

Test Report

Prepared for: Unication Co LTD

Model: U4

Description: WLB U Series Portable Radio

Serial Number: U4NLXXXXXH800001

FCC ID: LEA-U4LOWVHF

Project No: p25b0004

Test Results: Pass

To

FCC Part 90

Date of Issue: February 23, 2026

On the behalf of the applicant:

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ISED Site Reg. #2044A-2

Reviewed / Authorized By:



Madhava Gooduru,
EMC RF Test Engineer

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All results contained herein relate only to the sample tested.

Test Result Summary

Specification	Test Name	Pass, N/A	Fail,	Comments
FCC				
2.1046 90.205(b),(c)	Carrier Output Power (Conducted)	Pass		
2.1051 90.210(b)(d)	Unwanted Emissions (Transmitter Conducted)	Pass		
2.1053 90.210(b)(d)	Field Strength of Spurious Radiation	Pass		
2.1049(c) 90.210(b)(d)	Emission Masks (Occupied Bandwidth)	Pass		
2.1047(a)	Audio Low Pass Filter (Voice Input)	Pass		
2.1047(a)	Audio Frequency Response	Pass		
2.1047(b)	Modulation Limiting	Pass		
2.1055 90.213(a)	Frequency Stability (Temperature Variation)	Pass		
2.1055 90.213(a)	Frequency Stability (Voltage Variation)	Pass		
2.202 (g)	Necessary Bandwidth Calculation	Pass		

Statements of conformity are reported as:

- Pass - the measured value is below the acceptance limit, *acceptance limit = test limit*.
- Fail - the measured value is above the acceptance limit, *acceptance limit = test limit*.

Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	2/23/2026	Madhava Gooduru	Original Document
2.0	4/10/2026	Madhava Gooduru	Separated the RSS-119 report into a standalone document.

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ANAB

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to the joint ISO-ILAC-IAF Communiqué dated January 2009).

The tests results contained within this test report all fall within our scope of accreditation, unless noted below.

Please refer to <http://www.compliancetesting.com/labscope.html> for current scope of accreditation.



Test and Measurement Data

All tests and measurement data shown were performed in accordance with FCC Rules and Regulations, Volume II, Part 2, Subpart J, Sections 2.947, 2.1033(c), 2.1041, 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, ANSI C63.26-2015, FCC Part 22, 74, 80 and 90

Standard Test Conditions and Engineering Practices

Except as noted herein, the following conditions and procedures were observed during the testing.

In accordance with ANSI/TIA 603C, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40°C (50° to 104°F) unless the particular equipment requirements specified testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Environmental Conditions		
Temperature (°C)	Humidity (%)	Barometric Pressure (mbar)
24.0 – 25.9	32.7 -33.5	968.9 – 971.0

Measurement results, unless otherwise noted, are worse case measurements.

EUT Description

Model:	U4
Serial:	U4NLXXXXXH800001
Firmware:	V1.15
Software:	DR51
HVIN	U4 LOW VHF
PMN	U4
UPN	U4LOWVHF
FVIN	V1.15
Description:	WLB U Series Portable Radio
Additional Information:	The EUT is a 5-watt handheld WLB Radio transceiver, using Analog FM, FSK, C4FM and H-CPM modulation, operating in WLB band (30-88 MHz) as noted in Table 1. This radio has a built-in Bluetooth transmission function that supports operation with a wireless speaker microphone. LMR Antenna: Mfg: Unication; Part No : USXX-ANTX-A100 Gain (Max) : -15 dBi BT Antenna: Part No : T71U4BTANT-R Gain (Max) : +1.88 dBi
Power	Li-Ion battery (8 Vdc)
Receipt of Sample(s):	1/30/2026
EUT Condition:	Visual Damage No State of Development Production/Production Equivalent

EUT Operation during Tests

The EUT is powered by 8Vdc Battery Eliminator for conducted tests whereas EUT was powered internal battery for all other tests.

The Handheld transceiver operates with NB (12.5 kHz Channel), FSK, C4FM, H-CPM, and WB (25 kHz).

No software or GUI required for the operation of the EUT.

The output power was set to maximum for all tests with the modulations mentioned in Table 2.

Table 1 Frequency Allocation and modulation details

Frequency Range: WLB band (30-50 and 72-76 MHz)			
Type	Bandwidth (kHz)	Modulation type	Emission Designators
Analog NB FM	12.5	FM	11K0F3E
Analog WB FM	25.0	FM	20K0F3E
DMR	12.5	FSK	7K60FXW
P25 - Phase 1	12.5	C4FM (FSK)	8K10F1E
P25 - Phase 2	12.5	H-CPM	8K10F1W / 8K10F1D / 8K10F1E

Table 2 - FCC Test Frequencies and power levels

Test Frequency (MHz)	Power Levels setting (W)
30.025	5
40	5
49.975	5
75.3	1

Accessories:

Qty	Description	Manufacturer	Model	S/N
1	Battery Charger	Unication	NA	OUSCXF71202
1	Li-Ion Battery	Unication	U4XX-BATY-XXXX	NA
1	AC Adapter with 1mtr cable and ferrites	JET	T69ATS036T-R	NA
1	Battery Eliminator	Unication	NA	NA
1	Antenna	Unication	USXX-ANTX-A100	NA

Cables:

Qty	Description	Length (M)	Ferrites (Y/N)	Shielding Y/N	Shielded Hood Y/N	Termination / Connection
1	AC power cord	2	N	N	N	N/A

Modifications to EUT(s): None

Transmitter Output Power (Conducted)

Engineer: Madhava Gooduru

Test Date: 2/4/2026, 2/17/2026

Measurement Procedure

The Equipment Under Test (EUT) was connected to a spectrum analyzer through a 20 dB Power attenuator.

All cable and attenuator losses were entered into the spectrum analyzer as reference level offsets and amplitude corrections to ensure accurate measurements.

For narrowband and wideband signals, a CW signal and peak detector was used for performing output power measurements.

For digital signals, the transmitter was operated with modulation applied, and a peak detector was used to perform the output power measurements. A sufficient sweep time was set to ensure the maximum output power was captured.

Output power was recorded as power settings in Table 2.

The output power limits are below and as per FCC rule part.

