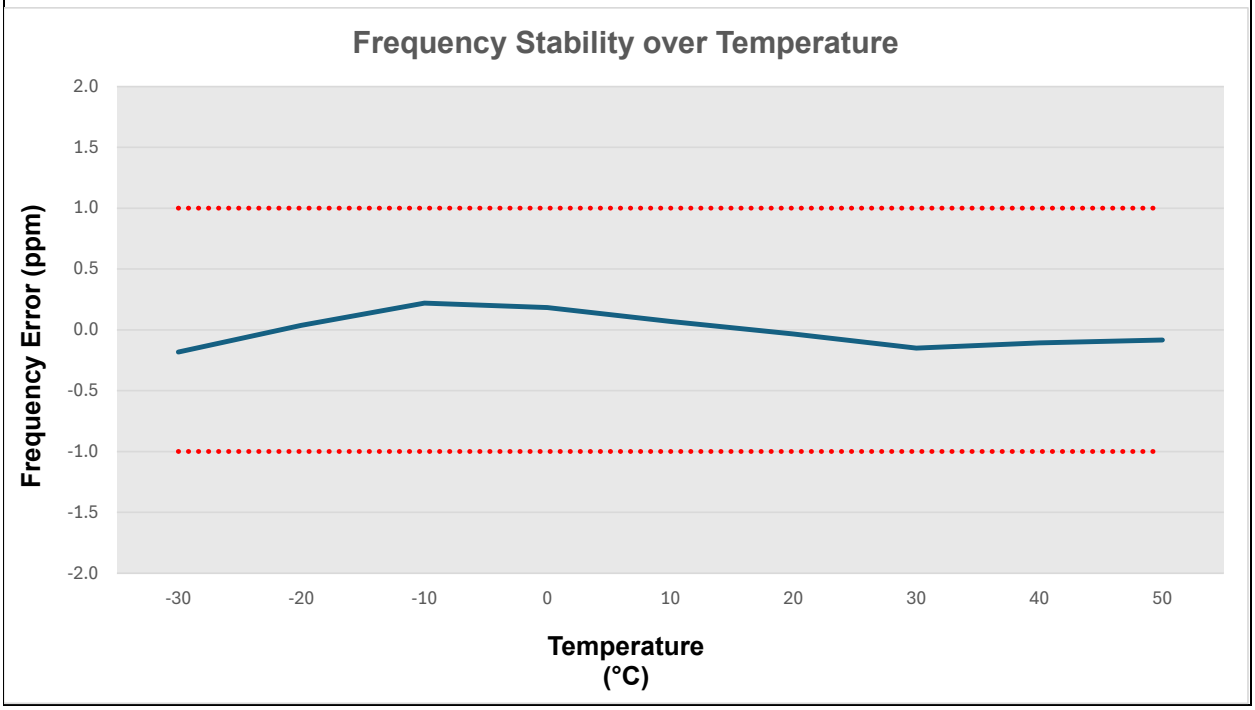
TX Frequency = 930.5 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	930.499846	-0.2	+/-1	-0.8	Compliant
-20	5.9	930.500045	0.0	+/-1	-1.0	Compliant
-10	5.9	930.500216	0.2	+/-1	-0.8	Compliant
0	5.9	930.500182	0.2	+/-1	-0.8	Compliant
10	5.9	930.500081	0.1	+/-1	-0.9	Compliant
20	5.9	930.499977	0.0	+/-1	-1.0	Compliant
30	5.9	930.499874	-0.1	+/-1	-0.9	Compliant
40	5.9	930.499912	-0.1	+/-1	-0.9	Compliant
50	5.9	930.499934	-0.1	+/-1	-0.9	Compliant
20	**5.015**	930.499973	0.0	+/-1	-1.0	Compliant
20	**6.785**	930.499970	0.0	+/-1	-1.0	Compliant



