Plot 6-7 1 GHz to 18GHz UNII 7 – 6 695 MHz 802.11ax20 – VLP

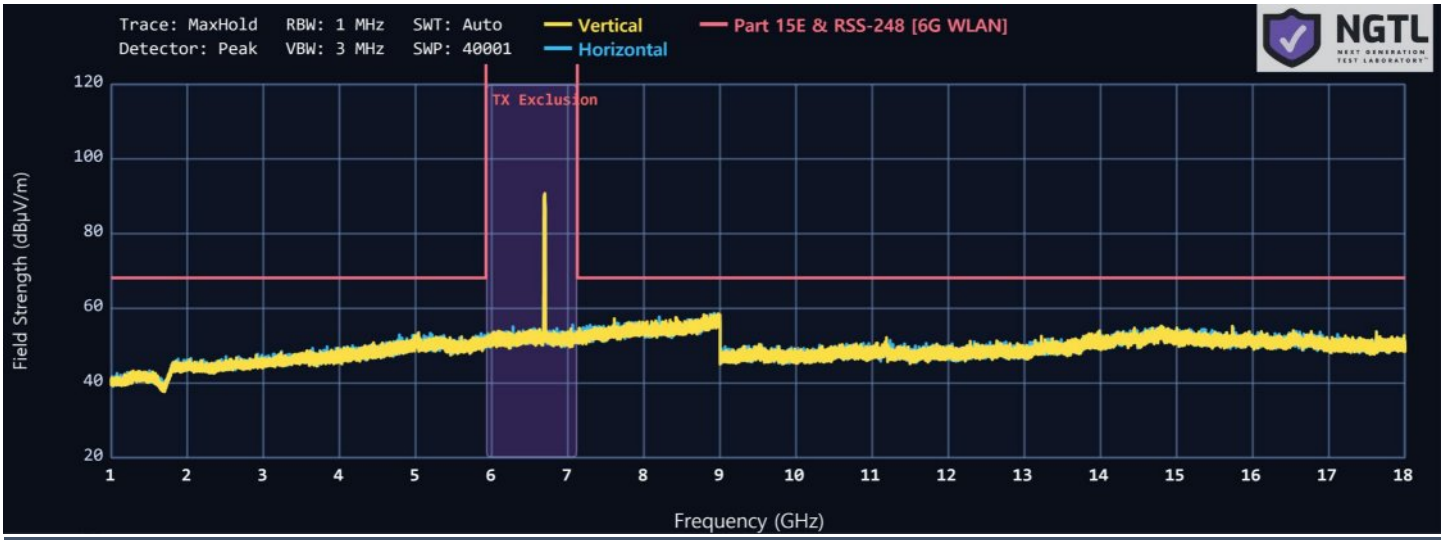
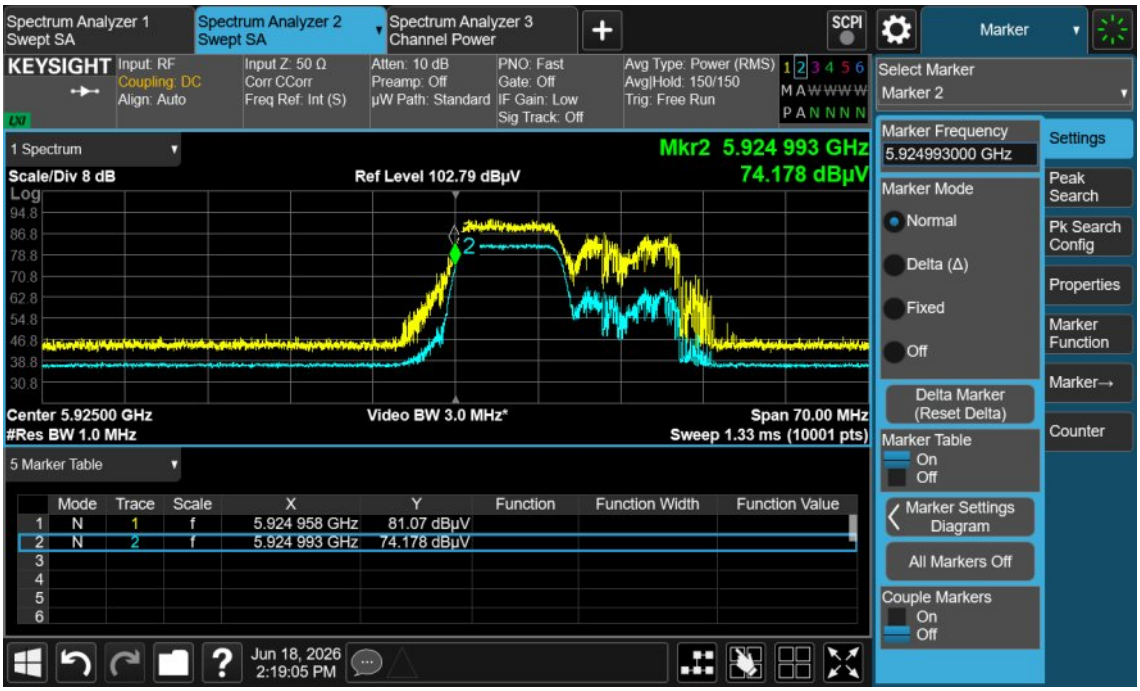


Table 6-7 Radiated Spurious Emissions – VLP 1 GHz to 18GHz

Test mode	Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBµV]	Pol [H/V]	Detector Mode	DCCF [dB]	AFCL [dB/m]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]
ax20	5935	11 871.36	45.54	H	PK	0.00	4.90	50.44	74.00	-23.56
		11 871.73	34.61	H	AV	0.00	4.90	39.51	54.00	-14.49
	6175	12 350.92	45.62	H	PK	0.00	5.30	50.92	74.00	-23.08
		12 351.95	35.18	H	AV	0.00	5.30	40.48	54.00	-13.52
	6415	12 830.59	45.11	H	PK	0.00	6.00	51.11	68.20	-17.09
ax20	6435	12 870.89	45.24	H	PK	0.00	6.00	51.24	68.20	-16.96
	6475	12 950.82	45.93	H	PK	0.00	5.90	51.83	68.20	-16.37
	6515	13 031.19	45.28	H	PK	0.00	6.10	51.38	68.20	-16.82
ax20	6535	13 071.50	45.68	H	PK	0.00	6.30	51.98	68.20	-16.22
	6695	13 350.49	45.12	H	PK	0.00	6.60	51.72	74.00	-22.28
		13 351.80	34.34	H	AV	0.00	6.60	40.94	54.00	-13.06
	6855	13 710.39	44.94	H	PK	0.00	6.80	51.74	68.20	-16.46
ax20	6875	13 791.92	44.68	H	PK	0.00	6.90	51.58	68.20	-16.62
	6995	13 991.58	44.55	H	PK	0.00	7.30	51.85	68.20	-16.35
	7115	14 230.43	45.22	H	PK	0.00	7.30	52.52	68.20	-15.68