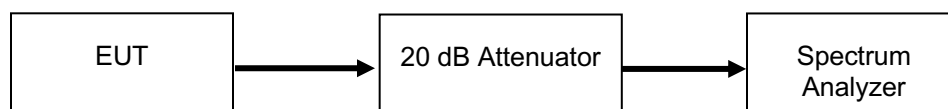
Manufacturer Rated Power = 5 watts (37 dBm) for 30-50 MHz and 1 watt(30dBm) for 72-76 MHz

Part 90: 90.205 Power and antenna height limits.

(b) 25-50 MHz. The maximum transmitter output power is 300 watts.

(c) 72-76 MHz. The maximum effective radiated power (ERP) for stations operating on fixed frequencies is 300 watts. Stations operating on mobile-only frequencies are limited to one watt transmitter output power.

Test Setup



Transmitter Output Power Test Summary Table

S.No	Modulation Type	Test Frequency (MHz)	Power level setting(W)	Transmitter Output Power		Result
				dBm	Watts	
1	Narrow band FM	30.025	5	36.79	4.77	Pass
2	Narrow band FM	40	5	36.53	4.50	Pass
3	Narrow band FM	49.975	5	36.20	4.17	Pass
4	Narrow band FM	75.3	1	29.90	0.98	Pass
5	Wide band FM	30.025	5	36.63	4.60	Pass
6	Wide band FM	40	5	36.58	4.55	Pass
7	Wide band FM	49.975	5	36.18	4.15	Pass
8	Wide band FM	75.3	1	29.77	0.95	Pass
9	FSK	30.025	5	36.68	4.66	Pass
10	FSK	40	5	36.65	4.62	Pass
11	FSK	49.975	5	36.26	4.23	Pass
12	FSK	75.3	1	29.60	0.91	Pass
13	C4FM	30.025	5	36.63	4.60	Pass
14	C4FM	40	5	36.56	4.53	Pass
15	C4FM	49.975	5	36.17	4.14	Pass
16	C4FM	75.3	1	29.75	0.94	Pass
17	H-CPM	30.025	5	36.59	4.56	Pass
18	H-CPM	40	5	36.56	4.53	Pass
19	H-CPM	49.975	5	36.15	4.12	Pass
20	H-CPM	75.3	1	29.74	0.94	Pass

Annex A Output Power

Refer to Annex A for Output Power plots.

Conducted Spurious Emissions

Engineer: Madhava Gooduru

Test Date: 2/9/2026, 2/17/2026

Test Procedure

The EUT was connected to a spectrum analyzer through a 20 dB Power attenuator to verify that the EUT met the requirements for spurious emissions.

All cable and attenuator losses were entered into the spectrum analyzer as reference level offsets and amplitude corrections to ensure accurate measurements.

For FM modulation, the transmitter was modulated by a 2500 Hz tone at an input level 16 dB greater than that necessary to produce 50 percent modulation.

For FSK, C4FM and H-CPM modulation, the internal standard test pattern was used

The resolution bandwidth was set for 100 kHz or 1 MHz as required per the rule section and the reference level was adjusted to ensure the system had sufficient dynamic range to measure spurious emissions.

The frequency range from 30 MHz to the 10th harmonic of the fundamental transmitter was observed and plotted. In this case, it was measured up to 1 GHz.

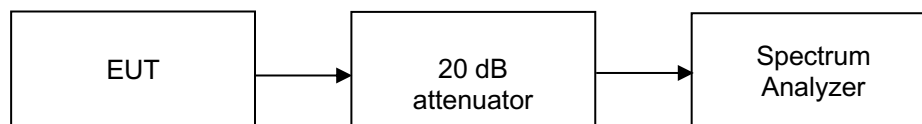
The conducted spurious emissions were recorded for all modulations that were used for operation.

The specification limit was set for -20 dBm for comparison to the emission mask “D” limit.

Note: On the 30 – 1000 MHz plots, marker 1 is the fundamental transmit frequency and is not subject to the -20 dBm limit.

The output power was set to maximum power for all conducted spurious measurements.

Test Setup



Conducted Spurious Emissions Test Summary Table

S.No	Modulation Type	Frequency Span	Tuned Frequency	Conducted Spurious		Limit	Margin	Result
				Frequency	Level			
		MHz	MHz	MHz	dBm			
1	Narrow band FM	30 - 1000	30.025	60.07	-28.34	-20	-8.34	Pass
2	Narrow band FM	30 - 1000	40	79.96	-30.86	-20	-10.86	Pass
3	Narrow band FM	30 - 1000	49.975	99.96	-31.45	-20	-11.45	Pass
4	Narrow band FM	30 - 1000	75.3	150.64	-41.02	-20	-21.02	Pass
5	Wide band FM	30 - 1000	30.025	60.07	-28.79	-20	-8.79	Pass
6	Wide band FM	30 - 1000	40	79.96	-30.34	-20	-10.34	Pass
7	Wide band FM	30 - 1000	49.975	99.96	-31.27	-20	-11.27	Pass
8	Wide band FM	30 - 1000	75.3	150.64	-40.79	-20	-20.79	Pass
9	FSK	30 - 1000	30.025	31.82	-23.4	-20	-3.4	Pass
10	FSK	30 - 1000	40	79.96	-30.77	-20	-10.77	Pass
11	FSK	30 - 1000	49.975	99.96	-29.71	-20	-9.71	Pass
12	FSK	30 - 1000	75.3	150.64	-41.08	-20	-21.08	Pass
13	C4FM	30 - 1000	30.025	60.07	-28.42	-20	-8.42	Pass
14	C4FM	30 - 1000	40	79.96	-30.72	-20	-10.72	Pass
15	C4FM	30 - 1000	49.975	99.96	-31.23	-20	-11.23	Pass
16	C4FM	30 - 1000	75.3	150.64	-40.63	-20	-20.63	Pass
17	H-CPM	30 - 1000	30.025	60.07	-28.7	-20	-8.7	Pass
18	H-CPM	30 - 1000	40	79.96	-30.67	-20	-10.67	Pass
19	H-CPM	30 - 1000	49.975	99.96	-31.35	-20	-11.35	Pass
20	H-CPM	30 - 1000	75.3	150.64	-40.55	-20	-20.55	Pass

Annex B Conducted Spurious Emission

Refer to Annex B for Conducted Spurious Emission plots.