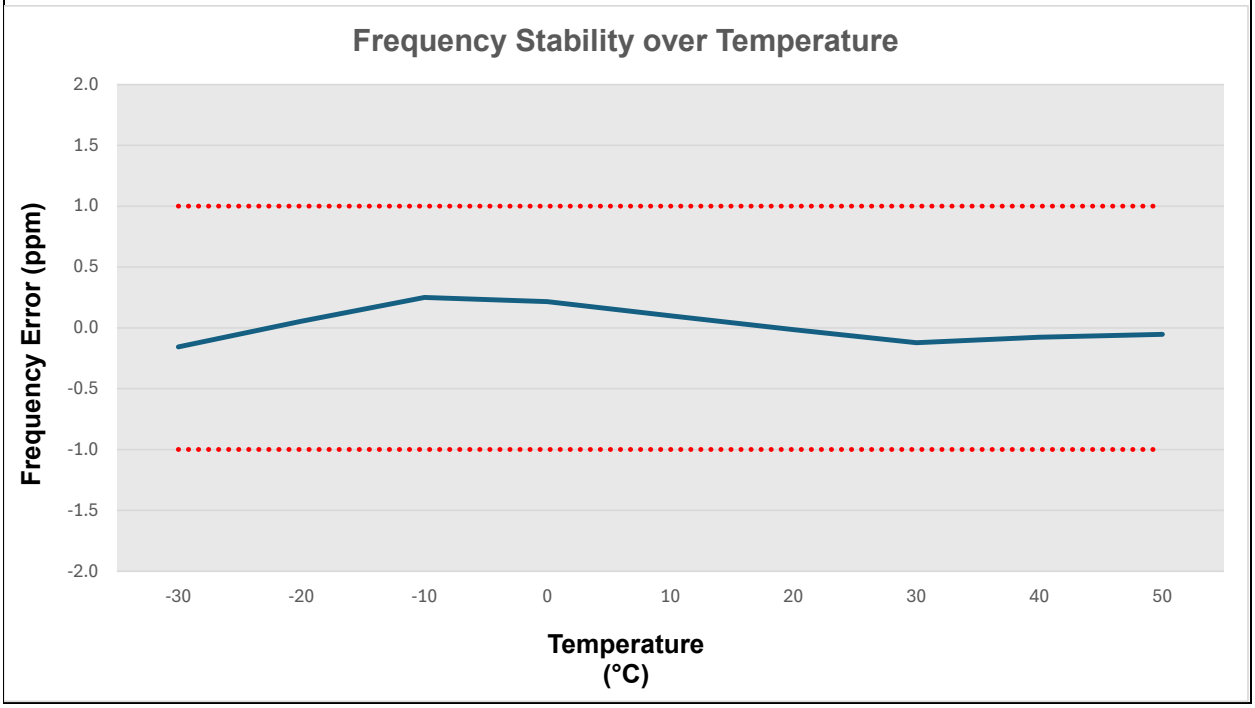
TX Frequency = 932.25 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	932.249837	-0.2	+/-1	-0.8	Compliant
-20	5.9	932.250035	0.0	+/-1	-1.0	Compliant
-10	5.9	932.250211	0.2	+/-1	-0.8	Compliant
0	5.9	932.250174	0.2	+/-1	-0.8	Compliant
10	5.9	932.250072	0.1	+/-1	-0.9	Compliant
20	5.9	932.249962	0.0	+/-1	-1.0	Compliant
30	5.9	932.249866	-0.1	+/-1	-0.9	Compliant
40	5.9	932.249905	-0.1	+/-1	-0.9	Compliant
50	5.9	932.249927	-0.1	+/-1	-0.9	Compliant
20	**5.015**	932.249968	0.0	+/-1	-1.0	Compliant
20	**6.785**	932.249957	0.0	+/-1	-1.0	Compliant



