



2.9.7 Test Results

6 GHz WLAN



Figure 446 - 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)	-70.55	-69.07	-67.07
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-72.95	-71.47	-69.47
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 395 - U-NII-5, Minimum Bandwidth

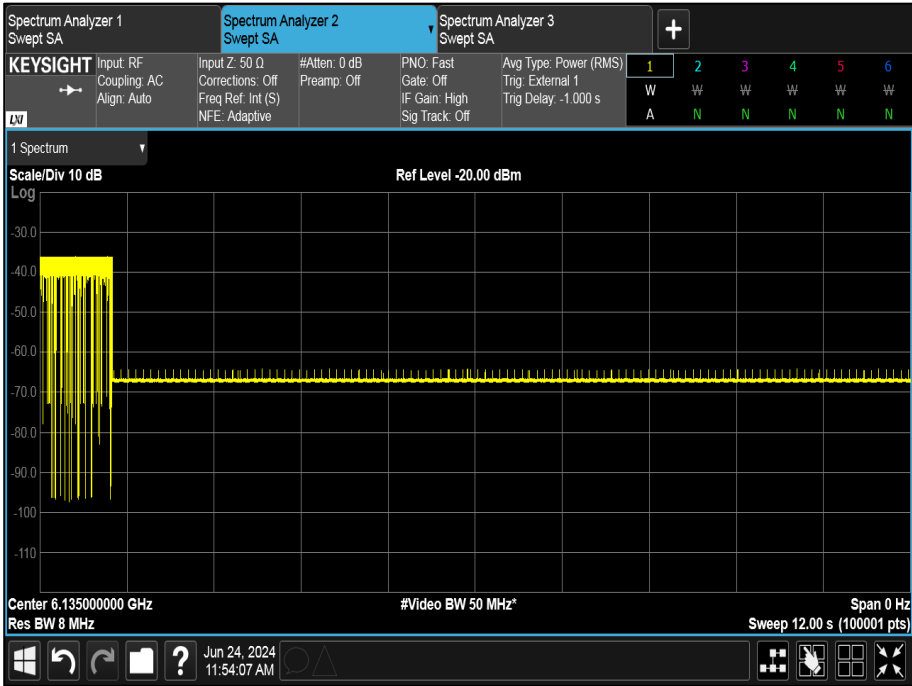


Figure 447 - U-NII-5, Minimum Bandwidth



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)	-68.71	-66.71	-65.91
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-71.11	-69.11	-68.31
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 396 - U-NII-5, Maximum Bandwidth (AWGN Low)