Field Strength of Spurious Radiation

Engineer: Madhava Gooduru

Test Date: 2/10/2026, 2/17/2026

Test Procedure

The EUT was tested in a semi-anechoic chamber with the turntable set 3m from the receiving antenna.

A spectrum analyzer was used to verify that the EUT met the requirements for radiated emissions.

The EUT was tested by rotating it 360 degrees with the antenna in both vertical and horizontal orientation while raised from 1 to 4 meters to ensure that the signal levels were maximized.

All cable and antenna correction factors were input into the spectrum analyzer ensuring an accurate measurement in ERP/EIRP with the resultant power in dBm.

The EUT was set to transmit at maximum power with the RF output terminated with a 50-watt 50 ohm load.

Radiated spurious emissions were recorded with the EUT using CW and all digital modulations.

The frequency range from 30 MHz to the 10th harmonic of the fundamental transmitter was observed and plotted. In this case, it was measured up to 1 GHz.

The RBW was set to 100 kHz for measurements below 1 GHz and 1 MHz for measurements above 1 GHz.

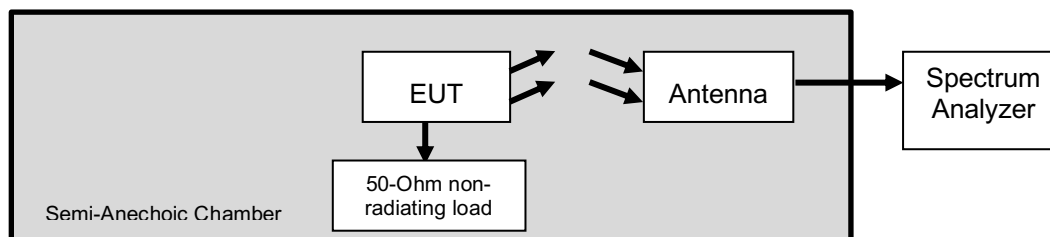
The VBW was set to 3 times the RBW.

The following formula was used for calculating the limits:

The worst case radiated spurious limit = $P_1 - (50 + 10\log(P_2)) = -20 \text{ dBm}$

On the 30 – 1000 MHz plots, marker 1 is the fundamental transmit frequency and is not subject to the -20 dBm limit.

Test Setup



Radiated Spurious Emissions Test Summary Table

S.No	Modulation Type	Frequency Span	Tuned Frequency	Radiated Spurious		Limit	Margin	Result
				Frequency	Level			
		MHz	MHz	MHz	dBm			
1	CW	30 - 1000	30.025	957.999	-56.47	-20	-36.47	Pass
2	CW	30 - 1000	40	947.814	-57.18	-20	-37.18	Pass
3	CW	30 - 1000	49.975	954.992	-56.84	-20	-36.84	Pass
4	CW	30 - 1000	75.3	301.212	-34.62	-20	-14.62	Pass
9	FSK	30 - 1000	30.025	992.531	-57.04	-20	-37.04	Pass
10	FSK	30 - 1000	40	970.803	-56.56	-20	-36.56	Pass
11	FSK	30 - 1000	49.975	962.752	-57.58	-20	-37.58	Pass
12	FSK	30 - 1000	75.3	301.212	-34.09	-20	-14.09	Pass
13	C4FM	30 - 1000	30.025	967.408	-55.86	-20	-35.86	Pass
14	C4FM	30 - 1000	40	926.377	-57.38	-20	-37.38	Pass
15	C4FM	30 - 1000	49.975	993.21	-57.12	-20	-37.12	Pass
16	C4FM	30 - 1000	75.3	301.212	-34.59	-20	-14.59	Pass
17	H-CPM	30 - 1000	30.025	994.471	-57.71	-20	-37.71	Pass
18	H-CPM	30 - 1000	40	931.033	-57.09	-20	-37.09	Pass
19	H-CPM	30 - 1000	49.975	939.76	-57.47	-20	-37.47	Pass
20	H-CPM	30 - 1000	75.3	301.212	-34.62	-20	-14.62	Pass

Annex C Radiated Spurious Emission
Refer to Annex C for Radiated Spurious Emission plots

Emission Masks

Engineer: Madhava Gooduru

Test Date: 2/9/2026, 2/17/2026

Test Procedure

The EUT was connected to a spectrum analyzer through a 20 dB attenuator to verify that the EUT meets the required emissions mask.

All cable and attenuator losses were entered into the spectrum analyzer as reference level offsets and amplitude corrections to ensure accurate measurements.

The reference level was set to the maximum power recorded in transmitter Output power measurements.

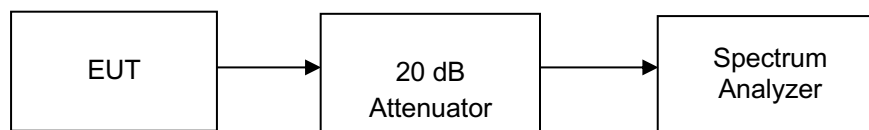
Mask B was used for wideband FM.

Mask D was used for narrowband FM and FSK, C4FM and H-CPM

For FM modulation, the transmitter was modulated by a 2500 Hz tone at an input level 16 dB greater than that necessary to produce 50 percent modulation.

For FSK, C4FM and H-CPM modulation, the internal standard test pattern was used

Test Setup



Annex D Emission Mask

Refer to Annex D for Emission Mask plots.

Occupied Bandwidth

Engineer: Madhava Gooduru

Test Date: 2/6/2026, 2/17/2026

Test Procedure

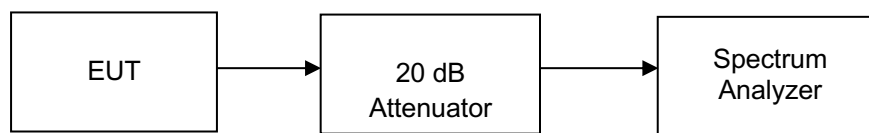
The EUT was connected through a 20 dB attenuator to a spectrum analyzer to verify that the EUT meets the required occupied bandwidth.