6.4.6. Radiated Band Edge Test Results

Plot 6-8 UNII 5 Lower Band Edge – 802.11ax20 106Tone – Peak



Plot 6-9 UNII 5 Lower Band Edge – 802.11ax20 106Tone – Average

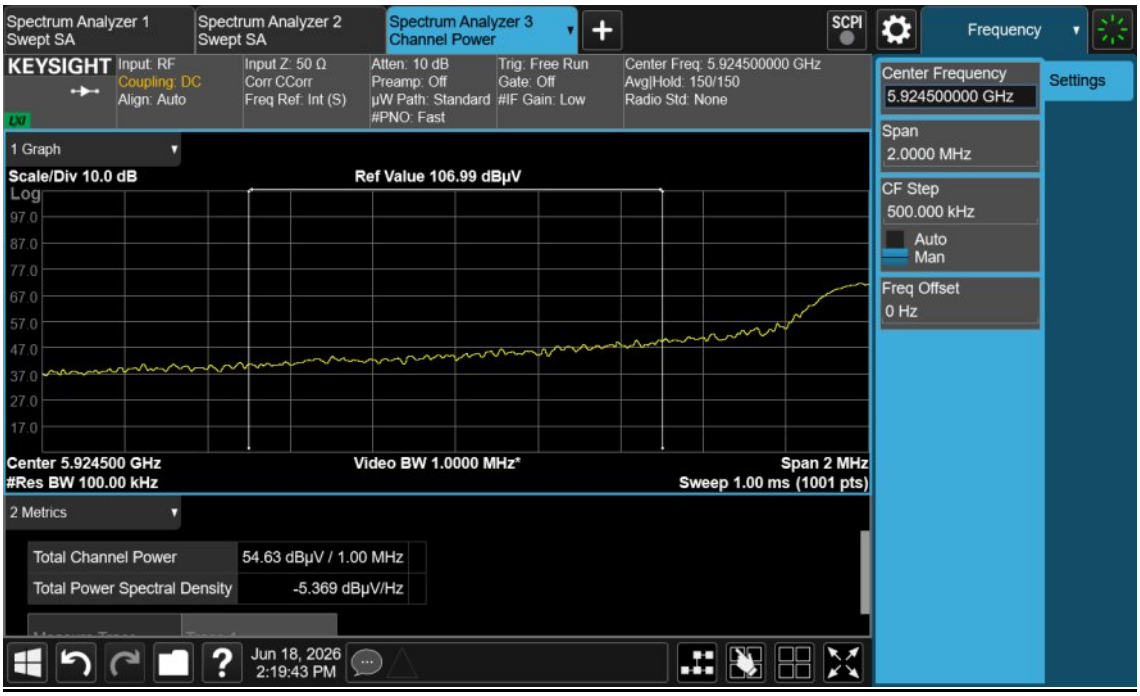
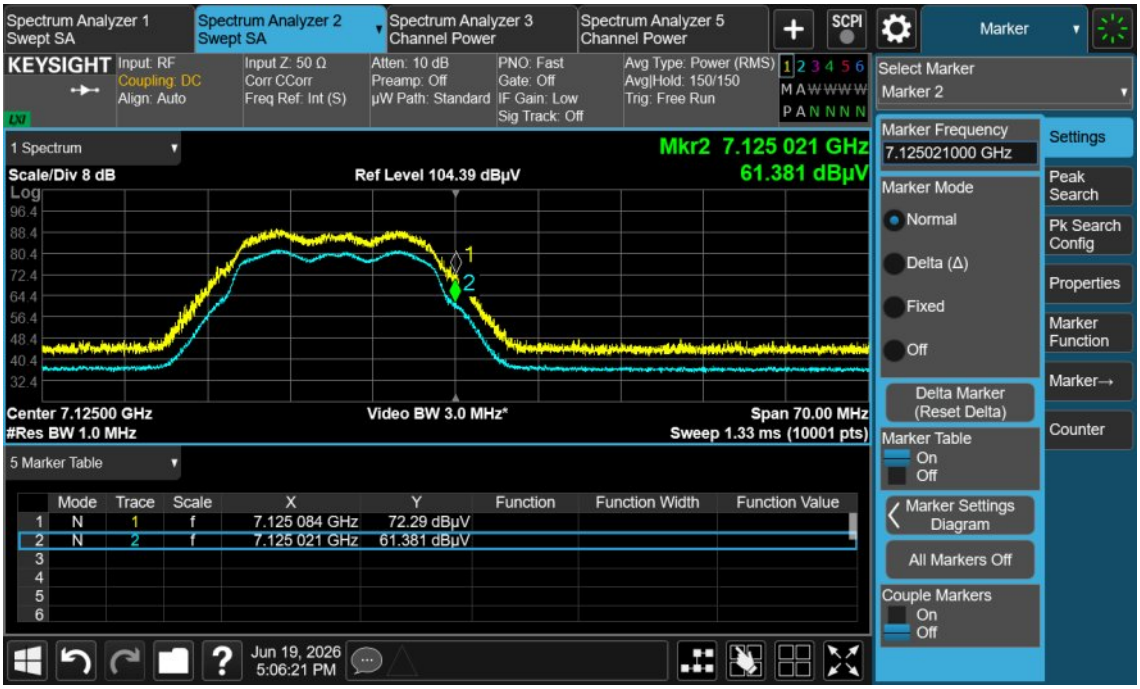


Table 6-8 Radiated Lower Band Edge – SP

Test mode	Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBµV]	Pol [H/V]	Detector Mode	DCCF [dB]	AFCL [dB/m]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]
a	5935	5 924.69	77.88	H	PK	0.00	5.13	83.01	88.20	-5.19
		5 924.93	60.49	H	AV	0.15	5.13	65.77	68.20	-2.43
ax20	5935	5 924.83	80.57	H	PK	0.00	5.13	85.70	88.20	-2.50
		5 925.00	59.74	H	AV	0.00	5.13	64.87	68.20	-3.33
ax40	5965	5 924.71	63.01	H	PK	0.00	5.13	68.14	88.20	-20.06
		5 924.73	52.55	H	AV	0.00	5.13	57.68	68.20	-10.52
ax80	5985	5 924.97	64.36	H	PK	0.00	5.13	69.49	88.20	-18.71
		5 920.59	54.08	H	AV	0.00	5.13	59.21	68.20	-8.99
ax160	6025	5 917.26	64.71	H	PK	0.00	5.13	69.84	88.20	-18.36
		5 916.72	52.53	H	AV	0.00	5.13	57.66	68.20	-10.54
ax20 26T	5935	5 924.94	80.97	H	PK	0.00	5.13	86.10	88.20	-2.10
		5 924.99	54.23	H	AV	0.00	5.13	59.36	68.20	-8.84
ax20 52T	5935	5 924.98	78.97	H	PK	0.00	5.13	84.10	88.20	-4.10
		5 924.99	53.09	H	AV	0.00	5.13	58.22	68.20	-9.98
ax20 106T	5935	5 924.96	81.07	H	PK	0.00	5.13	86.20	88.20	-2.00
		5 924.99	54.63	H	AV	0.00	5.13	59.76	68.20	-8.44
ax20 242T	5935	5 924.94	80.64	H	PK	0.00	5.13	85.77	88.20	-2.43
		5 924.99	53.86	H	AV	0.00	5.13	58.99	68.20	-9.21
ax40 484T	5965	5 924.19	69.30	H	PK	0.00	5.13	74.43	88.20	-13.77
		5 924.50	56.83	H	AV	0.00	5.13	61.96	68.20	-6.24
ax80 996T	5985	5 924.71	71.00	H	PK	0.00	5.13	76.13	88.20	-12.07
		5 923.04	57.86	H	AV	0.12	5.13	63.11	68.20	-5.09
ax160 996X2T	6025	5 898.71	66.27	H	PK	0.00	5.13	71.40	88.20	-16.80
		5 910.17	53.17	H	AV	0.00	5.13	58.30	68.20	-9.90

