



2.7.5 Test Setup Diagram

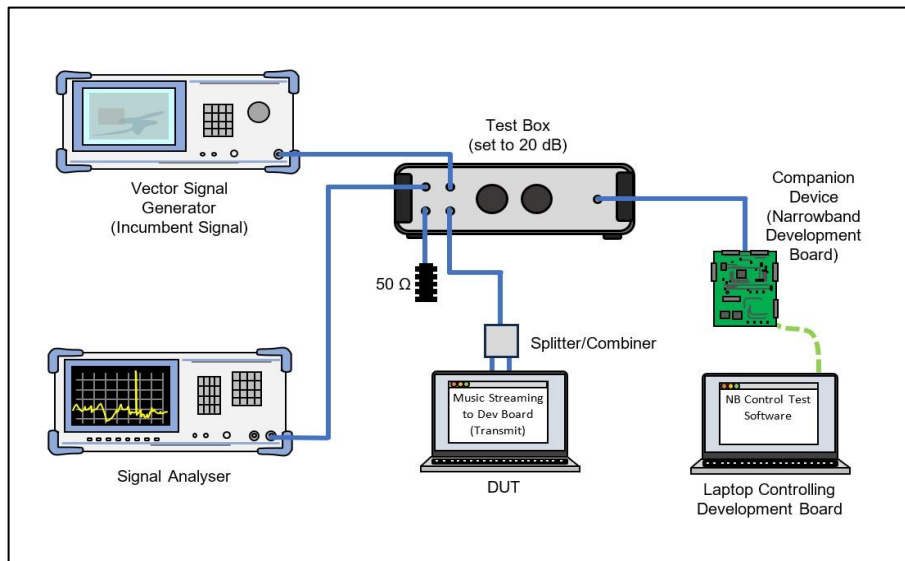


Figure 421 - Test Equipment Setup Diagram

2.7.6 Environmental Conditions

Ambient Temperature	22.7 °C
Relative Humidity	48.8 %



2.7.7 Test Results

Narrowband

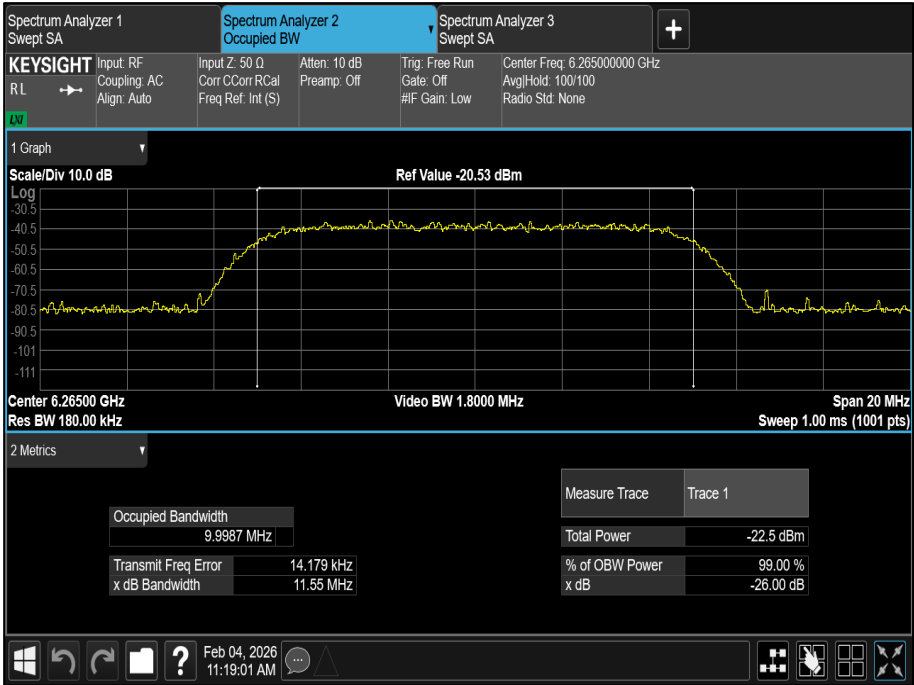


Figure 422 - Example of AWGN Signal



Parameter	Results		
U-NII Band	5	5	5
DUT Hop Centre Frequency (MHz)	6135	6135	6135
AWGN Centre Frequency (MHz)	6135	6135	6135
AWGN Signal Power (dBm)	-74.2	-73.2	-72.0
Antenna Gain (dBi)	2.8	2.8	2.8
Adjusted Power (dBm)	-77.0	-76.0	-74.8
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 219 - U-NII-5, Results