The internal occupied bandwidth tool built into the spectrum analyzer was used to record the -26 dB and 99% occupied bandwidth.

For FM modulation, the transmitter was modulated by a 2500 Hz tone at an input level 16 dB greater than that necessary to produce 50 percent modulation.

For FSK, C4FM and H-CPM modulations, the internal standard test pattern was used

Test Setup



Occupied Bandwidth Test Summary Table

S.No	Modulation Type	Test Frequency (MHz)	Occupied Bandwidth		Result
			99% (kHz)	-26dB (kHz)	
1	Narrow band FM	30.025	9.91	10.52	Pass
2	Narrow band FM	40	9.91	10.52	Pass
3	Narrow band FM	49.975	9.91	10.52	Pass
4	Narrow band FM	75.3	9.91	10.52	Pass
5	Wide band FM	30.025	14.95	15.63	Pass
6	Wide band FM	40	14.94	15.63	Pass
7	Wide band FM	49.975	14.94	15.63	Pass
8	Wide band FM	75.3	14.94	15.63	Pass
9	FSK	30.025	7.91	10.35	Pass
10	FSK	40	8.07	10.26	Pass
11	FSK	49.975	7.90	9.57	Pass
12	FSK	75.3	7.74	9.63	Pass
13	C4FM	30.025	8.02	10.40	Pass
14	C4FM	40	8.08	10.32	Pass
15	C4FM	49.975	8.41	10.53	Pass
16	C4FM	75.3	8.22	10.19	Pass
17	H-CPM	30.025	8.14	10.91	Pass
18	H-CPM	40	8.04	10.98	Pass
19	H-CPM	49.975	8.07	10.83	Pass
20	H-CPM	75.3	8.18	10.80	Pass

Note: occupied Bandwidth -26dB is for report purpose only

Annex E Occupied Bandwidth

Refer to Annex E for Occupied Bandwidth plots.

Audio Low Pass Filter (Voice Input)

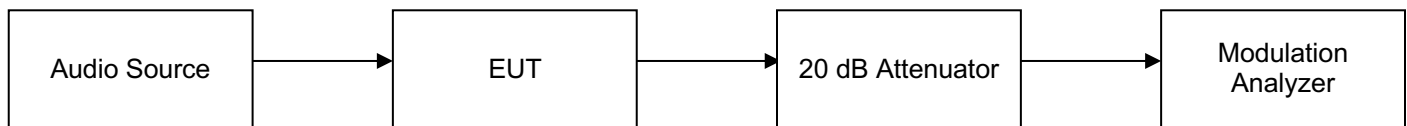
Engineer: Madhava Gooduru

Test Date: 2/6/2026

Test Procedure

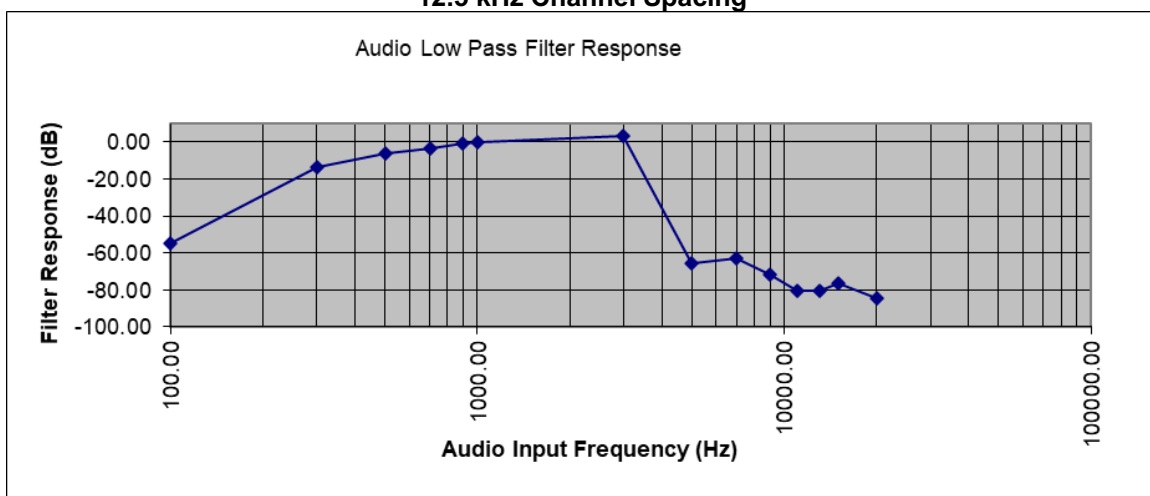
The EUT was connected directly to a modulation analyzer through an attenuator. Set the audio frequency generator to 1 kHz and adjust the level for 60% deviation per manufacturer's specifications. The audio source was tuned from 100 Hz to 20 kHz and the audio frequency response was measured and plotted. The modulation analyzer is a real time spectrum analyzer with integrated demodulation, audio measurement capabilities, and timing analysis. The Audio Low Pass Filter test data was recorded for 12.5 kHz and 25 kHz channel spacing.

