



Test Configuration			
Frequency Range:	5.925-6.425 GHz 6.425-6.525 GHz 6.525-6.875 GHz 6.875-7.125 GHz	Band:	U-NII-5 U-NII-6 U-NII-7 U-NII-8
Limit Clause(s):	15.407(b)(7) / RSS-248 4.6.2	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE160 SU VLP	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	TxBF	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
6185	-8.43	-7.83	-	-
6345	-7.24	-6.40	-	-
6505	-5.41	-7.61	-	-
6665	-5.85	-6.15	-	-
6825	-7.74	-7.48	-	-
6985	-7.54	-8.41	-	-

Table 1111 - Unwanted Emissions Within the Band Results



FCC 47 CFR Part 15, Limit Clause 15.407(b)(7)

For transmitters operating within the 5.925-7.125 GHz bands:

Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel centre, and by 40 dB at one- and one-half times the channel bandwidth away from channel centre. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the centre of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel centre by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

ISED RSS-248, Limit Clause 4.6.2(b)

e.i.r.p. spectral density of unwanted emissions falling into the 5925-7125 MHz band shall be attenuated (in dB) below the reference power spectral density by:

- i. 20 dB at 1 MHz away from the channel edge; and
- ii. a linearly interpolated value between 20 dB and 28 dB at frequencies between 1 MHz outside of channel edge and one (1) channel bandwidth from the operating channel centre, respectively; and
- iii. 28 dB at one (1) channel bandwidth away from the operating channel centre; and
- iv. a linearly interpolated value between 28 dB and 40 dB at frequencies between one (1) channel bandwidth from the channel centre and one- and one-half (1.5) times the channel bandwidth away from the operating channel centre, respectively; and
- v. 40 dB at one- and one-half (1.5) times the channel bandwidth away from the channel centre; and
- vi. a minimum of 40 dB at frequencies that are further away than one and one-half (1.5) times the channel bandwidth from the channel centre.



2.7.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 14 and RF Laboratory 18.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	02-Jan-2027
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	5759	12	05-Mar-2027
MXA Signal Analyser	Keysight Technologies	N9020B	5919	24	31-Mar-2027
Digital Multimeter	Fluke	115	6147	12	03-Jun-2027
MXA Signal Analyzer	Keysight Technologies	N9020B	6416	24	07-May-2027
MXA Signal Analyser	Keysight Technologies	N9020B	6419	24	16-Jun-2028
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	16-Mar-2027
Humidity and Temperature Meter	R.S Components	1364	6486	12	23-Jul-2027
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	25-Feb-2027
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	25-Feb-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6526	12	25-Feb-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6527	12	25-Feb-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6529	12	25-Feb-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	25-Feb-2027
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	16-Mar-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	16-Mar-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6903	12	05-Mar-2027
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6904	12	05-Mar-2027

Table 1112

O/P Mon - Output Monitored using calibrated equipment



2.8 Contention Based Protocol

2.8.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (d)(6)
ISED RSS-248, Clause 4.7

2.8.2 Equipment Under Test and Modification State

A3589, S/N: KMHJT7G919 - Modification State 0

2.8.3 Date of Test

04-May-2026 to 05-May-2026

2.8.4 Test Method

This test was performed in accordance with KDB 987594 D02, clause I.

The EUT was tested in SISO mode on Core 1, as this the port has the lowest gain antenna.

The EUT was set to HE20 MCS0 (Minimum) & HE160 MCS0 (Maximum)

The AWGN signal level was initially set at a level much less than the required threshold level (-62 dBm), it was verified at this point that transmissions from the device under test (DUT) were present. The signal level was gradually increased until it was observed that the DUT continuously ceased transmissions with the AWGN signal present, i.e. no partial transmissions other than short control signaling transmissions.

The AWGN Signal level recorded is the level into the DUT's receiver, corrected for all cable losses. The minimum antenna gain value was then used to correct the level as described in KDB 987594 D04.

Timing plots showing verification that transmissions from the DUT responded to the interferer have been included in the test results below.

The manufacturer has declared the device supports channel puncturing and channel bandwidth reduction. The device uses the IEEE 802.11 Clause 36 of the IEEE 802.11be (Wi-Fi 7) amendment or Clause 27 of the 802.11ax (Wi-Fi 6) standard process for channel puncturing. The device supports 20MHz puncturing on 80MHz and 160MHz baseline channel size, and 40MHz puncturing in 160MHz baseline channel size.

The bandwidth reduction implemented depends on the position of the EUTs 20 MHz control channel section within the current operating bandwidth. If the incumbent is within the control channel portion, the whole channel shuts down, otherwise the EUT will switch to the largest 80 MHz, 40 MHz, or 20 MHz bandwidth that includes the control channel, but not the incumbent.

Plots of this behaviour for 160 MHz channel 47 with the control channel set to the Preferred Scanning Channel (PSC) of 37 can be seen at the end of the results section.

2.8.5 Test Setup Diagram

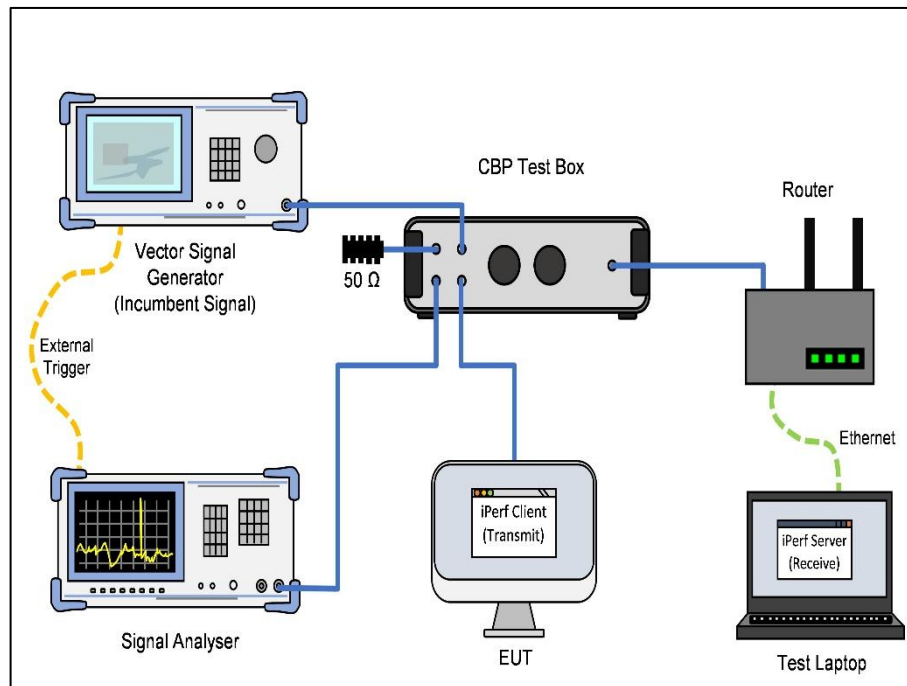


Figure 819 - Test Equipment Setup Diagram

2.8.6 Environmental Conditions

Ambient Temperature	20.1 °C
Relative Humidity	58.7 %



2.8.7 Test Results

6 GHz WLAN

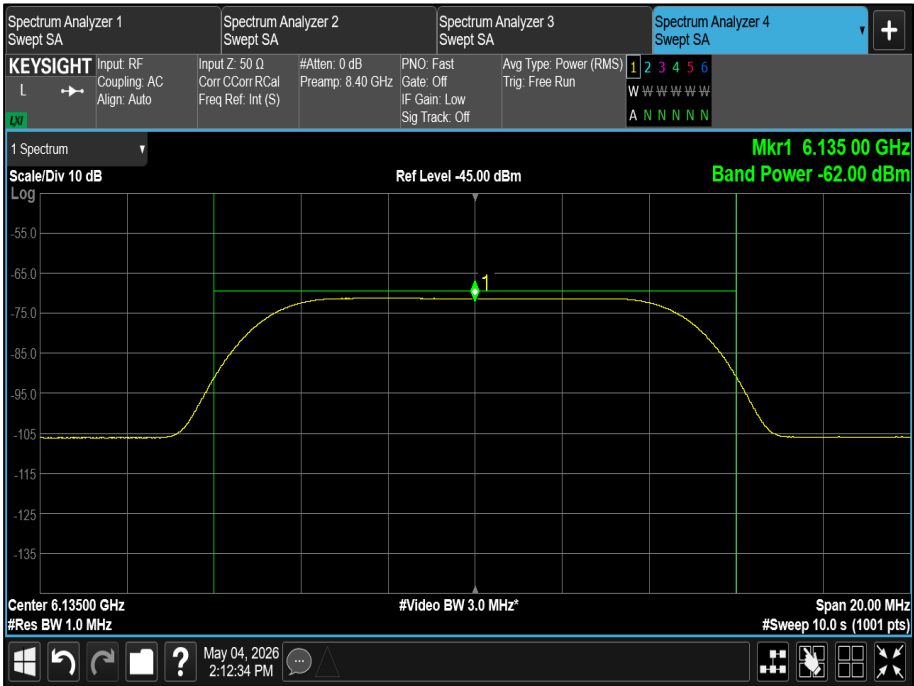


Figure 820 - Example of AWGN Signal



Parameter	Results		
U-NII Band	5	5	5
Channel Number	37	37	37
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6135	6135	6135
AWGN Centre Frequency (MHz)	6135	6135	6135
AWGN Signal Power (dBm)	-69.1	-61.60	-60.9
Antenna Gain (dBi)	2.90	2.90	2.90
Adjusted Power (dBm)	-72.00	-64.50	-63.8
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF
Detection Probability (Successful trials out of 10)	100%	100%	100%

