



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

DUT Configuration			
Mode:	802.11ax HE40 SU VLP	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	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
6125	9.72	10.85	-	-
6245	10.15	10.30	-	-
6405	9.58	9.90	-	-
6565	9.53	10.53	-	-
6685	9.00	10.77	-	-
6845	10.28	10.65	-	-

Table 317 - Unwanted Emissions Within the Band Results

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

DUT Configuration			
Mode:	802.11ax HE80 SU VLP	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	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
6145	9.15	9.99	-	-
6225	8.93	9.01	-	-
6385	9.15	9.94	-	-
6625	9.18	9.07	-	-
6705	9.36	9.82	-	-
6785	8.78	10.37	-	-

Table 318 - Unwanted Emissions Within the Band Results



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

DUT Configuration			
Mode:	802.11ax HE160 SU VLP	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	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	7.51	7.92	-	-
6345	7.25	7.25	-	-
6665	6.59	8.68	-	-

Table 319 - Unwanted Emissions Within the Band Results



TxBF

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE80 SU LPI	7.89	6334.000

Table 320 - Unwanted Emissions Within the RLAN Band Summary Results

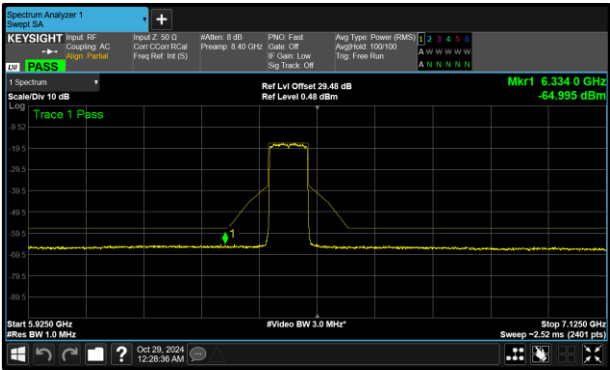


Figure 324 - A (Core 0) 802.11ax HE80 SU LPI 6465 MHz (CH103)



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 HE80 SU LPI	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
5985	9.68	9.49	-	-
6145	9.37	10.39	-	-
6385	10.34	9.54	-	-
6465	7.89	9.18	-	-
6545	8.98	9.52	-	-
6625	8.29	9.39	-	-
6705	9.95	8.79	-	-
6785	9.68	9.94	-	-
6865	10.04	10.94	-	-
6945	9.73	8.67	-	-
7025	10.11	8.54	-	-

Table 321 - Unwanted Emissions Within the Band Results



Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU SP	11.57	6100.300
802.11ax HE40 SU SP	11.34	6086.480
802.11ax HE80 SU SP	7.90	6130.000

Table 322 - Unwanted Emissions Within the RLAN Band Summary Results

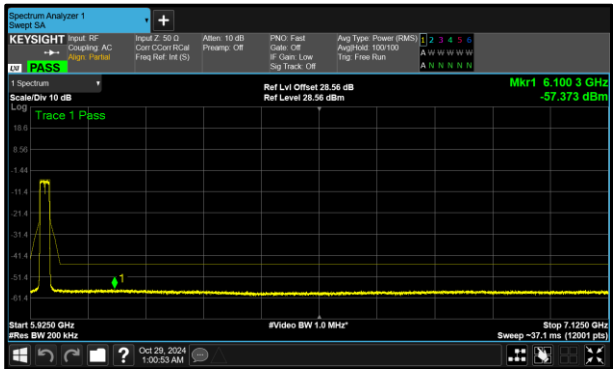


Figure 325 - A (Core 0) 802.11ax HE20 SU SP
5955 MHz (CH1)

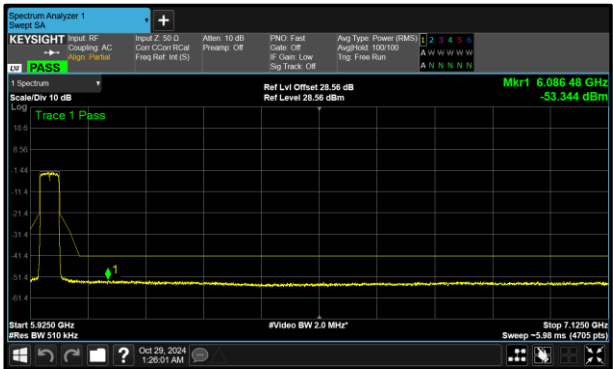


Figure 326 - A (Core 0) 802.11ax HE40 SU SP
5965 MHz (CH3)

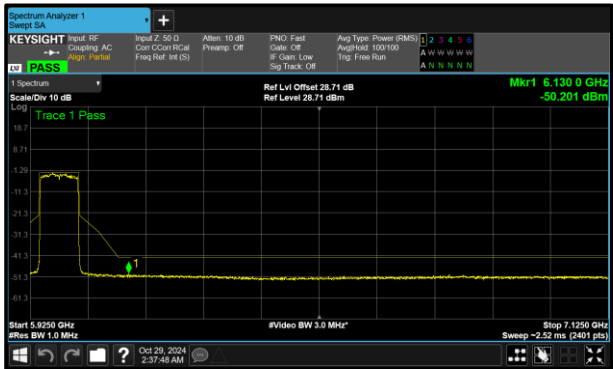


Figure 327 - A (Core 0) 802.11ax HE80 SU SP
5985 MHz (CH7)



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

DUT Configuration			
Mode:	802.11ax HE20 SU SP	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
5955	11.57	11.94	-	-
6175	12.01	12.46	-	-
6415	11.94	12.95	-	-
6435	11.77	12.54	-	-
6475	12.04	12.04	-	-
6515	11.89	12.78	-	-
6535	12.08	12.60	-	-
6695	12.36	13.04	-	-
6855	11.79	12.29	-	-

Table 323 - Unwanted Emissions Within the Band Results



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

DUT Configuration			
Mode:	802.11ax HE40 SU SP	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
5965	11.34	11.84	-	-
6165	11.90	12.49	-	-
6405	11.62	12.11	-	-
6445	11.61	12.24	-	-
6485	11.37	12.37	-	-
6525	11.47	12.31	-	-
6565	11.40	11.40	-	-
6685	11.67	12.40	-	-
6845	11.37	12.64	-	-

Table 324 - Unwanted Emissions Within the Band Results



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

DUT Configuration			
Mode:	802.11ax HE80 SU SP	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
5985	7.90	8.84	-	-
6145	9.34	9.87	-	-
6385	8.60	9.49	-	-
6465	8.68	9.14	-	-
6545	8.38	9.05	-	-
6625	8.22	9.09	-	-
6705	9.25	9.11	-	-
6785	8.62	8.70	-	-

Table 325 - Unwanted Emissions Within the Band Results



FCC 47 CFR Part 15, Limit Clause 15.407(b)(6)

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 Chamber 18 and RF Laboratory 2.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
True RMS Multimeter	Fluke	79 Series III	411	12	12-Jan-2025
Hygrometer	Rotronic	Hygropalm 0	3028	12	12-Aug-2025
Hygrometer	Rotronic	I-1000	3068	12	07-Nov-2024*
1800-6000 MHz Power Splitter	Mini-Circuits	ZN2PD-63-S+	4055	-	O/P Mon
1 MHz / 10 MHz reference	Quartzlock	E10-X	4973	12	03-Sep-2025
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
Attenuator 5W 30dB DC-18GHz	Aaren	AT40A-4041-D18-30	5505	12	22-Feb-2025



