



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 HE160 SU SP	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
6025	8.25	8.56	-	-
6185	6.71	7.57	-	-
6345	6.35	6.46	-	-
6505	6.96	7.81	-	-
6665	7.65	8.28	-	-

Table 349 - 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 HE20 RU26 SP	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
5955 (RU26.0)	19.56	18.31	-	-
6175 (RU26.0)	20.68	18.32	-	-
6415 (RU26.8)	18.51	16.08	-	-
6435 (RU26.0)	20.14	16.45	-	-
6475 (RU26.0)	20.40	17.32	-	-
6515 (RU26.8)	17.80	16.28	-	-
6535 (RU26.0)	20.06	18.42	-	-
6695 (RU26.0)	19.91	18.40	-	-
6855 (RU26.8)	17.95	17.09	-	-

Table 350 - 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 HE20 RU52 SP	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
5955 (RU52.37)	18.65	18.42	-	-
6175 (RU52.37)	19.37	17.58	-	-
6415 (RU52.40)	18.49	15.15	-	-
6435 (RU52.37)	19.56	18.75	-	-
6475 (RU52.37)	17.91	19.09	-	-
6515 (RU52.40)	18.57	15.74	-	-
6535 (RU52.37)	19.73	18.49	-	-
6695 (RU52.37)	18.90	19.29	-	-
6855 (RU52.40)	19.61	15.21	-	-

Table 351 - 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

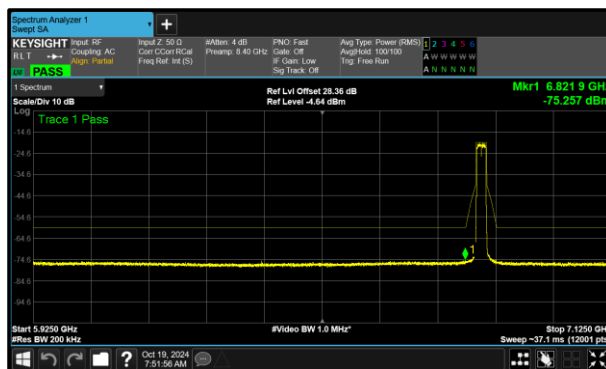
DUT Configuration			
Mode:	802.11ax HE20 RU106 SP	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955 (RU106.53)	19.24	17.23	-	-
6175 (RU106.53)	18.05	17.92	-	-
6415 (RU106.54)	15.06	15.02	-	-
6435 (RU106.53)	15.51	17.03	-	-
6475 (RU106.53)	15.65	16.98	-	-
6515 (RU106.54)	14.89	15.05	-	-
6535 (RU106.53)	16.45	16.33	-	-
6695 (RU106.53)	17.31	15.86	-	-
6855 (RU106.54)	19.01	16.85	-	-

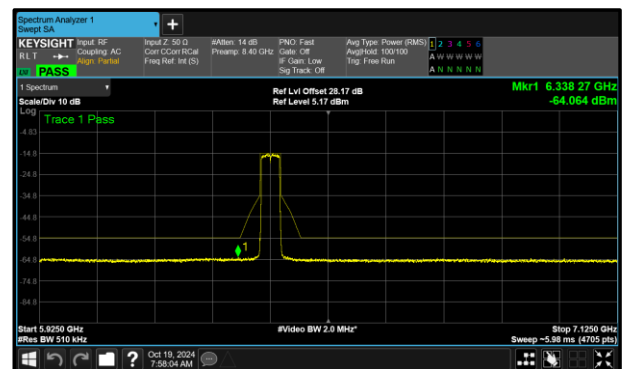
Table 352 - Unwanted Emissions Within the Band Results

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU VLP	15.66	6821.900
802.11ax HE40 SU VLP	9.36	6338.265
802.11ax HE80 SU VLP	8.68	5994.000
802.11ax HE160 SU VLP	8.10	6105.000

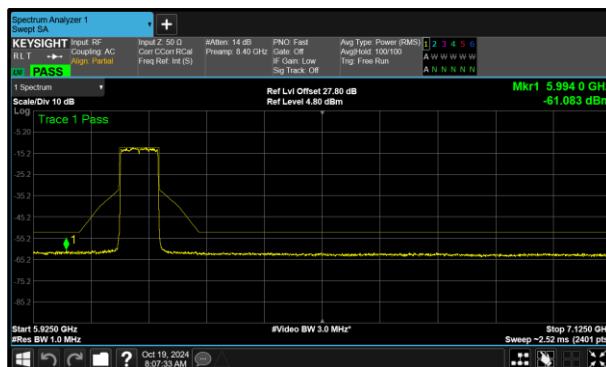
Table 353 - Unwanted Emissions Within the RLAN Band Summary Results



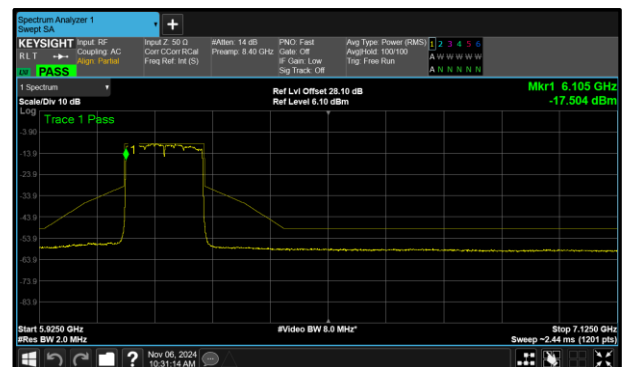
**Figure 363 - B (Core 1) 802.11ax HE20 SU VLP
6855 MHz (CH181)**



**Figure 364 - A (Core 0) 802.11ax HE40 SU VLP
6405 MHz (CH91)**



**Figure 365 - A (Core 0) 802.11ax HE80 SU VLP
6145 MHz (CH39)**



**Figure 366 - A (Core 0) 802.11ax HE160 SU VLP
6185 MHz (CH47)**



Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 RU106 VLP	14.74	6398.000

Table 354 - Unwanted Emissions Within the RLAN Band Summary Results

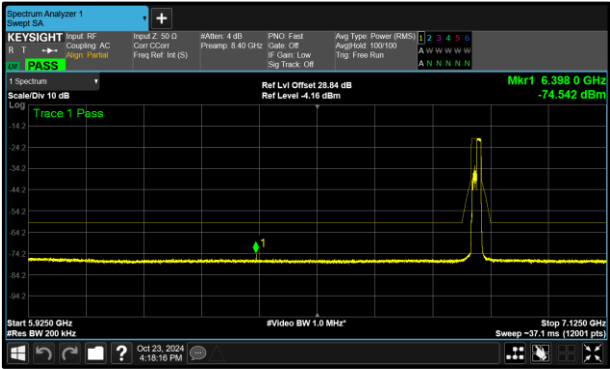


Figure 367 - B (Core 1) 802.11ax HE20 RU106 VLP 6855 MHz (CH181)



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 HE20 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
6115	16.64	17.74	-	-
6275	15.90	17.02	-	-
6415	17.10	16.59	-	-
6535	16.43	16.57	-	-
6695	15.87	16.50	-	-
6855	15.80	15.66	-	-

Table 355 - 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 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	10.67	11.48	-	-
6285	10.56	10.28	-	-
6405	9.36	11.29	-	-
6565	9.83	10.48	-	-
6685	10.49	10.62	-	-
6845	11.37	10.29	-	-