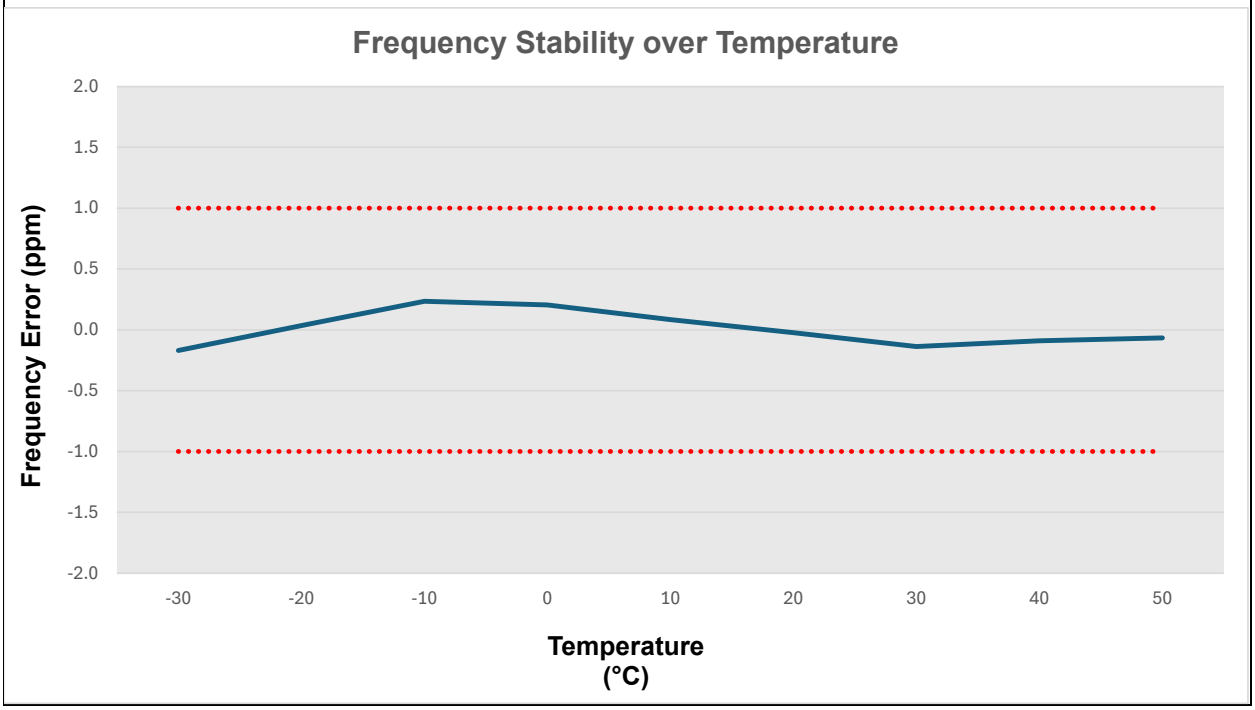
TX Frequency = 935.0125 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	935.012330	-0.2	+/-1	-0.8	Compliant
-20	5.9	935.012534	0.0	+/-1	-1.0	Compliant
-10	5.9	935.012706	0.2	+/-1	-0.8	Compliant
0	5.9	935.012672	0.2	+/-1	-0.8	Compliant
10	5.9	935.012565	0.1	+/-1	-0.9	Compliant
20	5.9	935.012468	0.0	+/-1	-1.0	Compliant
30	5.9	935.012360	-0.1	+/-1	-0.9	Compliant
40	5.9	935.012400	-0.1	+/-1	-0.9	Compliant
50	5.9	935.012422	-0.1	+/-1	-0.9	Compliant
20	**5.015**	935.012459	0.0	+/-1	-1.0	Compliant
20	**6.785**	935.012477	0.0	+/-1	-1.0	Compliant



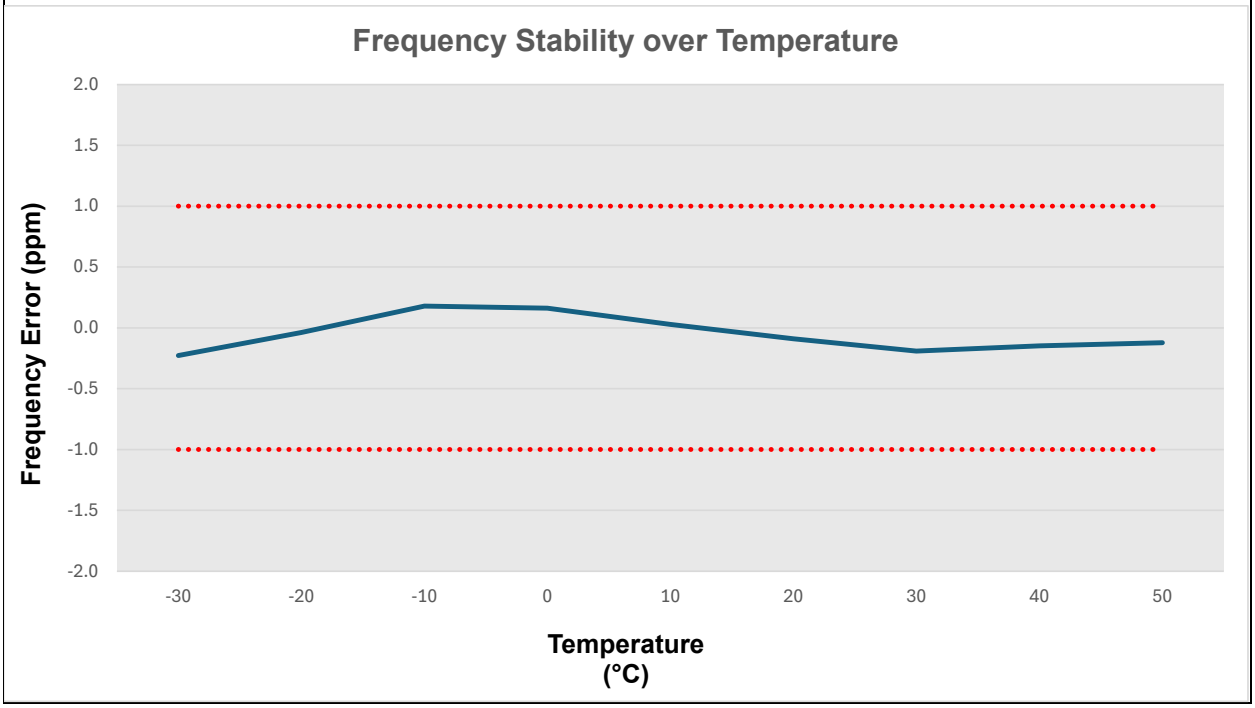
TX Frequency = 941.4875 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	941.487353	-0.2	+/-1	-0.8	Compliant
-20	5.9	941.487551	0.1	+/-1	-0.9	Compliant
-10	5.9	941.487735	0.2	+/-1	-0.8	Compliant
0	5.9	941.487702	0.2	+/-1	-0.8	Compliant
10	5.9	941.487593	0.1	+/-1	-0.9	Compliant
20	5.9	941.487487	0.0	+/-1	-1.0	Compliant
30	5.9	941.487385	-0.1	+/-1	-0.9	Compliant
40	5.9	941.487428	-0.1	+/-1	-0.9	Compliant
50	5.9	941.487450	-0.1	+/-1	-0.9	Compliant
20	**5.015**	941.487485	0.0	+/-1	-1.0	Compliant
20	**6.785**	941.487492	0.0	+/-1	-1.0	Compliant