Table 1113 - U-NII-5, Minimum Bandwidth



Figure 821 - U-NII-5, Minimum Bandwidth, State: Minimal

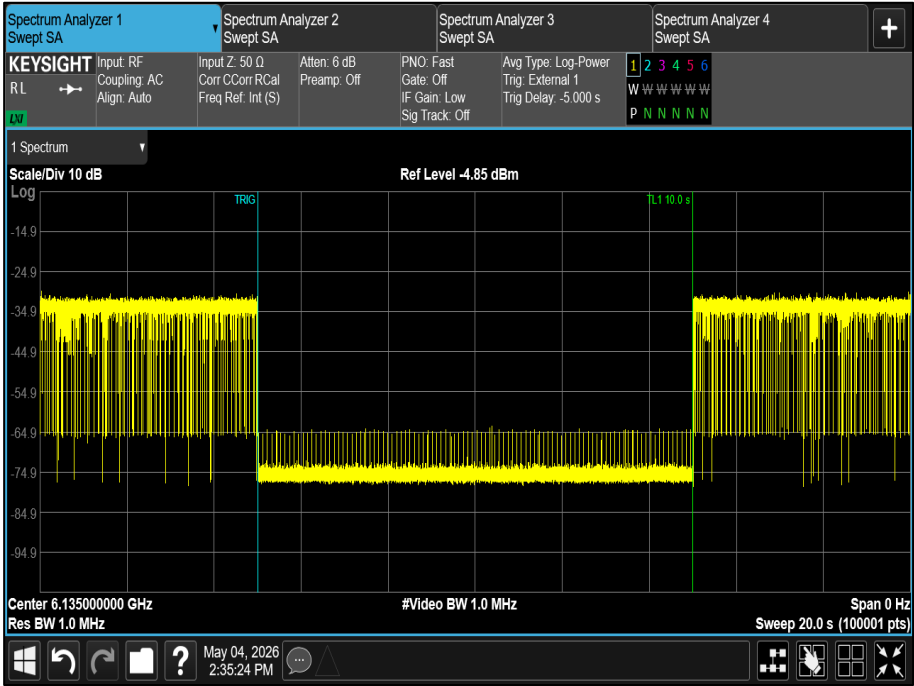


Figure 822 - U-NII-5, Minimum Bandwidth, State: Off



Parameter	Results		
U-NII Band	5	5	5
Channel Number	47	47	47
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6185	6185	6185
AWGN Centre Frequency (MHz)	6110	6110	6110
AWGN Signal Power (dBm)	-69.10	-66.85	-66.4
Antenna Gain (dBi)	2.90	2.90	2.90
Adjusted Power (dBm)	-72.00	-69.75	-69.3
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off
Detection Probability (Successful trials out of 10)	100%	100%	100%

Table 1114 - U-NII-5, Maximum Bandwidth (AWGN Low)



Figure 823 - U-NII-5, Maximum Bandwidth (AWGN Low), State: Minimal

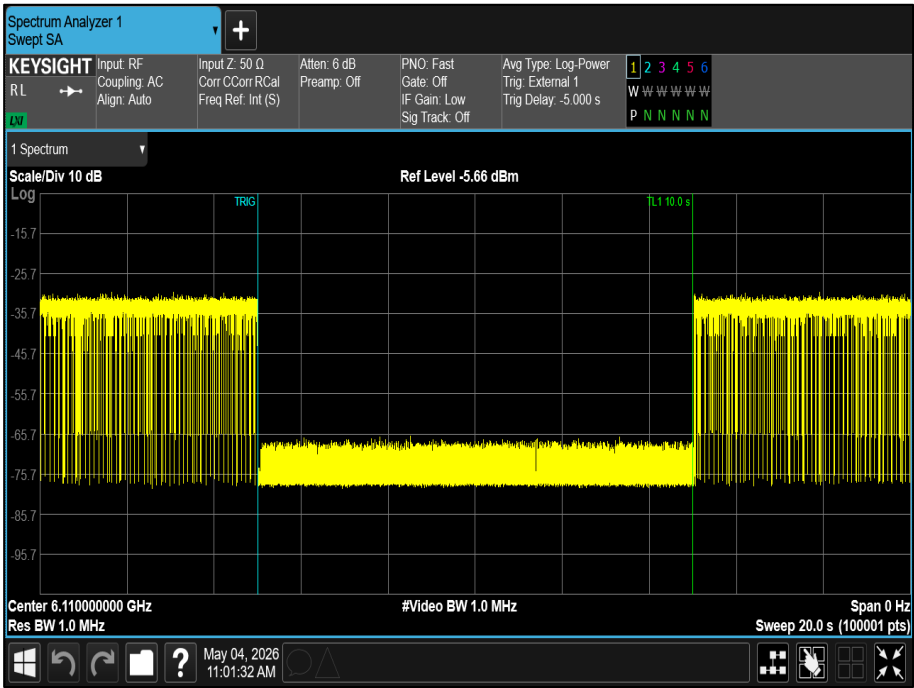


Figure 824 - U-NII-5, Maximum Bandwidth (AWGN Low), State: Off



Parameter	Results		
U-NII Band	5	5	5
Channel Number	47	47	47
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6185	6185	6185
AWGN Centre Frequency (MHz)	6185	6185	6185
AWGN Signal Power (dBm)	-67.10	-63.35	-62.4
Antenna Gain (dBi)	2.90	2.90	2.90
Adjusted Power (dBm)	-70.00	-66.25	-65.3
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off
Detection Probability (Successful trials out of 10)	90%	90%	90%

Table 1115 - U-NII-5, Maximum Bandwidth (AWGN Mid)



Figure 825 - U-NII-5, Maximum Bandwidth (AWGN Mid), State: Minimal

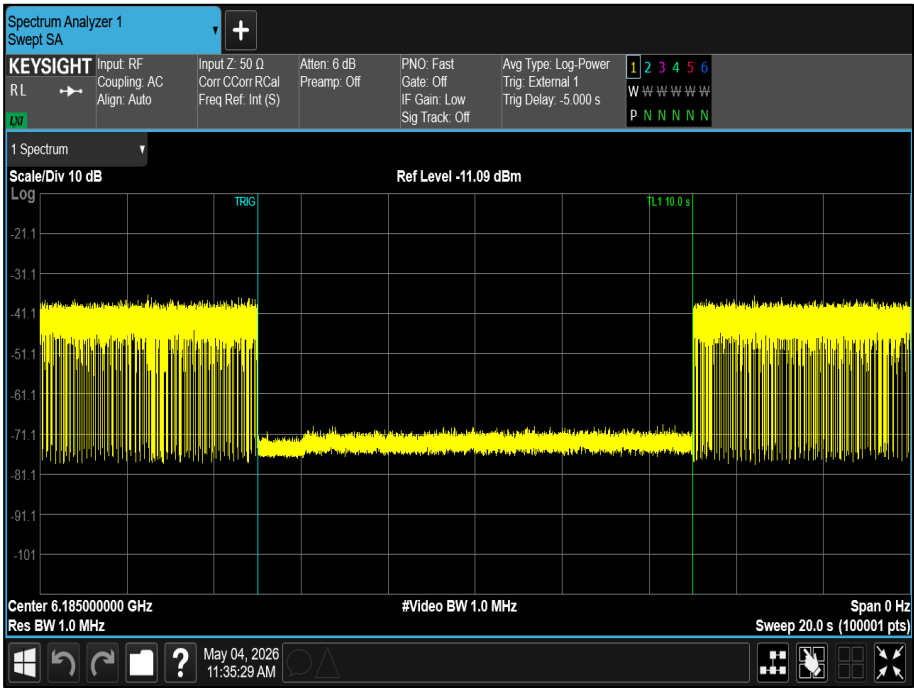


Figure 826 - U-NII-5, Maximum Bandwidth (AWGN Mid), State: Off



Parameter	Results		
U-NII Band	5	5	5
Channel Number	47	47	47
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6185	6185	6185
AWGN Centre Frequency (MHz)	6260	6260	6260
AWGN Signal Power (dBm)	-69.10	-67.10	-66.9
Antenna Gain (dBi)	2.90	2.90	2.90
Adjusted Power (dBm)	-72.00	-70.00	-69.8
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off
Detection Probability (Successful trials out of 10)	100%	100%	100%

Table 1116 - U-NII-5, Maximum Bandwidth (AWGN High)