Table 356 - 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	8.68	9.34	-	-
6225	10.41	9.62	-	-
6385	10.99	9.51	-	-
6625	10.01	9.81	-	-
6705	10.54	10.77	-	-
6785	10.07	10.48	-	-

Table 357 - 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	8.10	8.25	-	-
6345	8.81	8.59	-	-
6665	8.98	8.60	-	-

Table 358 - 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 HE20 RU106 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
6115 (RU106.53)	17.07	17.99	-	-
6275 (RU106.53)	17.01	17.35	-	-
6415 (RU106.54)	16.88	17.04	-	-
6535 (RU106.53)	17.11	17.15	-	-
6695 (RU106.53)	16.11	15.26	-	-
6855 (RU106.54)	16.65	14.74	-	-

Table 359 - Unwanted Emissions Within the Band Results

TxBF

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU LPI	15.80	6887.600
802.11ax HE40 SU LPI	8.49	6792.092
802.11ax HE80 SU LPI	8.80	6572.500

Table 360 - Unwanted Emissions Within the RLAN Band Summary Results

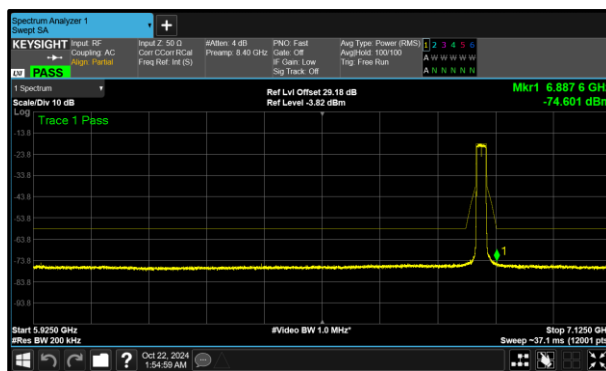


Figure 368 - B (Core 1) 802.11ax HE20 SU LPI
6855 MHz (CH181)

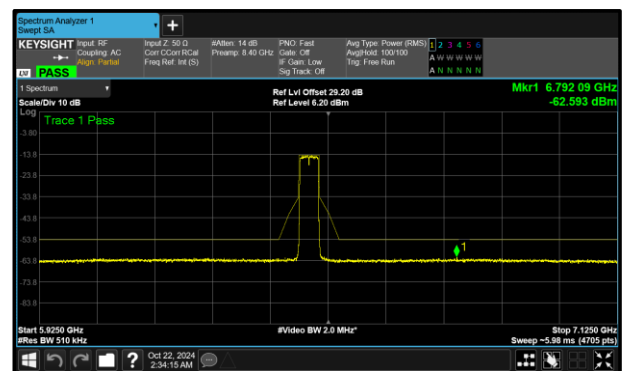


Figure 369 - B (Core 1) 802.11ax HE40 SU LPI
6485 MHz (CH107)

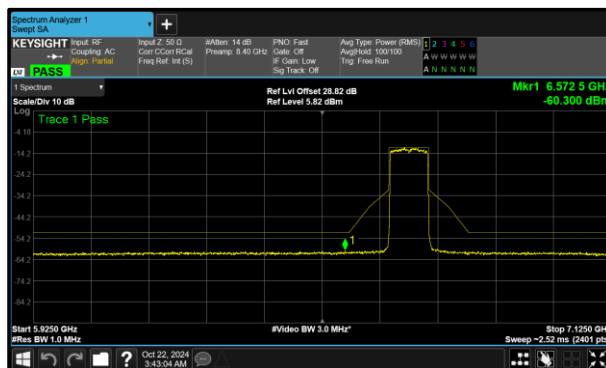


Figure 370 - B (Core 1) 802.11ax HE80 SU LPI
6705 MHz (CH151)



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 HE20 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
5955	17.18	16.93	-	-
6175	16.59	17.45	-	-
6415	16.66	16.90	-	-
6435	16.25	17.03	-	-
6475	16.77	16.51	-	-
6515	17.19	16.73	-	-
6535	17.13	16.62	-	-
6695	17.03	16.73	-	-
6855	16.66	15.80	-	-
6875	16.67	16.17	-	-
6895	16.30	15.94	-	-
6995	17.58	16.56	-	-
7095	17.42	16.30	-	-

Table 361 - 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 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 HE40 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
5965	9.85	9.66	-	-
6165	9.20	9.87	-	-
6405	10.48	11.40	-	-
6445	10.20	10.34	-	-
6485	10.01	8.49	-	-
6525	10.05	8.72	-	-
6565	10.04	10.09	-	-
6685	10.32	8.70	-	-
6845	11.68	10.74	-	-
6885	11.75	11.87	-	-
6925	10.90	12.50	-	-
7005	10.68	11.63	-	-
7085	10.90	11.43	-	-

Table 362 - 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 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	8.85	10.25	-	-
6145	10.96	9.80	-	-
6385	9.81	9.19	-	-
6465	9.36	8.84	-	-
6545	9.55	9.40	-	-
6625	9.56	9.95	-	-
6705	10.62	8.80	-	-
6785	10.41	10.42	-	-
6865	10.66	10.02	-	-
6945	9.55	10.28	-	-
7025	9.86	10.47	-	-

Table 363 - Unwanted Emissions Within the Band Results



Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU SP	11.74	6383.100
802.11ax HE40 SU SP	8.32	6517.347
802.11ax HE80 SU SP	4.47	6701.500

Table 364 - Unwanted Emissions Within the RLAN Band Summary Results

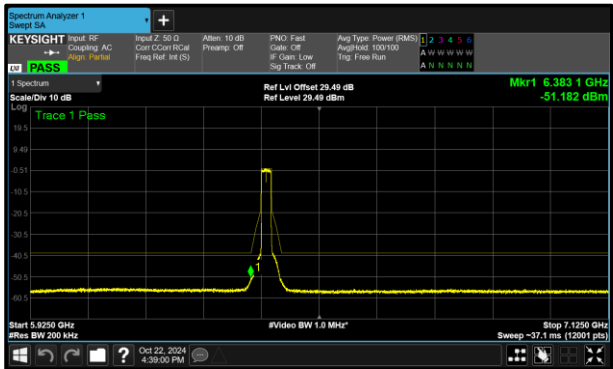


Figure 371 - A (Core 0) 802.11ax HE20 SU SP
6415 MHz (CH93)

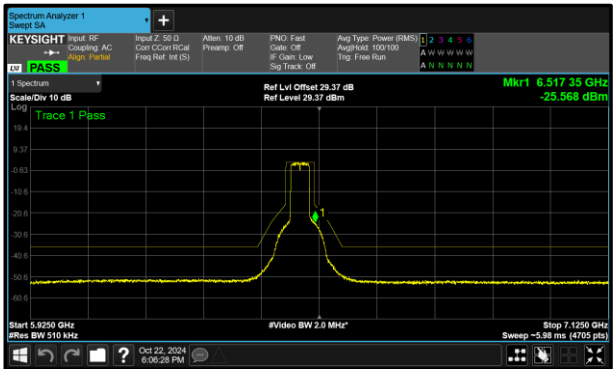


Figure 372 - A (Core 0) 802.11ax HE40 SU SP
6485 MHz (CH107)