Trial	1	2	3	4	5	6	7	8	9	10	Detection Probability
Detected	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100%

Table 220 – OFF Detection Probability

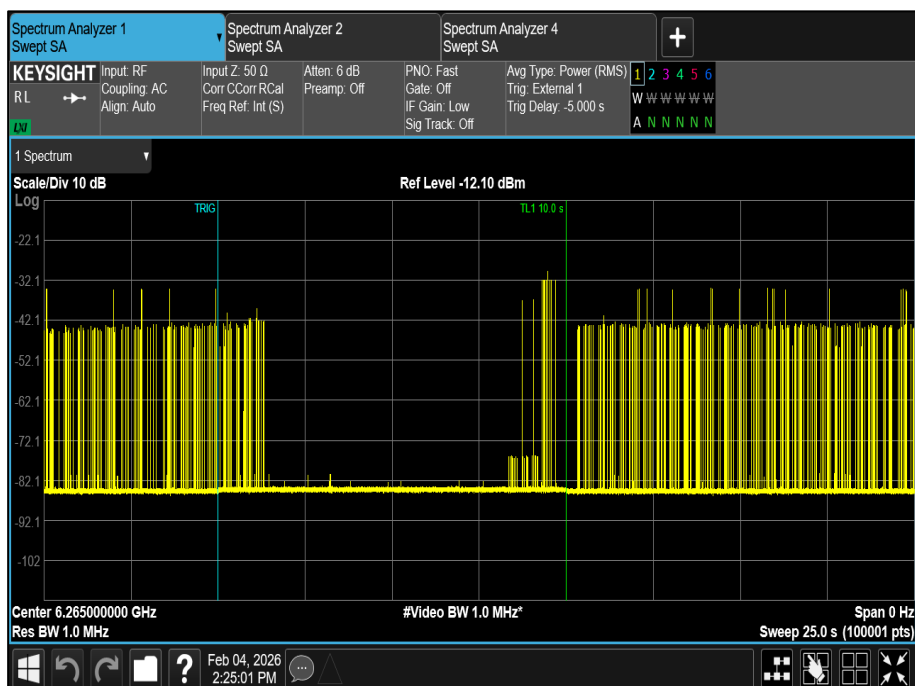


Figure 423 - U-NII-5, State: Minimal

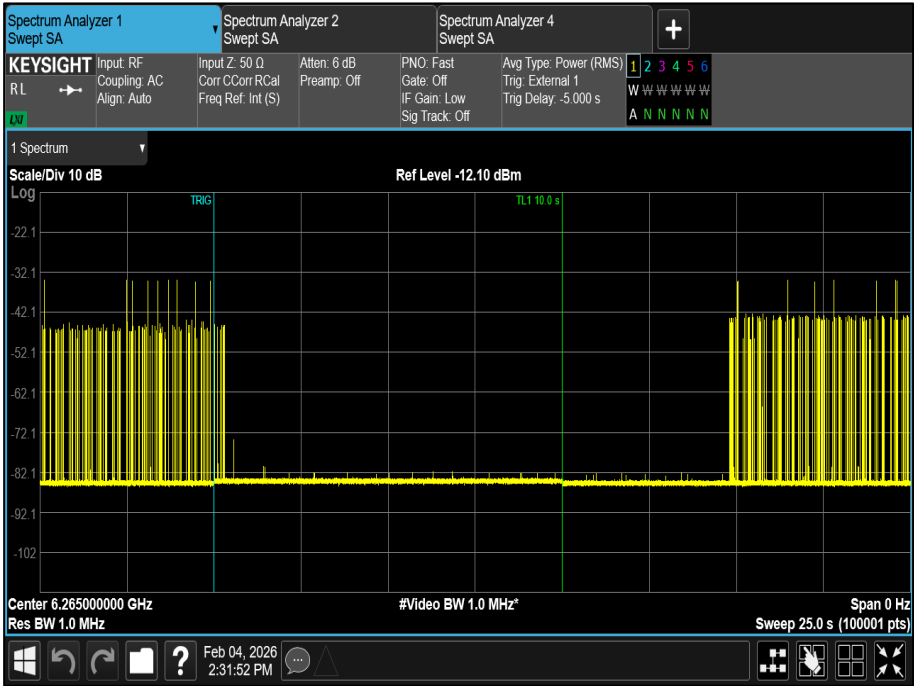


Figure 424 - U-NII-5, State: Off



FCC 47 CFR Part 15.407 (d)(6)

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

KDB 987594, Limit Clause I

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

ISED RSS-248, Limit Clause 4.7.2

The minimum detection threshold power is the received power referenced to a 0 dBi antenna. Devices shall use a contention-based protocol to detect the presence of any emissions on the channel that the device intends to occupy. The device shall be able to detect, within its entire occupied bandwidth, a radio frequency power of at least -62 dBm or lower.

If an emission is detected on a channel, the device shall cease transmissions and shall not resume transmissions on this channel while the detected radio frequency power is at or above the -62 dBm threshold.



2.7.8 Test Location and Test Equipment Used

This test was carried out in Shielded Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
2.92mm 1m cable	Junkosha	MWX211/B	5415	12	23-May-2026
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5429	12	23-May-2026
Cable (N to N 1m)	Junkosha	MWX221-01000AMSAMS/B	6009	12	06-Jun-2026
MXA Signal Analyzer	Keysight Technologies	N9020B	6415	24	31-Mar-2027
Test Coupling Network	TUV SUD	TUV_RxTest_001	6441	12	02-May-2026
Vector Signal Generator (7.5GHz)	Rohde & Schwarz	SMM100A	6532	36	11-Apr-2026