Test Setup

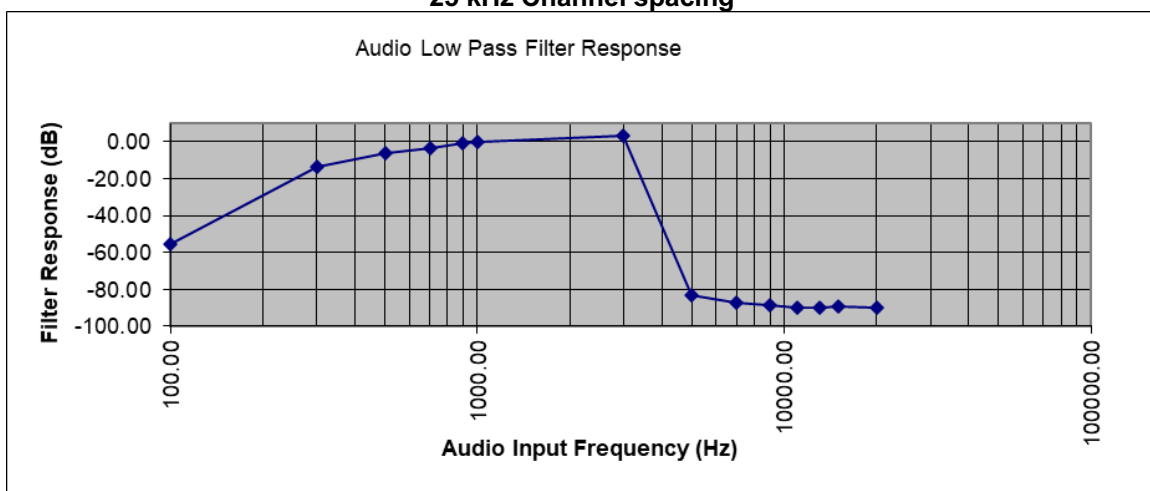


Test Results

12.5 kHz Channel Spacing



25 kHz Channel spacing



Audio Frequency Response

Engineer: Madhava Gooduru

Test Date: 2/6/2026

Measurement Procedure

The EUT was connected directly to a modulation analyzer through an attenuator.

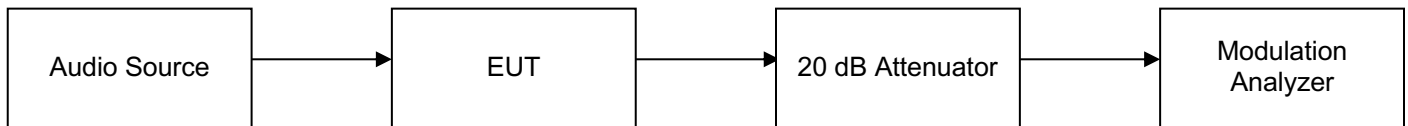
The audio frequency was set to 1 kHz and the level was adjusted for 20% deviation according to the manufacturer's instructions.

The audio source was tuned from 100 Hz to 5000 Hz and the audio frequency response was measured and plotted.

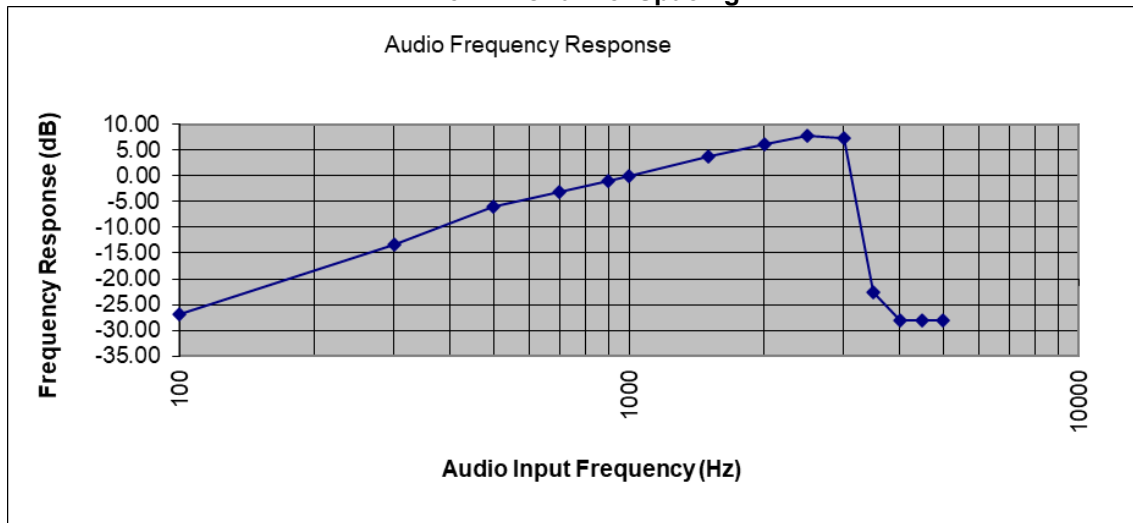
The modulation analyzer is a real time spectrum analyzer with integrated demodulation, audio measurement capabilities, and timing analysis.

The Audio Frequency Response test data was recorded for 12.5 kHz and 25 kHz channel spacing.

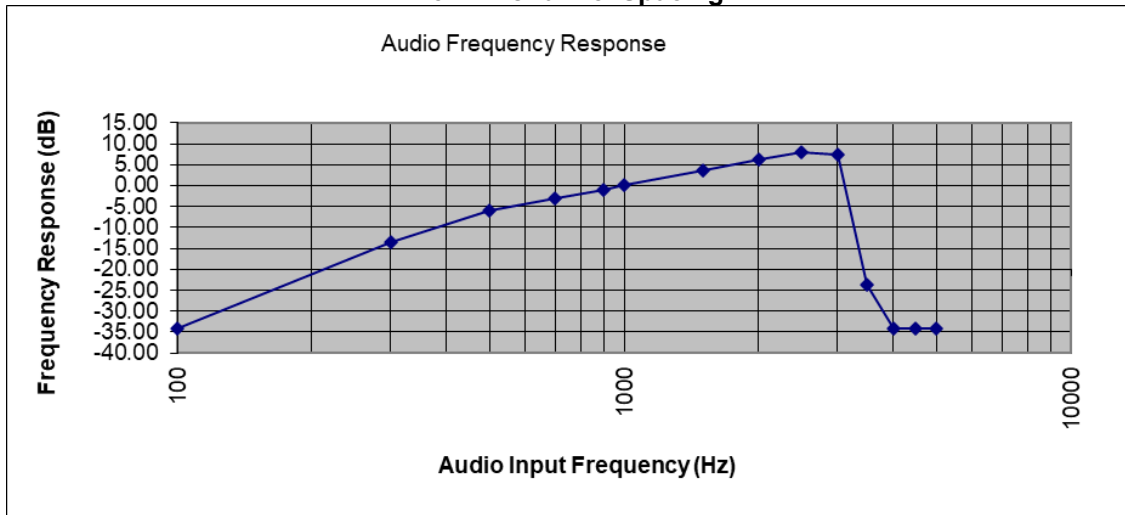
Test Setup



12.5 kHz Channel Spacing



25 kHz Channel Spacing



Modulation Limiting

Engineer: Madhava Gooduru

Test Date: 2/6/2026

Measurement Procedure

The EUT was connected directly to a modulation analyzer through an attenuator.