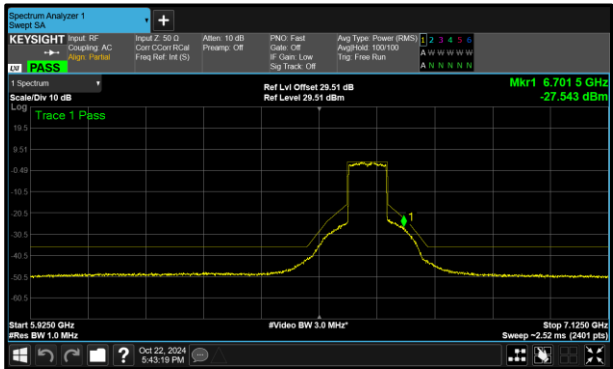


Figure 373 - A (Core 0) 802.11ax HE80 SU SP
6625 MHz (CH135)



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	14.76	15.13	-	-
6175	13.07	14.77	-	-
6415	11.74	13.52	-	-
6435	12.53	13.61	-	-
6475	12.66	13.74	-	-
6515	12.48	13.22	-	-
6535	15.05	15.21	-	-
6695	14.26	14.92	-	-
6855	14.08	14.20	-	-

Table 365 - 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	10.94	10.60	-	-
6165	9.07	9.74	-	-
6405	8.90	10.55	-	-
6445	9.44	10.39	-	-
6485	8.32	9.78	-	-
6525	9.87	8.46	-	-
6565	9.22	10.06	-	-
6685	9.01	10.22	-	-
6845	11.50	11.17	-	-

Table 366 - 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	8.06	8.59	-	-
6145	5.75	5.97	-	-
6385	6.49	6.41	-	-
6465	7.65	5.95	-	-
6545	4.80	5.94	-	-
6625	4.47	5.89	-	-
6705	6.29	6.46	-	-
6785	6.00	5.83	-	-

Table 367 - Unwanted Emissions Within the Band Results



Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE80 SU VLP	7.77	6430.500

Table 368 - Unwanted Emissions Within the RLAN Band Summary Results

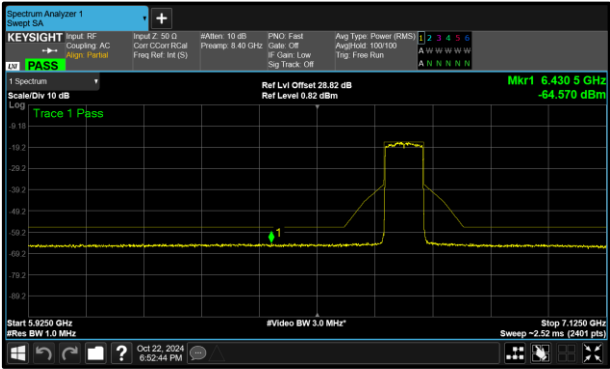


Figure 374 - B (Core 1) 802.11ax HE80 SU VLP 6705 MHz (CH151)



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:	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
6145	9.03	9.02	-	-
6225	8.88	9.02	-	-
6385	9.40	9.03	-	-
6625	8.98	8.44	-	-
6705	9.48	7.77	-	-
6785	8.85	9.93	-	-

Table 369 - 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 Chamber 18 and RF Laboratory 14.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Hygrometer	Rotronic	I-1000	3068	12	07-Nov-2024
1800-6000 MHz Power Splitter	Mini-Circuits	ZN2PD-63-S+	4055	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
Attenuator 5W 30dB DC-18GHz	Aaren	AT40A-4041-D18-30	5505	12	22-Feb-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
1500VA AC Power Supply	iTech	IT7324	5907	-	O/P Mon



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
MXA Signal Analyser	Keysight Technologies	N9020B	5919	24	18-Mar-2026
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
MXA Signal Analyser	Keysight Technologies	N9020B	6419	24	28-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
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6518	12	16-Feb-2025
Signal Conditioning Unit	TUV SUD	SPECTRUM_SCU001	6519	12	08-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6520	12	09-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6521	12	09-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	6529	12	16-Feb-2025
SCU Cable Assembly	TUV SUD	SPECTRUM_SCU_CA	6530	12	16-Feb-2025
AC Programmable Power Supply	iTech	IT7324	6662	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	6665	-	O/P Mon
WiFi 6E Tri-Band Gaming Router	Asus	GT-AXE110000	6694	-	TU
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 370

TU - Traceability Unscheduled
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

A3143, S/N: KF7HX3N4PJ - Modification State 0

2.8.3 Date of Test

30-September-2024

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, i.e. no partial transmissions other than short control signalling 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.