Plot 6-10 UNII 8 Upper Band Edge – 802.11a – Peak



Plot 6-11 UNII 8 Upper Band Edge – 802.11a – Average

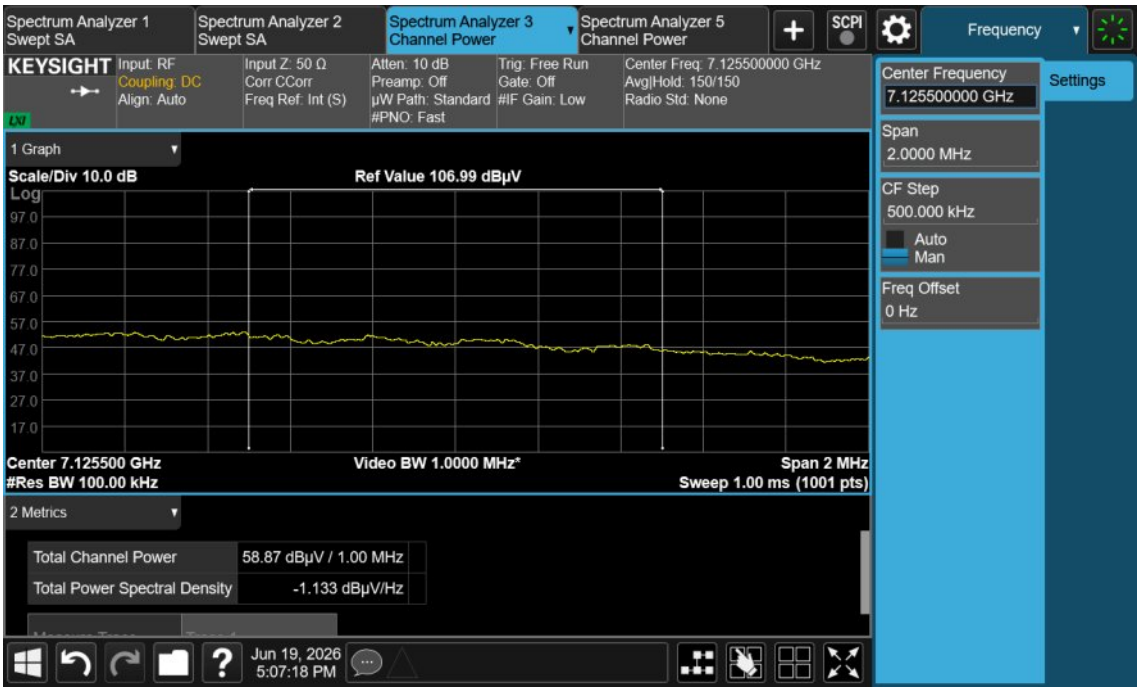


Table 6-9 Radiated Upper Band Edge – LPI

Test mode	Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBµV]	Pol [H/V]	Detector Mode	DCCF [dB]	AFCL [dB/m]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]
a	7115	7 125.08	72.29	H	PK	0.00	6.94	79.23	88.20	-8.97
		7 125.02	58.87	H	AV	0.15	6.94	65.96	68.20	-2.24
ax20	7115	7 125.04	77.87	H	PK	0.00	6.94	84.81	88.20	-3.39
		7 125.01	58.94	H	AV	0.00	6.94	65.88	68.20	-2.32
ax40	7085	7 125.18	48.65	H	PK	0.00	6.94	55.59	88.20	-32.61
		7 125.18	37.09	H	AV	0.00	6.94	44.03	68.20	-24.17
ax80	7025	7 126.61	47.79	H	PK	0.00	6.94	54.73	88.20	-33.47
		7 128.38	37.25	H	AV	0.00	6.94	44.19	68.20	-24.01
ax160	6985	7 145.36	46.97	H	PK	0.00	6.94	53.91	88.20	-34.29
		7 129.37	37.10	H	AV	0.00	6.94	44.04	68.20	-24.16
ax20 26T	7115	7 125.03	78.13	H	PK	0.00	6.94	85.07	88.20	-3.13
		7 125.01	50.15	H	AV	0.00	6.94	57.09	68.20	-11.11
ax20 52T	7115	7 125.30	78.58	H	PK	0.00	6.94	85.52	88.20	-2.68
		7 125.01	52.70	H	AV	0.00	6.94	59.64	68.20	-8.56
ax20 106T	7115	7 125.08	78.34	H	PK	0.00	6.94	85.28	88.20	-2.92
		7 125.01	51.48	H	AV	0.00	6.94	58.42	68.20	-9.78
ax20 242T	7115	7 125.01	78.15	H	PK	0.00	6.94	85.09	88.20	-3.11
		7 125.01	51.77	H	AV	0.00	6.94	58.71	68.20	-9.49
ax40 484T	7085	7 127.72	46.89	H	PK	0.00	6.94	53.83	88.20	-34.37
		7 125.08	37.34	H	AV	0.00	6.94	44.28	68.20	-23.92
ax80 996T	7025	7 128.47	48.37	H	PK	0.00	6.94	55.31	88.20	-32.89
		7 126.76	37.60	H	AV	0.12	6.94	44.66	68.20	-23.54
ax160 996X2T	6985	7 137.35	47.42	H	PK	0.00	6.94	54.36	88.20	-33.84
		7 131.17	37.28	H	AV	0.00	6.94	44.22	68.20	-23.98