Figure 827 - U-NII-5, Maximum Bandwidth (AWGN High), State: Minimal



Parameter	Results		
U-NII Band	6	6	6
Channel Number	101	101	101
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6455	6455	6455
AWGN Centre Frequency (MHz)	6455	6455	6455
AWGN Signal Power (dBm)	-69.10	-62.10	-61.4
Antenna Gain (dBi)	4.90	4.90	4.90
Adjusted Power (dBm)	-74.00	-67.00	-66.3
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1117 - U-NII-6, Minimum Bandwidth

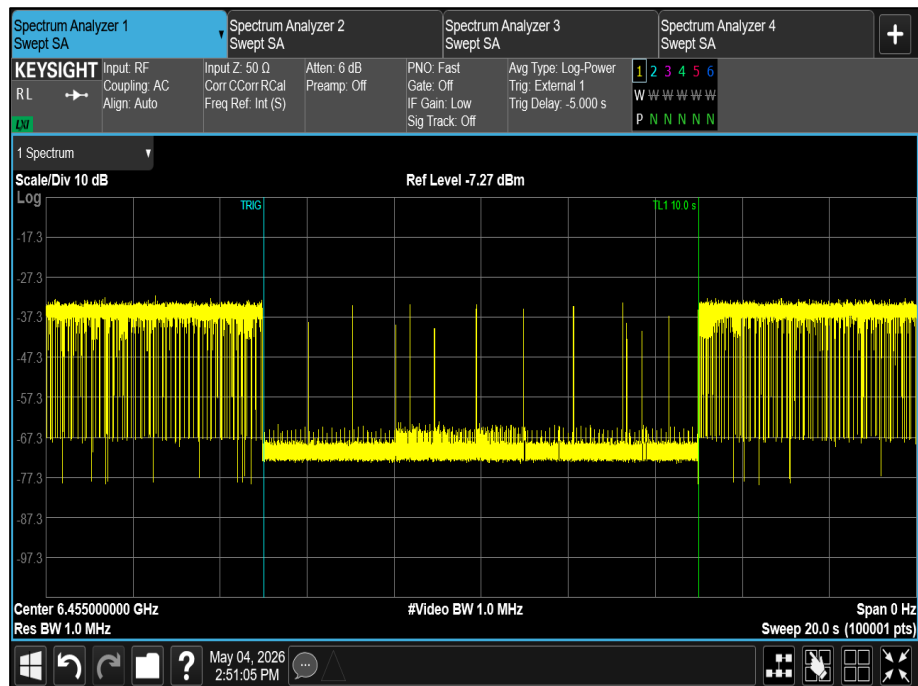


Figure 829 - U-NII-6, Minimum Bandwidth, State: Minimal



Figure 830 - U-NII-6, Minimum Bandwidth, State: Off

Parameter	Results		
U-NII Band	6	6	6
Channel Number	111	111	111
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6505	6505	6505
AWGN Centre Frequency (MHz)	6430	6430	6430
AWGN Signal Power (dBm)	-69.10	-66.85	-66.6
Antenna Gain (dBi)	4.90	4.90	4.90
Adjusted Power (dBm)	-74.00	-71.75	-71.5
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1118 - U-NII-6, Maximum Bandwidth (AWGN Low)

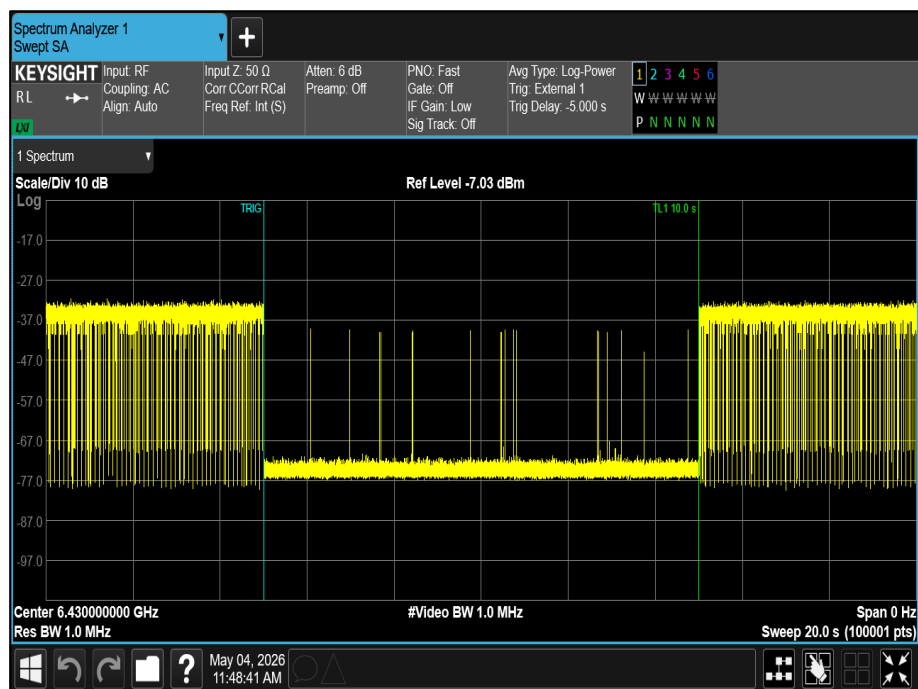


Figure 831 - U-NII-6, Maximum Bandwidth (AWGN Low), State: Minimal

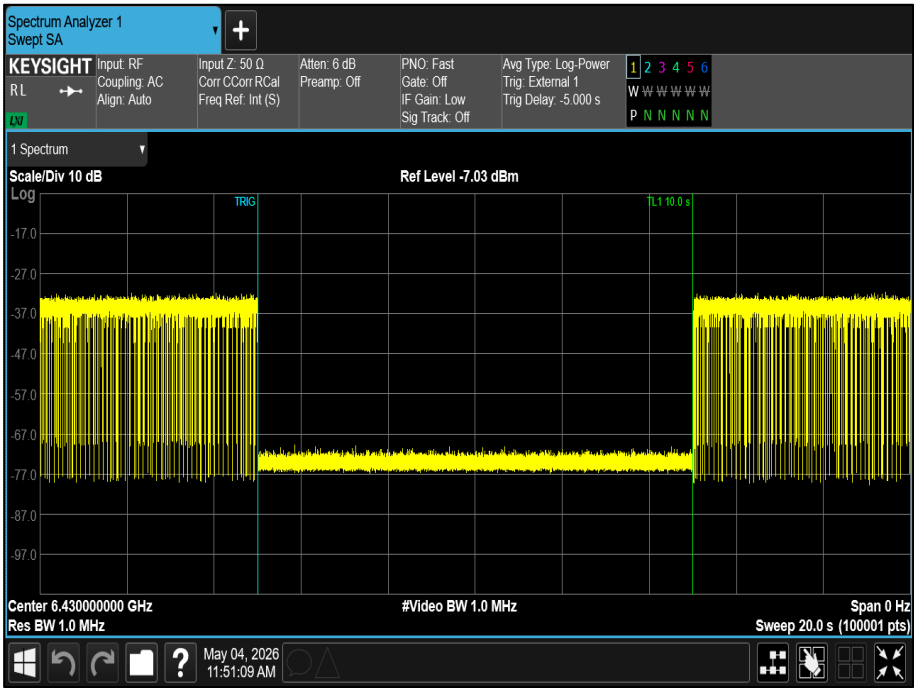


Figure 832 - U-NII-6, Maximum Bandwidth (AWGN Low), State: Off



Parameter	Results		
U-NII Band	6	6	6
Channel Number	111	111	111
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6505	6505	6505
AWGN Centre Frequency (MHz)	6505	6505	6505
AWGN Signal Power (dBm)	-67.1	-64.85	-64.35
Antenna Gain (dBi)	4.90	4.90	4.90
Adjusted Power (dBm)	-72.0	-69.75	-69.25
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1119 - U-NII-6, Maximum Bandwidth (AWGN Mid)



Figure 833 - U-NII-6, Maximum Bandwidth (AWGN Mid), State: Minimal

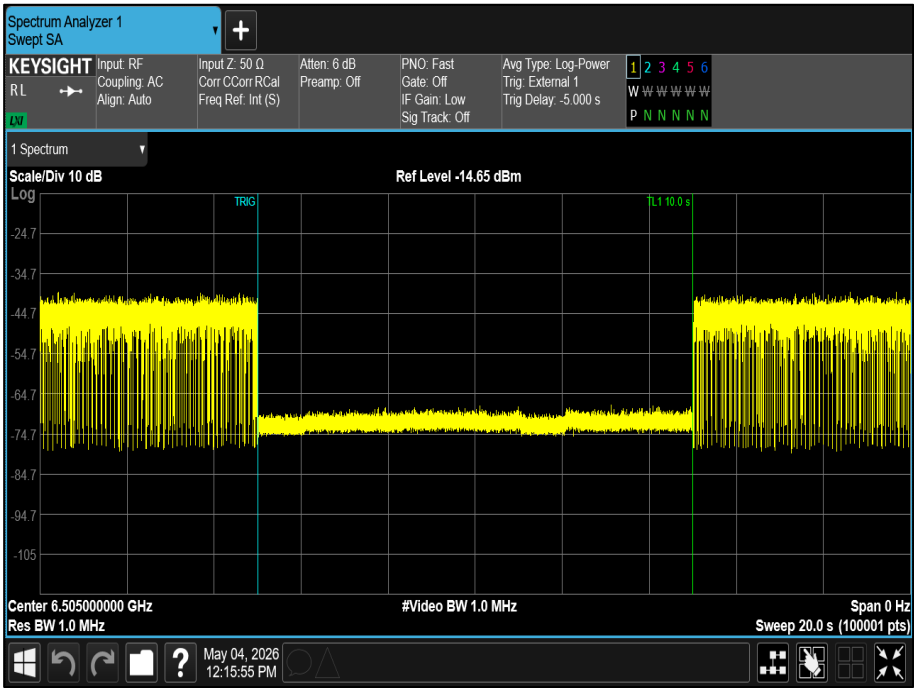


Figure 834 - U-NII-6, Maximum Bandwidth (AWGN Mid), State: Off

Parameter	Results		
U-NII Band	6	6	6
Channel Number	111	111	111
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6505	6505	6505
AWGN Centre Frequency (MHz)	6580	6580	6580
AWGN Signal Power (dBm)	-68.1	-66.60	-65.35
Antenna Gain (dBi)	4.90	4.90	4.90
Adjusted Power (dBm)	-73.0	-71.50	-70.25
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	100%	100%	100%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1120 - U-NII-6, Maximum Bandwidth (AWGN High)