2.8.5 Test Setup Diagram

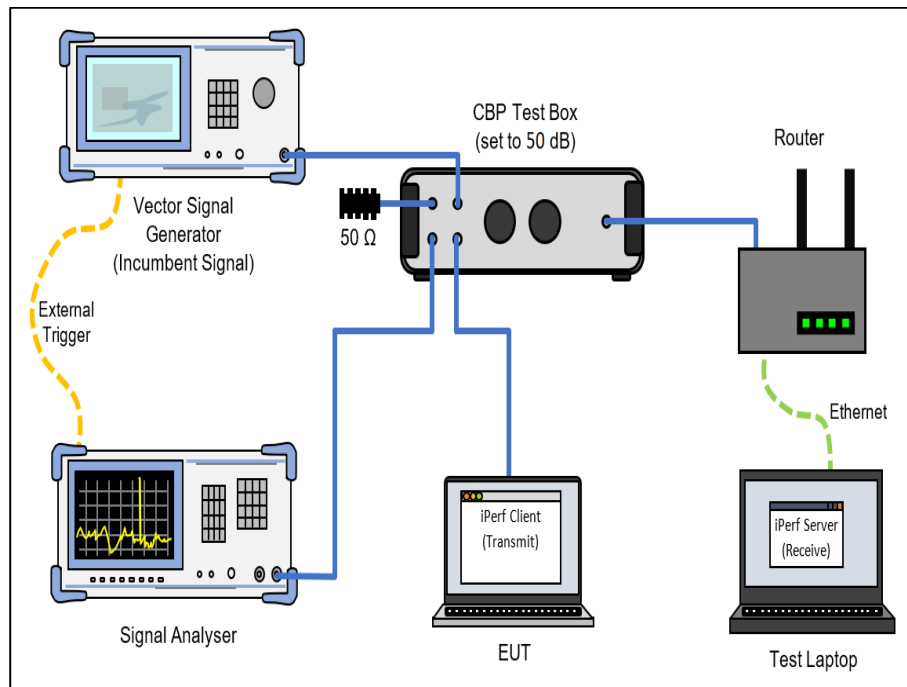


Figure 375 - Test Equipment Setup Diagram

2.8.6 Environmental Conditions

Ambient Temperature	22.9 °C
Relative Humidity	40.4 %



2.8.7 Test Results

6 GHz WLAN

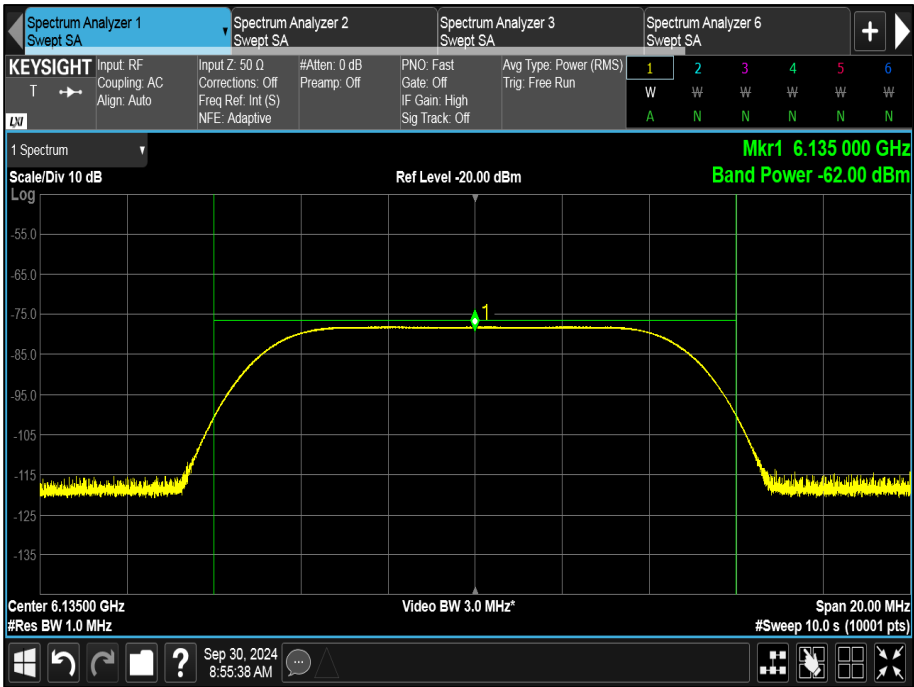


Figure 376 - Example of AWGN Signal



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)	-67.64	-67.23	-67.05
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-66.53	-66.12	-65.94
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 371 - U-NII-5, Minimum Bandwidth



Figure 377 - 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)	-66.98	-66.52	-66.36
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-65.87	-65.41	-65.25
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 372 - U-NII-5, Maximum Bandwidth (AWGN Low)

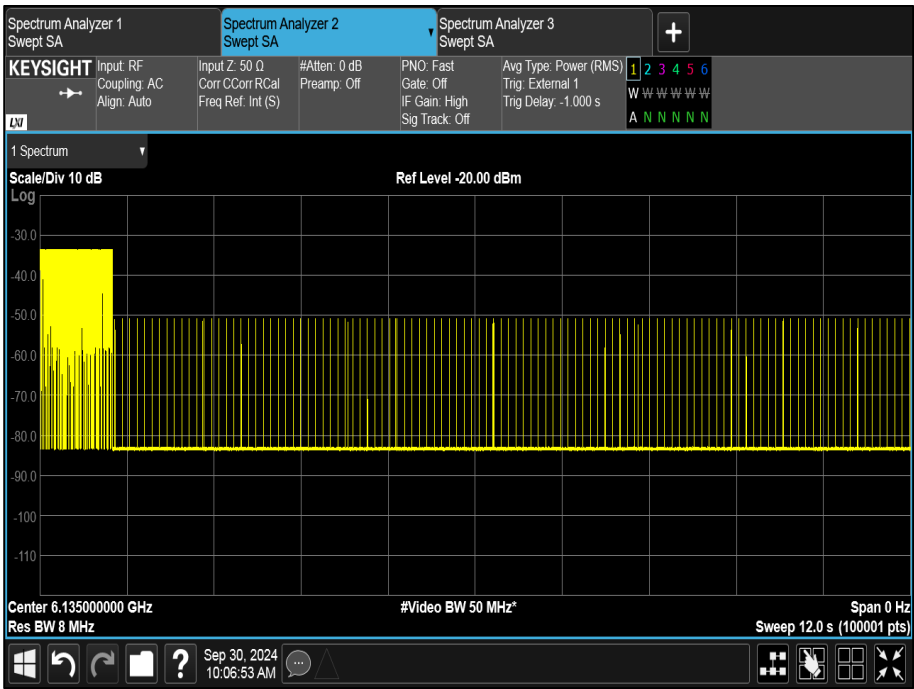


Figure 378 - U-NII-5, Maximum Bandwidth (AWGN Low)



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)	-69.29	-68.14	-64.01
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-68.18	-67.03	-62.90
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 373 - U-NII-5, Maximum Bandwidth (AWGN Mid)

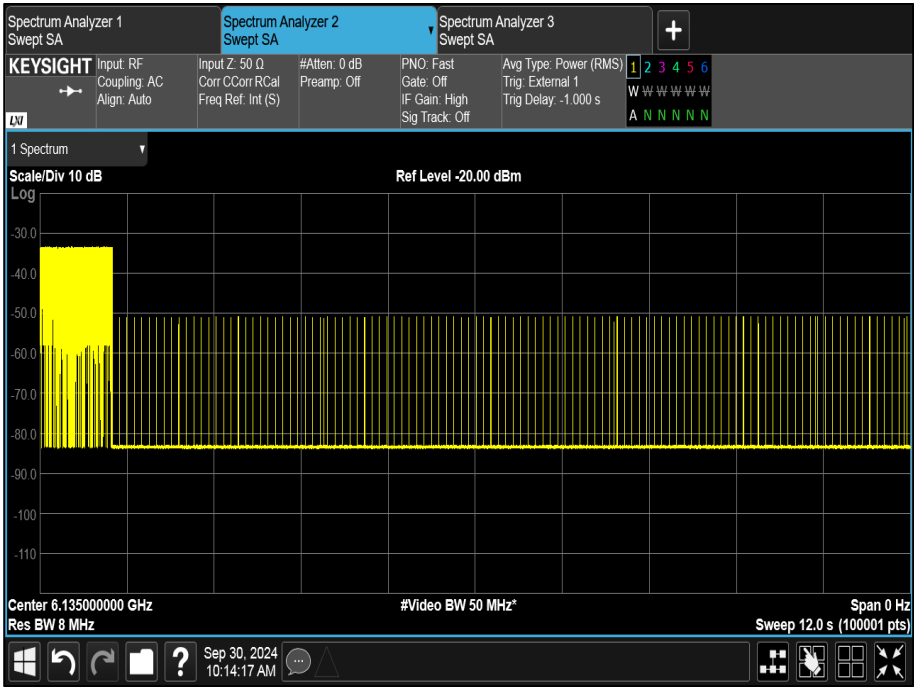


Figure 379 - U-NII-5, Maximum Bandwidth (AWGN Mid)



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)	-65.14	-64.71	-63.61
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-64.03	-63.60	-62.50
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 374 - U-NII-5, Maximum Bandwidth (AWGN High)