1m SMA Cable	Junkosha	MWX221-01000AMSAMS/B	6920	12	09-Dec-2026
Power Splitter	Mini-Circuits	ZN2PD2-14W-S+	7098	12	25-Jul-2026
Humidity & Temperature meter	Fluke	971	7102	12	05-Aug-2026

Table 221



2.8 Transmit Power Control; Very Low Power Devices

2.8.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (d)(10)

2.8.2 Equipment Under Test and Modification State

A3449, S/N: D1W06FPHVY - Modification State 0

2.8.3 Date of Test

29-January-2026

2.8.4 Test Method

The DUT and companion device was setup for peer-to-peer communication as shown in the test setup diagram below.

The purpose of this test is to demonstrate the ability of the device under test (DUT) to decrease its full power from below the -5 dBm/MHz PSD limit when operating with a low RSSI (poor signal), down to below -11 dBm/MHz as the RSSI is increased (good signal).

Since this mechanism must be tested in real-world operation it must also be tested hopping. This means the spectrum analyser must be in max-hold mode, and therefore average power measurement cannot be made to directly compare to the average PSD limit. Therefore, the delta between high and low RSSI modes was measured and subtracted from the average PSD measured in a non-hopping test mode from the Maximum Conducted Power Spectral Density section of this report.

Initially the value of the attenuation was set to 0 dB and the peak amplitude of all hops was measured. The attenuation was then increased until the EUT adjusted its power to the maximum setting and the difference in peak amplitude measured.