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	18-Sep-2025
MXA Signal Analyser	Keysight Technologies	N9020B	5529	24	13-Dec-2024
2-Way Power Divider (2-8 GHz)	Aaren	AT30A-TE0208-2-AF	5685	12	02-Jan-2025
Digital Multimeter	Fluke	115	6145	12	06-Jun-2025
Cable (SMA to SMA 1m)	Junkosha	MWX221/B	6305	12	20-May-2025
Cable (SMA to SMA 3m)	Junkosha	MWX221-03000AMSAMS/A	6317	12	23-May-2025
Humidity and Temperature Meter	R.S Components	1364	6346	12	06-Mar-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6350	12	02-Aug-2025
MXA Signal Analyser	Keysight Technologies	N9020B	6419	24	28-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6426	12	07-Feb-2025
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	6447	-	O/P Mon
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	6448	-	O/P Mon
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6517	12	22-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6526	12	22-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6527	12	05-Mar-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6638	12	02-Aug-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6639	12	02-Aug-2025
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon
WiFi 6E Tri-Band Gaming Router	Asus	GT-AXE110000	6694	-	TU
10dB attenuator	Pasternack	PE-7013-10	6728	12	07-Jan-2025
10dB attenuator	RF-Lambda	RFS5G08B10SMF	6730	12	07-Jan-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6752	12	06-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6753	12	06-Feb-2025

Table 326

TU - Traceability Unscheduled
O/P Mon - Output Monitored using calibrated equipment

*NOTE: Only used within calibration period.



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

A3241, S/N: CYR6L3Y9NF - Modification State 0

2.8.3 Date of Test

02-October-2024 and 26-February-2025

2.8.4 Test Method

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

The AWGN signal level was initially set at a level much less than the required threshold level ($\ll -62$ 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.

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, as opposed to the peak antenna gain that appears in section 1.4.4.

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

For 160 MHz bandwidth time domain plots the spectrum analyser frequency was set to the centre frequency of the 20 MHz control channel portion. This was deemed worst-case, since further disallowed transmissions may occur only on the control channel, not necessarily across the full 160 MHz bandwidth. It additionally showed that the access point beacons were still present and so only the DUT shut down, proving communications were not ceased due to the access point shutting down. As a result, after the shutdown of the DUT any transmissions from the router can still be seen. An example plot in the frequency domain is provided at the end of the results section as evidence to show that the lower-level signals are the router and are not coming from the DUT.

The EUT does not support channel puncturing or bandwidth reduction for the purposes of incumbent avoidance, with the whole channel shutting down when an incumbent signal is present.

2.8.5 Test Setup Diagram

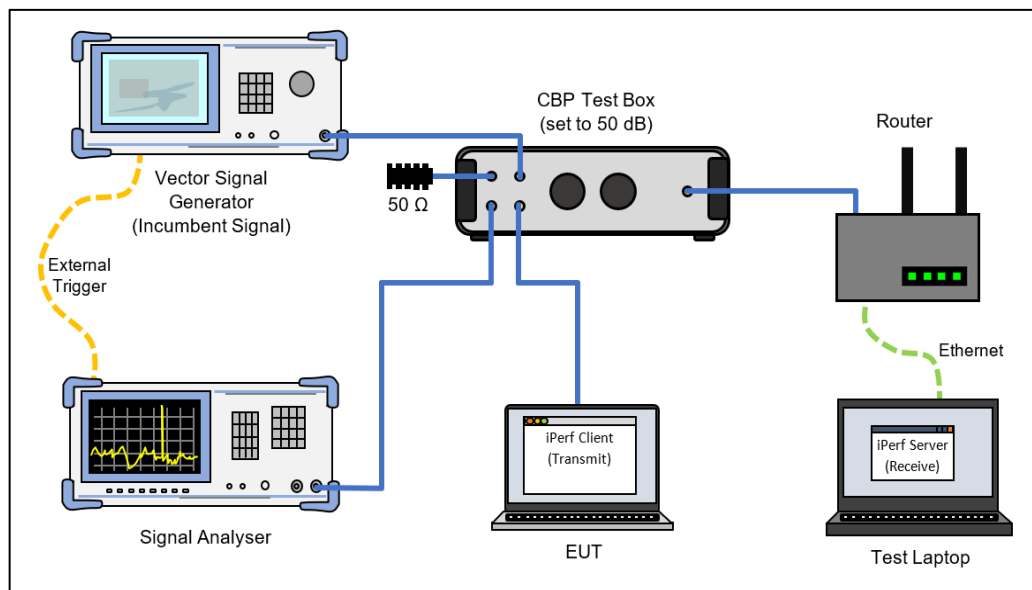


Figure 328 - Test Equipment Setup Diagram

2.8.6 Environmental Conditions

Ambient Temperature	21.6 °C
Relative Humidity	41.2 %



2.8.7 Test Results

6 GHz WLAN

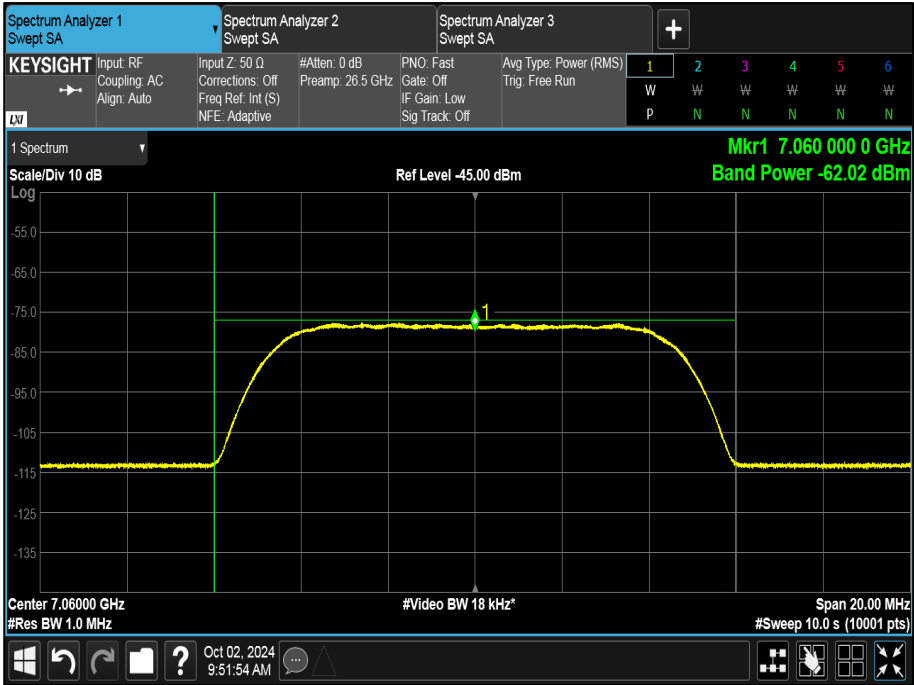


Figure 329 - Example of AWGN Signal



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)	-71.34	-70.56	-67.96
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-74.01	-73.23	-70.63
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 327 - U-NII-5, Minimum Bandwidth

