



5.9. Frequency Stability

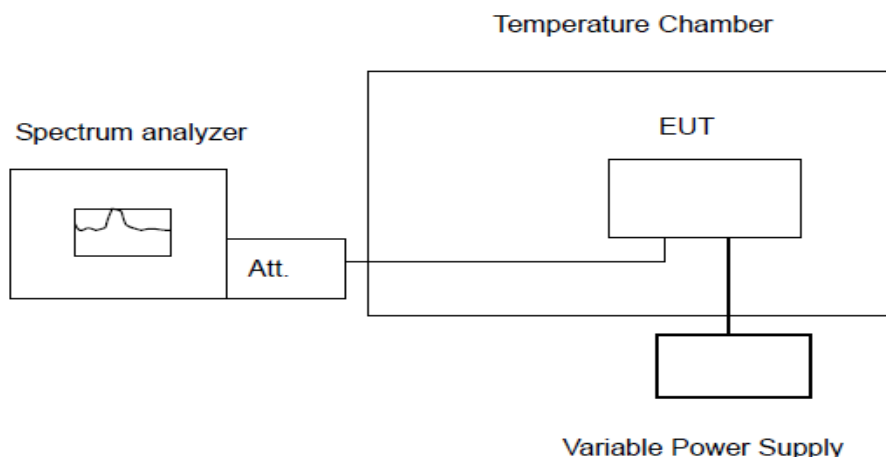
5.9.1. Standard Applicable

According to FCC §15.407(g) "Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user manual."

According to FCC §2.1055(a) "The frequency stability shall be measured with variation of ambient temperature as follows:"

- (1) From -30° to $+50^{\circ}$ centigrade for all equipment except that specified in paragraphs (a) (2) and (3) of this section.
- (2) From -20° to $+50^{\circ}$ centigrade for equipment to be licensed for use in the Maritime Services under part 80 of this chapter, except for Class A, B, and S Emergency Position Indicating Radio beacons (EPIRBS), and equipment to be licensed for use above 952 MHz at operational fixed stations in all services, stations in the Local Television Transmission Service and Point-to-Point Microwave Radio Service under part 21 of this chapter, equipment licensed for use aboard aircraft in the Aviation Services under part 87 of this chapter, and equipment authorized for use in the Family Radio Service under part 95 of this chapter.
- (3) From 0° to $+50^{\circ}$ centigrade for equipment to be licensed for use in the Radio Broadcast Services under part 73 of this chapter.

5.9.2. Block Diagram of Test Setup



5.9.3. Test Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20 degree operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30 degree. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10 degree increased per stage until the highest temperature of +50 degree reached.

5.9.4. Test Results

Pass

Remark:

4. Measured all conditions and recorded worst case.
5. Please refer to Appendix E of Appendix Test Data for RLAN(5.2G).





6. LIST OF MEASURING EQUIPMENT

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
1	MXA Signal Analyzer	Keysight	N9020A	MY52091623	2026-01-11	2027-01-10
2	Power Sensor	Agilent	U2021XA	MY5365004	2026-01-11	2027-01-10
3	Power Meter	Agilent	U2531A	TW53323507	2026-01-11	2027-01-10
4	Loop Antenna	schwarzbeck	FMZB1519B	00023	2025-10-18	2028-10-17
5	Wideband Antenna	schwarzbeck	VULB 9163	958	2025-10-18	2028-10-17
6	Horn Antenna	schwarzbeck	BBHA 9120D	01989	2025-10-18	2028-10-17
7	EMI Test Receiver	R&S	ESCI	100849/003	2026-01-11	2027-01-10
8	Controller	MF	MF7802	N/A	N/A	N/A
9	Amplifier	schwarzbeck	BBV 9743	209	2026-01-11	2027-01-10
10	Amplifier	Tonscend	TSAMP-0518SE	--	2026-01-11	2027-01-10
11	RF Cable(below 1GHz)	HUBER+SUHNER	RG214	N/A	2026-01-11	2027-01-10
12	RF Cable(above 1GHz)	HUBER+SUHNER	RG214	N/A	2026-01-11	2027-01-10
13	Artificial Mains	ROHDE & SCHWARZ	ENV 216	101333-IP	2026-01-11	2027-01-10
14	EMI Test Software	ROHDE & SCHWARZ	ESK1	V1.71	N/A	N/A
15	Amplifier	Chengyi	EMC184045SE	980508	2026-01-11	2027-01-10
16	Horn Antenna	A-INFO	LB-180400-KF	J211020657	2025-10-18	2028-10-17
17	Spectrum Analyzer	R&S	FSV40	101321	2026-01-11	2027-01-10
18	Fixed Attenuator	Mini circuits	BW-S6-2W263A+	N/A	2026-01-11	2027-01-10

Test software used:

Item	Test Software	Manufacturer	Name	Version
1	EMI Test Software	ROHDE & SCHWARZ	ESK1	V1.71
2	RE test software	Tonscend	JS32-RE	V5.0.0.0
3	Test Software	Tonscend	JS1120-3	V3.2.22





7. TEST SETUP PHOTOGRAPHS OF EUT

Please refer to separated files for Test Setup Photos of the EUT.

8. EXTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for External Photos of the EUT.

9. INTERIOR PHOTOGRAPHS OF THE EUT

Please refer to separated files for Internal Photos of the EUT.

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