Plot 6-12 UNII 5 Lower Band Edge – 802.11ax20 – Peak

Plot 6-13 UNII 5 Lower Band Edge – 802.11ax20 – Average

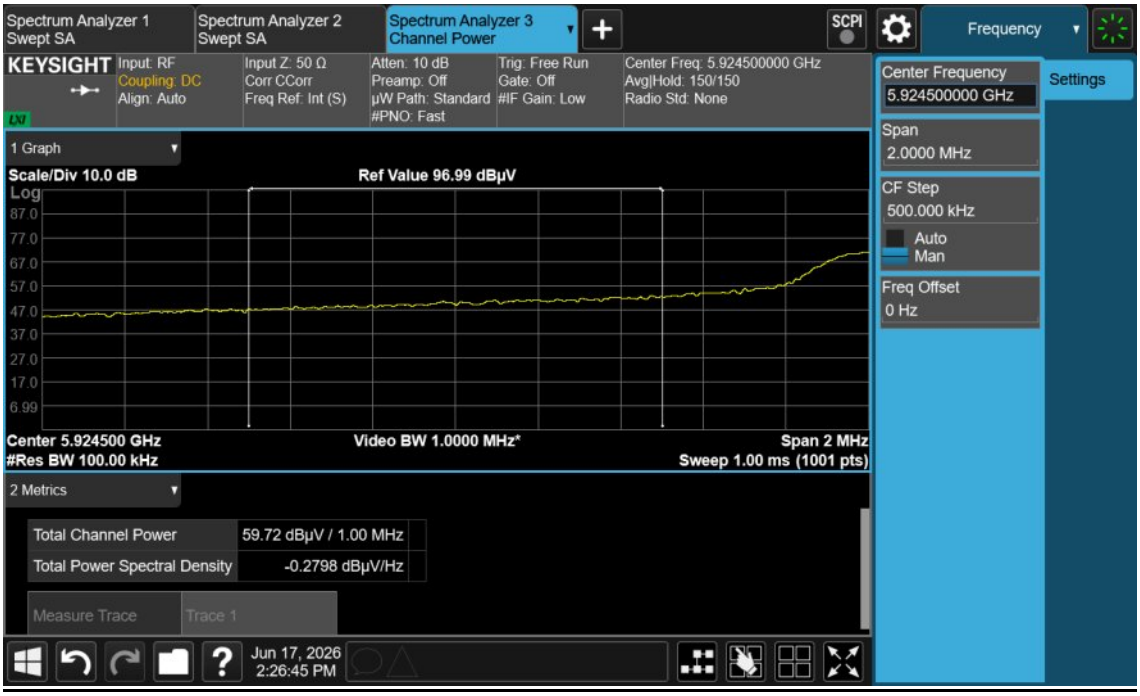


Table 6-10 Radiated Lower Band Edge – VLP

Test mode	Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBµV]	Pol [H/V]	Detector Mode	DCCF [dB]	AFCL [dB/m]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]
a	5935	5 924.97	77.51	H	PK	0.00	5.13	82.64	88.20	-5.56
		5 924.97	60.02	H	AV	0.15	5.13	65.30	68.20	-2.90
ax20	5935	5 924.99	80.57	H	PK	0.00	5.13	85.70	88.20	-2.50
		5 924.99	59.72	H	AV	0.00	5.13	64.85	68.20	-3.35
ax20 242T	5935	5 924.99	80.26	H	PK	0.00	5.13	85.39	88.20	-2.81
		5 924.96	53.82	H	AV	0.00	5.13	58.95	68.20	-9.25

Plot 6-14 UNII 8 Upper Band Edge – 802.11a – Peak & Average

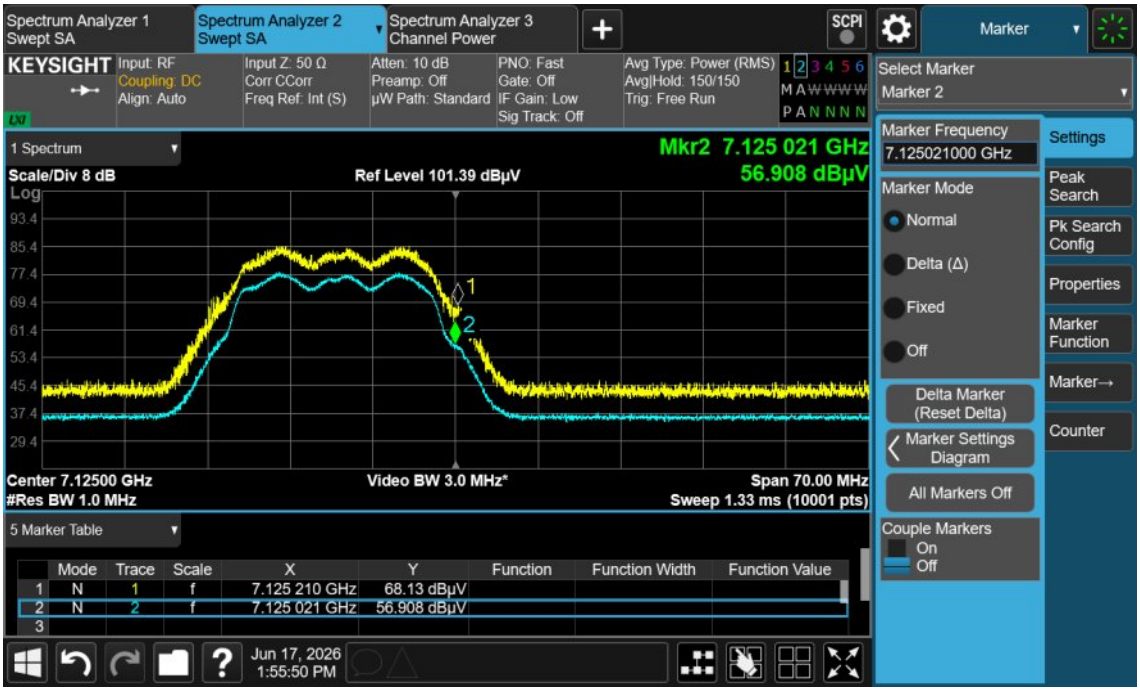


Table 6-11 Radiated Upper Band Edge – VLP

Test mode	Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBµV]	Pol [H/V]	Detector Mode	DCCF [dB]	AFCL [dB/m]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]
a	7115	7 125.21	68.13	H	PK	0.00	5.13	73.26	88.20	-14.94
		7 125.02	56.91	H	AV	0.15	5.13	62.19	68.20	-6.01
ax20	7115	7 125.02	74.84	H	PK	0.00	5.13	79.97	88.20	-8.23
		7 125.01	53.19	H	AV	0.00	5.13	58.32	68.20	-9.88
ax20 242T	7115	7 125.06	74.43	H	PK	0.00	5.13	79.56	88.20	-8.64
		7 125.01	47.98	H	AV	0.00	5.13	53.11	68.20	-15.09

7. AC Line Conducted Test Results

7.1. Test Configuration

AC line conducted emission testing was performed inside a 3 m semi-anechoic chamber (shielded room) in strict accordance with Clauses 6.2 of ANSI C63.10. The DUT was configured as a tabletop device and placed on a non-conducting platform with a nominal size of 1 m × 1.5 m, raised 80 cm above the reference ground plane. A vertical conducting plane or screen with a size of at least 2 m × 2 m was positioned 40 cm to the rear of the DUT. The rear of the DUT and its associated peripherals were aligned and flush with the back edge of the tabletop.

Interconnecting cables hanging closer than 40 cm to the ground plane were folded back and forth in the center, forming a bundle 30 cm to 40 cm long. Peripherals and accessories that are part of the tested system were arranged on the tabletop with a 10 cm separation between the nearest points of their cabinets.

AC line conducted emission measurements were performed over the frequency range from 150 kHz to 30 MHz. Since the fundamental frequency of the DUT does not operate within this AC power-line emission test range, the DUT was operated on the mid channel and in the operational mode producing the highest output power.

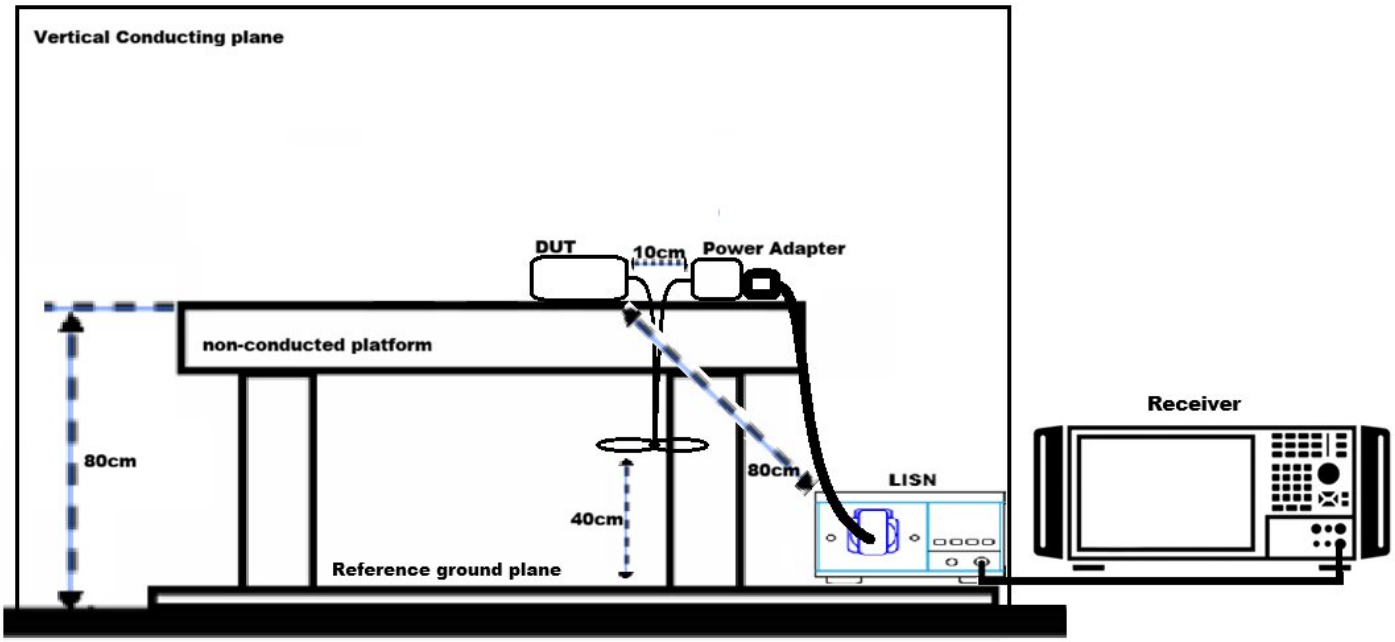
The electrical power parameters applied during the test were as follows:

- **Applied Supply Voltage:** 120 V AC
- **Applied Supply Frequency:** 60 Hz

AC Line Conducted emissions were captured using automated test software 'EMC 32' Ver. 10.60.20

7.2. AC Line Conducted Measurement Setup

Figure 7-1 AC Line Conducted Measurement Setup



7.3. AC Line Conducted Measurement Sample

Serial Number(s) : ZDH0461M, ZDH0460M

7.4. AC Line Conducted Emissions

7.4.1. Regulatory Limit

Part. 15.207(a)

Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 µH / 50 Ω Line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

RSS-GEN - Section 8.8

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 µH / 50 Ω Line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

7.4.2. Test Method

ANSI C63.10 – 2020, clause 6.2

7.4.3. Test Procedure

Quasi-Peak

a) RBW = 9 kHz
b) Detector = Quasi-Peak
c) Sweep time = Auto (Coupled) or sufficient to investigate
d) Trace mode = Max-Hold

Average

a) RBW = 9 kHz
b) Detector = RMS
c) Sweep time = Auto (Coupled) or sufficient to investigate
d) Trace mode = Max-Hold

Test Note

- ✓ All 802.11 modes were investigated. The DUT was operated on the mid-channel in the mode producing the highest output power, and those results are reported.

7.4.4. Test Results

Plot 7-1 UNII 5 – Line L

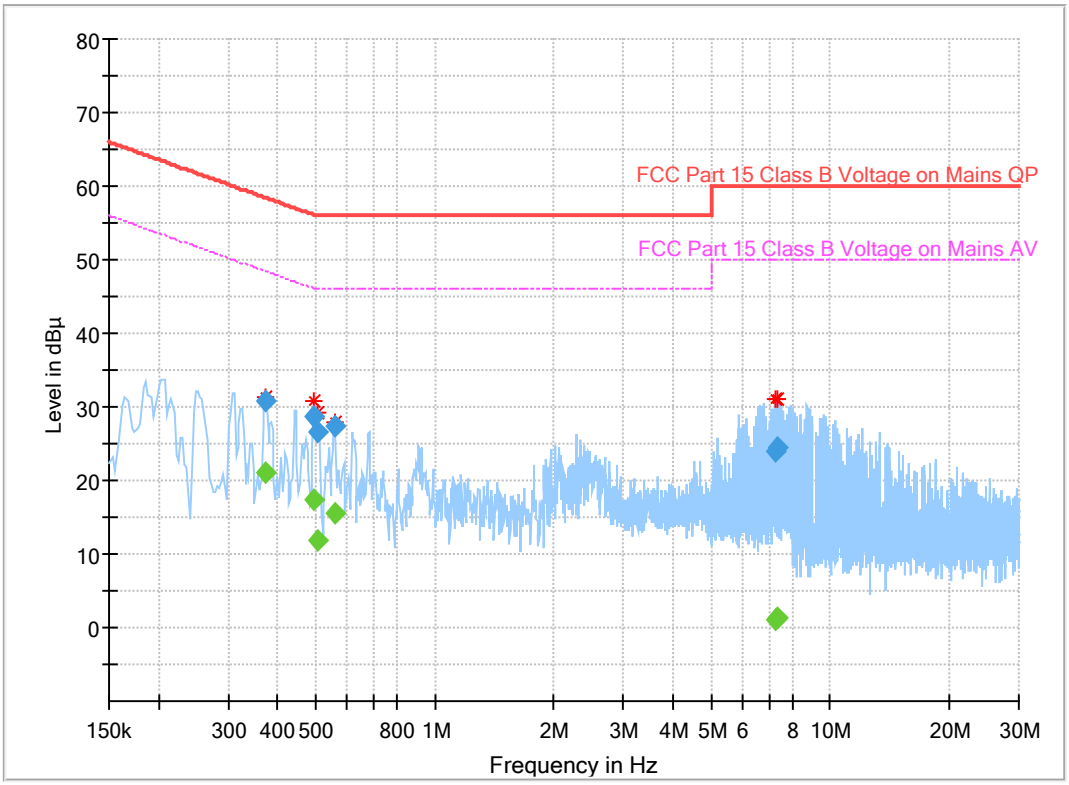


Table 7-1 UNII 5 – Line L

Frequency [MHz]	Quasi-Peak [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.37	30.70	58.41	27.72	1000.00	9.00	L1	OFF	9.81
0.50	28.78	56.06	27.29	1000.00	9.00	L1	OFF	9.88
0.51	26.56	56.00	29.44	1000.00	9.00	L1	OFF	9.88
0.56	27.32	56.00	28.68	1000.00	9.00	L1	OFF	9.87
7.24	23.92	60.00	36.08	1000.00	9.00	L1	OFF	10.13
7.38	24.47	60.00	35.53	1000.00	9.00	L1	OFF	10.14
Frequency [MHz]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.37	21.09	48.41	27.33	1000.00	9.00	L1	OFF	9.81
0.50	17.40	46.06	28.66	1000.00	9.00	L1	OFF	9.88
0.51	11.76	46.00	34.24	1000.00	9.00	L1	OFF	9.88
0.56	15.54	46.00	30.46	1000.00	9.00	L1	OFF	9.87
7.24	1.13	50.00	48.87	1000.00	9.00	L1	OFF	10.13
7.38	1.41	50.00	48.59	1000.00	9.00	L1	OFF	10.14