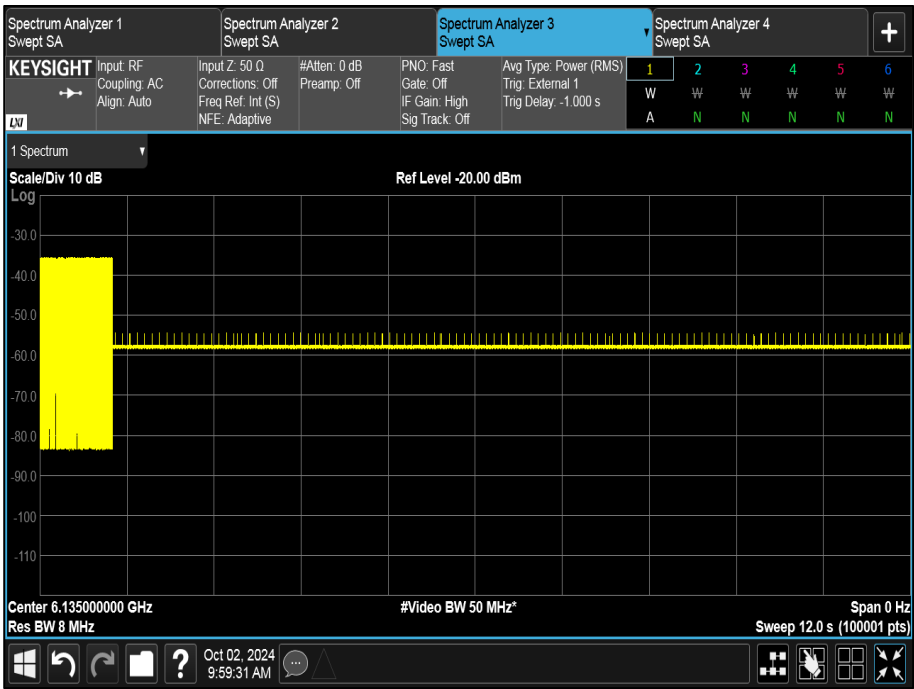


Figure 330 - U-NII-5, Minimum Bandwidth, OFF Level



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)	-67.96	-67.17	-64.41
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-70.63	-69.84	-67.08
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 328 - U-NII-5, Maximum Bandwidth (AWGN Low)

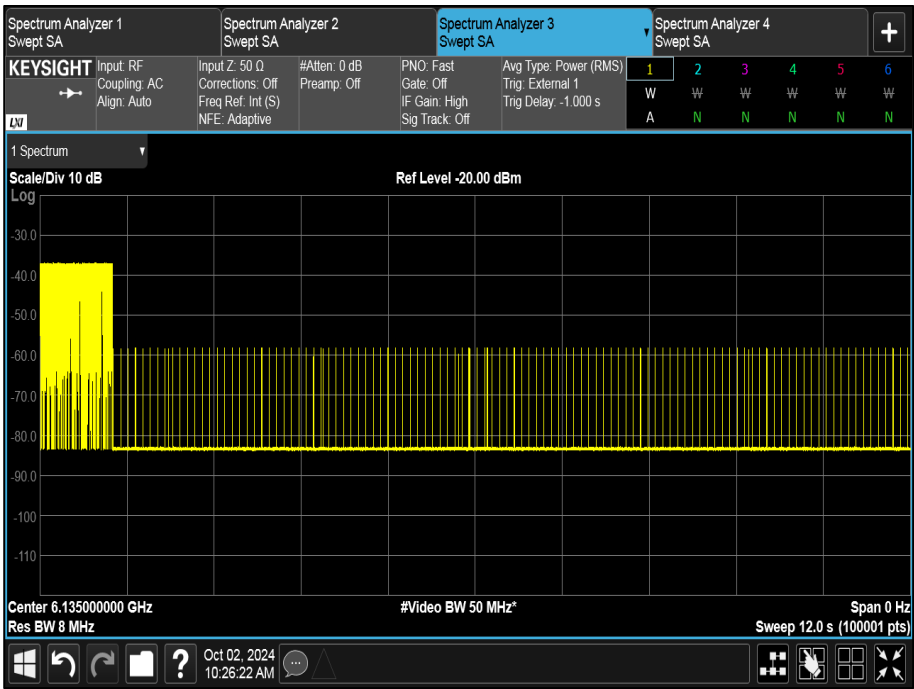


Figure 331 - U-NII-5, Maximum Bandwidth (AWGN Low), OFF Level



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)	-70.47	-68.88	-64.33
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-73.14	-71.55	-67.00
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 329 - U-NII-5, Maximum Bandwidth (AWGN Mid)

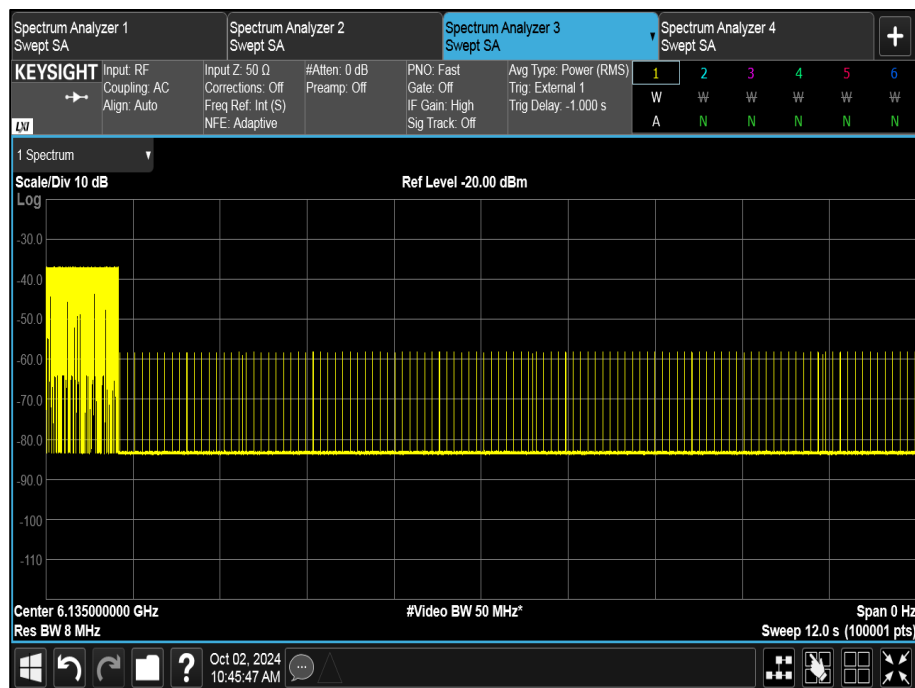


Figure 332 - U-NII-5, Maximum Bandwidth (AWGN Mid), OFF Level



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)	-64.14	-63.06	-62.24
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-66.81	-65.73	-64.91
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 330 - U-NII-5, Maximum Bandwidth (AWGN High)