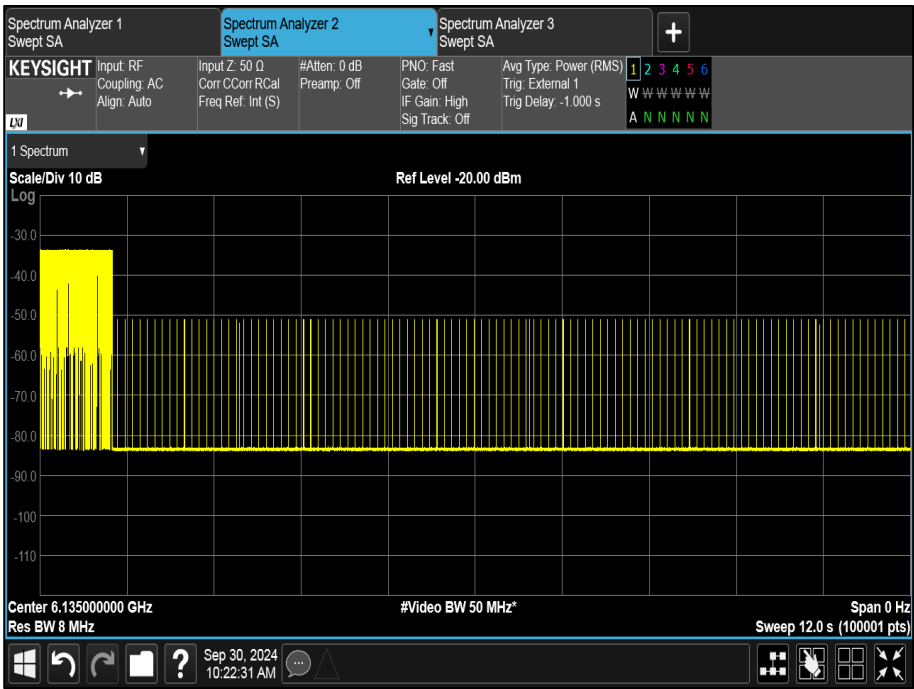


Figure 380 - U-NII-5, Maximum Bandwidth (AWGN High)

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)	-69.05	-68.45	-67.91
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-67.94	-67.34	-66.80
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 375 - U-NII-6, Minimum Bandwidth

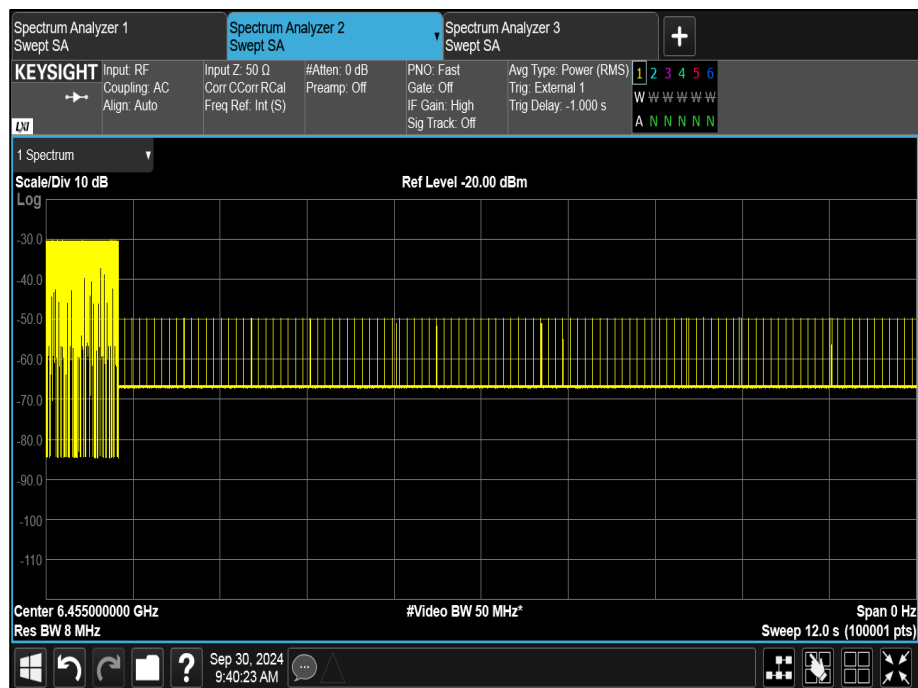


Figure 381 - U-NII-6, Minimum Bandwidth



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)	-69.52	-68.84	-68.65
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-68.41	-67.73	-67.54
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 376 - U-NII-6, Maximum Bandwidth (AWGN Low)

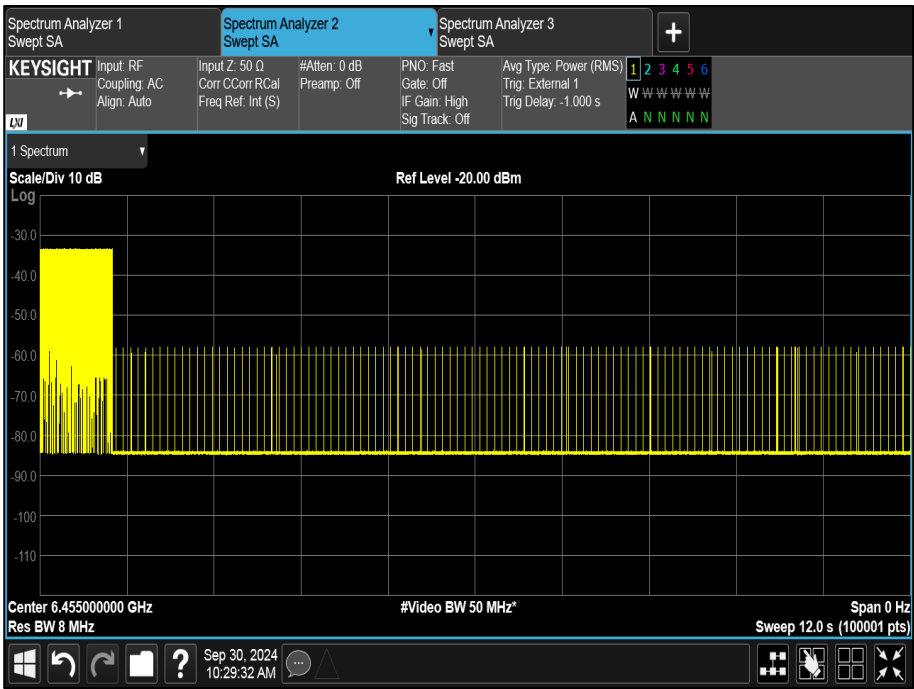


Figure 382 - U-NII-6, Maximum Bandwidth (AWGN Low)



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)	-70.68	-69.47	-65.92
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-69.57	-68.36	-64.81
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 377 - U-NII-6, Maximum Bandwidth (AWGN Mid)

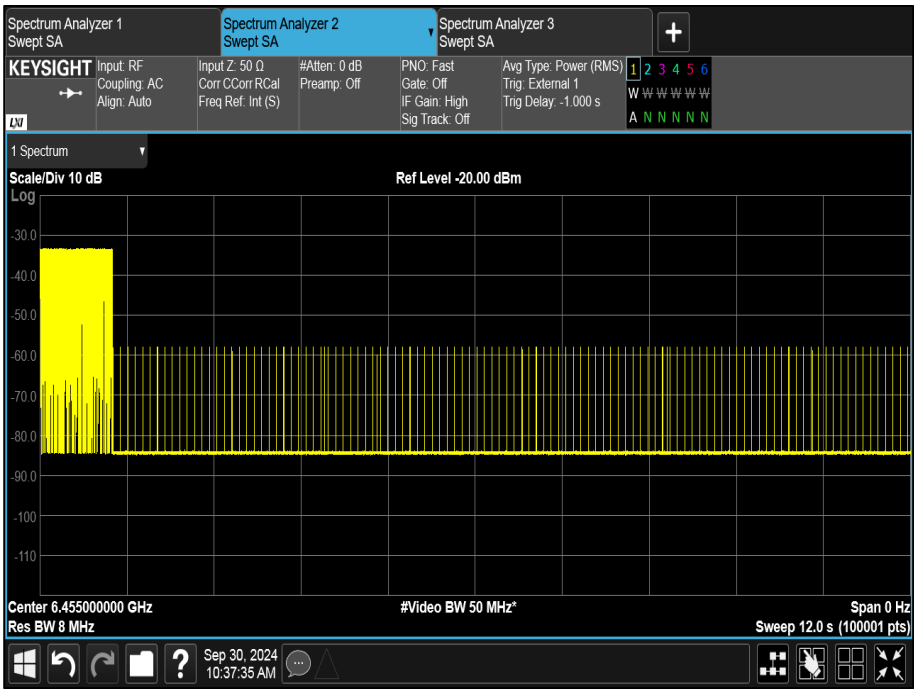


Figure 383 - U-NII-6, Maximum Bandwidth (AWGN Mid)