2.8.5 Test Setup Diagram

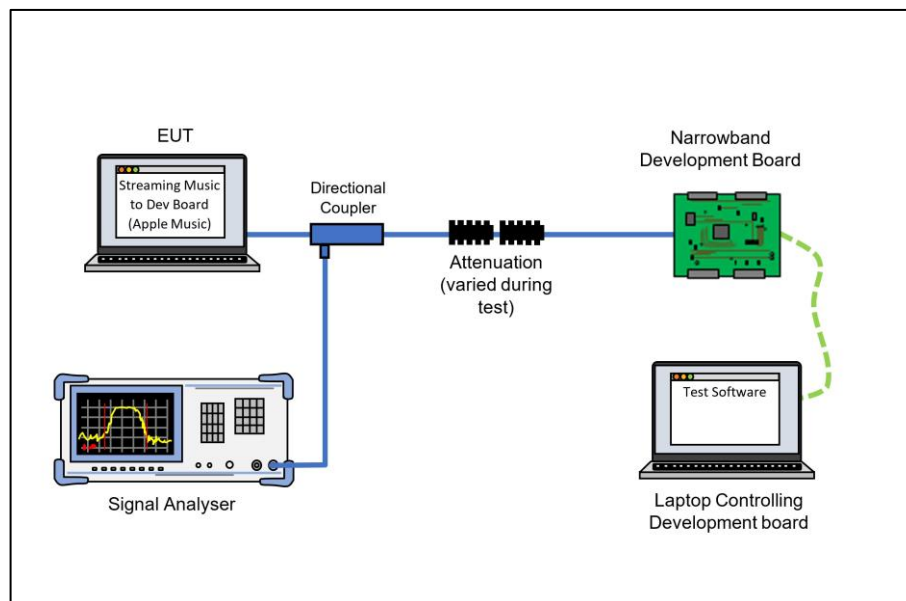


Figure 425 - Test Equipment Setup Diagram

2.8.6 Environmental Conditions

Ambient Temperature	23.3 °C
Relative Humidity	43.2 %

2.8.7 Test Results

Narrowband

Frequency (MHz)	RSSI High Value	RSSI Low Value	Δ PSD (dB)	Full Average PSD EIRP for Low RSSI (dBm/MHz)	Low TPC Average PSD EIRP for High RSSI (dBm/MHz)	Low TPC Limit (dBm/MHz)	Verdict
6140	-1.04	5.27	6.31	-5.41	-11.72	-11.0	Pass

Table 222 - TPC VLP Results



Figure 426 – TPC High vs Low

FCC 47 CFR Part 15, Limit Clause 15.407(d)(10)

Very low power devices operating in the 5.925-6.425 and 6.525-6.875 GHz bands shall employ a transmit power control (TPC) mechanism. A very low power device is required to have the capability to operate at least 6 dB below the maximum EIRP power spectral density (PSD) value of -5 dBm/MHz.



2.8.8 Test Location and Test Equipment Used

This test was carried out in Shielded Laboratory 1.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
2.92mm 1m cable	Junkosha	MWX211/B	5415	12	23-May-2026
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5429	12	23-May-2026
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5766	-	O/P Mon
MXA Signal Analyzer	Keysight Technologies	N9020B	6415	24	31-Mar-2027
Vector Signal Generator (7.5GHz)	Rohde & Schwarz	SMM100A	6532	36	11-Apr-2026
Attenuator 5W 20dB DC-18GHz	Aaren	AT40A-4041-D18-20	6554	12	17-Jun-2026
10dB attenuator	RF-Lambda	RFS5G08B10SMF	6731	12	14-Jan-2027
10dB attenuator	RF-Lambda	RFS5G08B10SMF	6732	12	14-Jan-2027
1m SMA Cable	Junkosha	MWX221-01000AMSAMS/B	6920	12	09-Dec-2026
Humidity & Temperature meter	Fluke	971	7102	12	05-Aug-2026

Table 223

O/P Mon - Output Monitored using calibrated equipment



2.9 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Maximum Conducted Output Power	Method PM: ± 0.65 dB Method SA: ± 1.05 dB
Maximum Conducted Power Spectral Density	± 1.00 dB
Emission Bandwidth	± 272.83 kHz
Authorised Band Edges	± 6.3 dB
Spurious Radiated Emissions	30 MHz to 1 GHz: ± 5.2 dB 1 GHz to 40 GHz: ± 6.3 dB
Unwanted Emissions within the 5925-7125 MHz band	± 3.45 dB
Contention Based Protocol	Time: 0.30% Interferer BW: 267.98 kHz Interferer Level: 0.80 dB
Transmit Power Control; Very Low Power Devices	± 1.49 dB

Table 224

Measurement Uncertainty Decision Rule – Accuracy Method

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2021, Clause 4.4.3 (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.