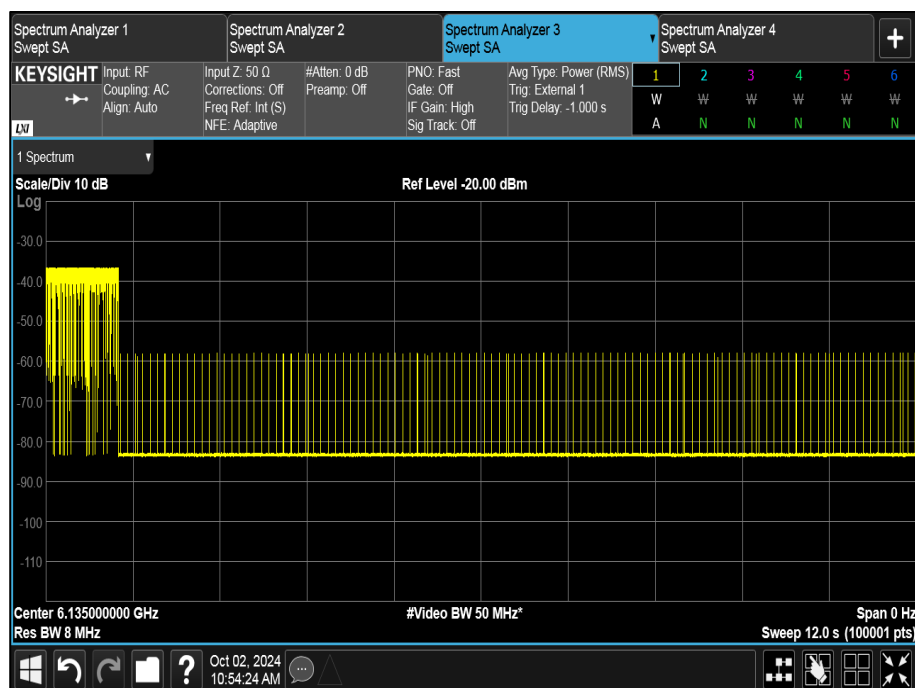


Figure 333 - U-NII-5, Maximum Bandwidth (AWGN High), OFF Level



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)	-69.79	-68.73	-67.75
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-72.46	-71.40	-70.42
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 331 - U-NII-6, Minimum Bandwidth

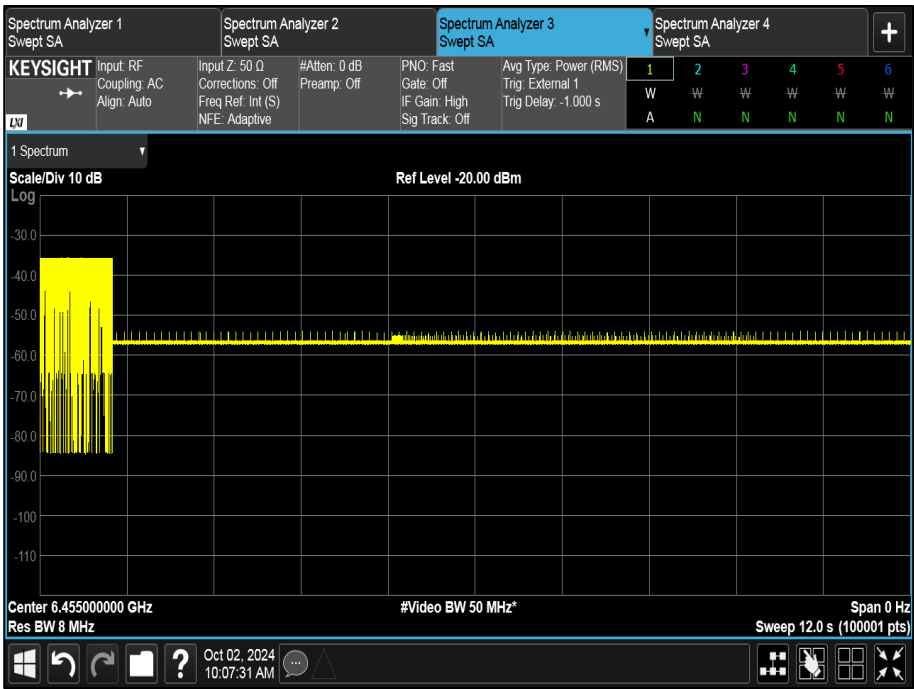


Figure 334 - U-NII-6, Minimum Bandwidth, OFF Level



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)	-66.23	-65.17	-63.36
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-68.90	-67.84	-66.03
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 332 - U-NII-6, Maximum Bandwidth (AWGN Low)

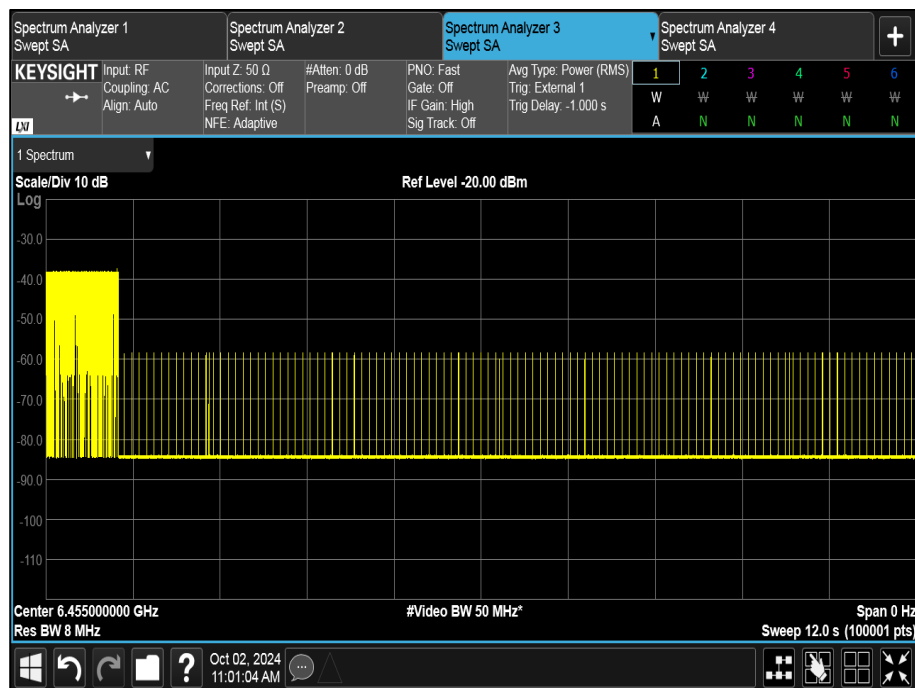


Figure 335 - U-NII-6, Maximum Bandwidth (AWGN Low), OFF Level



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)	-67.71	-66.26	-64.36
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-70.38	-68.93	-67.03
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 333 - U-NII-6, Maximum Bandwidth (AWGN Mid)

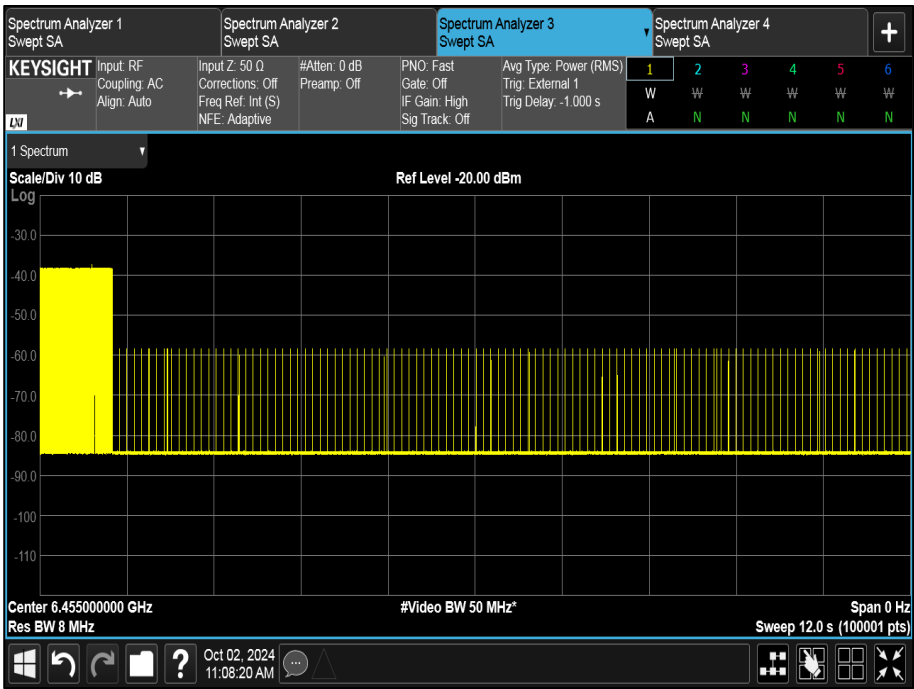


Figure 336 - U-NII-6, Maximum Bandwidth (AWGN Mid), OFF Level



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)	-64.28	-63.89	-62.29
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-66.95	-66.56	-64.96
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 334 - U-NII-6, Maximum Bandwidth (AWGN High)