Plot 7-2 UNII 5 – Line N

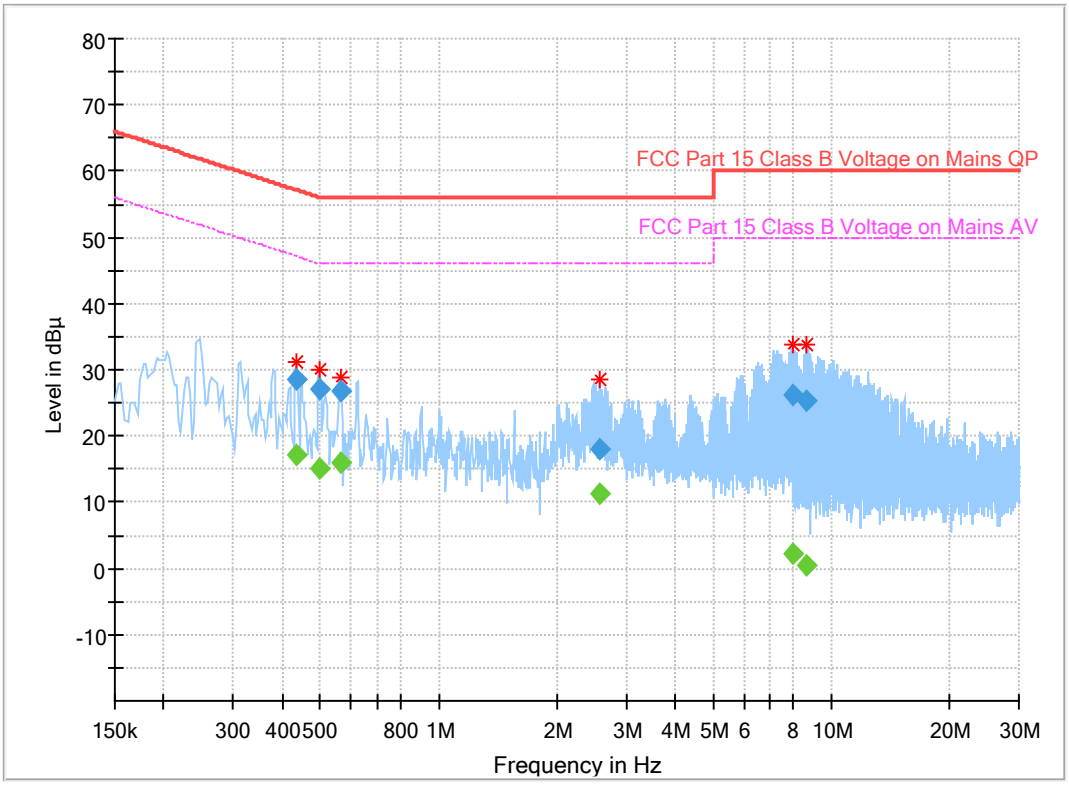


Table 7-2 UNII 5 – Line N

Frequency [MHz]	Quasi-Peak [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.43	28.45	57.18	28.74	1000.00	9.00	N	OFF	9.88
0.50	27.19	56.06	28.87	1000.00	9.00	N	OFF	9.91
0.56	26.81	56.00	29.19	1000.00	9.00	N	OFF	9.90
2.58	18.15	56.00	37.85	1000.00	9.00	N	OFF	9.91
7.99	26.25	60.00	33.75	1000.00	9.00	N	OFF	10.18
8.65	25.26	60.00	34.74	1000.00	9.00	N	OFF	10.21
Frequency [MHz]	Average [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.43	17.11	47.18	30.07	1000.00	9.00	N	OFF	9.88
0.50	15.16	46.06	30.90	1000.00	9.00	N	OFF	9.91
0.56	16.06	46.00	29.94	1000.00	9.00	N	OFF	9.90
2.58	11.22	46.00	34.78	1000.00	9.00	N	OFF	9.91
7.99	2.16	50.00	47.84	1000.00	9.00	N	OFF	10.18
8.65	0.56	50.00	49.44	1000.00	9.00	N	OFF	10.21

Plot 7-3 UNII 6 – Line L

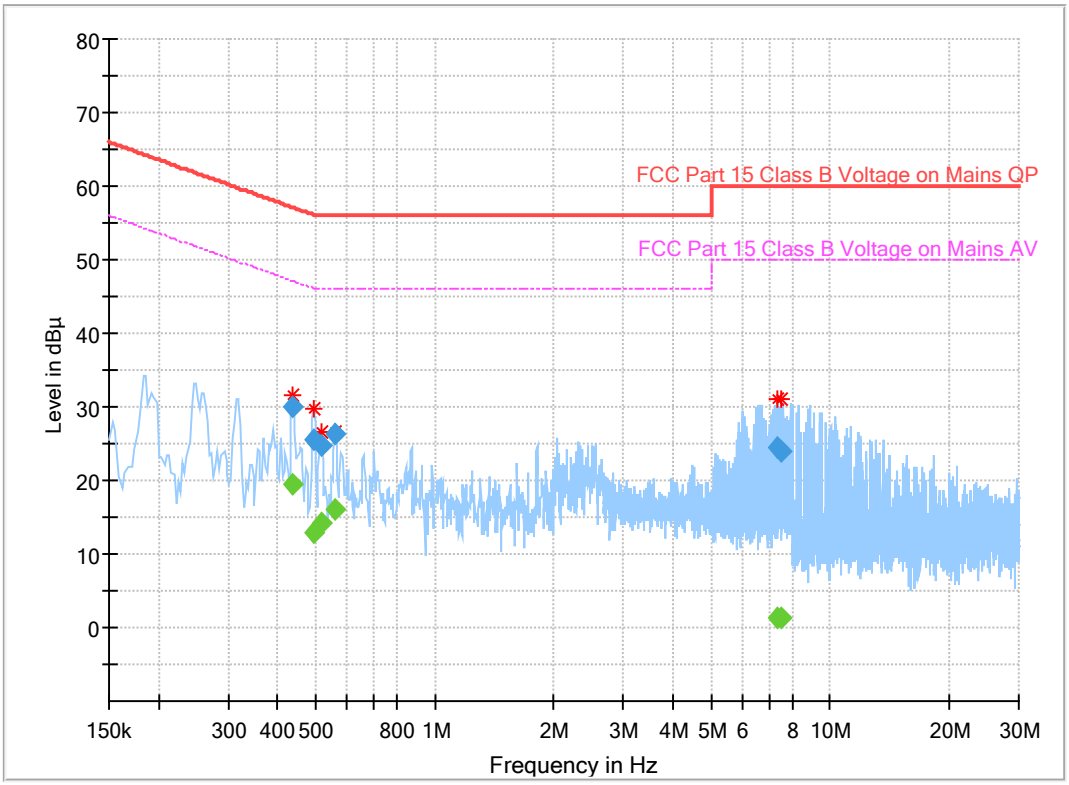


Table 7-3 UNII 6 – Line L

Frequency [MHz]	Quasi-Peak [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.44	30.01	57.13	27.12	1000.00	9.00	L1	OFF	9.86
0.49	25.55	56.11	30.57	1000.00	9.00	L1	OFF	9.87
0.52	24.63	56.00	31.37	1000.00	9.00	L1	OFF	9.88
0.56	26.44	56.00	29.56	1000.00	9.00	L1	OFF	9.87
7.38	24.46	60.00	35.54	1000.00	9.00	L1	OFF	10.14
7.48	23.99	60.00	36.01	1000.00	9.00	L1	OFF	10.14
Frequency [MHz]	Average [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.44	19.54	47.13	27.59	1000.00	9.00	L1	OFF	9.86
0.49	12.79	46.11	33.32	1000.00	9.00	L1	OFF	9.87
0.52	14.25	46.00	31.75	1000.00	9.00	L1	OFF	9.88
0.56	15.99	46.00	30.01	1000.00	9.00	L1	OFF	9.87
7.38	1.36	50.00	48.64	1000.00	9.00	L1	OFF	10.14
7.48	1.25	50.00	48.75	1000.00	9.00	L1	OFF	10.14