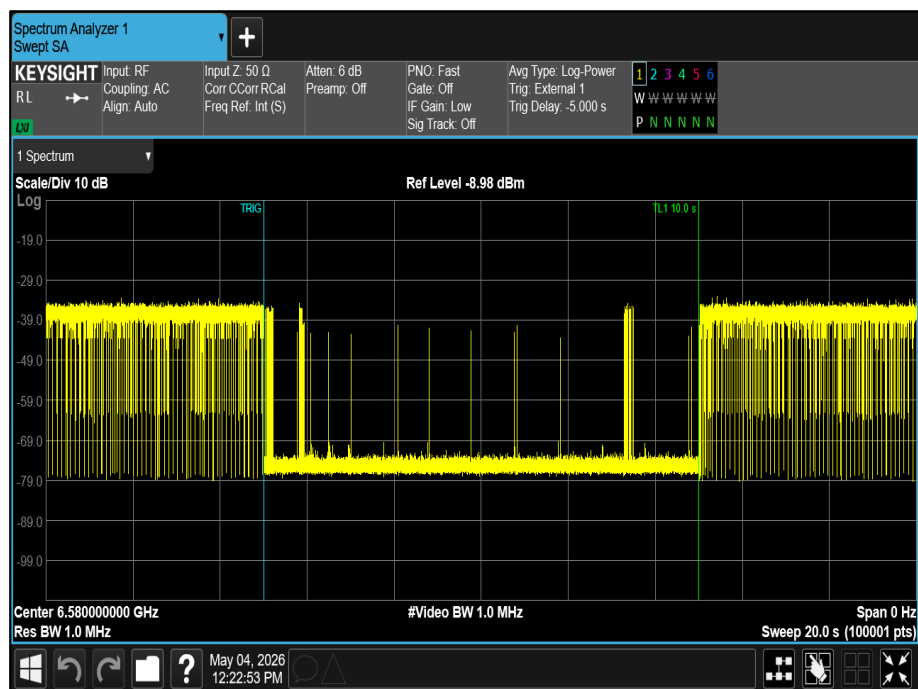


Figure 835 - U-NII-6, Maximum Bandwidth (AWGN High), State: Minimal

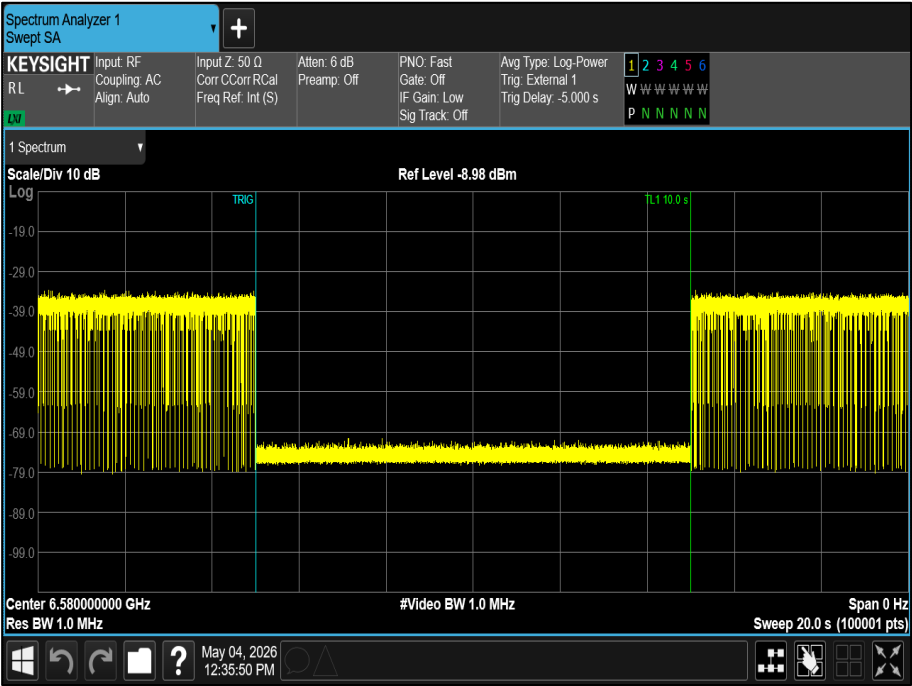


Figure 836 - U-NII-6, Maximum Bandwidth (AWGN High), State: Off

Parameter	Results		
U-NII Band	7	7	7
Channel Number	133	133	133
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6615	6615	6615
AWGN Centre Frequency (MHz)	6615	6615	6615
AWGN Signal Power (dBm)	-66.30	-61.55	-61.1
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-69.00	-64.25	-63.8
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1121 - U-NII-7, Minimum Bandwidth

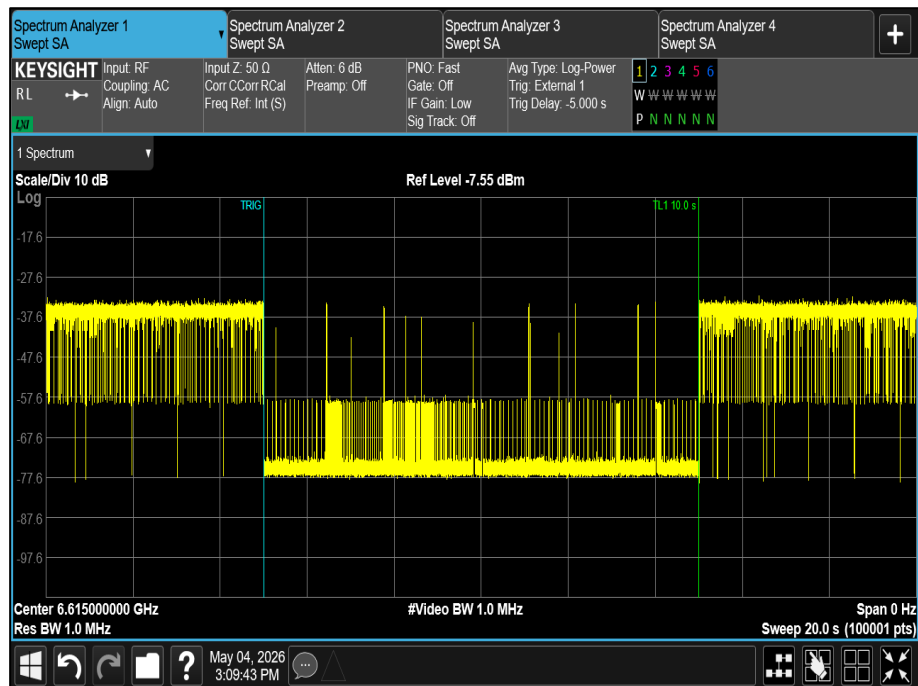


Figure 837 - U-NII-7, Minimum Bandwidth, State: Minimal



Figure 838 - U-NII-7, Minimum Bandwidth, State: Off

Parameter	Results		
U-NII Band	7	7	7
Channel Number	143	143	143
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6665	6665	6665
AWGN Centre Frequency (MHz)	6590	6590	6590
AWGN Signal Power (dBm)	-69.3	-66.80	-66.55
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-72.0	-69.50	-69.25
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	100%	100%	100%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1122 - U-NII-7, Maximum Bandwidth (AWGN Low)