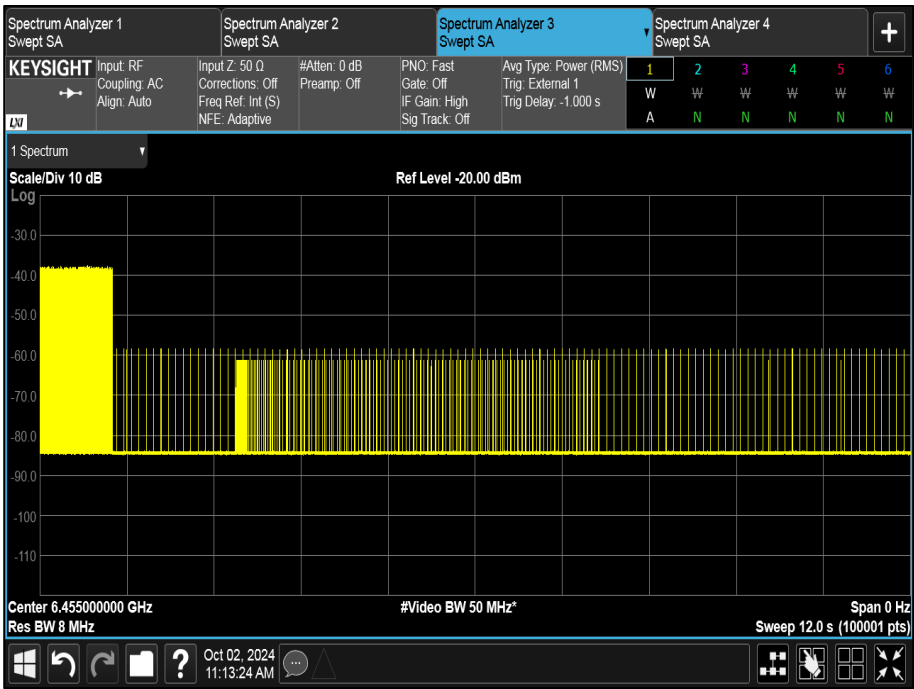


Figure 337 - U-NII-6, Maximum Bandwidth (AWGN High), OFF Level



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)	-69.50	-68.73	-68.34
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-72.17	-71.40	-71.01
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 335 - U-NII-7, Minimum Bandwidth

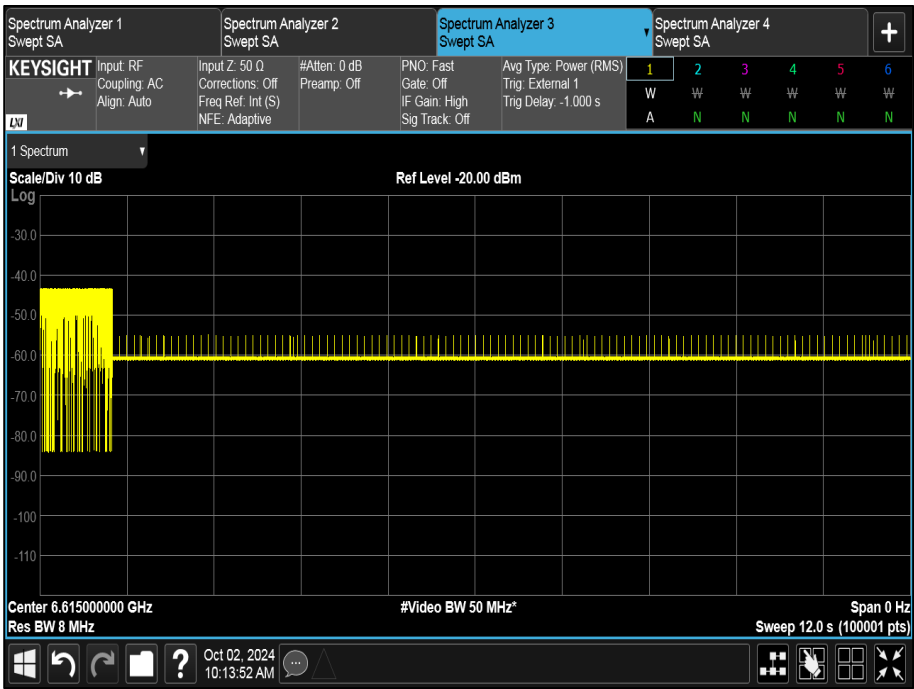


Figure 338 - U-NII-7, Minimum Bandwidth, OFF Level

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)	-64.56	-63.16	-61.86
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-67.23	-65.83	-64.53
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 336 - U-NII-7, Maximum Bandwidth (AWGN Low)

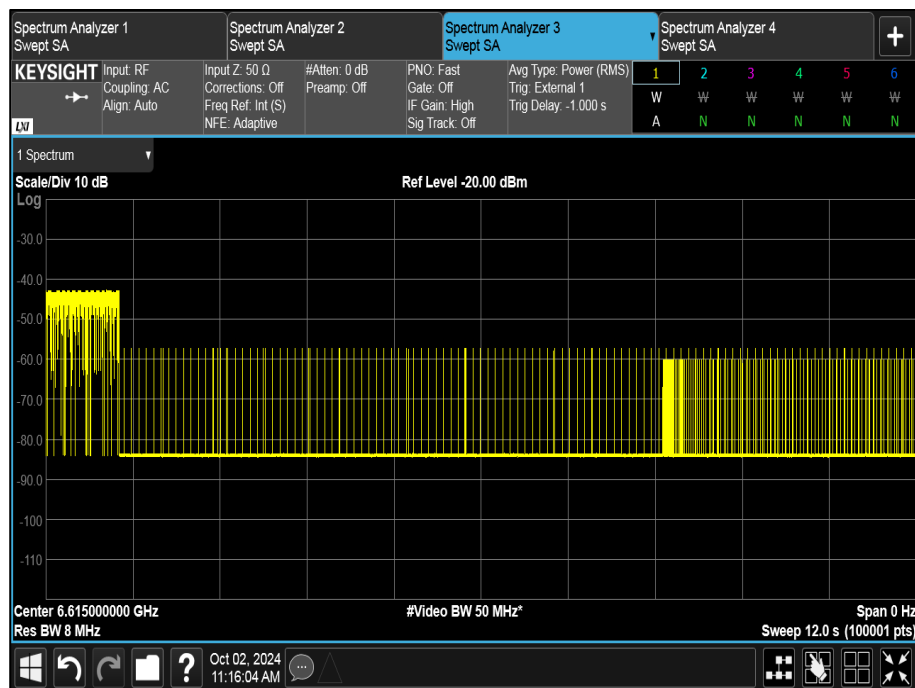


Figure 339 - U-NII-7, Maximum Bandwidth (AWGN Low), OFF Level



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)	-67.98	-67.29	-62.24
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-70.65	-69.96	-64.91
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 337 - U-NII-7, Maximum Bandwidth (AWGN Mid)