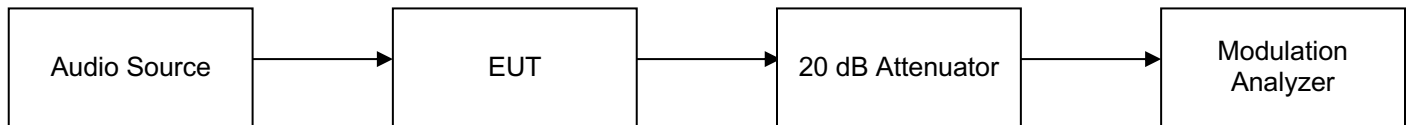
The audio frequency was set to 1 kHz and the level was adjusted for 60% deviation according to the manufacturer's instructions. The input level was then set to 20 dB above the level used for 60 % modulation.

The audio source was tuned from 100 Hz to 5000 Hz and the audio frequency response was measured and plotted.

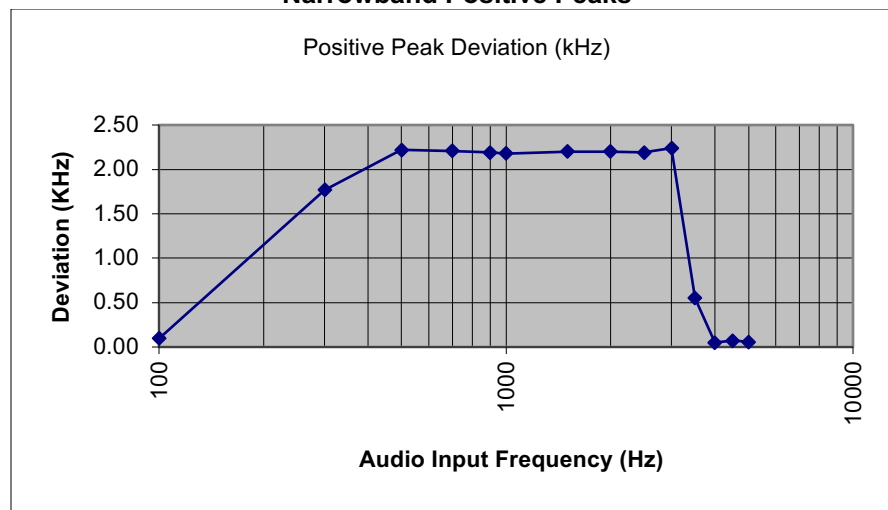
The modulation analyzer is a real time spectrum analyzer with integrated demodulation, audio measurement capabilities, and timing analysis.

The Modulation Limiting test data was recorded for 12.5 kHz and 25 kHz channel spacing.