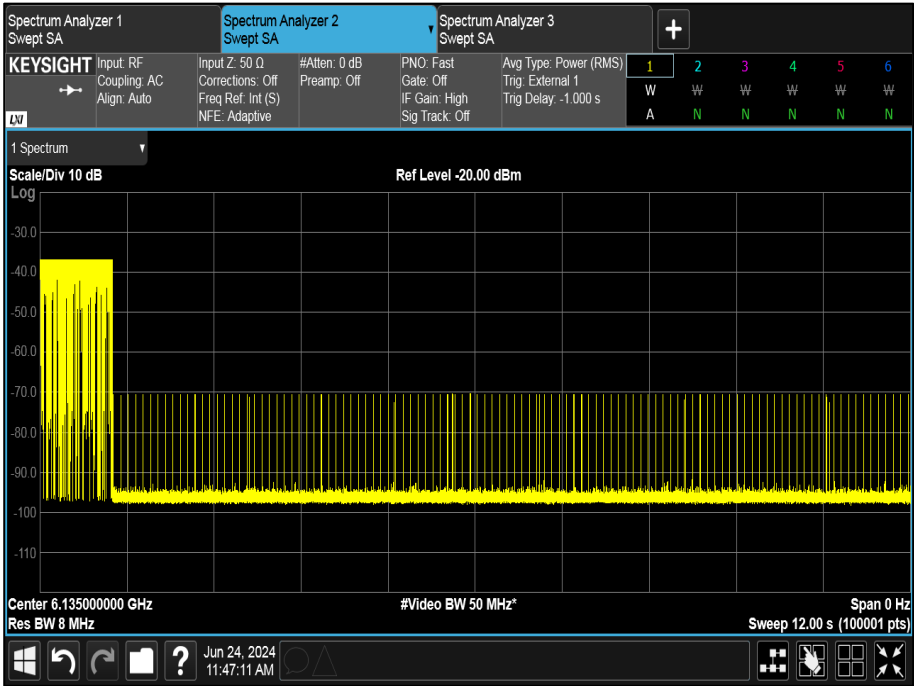


Figure 448 - U-NII-5, Minimum Bandwidth (AWGN Low)



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)	-69.52	-66.67	-65.87
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-71.92	-69.07	-68.27
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 397 - U-NII-5, Maximum Bandwidth (AWGN Mid)

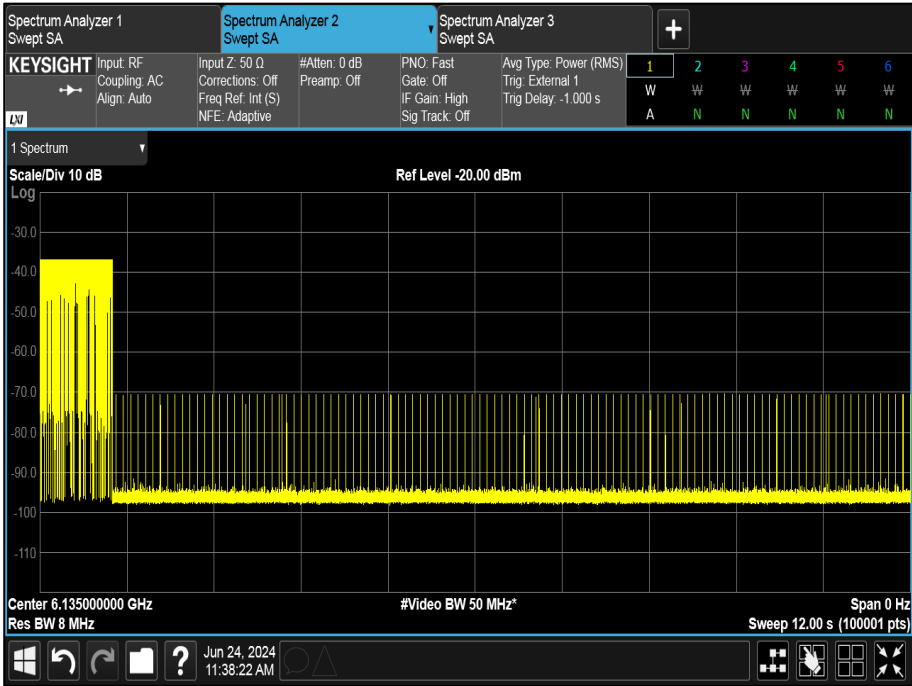


Figure 449 - U-NII-5, Minimum Bandwidth (AWGN Mid)



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)	-65.78	-63.98	-62.57
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-68.18	-66.38	-64.97
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 398 - U-NII-5, Maximum Bandwidth (AWGN High)