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)	-66.00	-65.74	-65.56
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-64.89	-64.63	-64.45
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 378 - U-NII-6, Maximum Bandwidth (AWGN High)



Figure 384 - U-NII-6, Maximum 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)	-73.94	-73.11	-67.95
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-72.83	-72.00	-66.84
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 379 - U-NII-7, Minimum Bandwidth

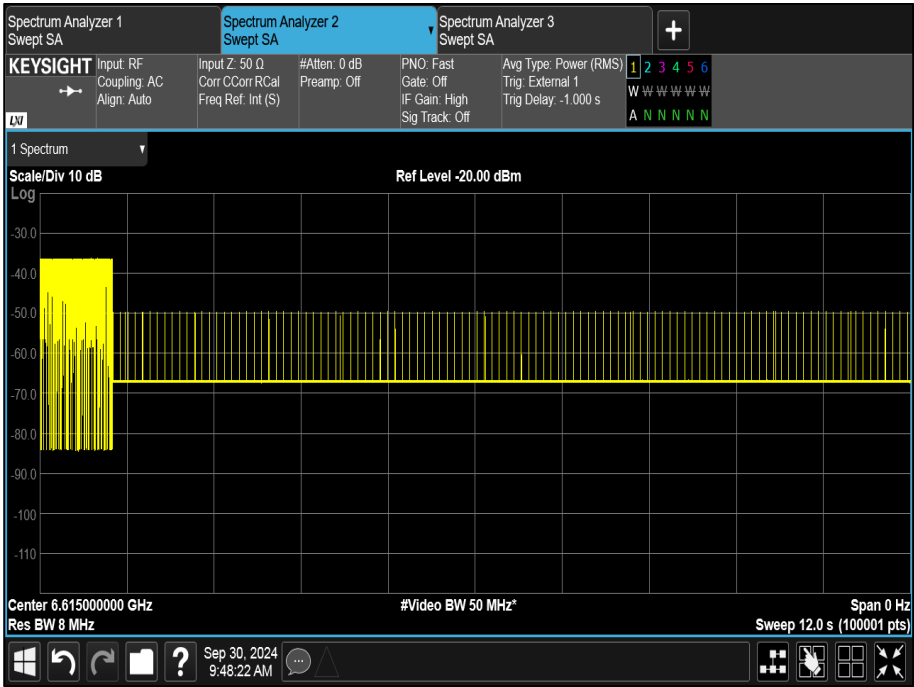


Figure 385 - U-NII-7, Minimum Bandwidth



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)	-69.32	-68.87	-68.28
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-68.21	-69.75	-67.17
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 380 - U-NII-7, Maximum Bandwidth (AWGN Low)

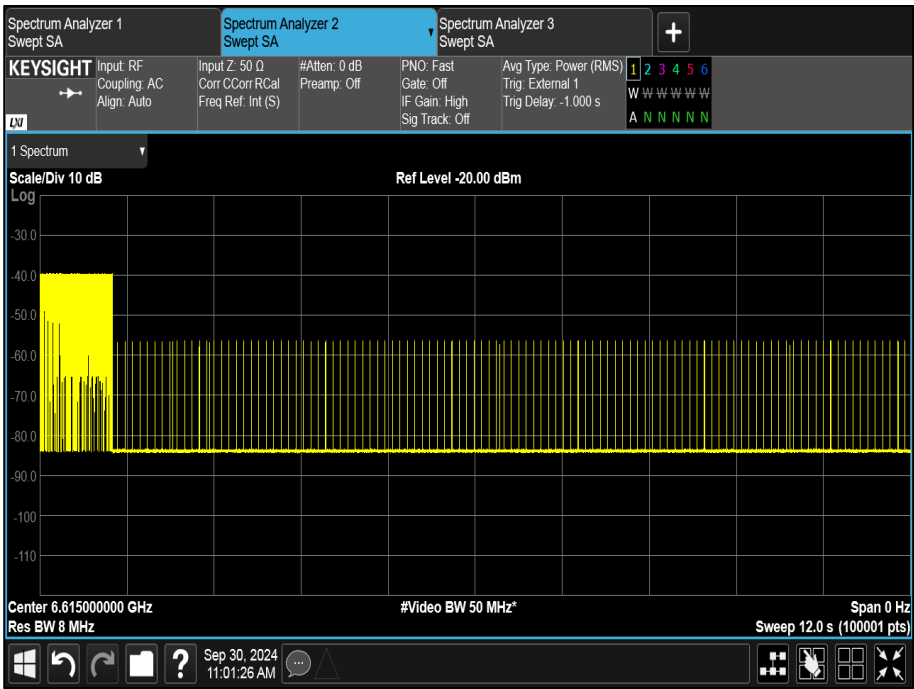


Figure 386 - U-NII-7, Maximum Bandwidth (AWGN Low)



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)	-70.13	-69.37	-64.81
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-69.02	-68.26	-63.70
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 381 - U-NII-7, Maximum Bandwidth (AWGN Mid)

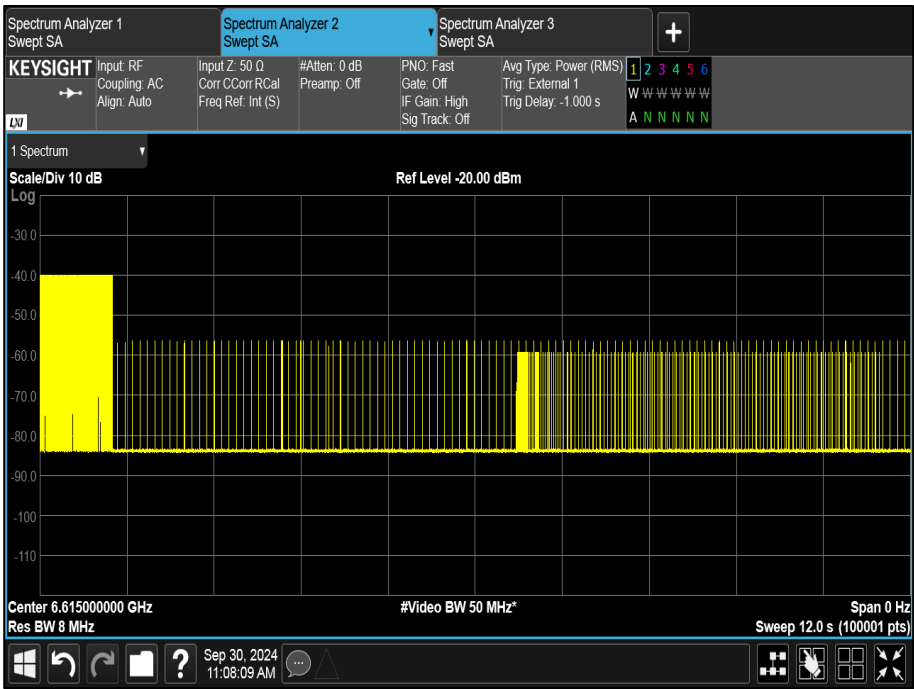


Figure 387 - U-NII-7, Maximum Bandwidth (AWGN Mid)