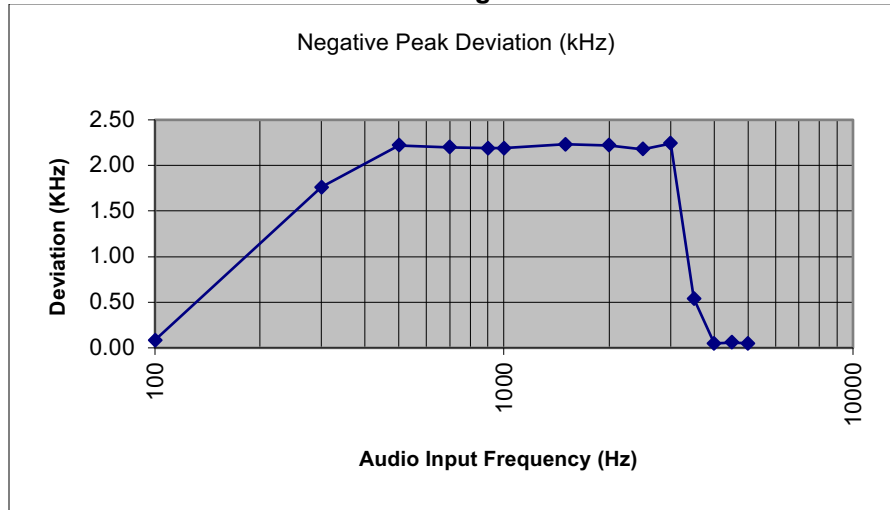
Test Setup



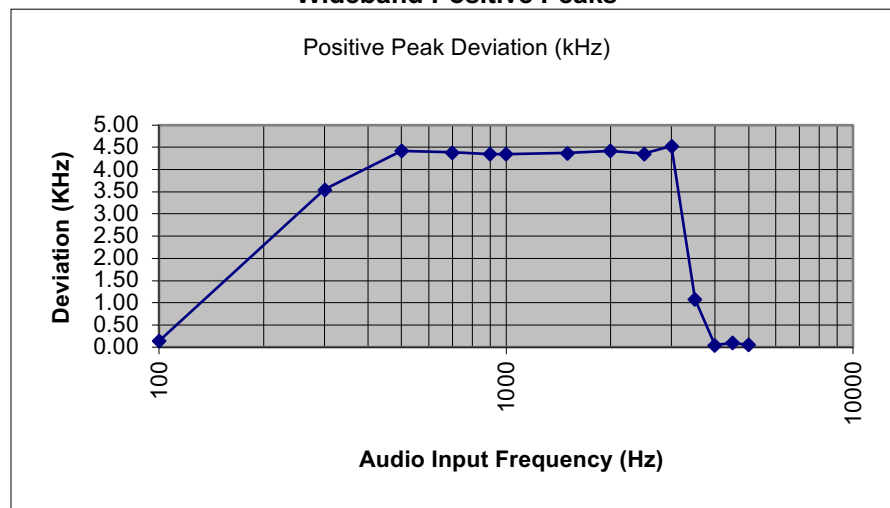
Narrowband Positive Peaks



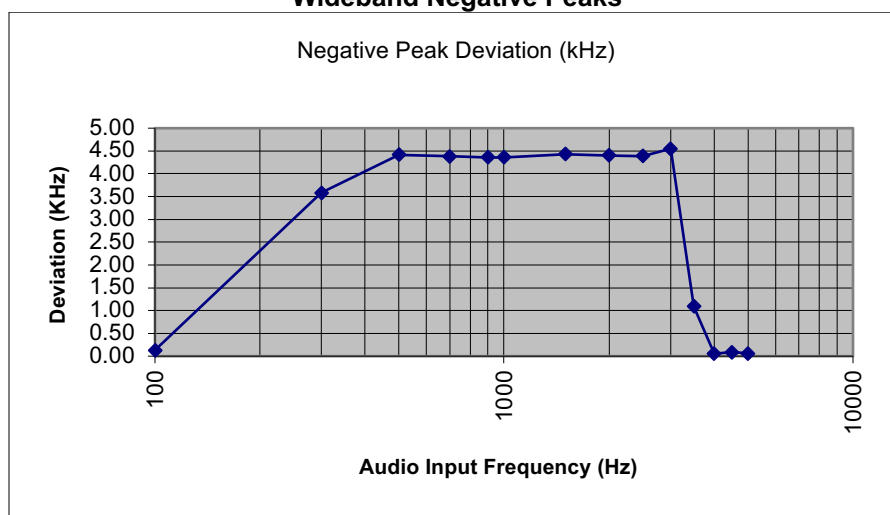
Narrowband Negative Peaks



Wideband Positive Peaks



Wideband Negative Peaks



Frequency Stability (Temperature and Voltage Variation)

Engineer: Madhava Gooduru

Test Date: 2/5/2026

Measurement Procedure

The EUT was placed in an environmental test chamber, and the RF output was connected to a spectrum analyzer.

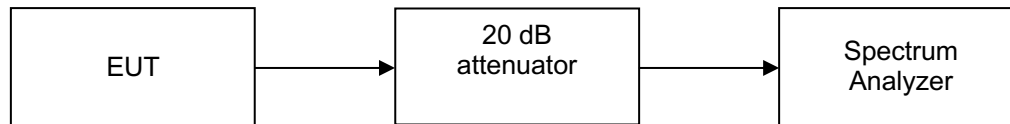
The temperature varied from -30°C to 50°C in 10°C increments.

After sufficient time for temperature stabilization, the RF output frequency was measured at each increment.

At 20°C the power supply voltage to the EUT varied from 85% to 115% of the nominal value and the RF output was measured.

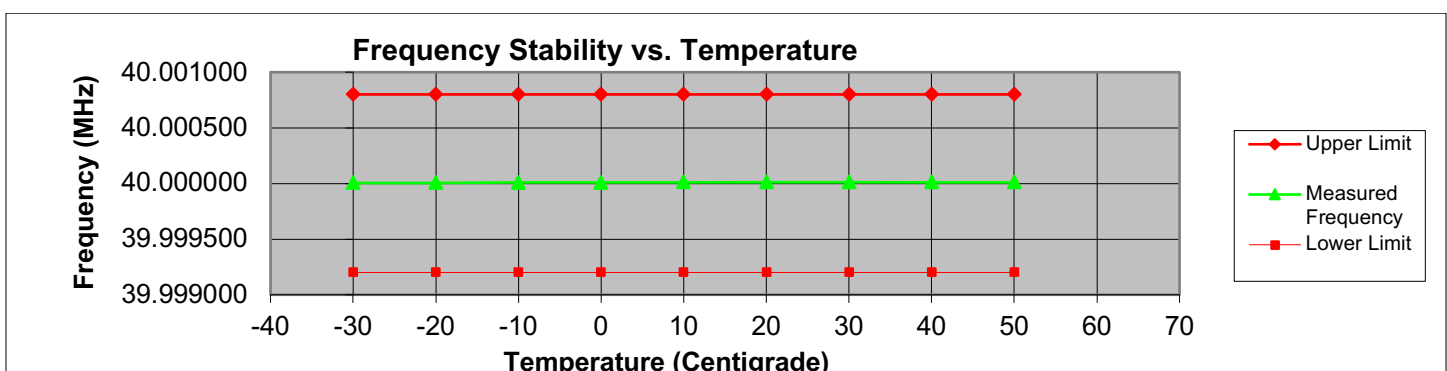
The transmitter DC input = 8 vdc.