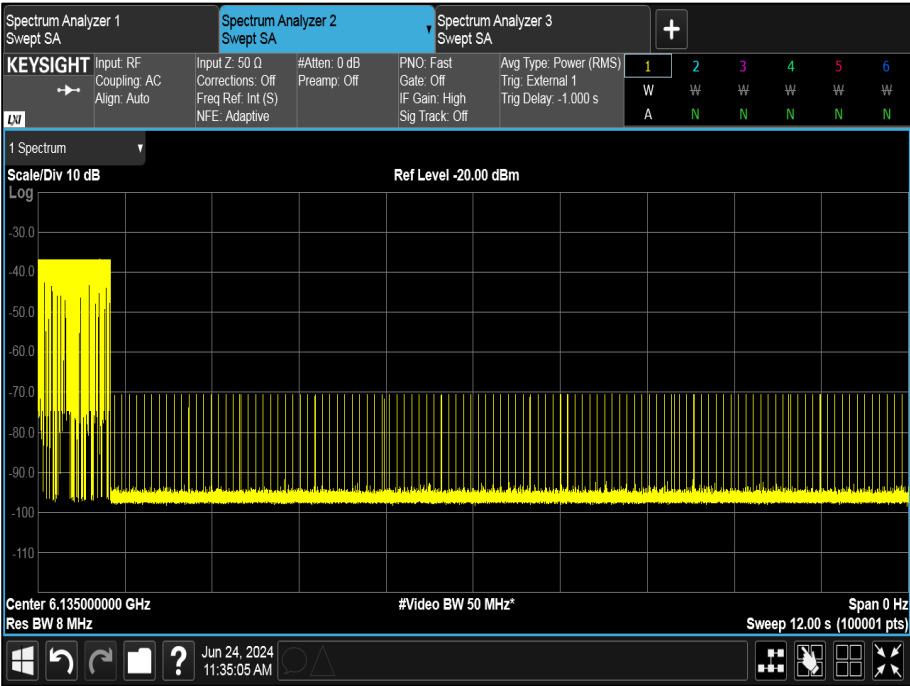


Figure 450 - U-NII-5, Minimum Bandwidth (AWGN High)



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)	-72.51	-70.81	-68.16
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-74.91	-73.21	-70.56
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 399 - U-NII-6, Minimum Bandwidth

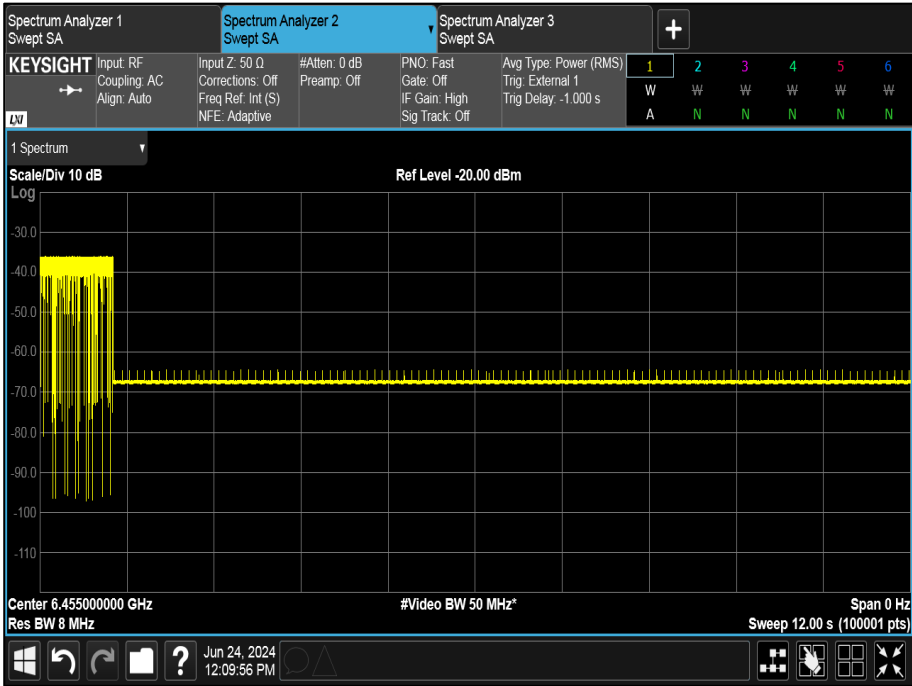


Figure 451 - U-NII-6, Minimum Bandwidth



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)	-70.91	-68.63	-67.77
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-73.31	-71.03	-70.17
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 400 - U-NII-6, Maximum Bandwidth (AWGN Low)