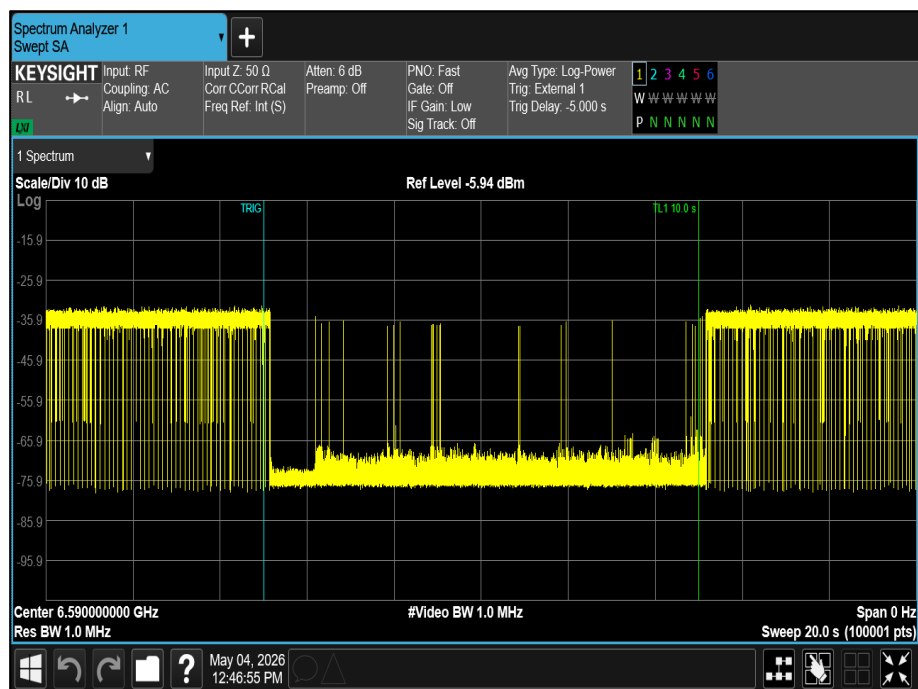


Figure 839 - U-NII-7, Maximum Bandwidth (AWGN Low), State: Minimal

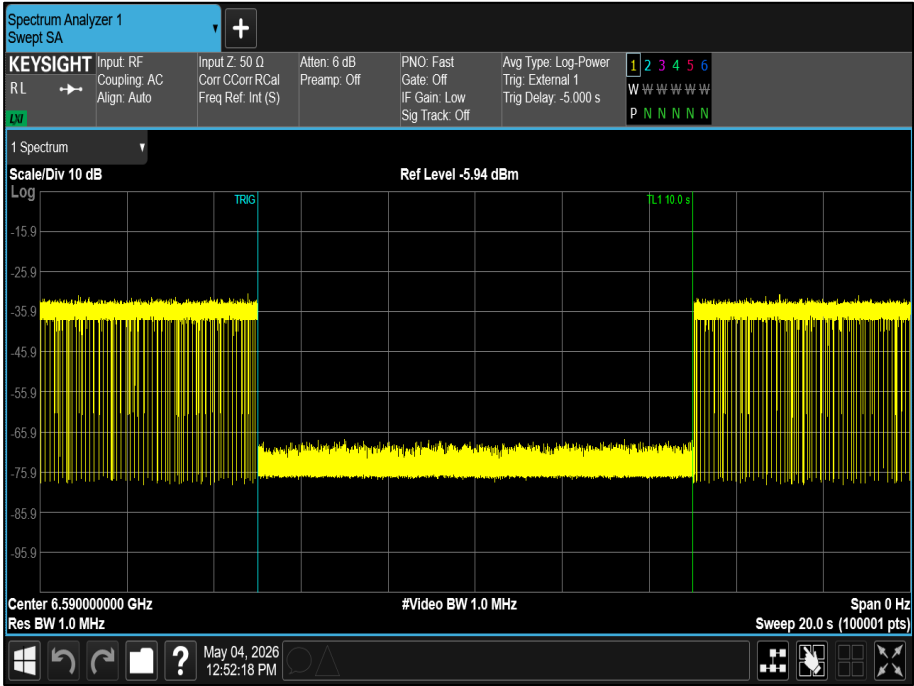


Figure 840 - U-NII-7, Maximum Bandwidth (AWGN Low), State: Off

Parameter	Results		
U-NII Band	7	7	7
Channel Number	143	143	143
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6665	6665	6665
AWGN Centre Frequency (MHz)	6665	6665	6665
AWGN Signal Power (dBm)	-67.3	-65.05	-64.8
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-70.0	-67.75	-67.5
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	100%	100%	100%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1123 - U-NII-7, Maximum Bandwidth (AWGN Mid)

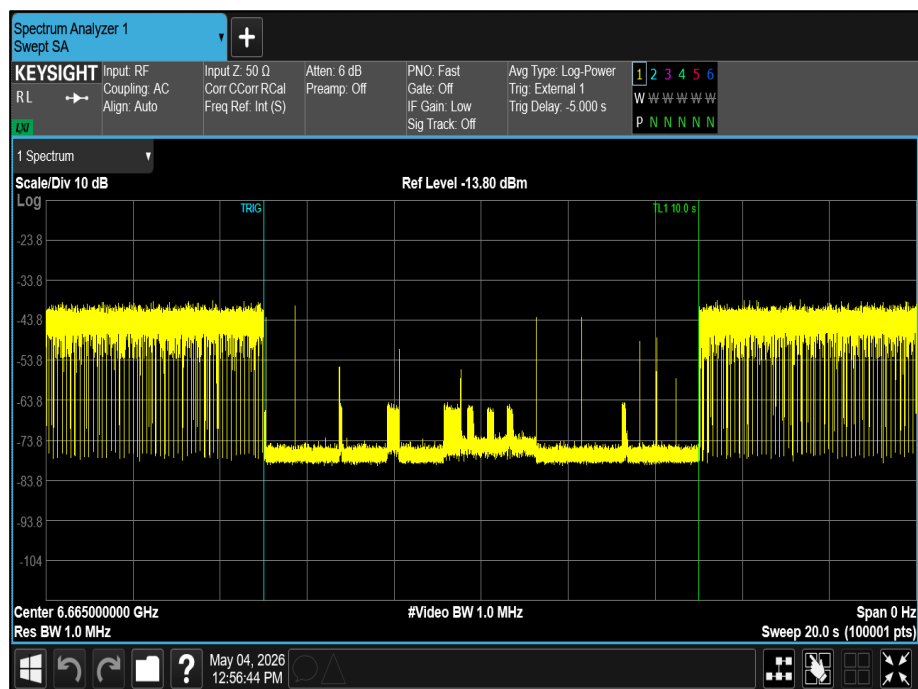


Figure 841 - U-NII-7, Maximum Bandwidth (AWGN Mid), State: Minimal

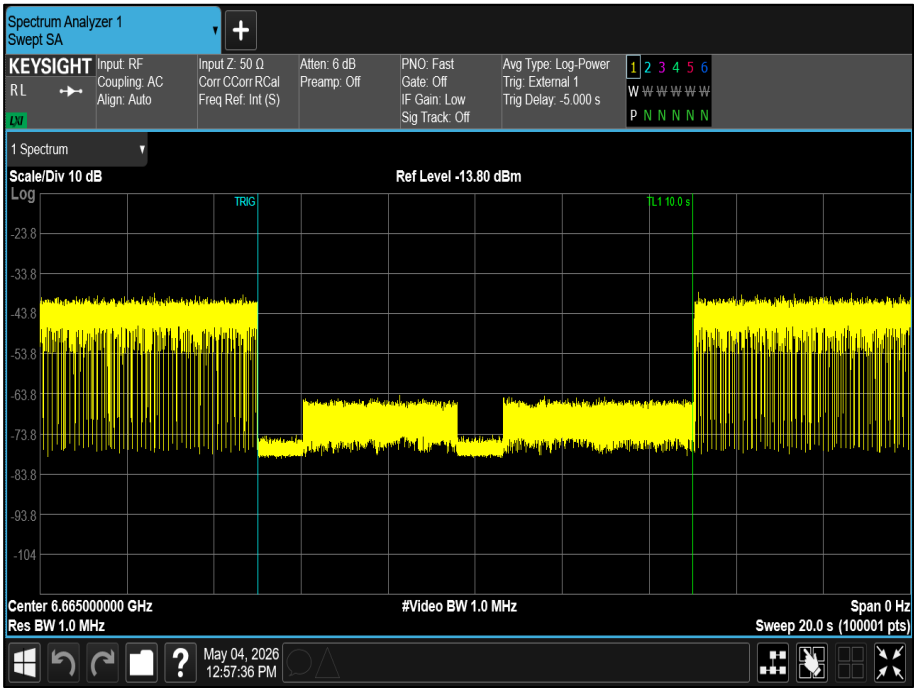


Figure 842 - U-NII-7, Maximum Bandwidth (AWGN Mid), State: Off

Parameter	Results		
U-NII Band	7	7	7
Channel Number	143	143	143
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6665	6665	6665
AWGN Centre Frequency (MHz)	6740	6740	6740
AWGN Signal Power (dBm)	-69.3	-67.30	-67.05
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-72.0	-70.00	-69.75
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1124 - U-NII-7, Maximum Bandwidth (AWGN High)