Measurement Setup



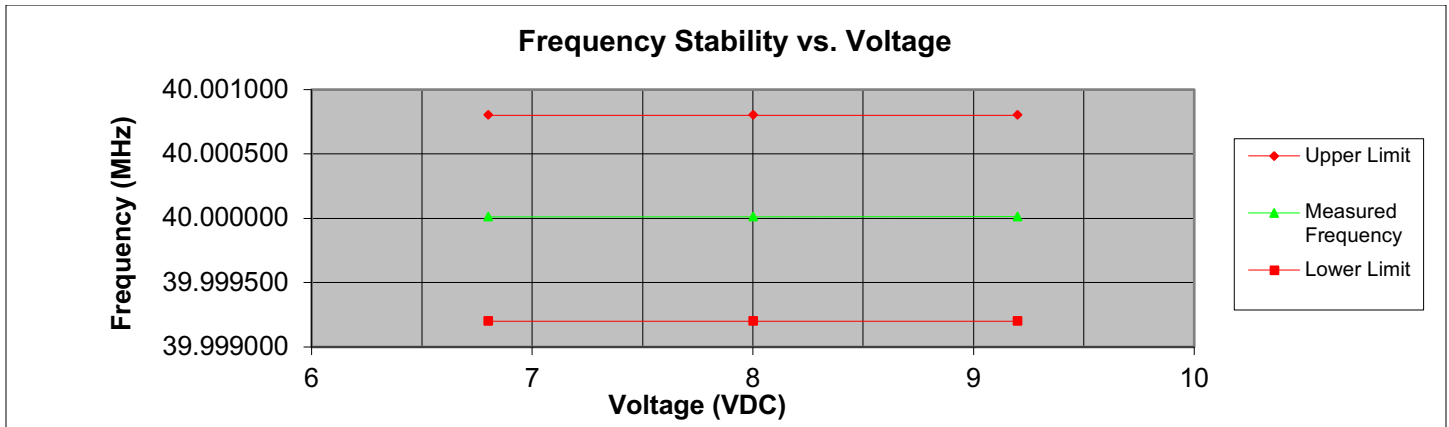
Frequency Stability vs Temperature

Tuned Frequency	Temperature	Tolerance	Measured Frequency	Upper Limit	Lower Limit	Upper Margin	Lower Margin
(MHz)	(deg C)	(PPM)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
40.0	-30	20	40.000004	40.000800	39.999200	-0.000796	0.000804
40.0	-20	20	40.000004	40.000800	39.999200	-0.000796	0.000804
40.0	-10	20	40.000007	40.000800	39.999200	-0.000793	0.000807
40.0	0	20	40.000009	40.000800	39.999200	-0.000791	0.000809
40.0	10	20	40.000010	40.000800	39.999200	-0.000790	0.000810
40.0	20	20	40.000011	40.000800	39.999200	-0.000789	0.000811
40.0	30	20	40.000011	40.000800	39.999200	-0.000789	0.000811
40.0	40	20	40.000010	40.000800	39.999200	-0.000790	0.000810
40.0	50	20	40.000010	40.000800	39.999200	-0.000790	0.000810



Frequency Stability vs Voltage

Tuned Frequency	Tolerance	Voltage	Measured Frequency	Upper Limit	Lower Limit	Upper Margin	Lower Margin
(MHz)	(PPM)	(PPM)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
40.0	20	11.73	40.000011	40.000800	39.999200	-0.000789	0.000811
40.0	20	13.80	40.000011	40.000800	39.999200	-0.000789	0.000811
40.0	20	15.87	40.000011	40.000800	39.999200	-0.000789	0.000811



Necessary Bandwidth Calculations

Engineer: Madhava Gooduru

Test Date: 2/18/2026

Modulation = 11K0F3E	
Necessary Bandwidth Calculation:	
Maximum Modulation (M), kHz	3
Maximum Deviation (D), kHz	2.5
Constant Factor (K)	1
Necessary Bandwidth (B _N), kHz	$(2 \times M) + (2 \times D \times K)$
=	11.0

Modulation = 20K0F3E	
Necessary Bandwidth Calculation:	
Maximum Modulation (M) kHz	3
Maximum Deviation (D), kHz	5
Constant Factor (K)	1
Necessary Bandwidth (B _N), kHz	$(2 \times M) + (2 \times D \times K)$
=	16.0

Modulation = 8K10F1E	
Necessary Bandwidth Calculation:	
Data Rate (R) Kbps	9.6
Maximum Deviation (D), kHz	3.111
Signaling States	4
Constant Factor (K)	0.531
Necessary Bandwidth (B _N), kHz	$(R / \log_2 S) + 2DK$
=	8.1

Modulation = 8K10F1W, 8K10F7D, 8K10F7E	
Necessary Bandwidth Calculation:	
Symbol rate (R _s) sps	6.0
Maximum Deviation (D), kHz	1.05
Constant Factor (K)	1
Necessary Bandwidth (B _N), kHz	$R_s + 2DK$
=	8.1

Modulation = 7K60FXW	
Necessary Bandwidth Calculation:	
Data Rate (R) Kbps	9.6
Maximum Deviation (D), kHz	1.944
Signaling States	4
Constant Factor (K)	0.55
Necessary Bandwidth (B _N), kHz	$(R / \log_2 S) + 2DK$
=	6.94

Test Equipment Utilized

Description	Manufacturer	Model #	CT Asset #	Last Cal Date	Cal Due Date
Digital Radio Test Set	Aeroflex	3920B	i00524	Verified on: 2/4/2026	
Horn Antenna	ARA	DRG-118/A	i00271	8/9/2024	8/9/2026
Temp./humidity/pressure monitor (Main Lab)	Omega Engineering	iBTHX-W-5	i00686	01/28/2026	01/28/2027
Data Logger	Fluke	Hydra Data Bucket	i00343	7/1/2025	7/1/2026
Attenuator, 20 dB, 50W	Minicircuits	BW-N20W50+	i00611	Verified on: 2/4/2026	
Bi-Log Antenna	Schaffner	CBL 6111D	i00349	2/27/2025	2/27/2027
Spectrum Analyzer	Textronix	RSA5126A	i00424	7/1/2025	7/1/2026
Spectrum Analyzer	Agilent	E4445A	I00471	1/25/2025	1/25/2026*
3 Meter Semi-Anechoic Chamber	Panashield	3 Meter Semi-Anechoic Chamber	i00428	7/13/2023	7/13/2026
Multimeter	Fluke	179	i00488	6/25/2025	6/25/2026
MXE EMI receiver	Keysight	N9038A	i00552	3/17/2025	3/17/2026
Temperature Chamber	Thermotron	SE-1000-3-3	i00557	Verified on: 2/5/2026	
DC Power Supply	Keysight	N7973A	i00565	Verified on: 2/4/2026	
Preamplifier	COM-Power	PAM-103	i00734	Verified on: 1/5/2026	
Preamplifier	Eravant	SBB-0115034019-2F2F-E3	i00722	Verified on: 1/5/2026	

Note *: 30-day calibration extension by Quality Manager

In addition to the above-listed equipment, standard RF connectors and cables were utilized in the testing of the equipment described. Prior to testing, these components were tested to verify proper operation.

Measurement Uncertainty

Measurement Uncertainty (U_{lab}) for Compliance Testing is listed in the table below.

Measurement	U_{lab}
Radio Frequency	$\pm 3.3 \times 10^{-8}$
RF Power, conducted	$\pm .54$ dB
RF Power Density, conducted	± 1.0 dB
Conducted Emissions	± 0.94 dB
Radiated Emissions 9kHz-30MHz	± 2.76 dB
Radiated Emissions 30MHz-1000MHz	± 4.25 dB
Radiated Emissions – 1GHz-18GHz	± 4.49 dB
Temperature	± 1.5 deg C
Humidity	± 4.3 %
DC voltage	± 0.20 VDC
AC Voltage	± 1.2 VAC

The reported expanded uncertainty $\pm U_{lab}$ (dB) has been estimated at a 95% confidence level ($k=2$)

U_{lab} is less than or equal to U_{ETSI} therefore

- Compliance is deemed to occur if no measured disturbance exceeds the disturbance limit
- Non-Compliance is deemed to occur if any measured disturbance exceeds the disturbance limit

END OF TEST REPORT