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)	-65.35	-64.72	-64.26
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-64.24	-63.61	-63.15
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 382 - U-NII-7, Maximum Bandwidth (AWGN High)

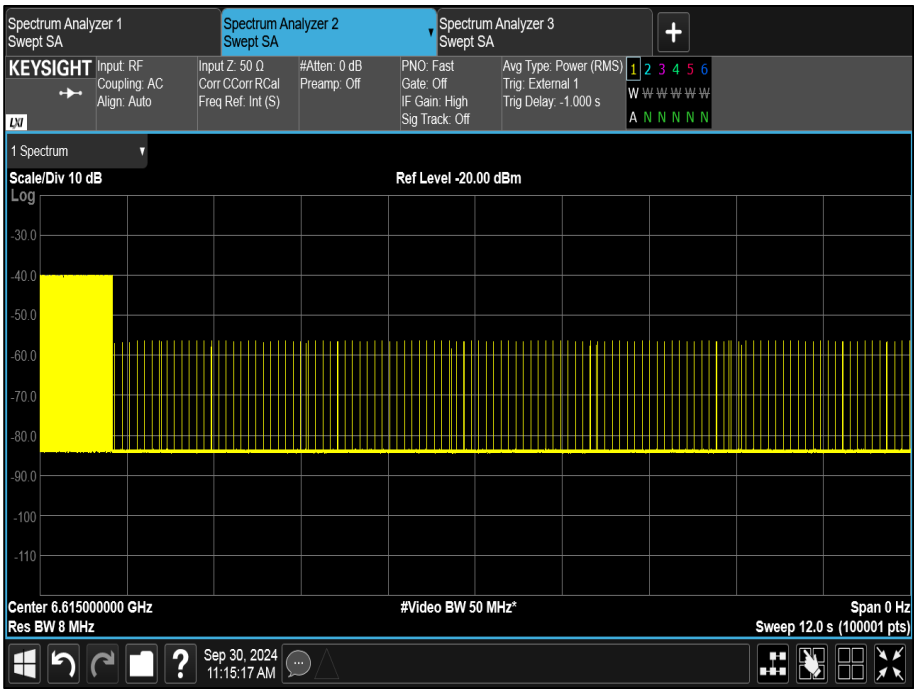


Figure 388 - U-NII-7, Maximum Bandwidth (AWGN High)

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)	-74.84	-73.95	-68.97
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-73.73	-72.84	-67.86
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 383 - U-NII-8, Minimum Bandwidth

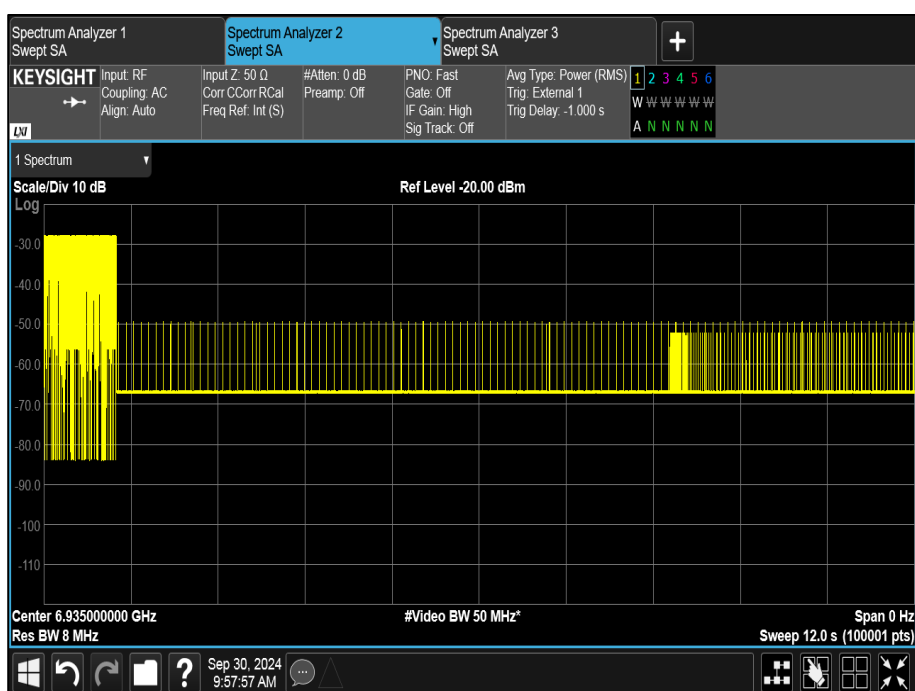


Figure 389 - U-NII-8, Minimum Bandwidth



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)	-67.74	-66.92	-66.68
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-66.63	-65.81	-65.57
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 384 - U-NII-8, Maximum Bandwidth (AWGN Low)

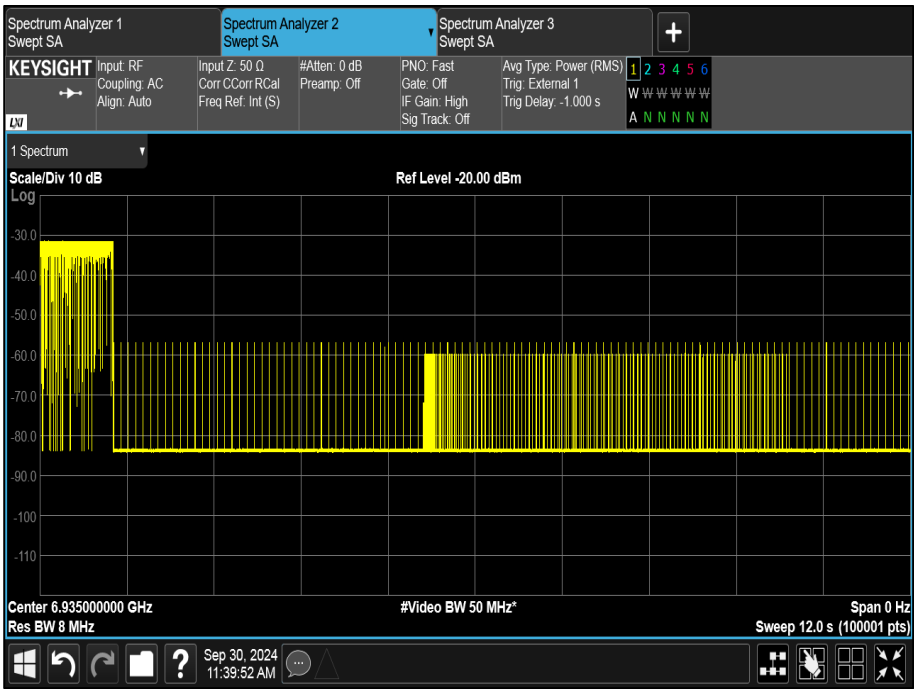


Figure 390 - U-NII-8, Maximum Bandwidth (AWGN Low)