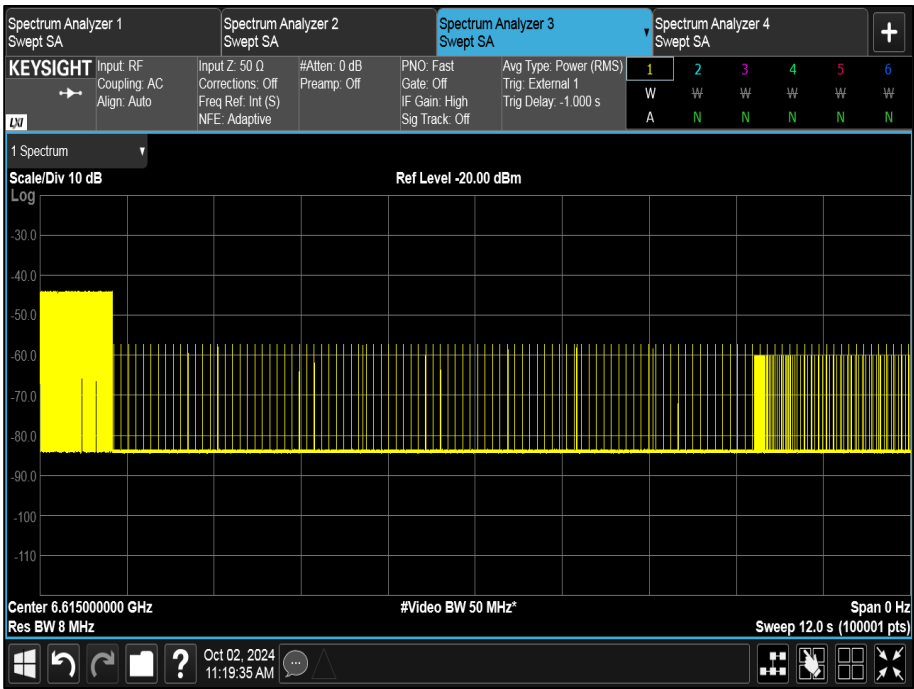


Figure 340 - U-NII-7, Maximum Bandwidth (AWGN Mid), OFF Level



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)	-64.71	-63.13	-60.37
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-67.38	-65.80	-63.04
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 338 - U-NII-7, Maximum Bandwidth (AWGN High)

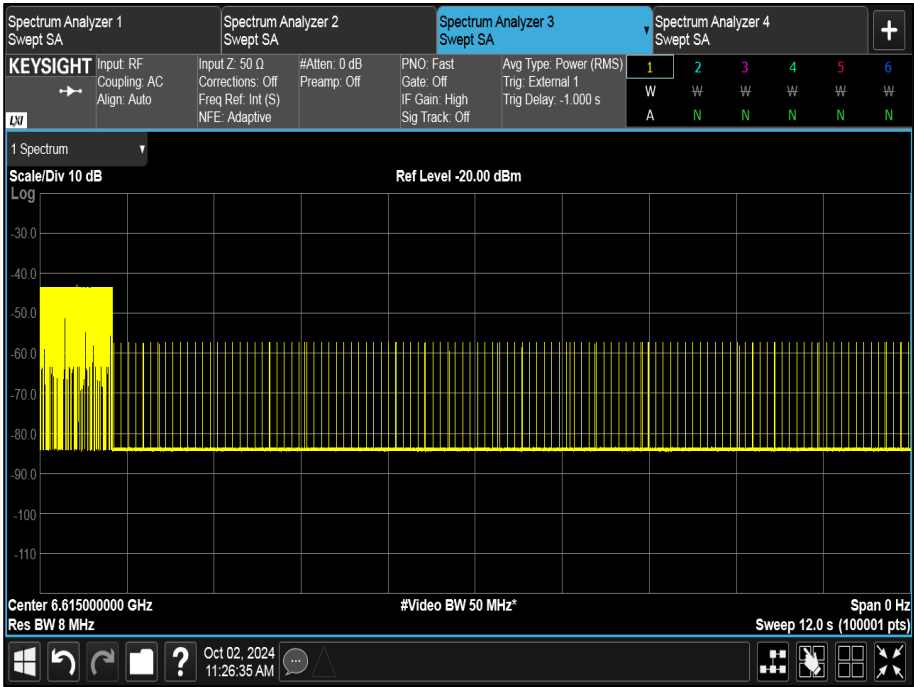


Figure 341 - U-NII-7, Maximum Bandwidth (AWGN High), OFF Level



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)	-71.39	-70.59	-69.49
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-74.06	-73.26	-72.16
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 339 - U-NII-8, Minimum Bandwidth

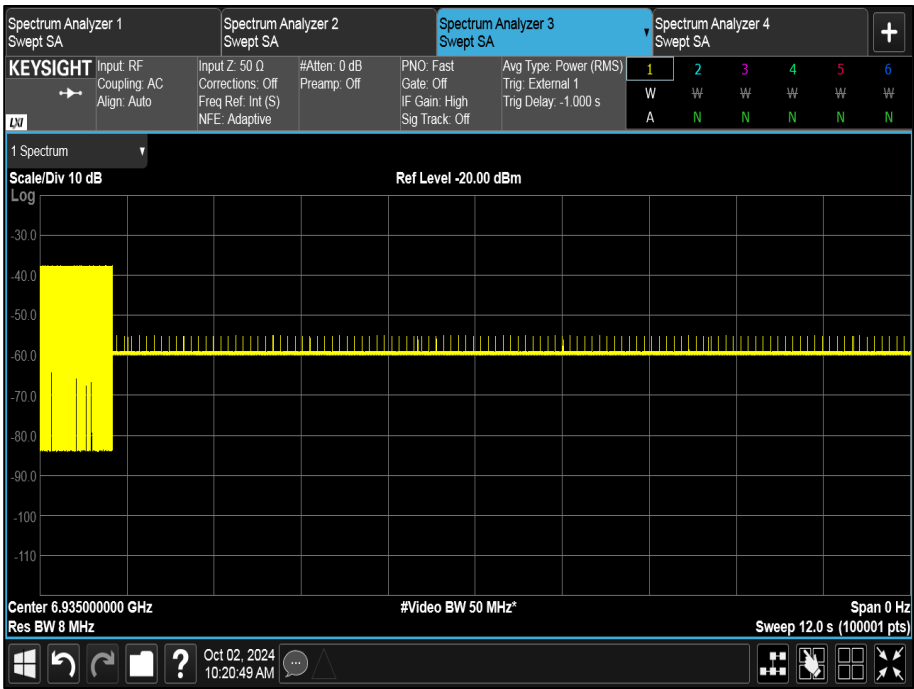


Figure 342 - U-NII-8, Minimum Bandwidth, OFF Level



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)	-66.96	-65.37	-63.36
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-69.63	-68.04	-66.03
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 340 - U-NII-8, Maximum Bandwidth (AWGN Low)