Plot 7-4 UNII 6 – Line N

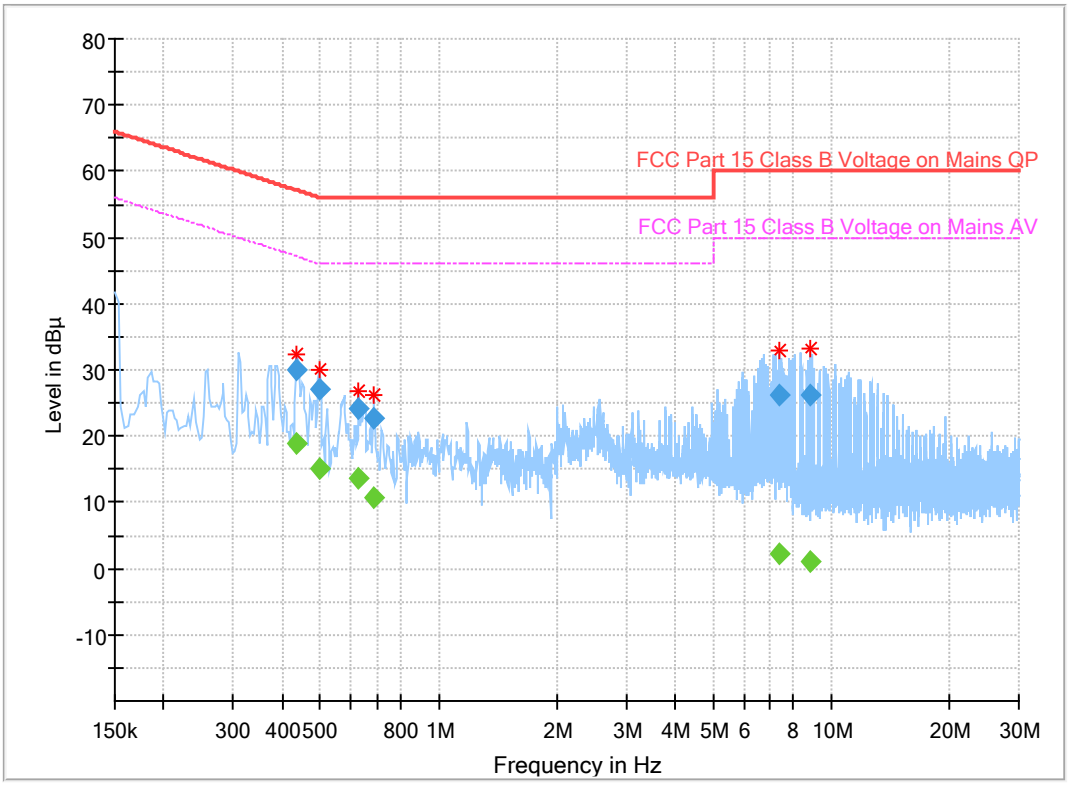


Table 7-4 UNII 6 – Line N

Frequency [MHz]	Quasi-Peak [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.44	30.11	57.13	27.02	1000.00	9.00	N	OFF	9.89
0.50	26.94	56.06	29.12	1000.00	9.00	N	OFF	9.91
0.63	24.17	56.00	31.83	1000.00	9.00	N	OFF	9.90
0.68	22.76	56.00	33.24	1000.00	9.00	N	OFF	9.89
7.33	26.27	60.00	33.73	1000.00	9.00	N	OFF	10.17
8.82	26.27	60.00	33.73	1000.00	9.00	N	OFF	10.21
Frequency [MHz]	Average [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.44	18.91	47.13	28.22	1000.00	9.00	N	OFF	9.89
0.50	14.99	46.06	31.07	1000.00	9.00	N	OFF	9.91
0.63	13.57	46.00	32.43	1000.00	9.00	N	OFF	9.90
0.68	10.77	46.00	35.23	1000.00	9.00	N	OFF	9.89
7.33	2.10	50.00	47.90	1000.00	9.00	N	OFF	10.17
8.82	0.93	50.00	49.07	1000.00	9.00	N	OFF	10.21

Plot 7-5 UNII 7 – Line L

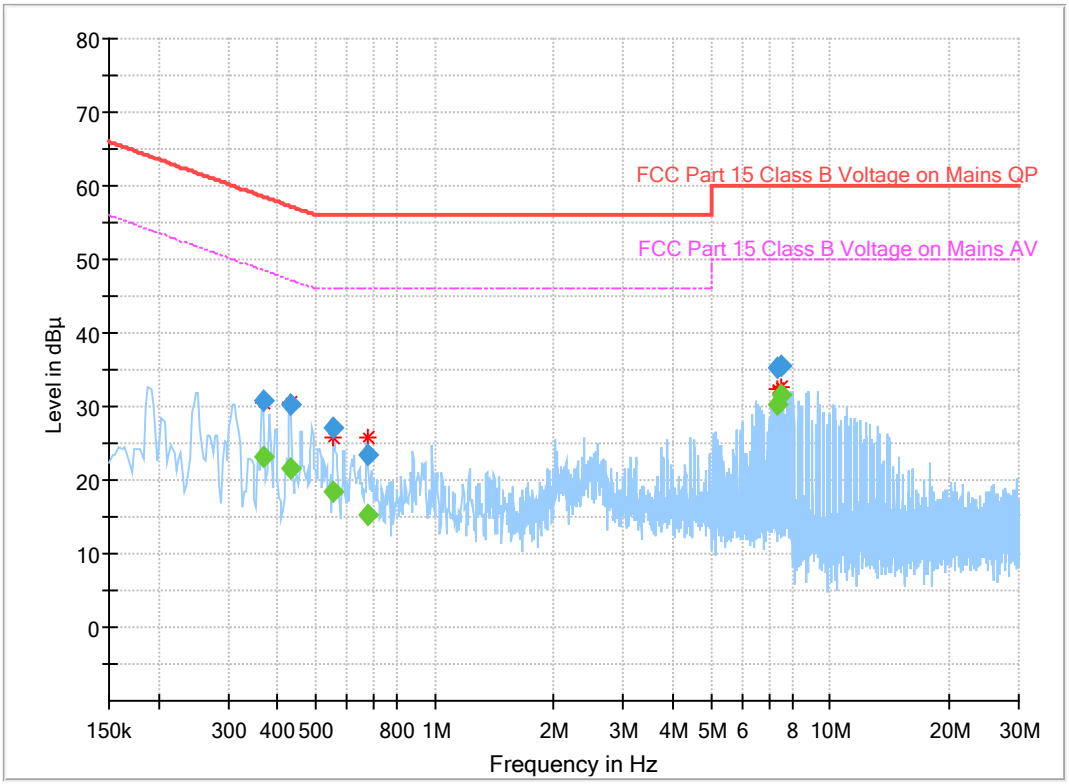


Table 7-5 UNII 7 – Line L

Frequency [MHz]	Quasi-Peak [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.37	30.91	58.55	27.63	1000.00	9.00	L1	OFF	9.81
0.43	30.23	57.24	27.01	1000.00	9.00	L1	OFF	9.85
0.56	27.00	56.00	29.00	1000.00	9.00	L1	OFF	9.87
0.68	23.29	56.00	32.71	1000.00	9.00	L1	OFF	9.87
7.38	35.15	60.00	24.85	1000.00	9.00	L1	OFF	10.14
7.49	35.56	60.00	24.44	1000.00	9.00	L1	OFF	10.14
Frequency [MHz]	Average [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.37	23.06	48.55	25.48	1000.00	9.00	L1	OFF	9.81
0.43	21.47	47.24	25.77	1000.00	9.00	L1	OFF	9.85
0.56	18.51	46.00	27.49	1000.00	9.00	L1	OFF	9.87
0.68	15.14	46.00	30.86	1000.00	9.00	L1	OFF	9.87
7.38	30.33	50.00	19.67	1000.00	9.00	L1	OFF	10.14
7.49	31.59	50.00	18.41	1000.00	9.00	L1	OFF	10.14