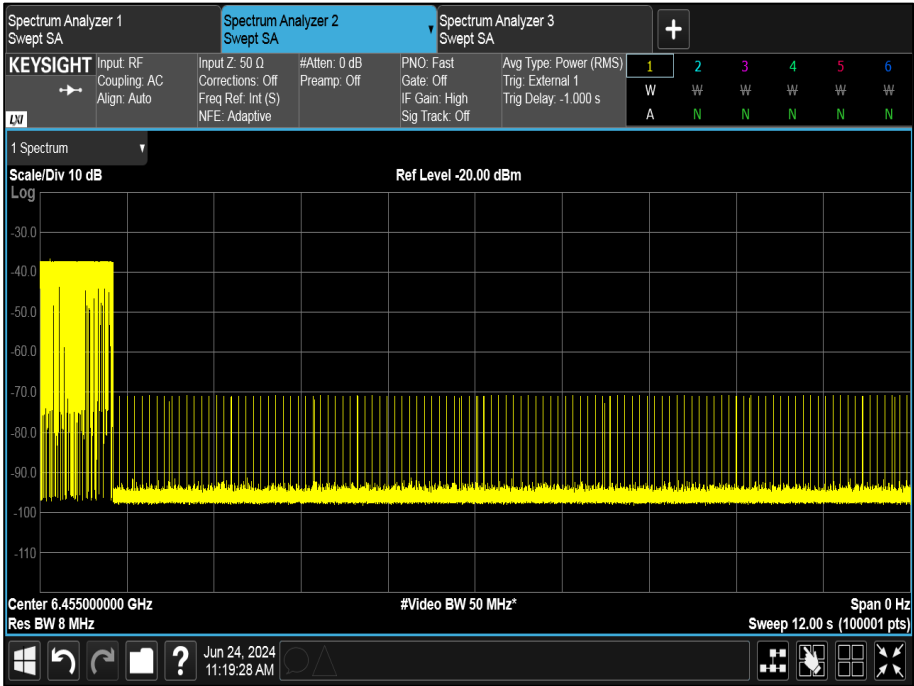


Figure 452 - U-NII-6, Minimum Bandwidth (AWGN Low)



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)	-70.04	-67.60	-66.24
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-72.44	-70.00	-68.64
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 401 - U-NII-6, Maximum Bandwidth (AWGN Mid)

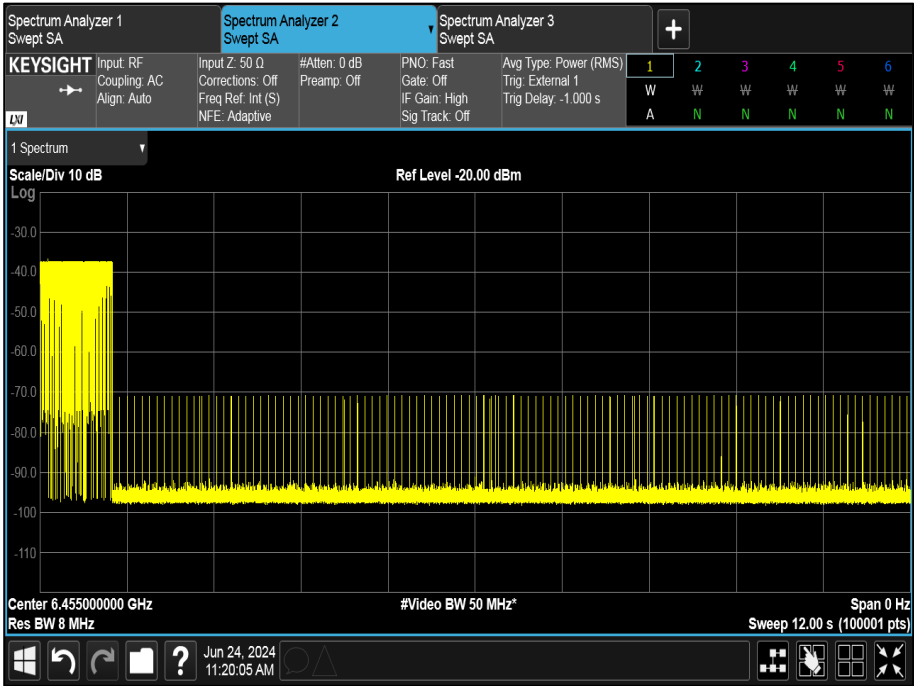


Figure 453 - U-NII-6, Minimum Bandwidth (AWGN Mid)