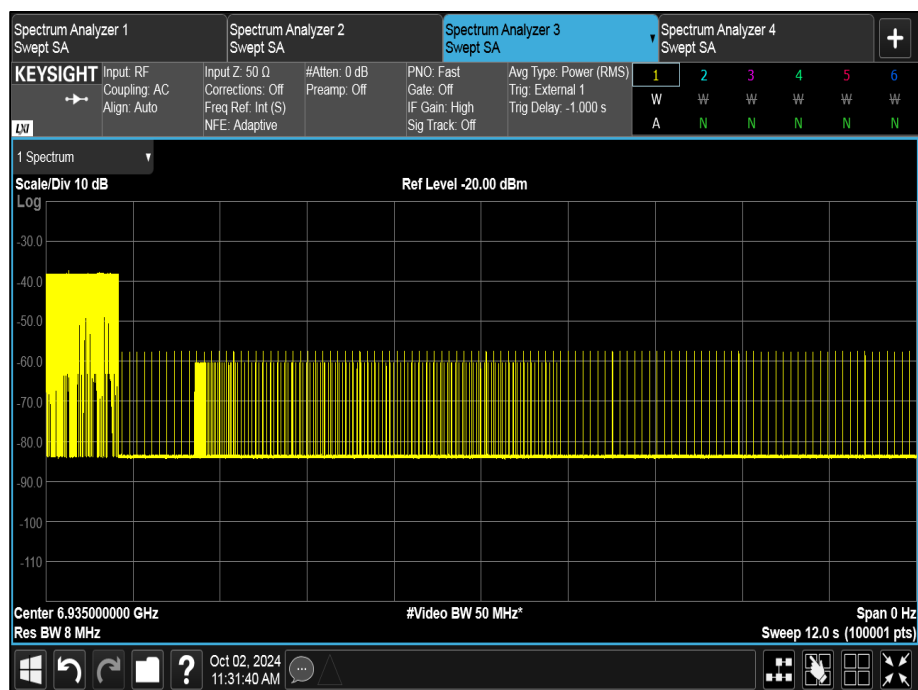


Figure 343 - U-NII-8, Maximum Bandwidth (AWGN Low), OFF Level



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)	-72.24	-70.01	-66.90
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-74.91	-72.68	-69.57
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 341 - U-NII-8, Maximum Bandwidth (AWGN Mid)

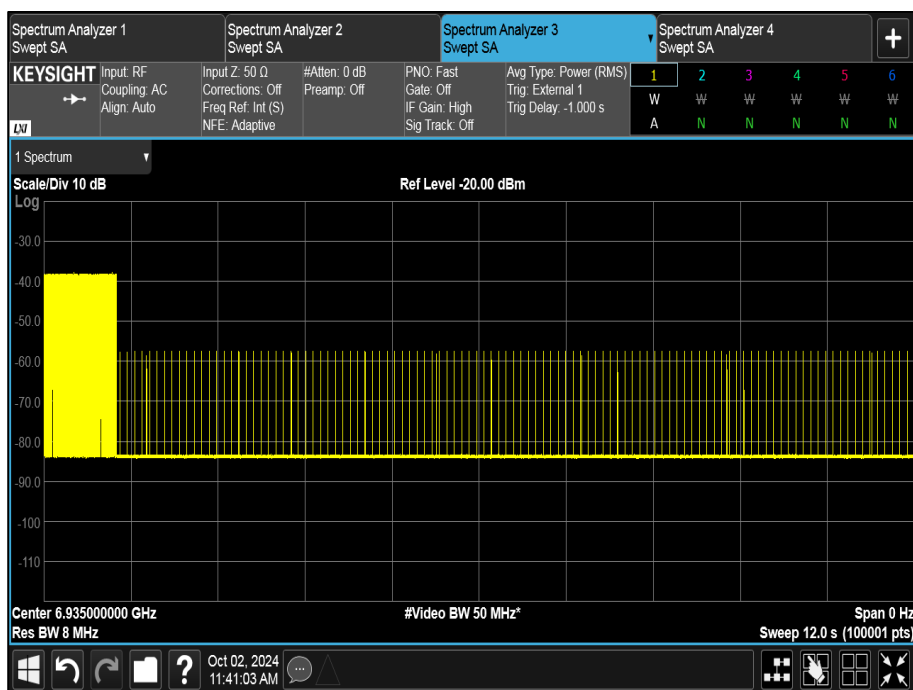


Figure 344 - U-NII-8, Maximum Bandwidth (AWGN Mid), OFF Level



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)	-64.19	-63.25	-60.68
Antenna Gain (dBi)	2.67	2.67	2.67
Adjusted Power (dBm)	-66.86	-65.92	-63.35
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 342 - U-NII-8, Maximum Bandwidth (AWGN High)

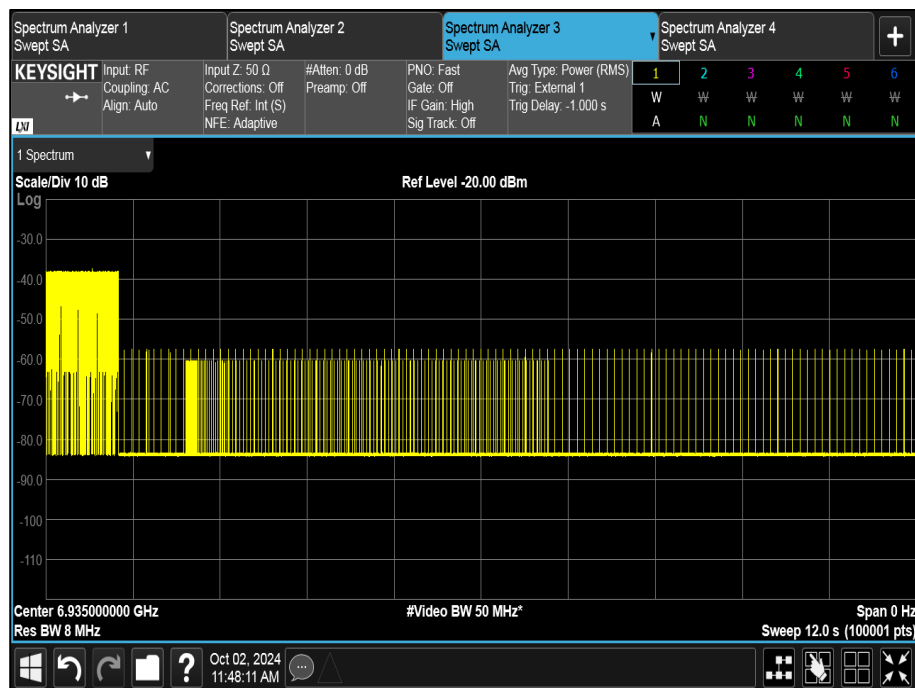


Figure 345 - U-NII-8, Maximum Bandwidth (AWGN High), OFF Level

Frequency Domain Plot

The below 160 MHz bandwidth example plot shows the relative signals in the frequency domain during testing of channel 111 (6505 MHz). The cyan trace shows the level and bandwidth of the DUT during data transfer. The yellow trace shows the router idling and intermittently beaconing without the DUT present only within the 20 MHz control channel portion (channel 101 / 6455 MHz). The pink trace shows both DUT and router when the interferer is present. When the interferer is present it can be observed that the only other signal is the router, transmitting only within the control channel portion at the same amplitude as when the EUT is not present. Therefore, it can be proven that any other transmissions at a similar amplitude to the router's 100 ms beacons are also coming from the router.

Note the amplitude appears slightly smaller than the time domain plots due to the reduction in RBW to give greater frequency resolution.