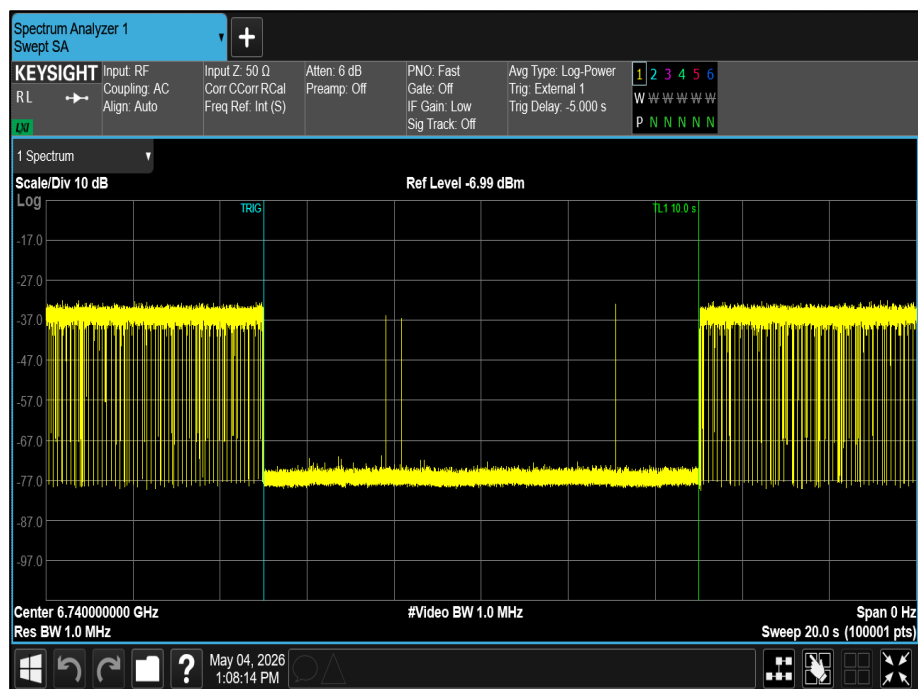


Figure 843 - U-NII-7, Maximum Bandwidth (AWGN High), State: Minimal

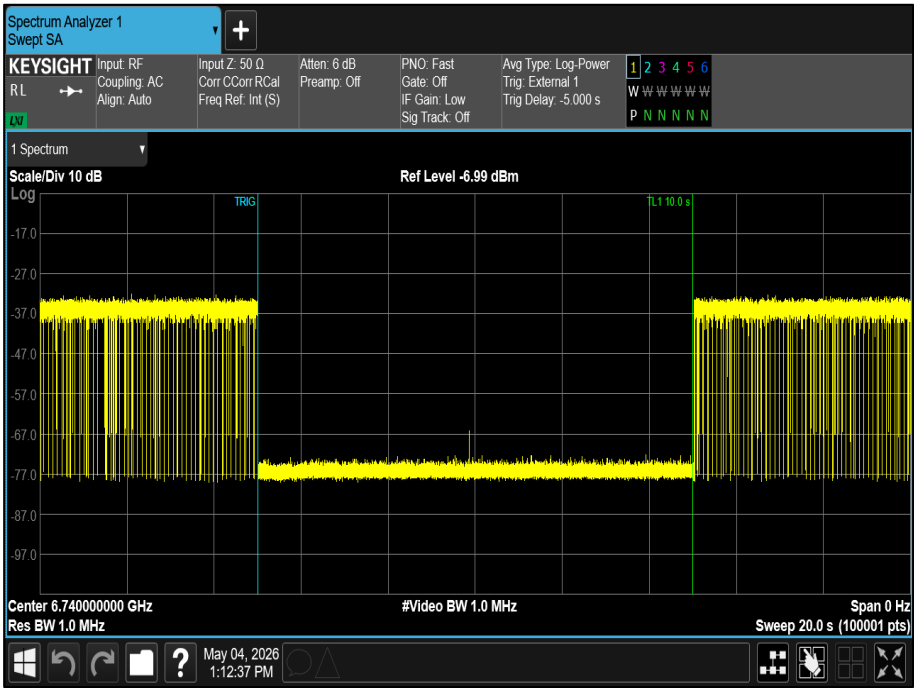


Figure 844 - U-NII-7, Maximum Bandwidth (AWGN High), State: Off

Parameter	Results		
U-NII Band	8	8	8
Channel Number	197	197	197
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6935	6935	6935
AWGN Centre Frequency (MHz)	6935	6935	6935
AWGN Signal Power (dBm)	-69.30	-62.05	-61.1
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-72.00	-64.75	-63.8
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1125 - U-NII-8, Minimum Bandwidth

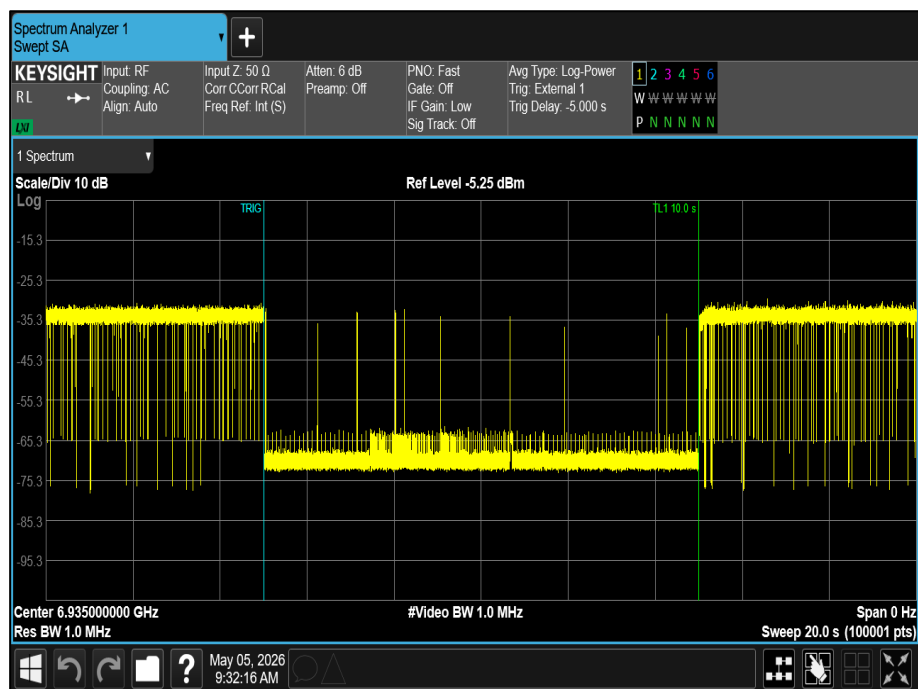


Figure 845 - U-NII-8, Minimum Bandwidth, State: Minimal

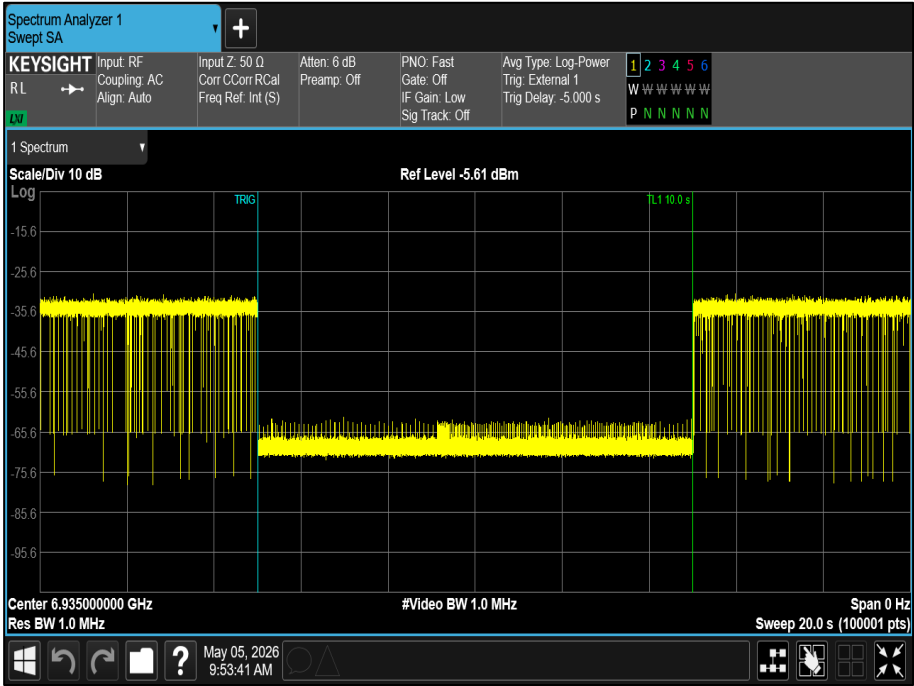


Figure 846 - U-NII-8, Minimum Bandwidth, State: Off

Parameter	Results		
U-NII Band	8	8	8
Channel Number	207	207	207
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6985	6985	6985
AWGN Centre Frequency (MHz)	6910	6910	6910
AWGN Signal Power (dBm)	-69.3	-66.80	-66.55
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-72.0	-69.50	-69.25
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1126 - U-NII-8, Maximum Bandwidth (AWGN Low)