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)	-67.85	-65.94	-63.64
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-70.25	-68.34	-66.04
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 402 - U-NII-6, Maximum Bandwidth (AWGN High)

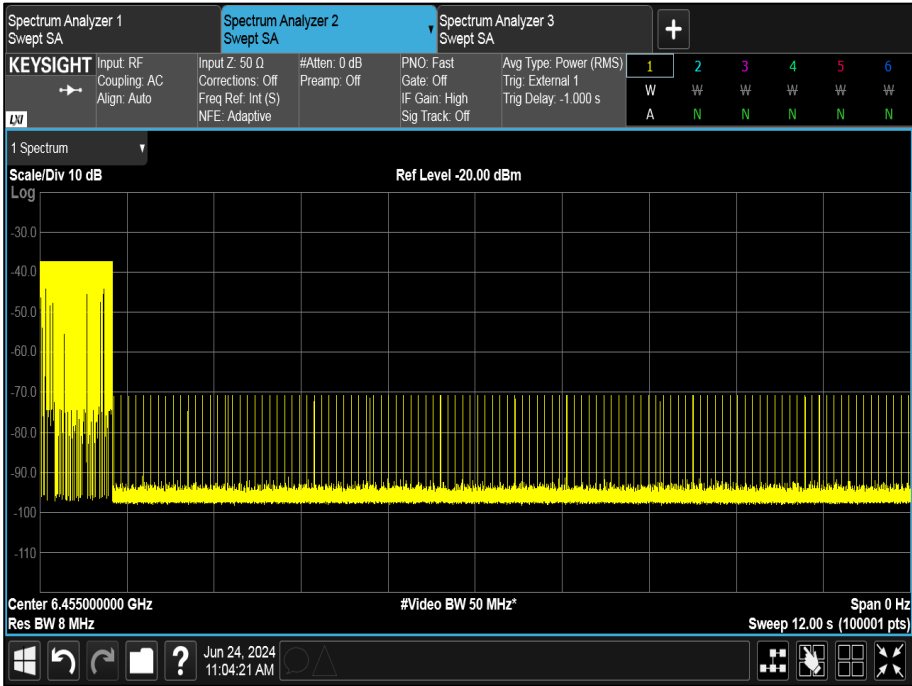


Figure 454 - U-NII-6, Minimum Bandwidth (AWGN High)



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)	-71.88	-70.27	-68.28
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-74.28	-72.67	-70.68
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 403 - U-NII-7, Minimum Bandwidth