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)	-69.22	-68.06	-64.18
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-68.11	-66.95	-63.07
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 385 - U-NII-8, Maximum Bandwidth (AWGN Mid)

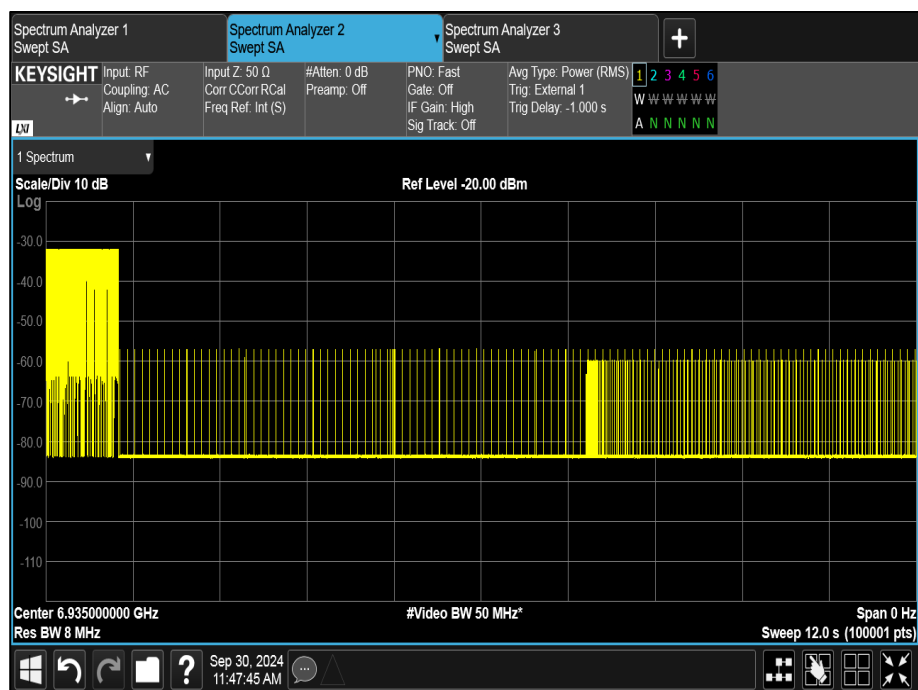


Figure 391 - U-NII-8, Maximum Bandwidth (AWGN Mid)



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)	-65.87	-65.50	-64.63
Antenna Gain (dBi)	-1.11	-1.11	-1.11
Adjusted Power (dBm)	-64.76	-64.39	-63.52
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 386 - U-NII-8, Maximum Bandwidth (AWGN High)



Figure 392 - U-NII-8, Maximum 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.



2.8.8 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 387

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

A3143, S/N: XJ32YWNFP0 - Modification State 0

2.9.3 Date of Test

29-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

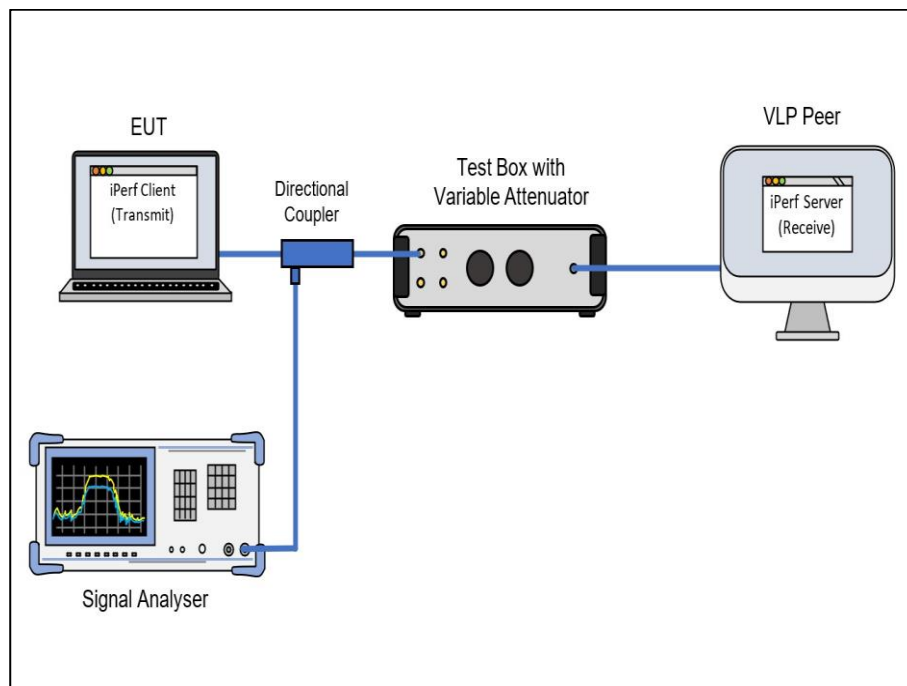


Figure 393 - Test Equipment Setup Diagram

2.9.6 Environmental Conditions

Ambient Temperature	23.1 °C
Relative Humidity	41.4 %



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	-8.195	-14.286	-11.0	-3.286	6.091	Pass

Table 388 - TPC VLP Results

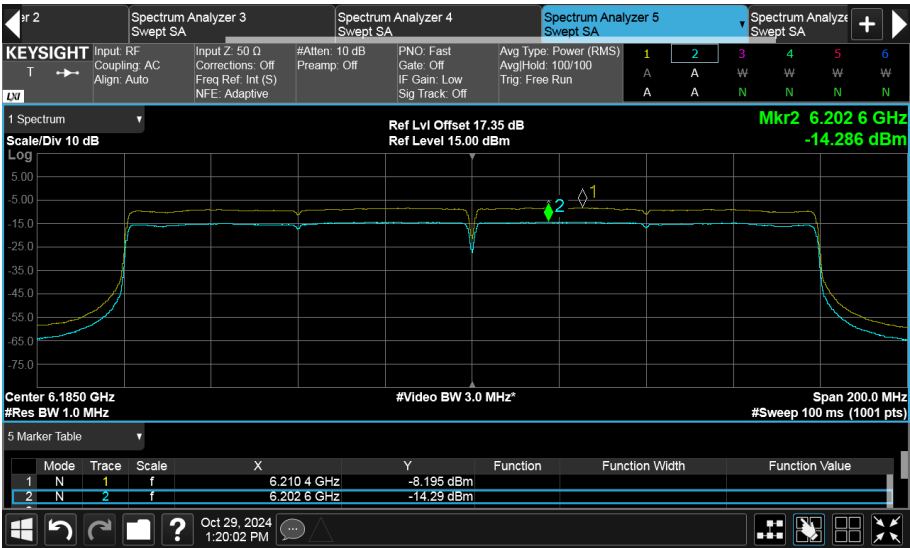


Figure 394 - TPC VLP

FCC 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	5429	12	16-May-2025
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5430	12	16-May-2025
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5765	-	O/P Mon
3.5mm Cable (1m)	Junkosha	MWX221/B	5838	12	29-Jul-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 389

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 390

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.