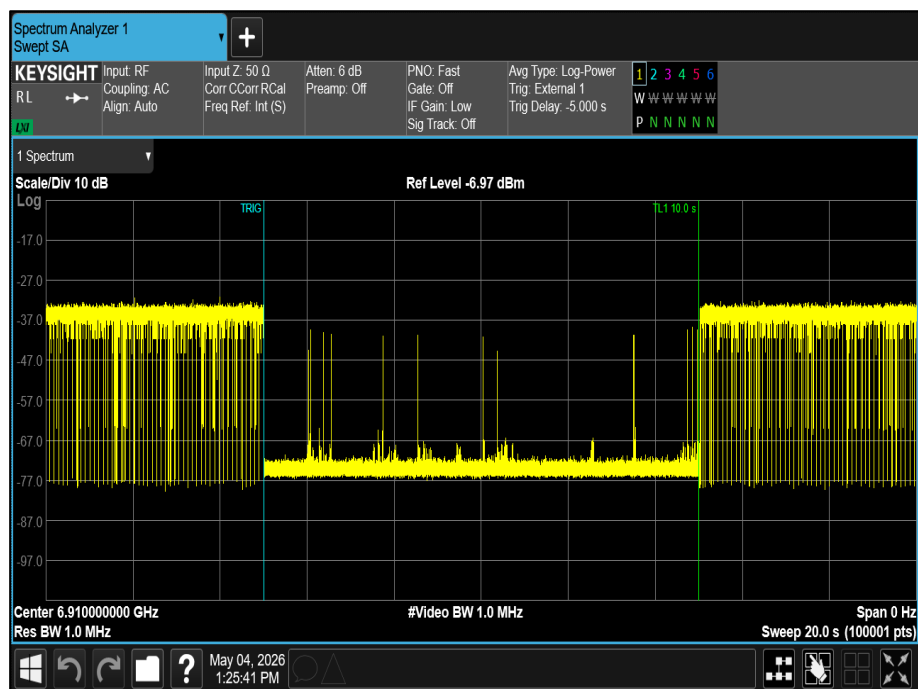


Figure 847 - U-NII-8, Maximum Bandwidth (AWGN Low), State: Minimal

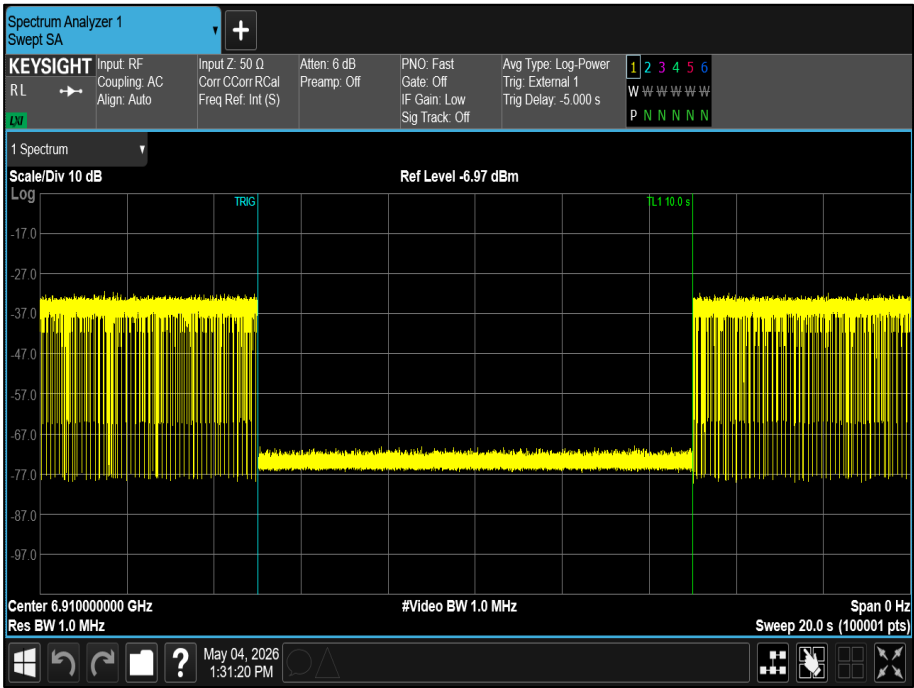


Figure 848 - U-NII-8, Maximum Bandwidth (AWGN Low), State: Off



Parameter	Results		
U-NII Band	8	8	8
Channel Number	207	207	207
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6985	6985	6985
AWGN Centre Frequency (MHz)	6985	6985	6985
AWGN Signal Power (dBm)	-67.3	-65.05	-64.05
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-70.0	-67.75	-66.75
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	90%	90%	90%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1127 - U-NII-8, Maximum Bandwidth (AWGN Mid)



Figure 849 - U-NII-8, Maximum Bandwidth (AWGN Mid), State: Minimal

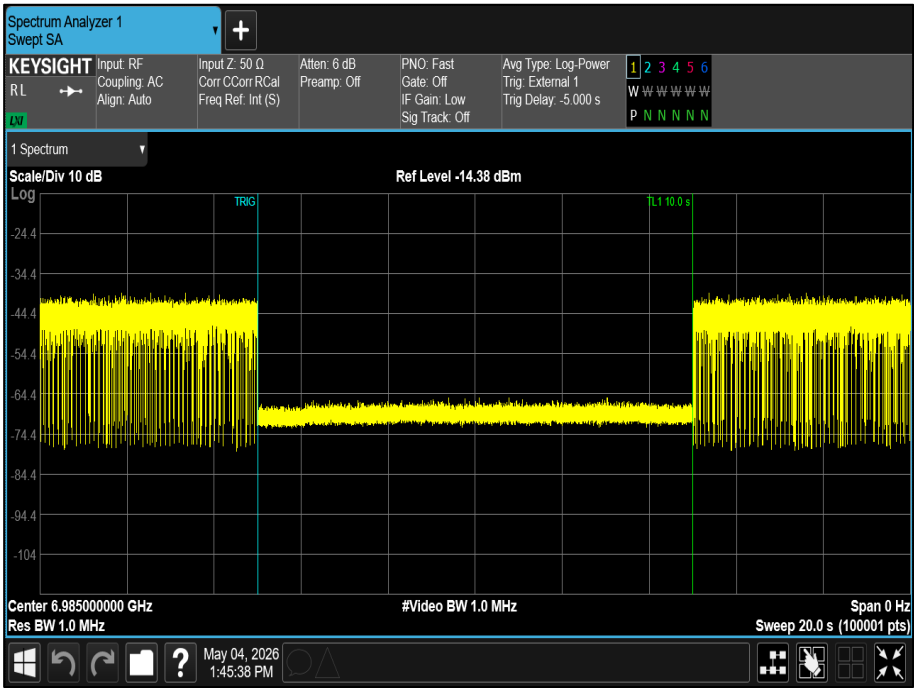


Figure 850 - U-NII-8, Maximum Bandwidth (AWGN Mid), State: Off



Parameter	Results		
U-NII Band	8	8	8
Channel Number	207	207	207
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6985	6985	6985
AWGN Centre Frequency (MHz)	7060	7060	7060
AWGN Signal Power (dBm)	-69.3	-67.05	-66.55
Antenna Gain (dBi)	2.70	2.70	2.70
Adjusted Power (dBm)	-72.0	-69.75	-69.25
Detection Limit (dBm)	-62.0	-62.0	-62.0
Detection Probability (Successful trials out of 10)	100%	100%	100%
EUT Tx Status (OFF/Minimal/ON)	On	Minimal	Off

Table 1128 - U-NII-8, Maximum Bandwidth (AWGN High)



Figure 851 - U-NII-8, Maximum Bandwidth (AWGN High), State: Minimal

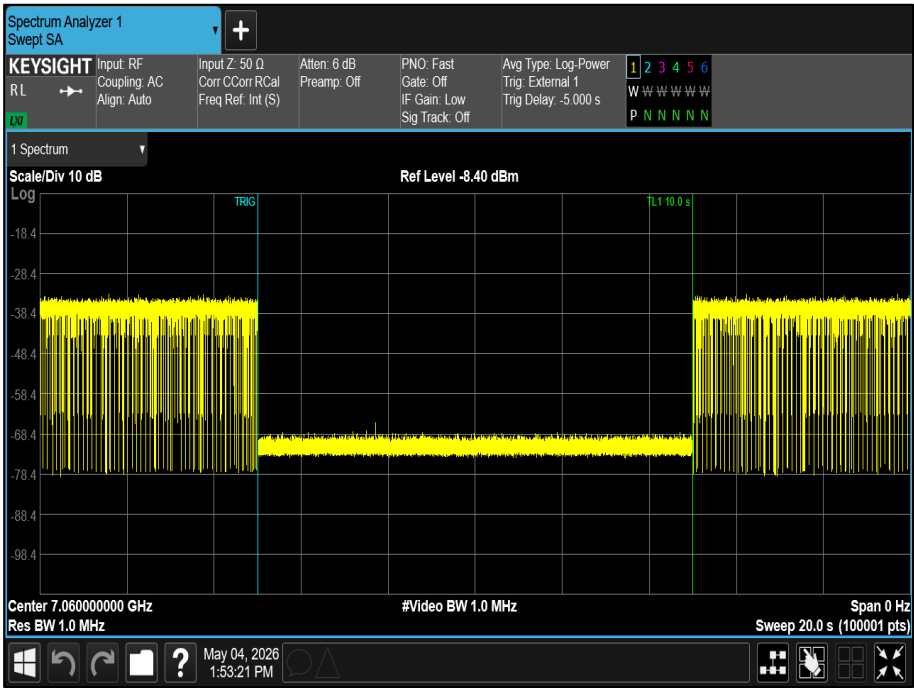


Figure 852 - U-NII-8, Maximum Bandwidth (AWGN High), State: Off



Figure 853 - Bandwidth Reduction, Initial Channel: 47, Initial Bandwidth: 160, Final Channel: 39, Final Bandwidth: 80



Figure 854 - Bandwidth Reduction, Initial Channel: 47, Initial Bandwidth: 160, Final Channel: 35, Final Bandwidth: 40



Figure 855 - Bandwidth Reduction, Initial Channel: 47, Initial Bandwidth: 160, Final Channel: 37, Final Bandwidth: 20



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 4.7.3

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.