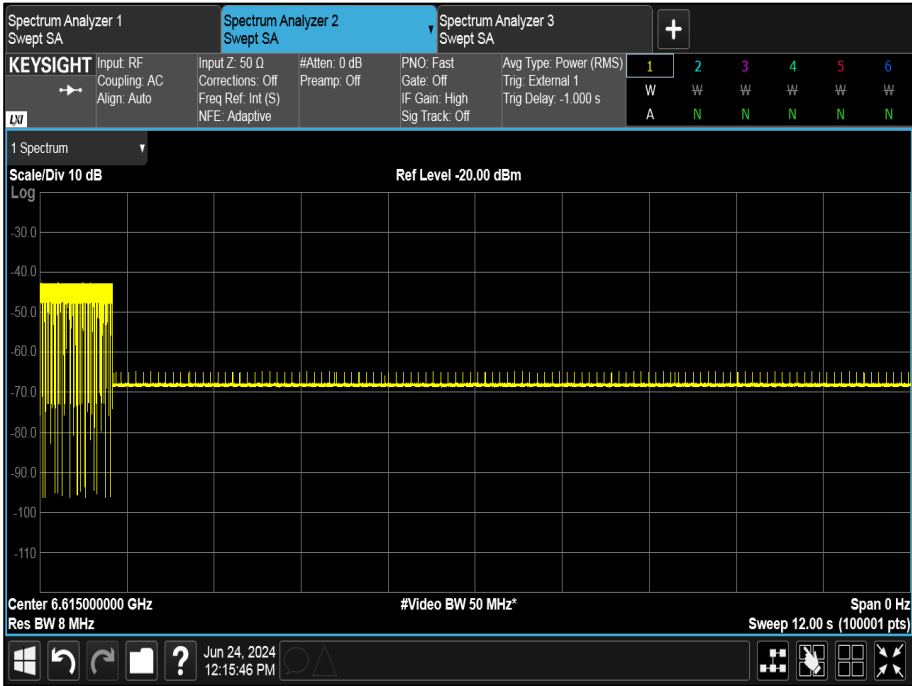


Figure 455 - U-NII-7, Minimum Bandwidth



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)	-69.46	-67.59	-65.67
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-71.86	-69.99	-68.07
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 404 - U-NII-7, Maximum Bandwidth (AWGN Low)

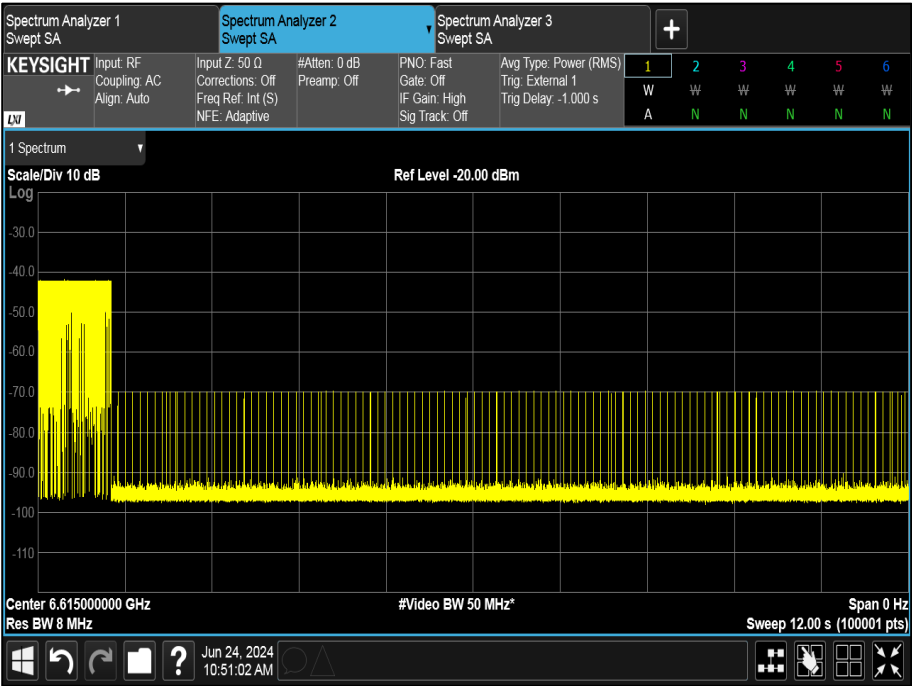


Figure 456 - U-NII-7, Minimum Bandwidth (AWGN Low)



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)	-70.73	-68.27	-66.27
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-73.13	-70.67	-68.67
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 405 - U-NII-7, Maximum Bandwidth (AWGN Mid)



Figure 457 - U-NII-7, Minimum Bandwidth (AWGN Mid)



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)	-66.25	-64.16	-62.49
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-68.65	-66.56	-64.89
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 406 - U-NII-7, Maximum Bandwidth (AWGN High)



Figure 458 - U-NII-7, Minimum Bandwidth (AWGN High)



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)	-71.57	-69.71	-68.93
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-73.97	-72.11	-71.33
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 407 - U-NII-8, Minimum Bandwidth