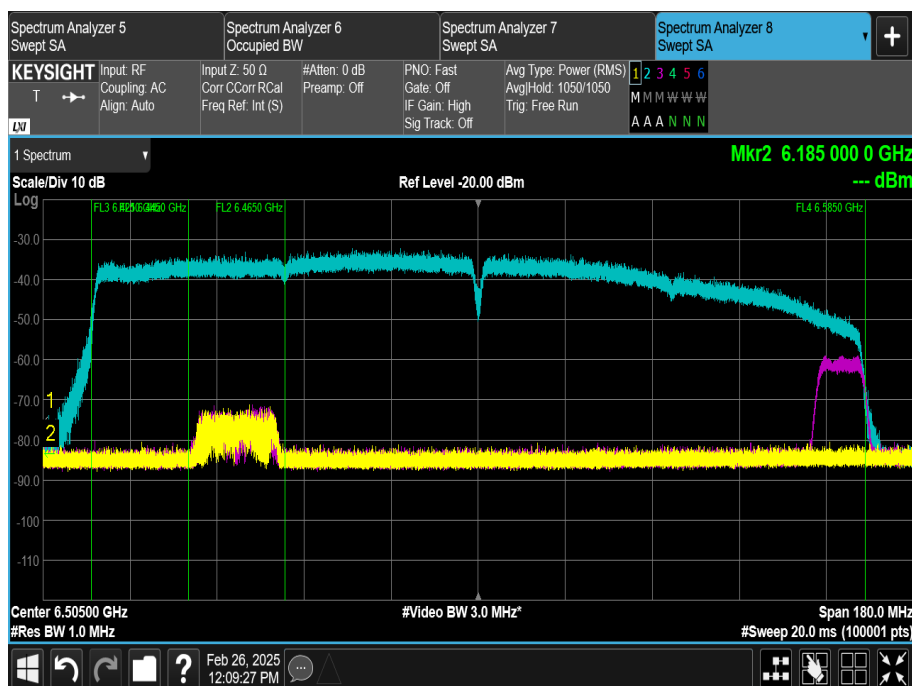


Figure 346 – Frequency Domain Plot of Channel 111 (6505 MHz) Shutdown

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.



2.8.8 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
EXA Signal Analyser	Keysight Technologies	N9010B	4968	24	29-Jan-2026
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5430	12	16-May-2025
3.5mm Cable (1m)	Junkosha	MWX221/B	5837	12	29-Jul-2025
WiFi 6E Tri-Band Gaming Router	Asus	GT-AXE110000	5926	-	TU
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5936	12	23-May-2025
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5938	12	23-May-2025
Thermohygrometer	R.S Components	1364	6352	12	13-Jun-2025
Test Coupling Network	TUV SUD	TUV_RxTest_001	6387	12	06-Sep-2025
Vector Signal Generator (7.5GHz)	Rohde & Schwarz	SMM100A	6532	36	11-Apr-2026

Table 343

TU - Traceability Unscheduled



2.9 Transmit Power Control

2.9.1 Specification Reference

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

2.9.2 Equipment Under Test and Modification State

A3241, S/N: CYR6L3Y9NF - Modification State 0

2.9.3 Date of Test

04-October-2024

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 setup 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.

2.9.5 Test Setup Diagram

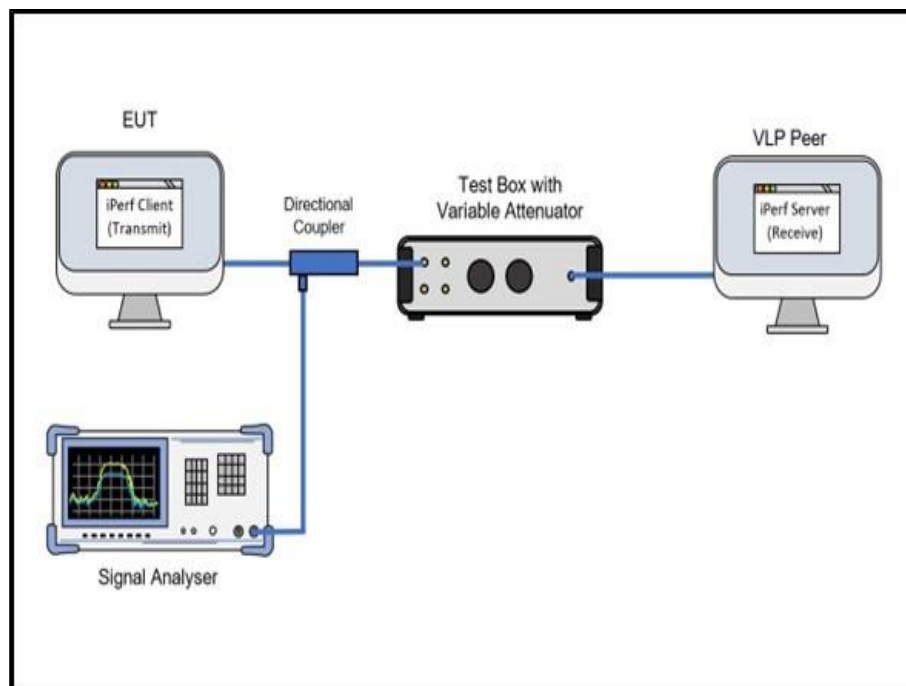


Figure 347 - Test Equipment Setup Diagram

2.9.6 Environmental Conditions

Ambient Temperature	21.2 °C
Relative Humidity	41.2 %



2.9.7 Test Results

6 GHz WLAN

Frequency (MHz)	Bandwidth (MHz)	Power Spectral Density (dBm/MHz) EIRP		TPC Low Limit (dBm/MHz)	Margin (dB)	Δ PSD (dB)	Verdict
		TPC High	TPC Low				
6185	160	-9.00	-15.58	-11.0	-4.58	6.58	Pass

Table 344 - TPC VLP Results

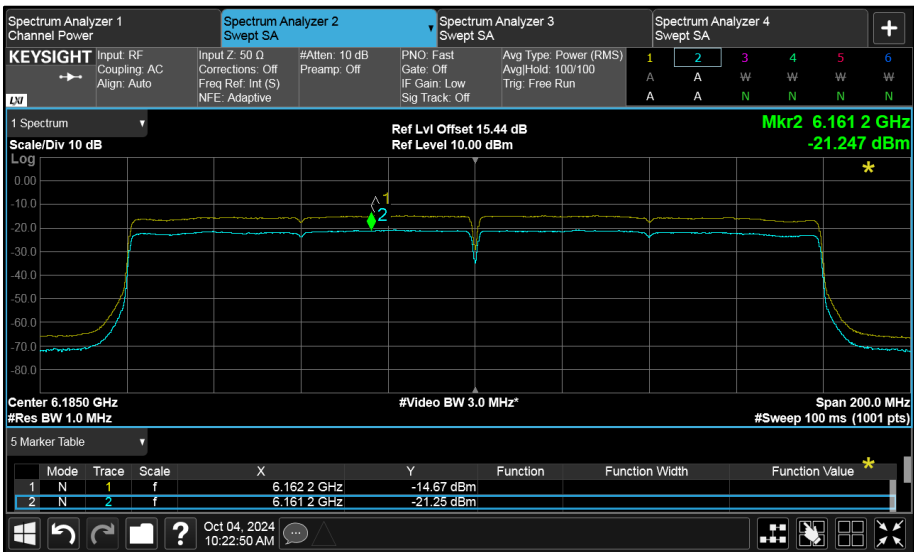


Figure 348 - TPC VLP

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.



2.9.8 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	5430	12	16-May-2025
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5765	-	O/P Mon
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5936	12	23-May-2025
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5938	12	23-May-2025
Thermohygrometer	R.S Components	1364	6352	12	13-Jun-2025
Test Coupling Network	TUV SUD	TUV_RxTest_001	6387	12	06-Sep-2025

Table 345

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
Emission Bandwidth	± 3.91 MHz
Dual Client Test	± 1.38 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
Transmit Power Control	± 1.49 dB

Table 346

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.