2.8.8 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 Expiry Date
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5427	12	15-Aug-2026
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5429	12	23-May-2026
WiFi 6E Tri-Band Gaming Router	Asus	GT-AXE110000	5926	-	TU
1m Coaxial Cable Assy	Junkosha	MWX221-01000AMSAMS/A	6356	12	23-May-2026
1m Coaxial Cable Assy	Junkosha	MWX221-01000AMSAMS/A	6374	12	23-May-2026
Test Coupling Network	TUV SUD	TUV_RxTest_001	6387	12	05-Dec-2026
MXA Signal Analyzer	Keysight Technologies	N9020B	6415	24	31-Mar-2027
Vector Signal Generator (7.5GHz)	Rohde & Schwarz	SMM100A	6532	12	24-Mar-2027
Power Splitter	Mini-Circuits	ZN2PD2-14W-S+	7098	12	25-Jul-2026
Humidity & Temperature meter	Fluke	971	7102	12	05-Aug-2026

Table 1129

TU - Traceability Unscheduled

2.9 Transmit Power Control; Very Low Power Devices

2.9.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (d)(10)
ISED RSS-248, Clause 4.5.6

2.9.2 Equipment Under Test and Modification State

A3589, S/N: KMHJT7G919 - Modification State 0

2.9.3 Date of Test

02-July-2026

2.9.4 Test Method

The purpose of this test is to demonstrate the ability of the device under test (DUT) to increase and decrease its power by a minimum of 6 dB as the RSSI is decreased and increased.

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

Initially the value of the step attenuator is set to 0 dB and the power spectral density (PSD) was measured, the result was noted as RSSI (High). The step attenuation was then increased up to a value of 50 dB and the PSD was measured again and this was noted as RSSI (Low). The difference in the PSD was computed and compared to the 6 dB requirement.

Both measurements were taken on the same plot (different traces) for direct and visual comparison

2.9.5 Test Setup Diagram

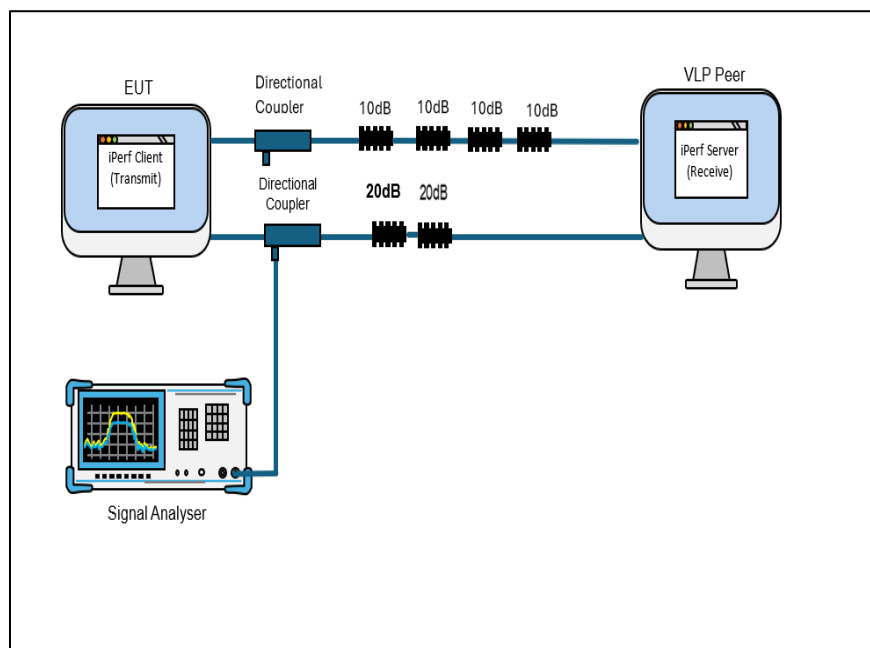


Figure 856 - Test Equipment Setup Diagram



2.9.6 Environmental Conditions

Ambient Temperature 19.4 °C
Relative Humidity 49.6 %

2.9.7 Test Results

6 GHz WLAN

CH	Frequency (MHz)	Bandwidth (MHz)	Power Spectral Density (dBm/MHz) EIRP		ΔPSD (dB)	Verdict
			RSSI (High)	RSSI (Low)		
47	6185	160	-25.43	-11.44	13.99	Pass

Table 1130 - TPC VLP Results

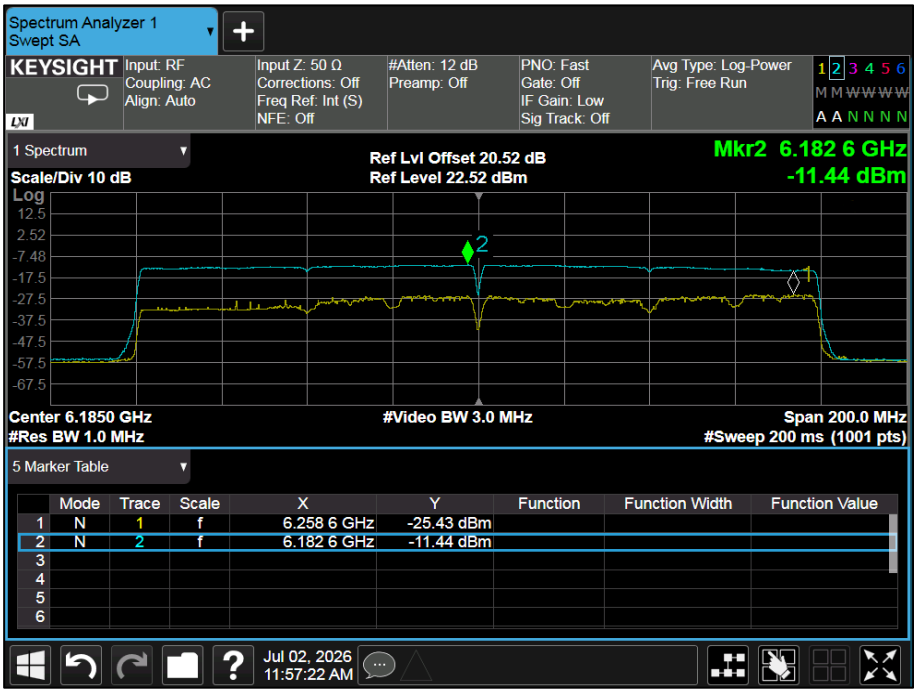


Figure 857 - TPC - RSSI High (Trace 1) and RSSI Low (Trace 2)

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.

ISED RSS-248 Limit Clause 4.5.6

A very low-power device shall implement transmitter power control in order to have the capability to operate at least 6 dB lower than the maximum e.i.r.p. spectral density limit.



2.9.8 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 Expiry Date
Attenuator (20dB, 1W)	Sealectro	60-674-1020-89	1520	-	O/P Mon
EXA Signal Analyser	Keysight Technologies	N9010B	4968	24	05-Feb-2028
2.92mm 1m cable	Junkosha	MWX211/B	5415	12	15-May-2027
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5426	12	15-May-2027
Attenuator 2W 10dB DC-10GHz	Telegartner	J01156A0031	5577	-	O/P Mon
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5765	-	O/P Mon
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5766	-	O/P Mon
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5936	12	15-May-2027
Coaxial Fixed Attenuator DC-18GHz 5W 10dB	RF-Lambda	RFS5G18B10SMP	6176	12	09-Oct-2026
Attenuator 5W 10dB DC-18GHz	Aaren	AT40A-4041-D18-10	6550	12	09-Oct-2026
10dB attenuator	Pasternack	PE-7013-10	6728	12	14-Jan-2027
10dB attenuator	RF-Lambda	RFS5G08B10SMF	6731	12	14-Jan-2027
10dB attenuator	RF-Lambda	RFS5G08B10SMF	6732	12	14-Jan-2027
Humidity & Temperature meter	Fluke	971	7102	12	05-Aug-2026

Table 1131

O/P Mon - Output Monitored using calibrated equipment



3 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	± 3 MHz
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
Dual Client Test	± 1.38 dB
Transmit Power Control; Very Low Power Devices	± 1.49 dB

Table 1132

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.