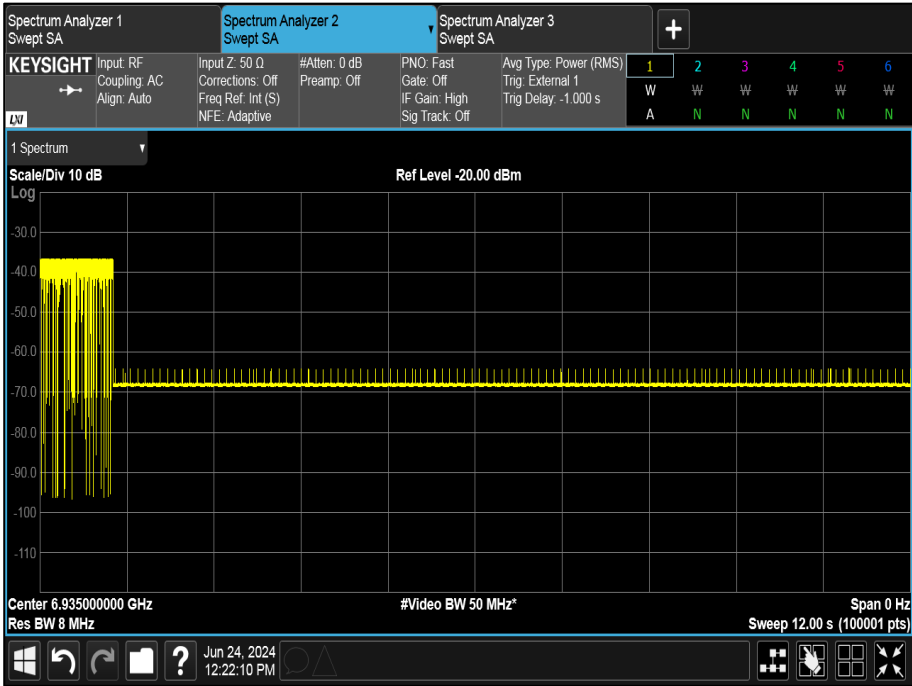


Figure 459 - U-NII-8, Minimum Bandwidth



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)	-67.32	-65.42	-60.62
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-69.72	-67.82	-63.02
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 408 - U-NII-8, Maximum Bandwidth (AWGN Low)



Figure 460 - U-NII-8, Minimum Bandwidth (AWGN Low)



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)	-68.14	-65.28	-64.37
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-70.54	-67.68	-66.77
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 409 - U-NII-8, Maximum Bandwidth (AWGN Mid)



Figure 461 - U-NII-8, Minimum Bandwidth (AWGN Mid)



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)	-64.88	-63.41	-62.13
Antenna Gain (dBi)	2.40	2.40	2.40
Adjusted Power (dBm)	-67.28	-65.81	-64.53
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 410 - U-NII-8, Maximum Bandwidth (AWGN High)



Figure 462 - U-NII-8, Minimum Bandwidth (AWGN High)



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.



2.9.8 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
EXA Signal Analyser	Keysight Technologies	N9010B	4968	24	29-Jan-2026
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5429	12	16-May-2025
4m cable with K type Connector up to 40GHz	Rosenberger	LU1-500-4000	5628	12	07-Mar-2025
3.5mm Cable (1m)	Junkosha	MWX221/B	5837	12	27-Jul-2024
3.5mm Cable (1m)	Junkosha	MWX221/B	5838	12	27-Jul-2024
Vector Signal Generator	Rohde & Schwarz	SMM100A	5915	36	01-Mar-2026
WiFi 6E Tri-Band Gaming Router	Asus	GT-AXE110000	5926	-	TU
Humidity & Temperature meter	R.S Components	1364	6148	12	21-Jul-2024
Test Coupling Network	TUV SUD	TUV_RxTest_001	6441	12	30-Apr-2025

Table 411

TU - Traceability Unscheduled



3 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
Emission Bandwidth	± 3.91 MHz
Dual Client Test	± 1.38 dB
Transmit Power Control	± 1.49 dB
Maximum Conducted Output Power	± 1.38 dB
Maximum Conducted Power Spectral Density	± 1.49 dB
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

Table 412

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.