TX Frequency = 952.5 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	952.499838	-0.2	+/-1	-0.8	Compliant
-20	5.9	952.500034	0.0	+/-1	-1.0	Compliant
-10	5.9	952.500224	0.2	+/-1	-0.8	Compliant
0	5.9	952.500196	0.2	+/-1	-0.8	Compliant
10	5.9	952.500080	0.1	+/-1	-0.9	Compliant
20	5.9	952.499978	0.0	+/-1	-1.0	Compliant
30	5.9	952.499870	-0.1	+/-1	-0.9	Compliant
40	5.9	952.499914	-0.1	+/-1	-0.9	Compliant
50	5.9	952.499937	-0.1	+/-1	-0.9	Compliant
20	**5.015**	952.499988	0.0	+/-1	-1.0	Compliant
20	**6.785**	952.499971	0.0	+/-1	-1.0	Compliant



TX Frequency = 959.925 MHz						
Temperature °C	Input Voltage Vdc	Measured Carrier Frequency MCF_{MHz}	Frequency Error ppm	Limit ppm	Margin ppm	Verdict
-30	5.9	959.924782	-0.2	+/-1	-0.8	Compliant
-20	5.9	959.924964	0.0	+/-1	-1.0	Compliant
-10	5.9	959.925172	0.2	+/-1	-0.8	Compliant
0	5.9	959.925155	0.2	+/-1	-0.8	Compliant
10	5.9	959.925027	0.0	+/-1	-1.0	Compliant
20	5.9	959.924913	-0.1	+/-1	-0.9	Compliant
30	5.9	959.924816	-0.2	+/-1	-0.8	Compliant
40	5.9	959.924858	-0.1	+/-1	-0.9	Compliant
50	5.9	959.924883	-0.1	+/-1	-0.9	Compliant
20	**5.015**	959.924912	-0.1	+/-1	-0.9	Compliant
20	**6.785**	959.924917	-0.1	+/-1	-0.9	Compliant



Test Personnel: Jeremy Pickens

Reference Standard: ANSI C63.26

Test Date: 16 February 2026

Ambient Temperature: 19.5ºC

Relative Humidity: 33.8%

Atmospheric Pressure: 99.0kPa

12 Measurement Uncertainty

Parameter	Expanded Uncertainty for Normal k factor equal to 2
Radio Frequency	0.07 PPM
Total RF Power (Conducted)	0.65 dB
Power Density (Conducted)	0.65 dB
RF Spurious (Conducted)	1.8 dB
Radiated Emissions (9kHz-30MHz)	4.7 dB
Radiated Emissions (30MHz-1GHz)	4.1 dB
Radiated Emissions (1GHz-18GHz)	4.5dB
Radiated Emissions (18GHz-40GHz)	4.7 dB
AC Line Conducted Emissions	2.8 dB
Temperature	0.7°
Humidity	3.9%

13 Revision History

Revision Level	Date	Prepared By	Reviewed By	Notes
0	27 February 2026	JOP	MC	Original Issue
1	05 March 2026	JOP	MC	• Added clarification regarding ASK modulation in the 896-901MHz band on Page 7

END OF REPORT