Plot 7-6 UNII 7 – Line N

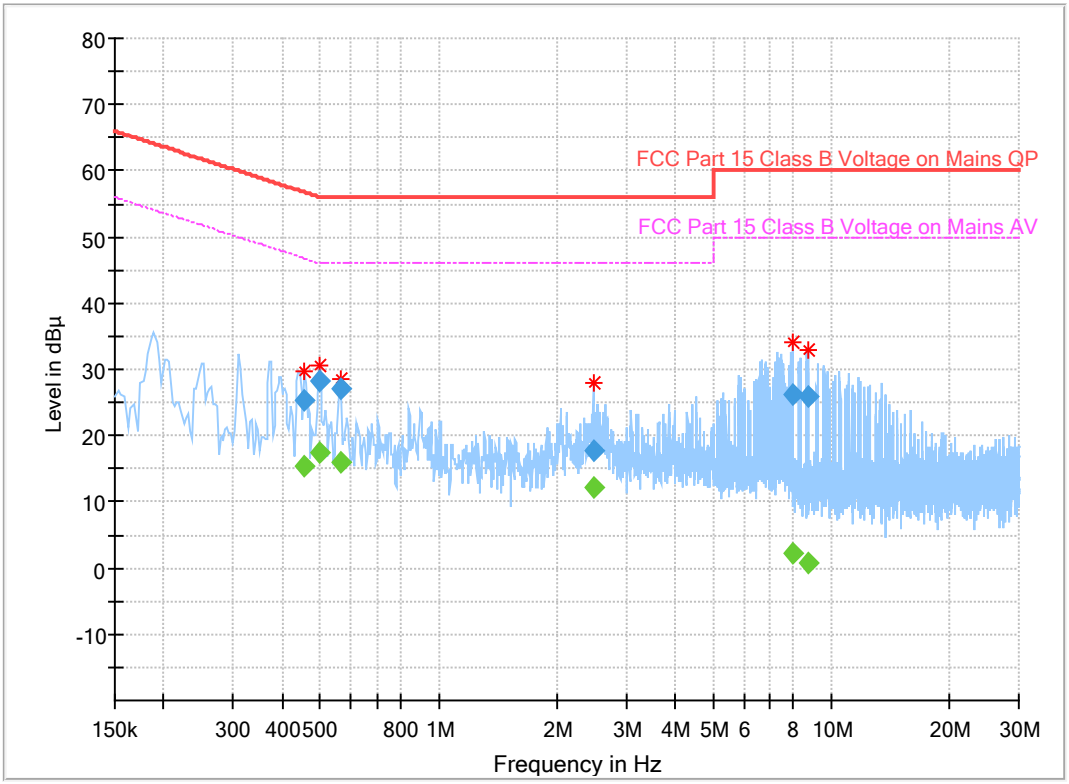


Table 7-6 UNII 7 – Line N

Frequency [MHz]	Quasi-Peak [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.46	25.33	56.74	31.40	1000.00	9.00	N	OFF	9.89
0.50	28.39	56.01	27.62	1000.00	9.00	N	OFF	9.91
0.56	27.16	56.00	28.84	1000.00	9.00	N	OFF	9.90
2.47	17.83	56.00	38.17	1000.00	9.00	N	OFF	9.90
7.99	26.24	60.00	33.76	1000.00	9.00	N	OFF	10.18
8.71	25.83	60.00	34.17	1000.00	9.00	N	OFF	10.21
Frequency [MHz]	Average [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.46	15.50	46.74	31.24	1000.00	9.00	N	OFF	9.89
0.50	17.49	46.01	28.53	1000.00	9.00	N	OFF	9.91
0.56	15.91	46.00	30.09	1000.00	9.00	N	OFF	9.90
2.47	12.13	46.00	33.87	1000.00	9.00	N	OFF	9.90
7.99	2.08	50.00	47.92	1000.00	9.00	N	OFF	10.18
8.71	0.75	50.00	49.25	1000.00	9.00	N	OFF	10.21

Plot 7-7 UNII 8 – Line L

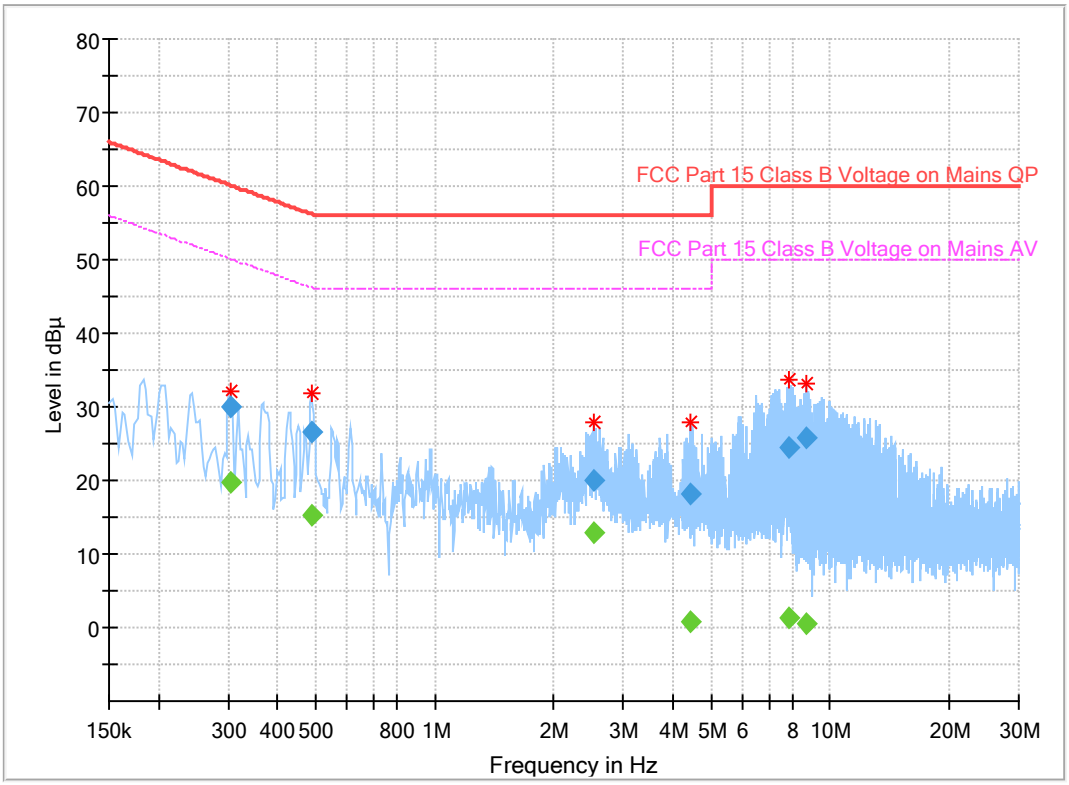


Table 7-7 UNII 8 – Line L

Frequency [MHz]	Quasi-Peak [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.31	29.90	60.10	30.20	1000.00	9.00	L1	OFF	9.72
0.49	26.45	56.21	29.76	1000.00	9.00	L1	OFF	9.87
2.52	19.89	56.00	36.11	1000.00	9.00	L1	OFF	9.87
4.44	18.27	56.00	37.73	1000.00	9.00	L1	OFF	10.01
7.84	24.42	60.00	35.58	1000.00	9.00	L1	OFF	10.15
8.68	25.69	60.00	34.31	1000.00	9.00	L1	OFF	10.18
Frequency [MHz]	Average [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.31	19.72	50.10	30.38	1000.00	9.00	L1	OFF	9.72
0.49	15.38	46.21	30.83	1000.00	9.00	L1	OFF	9.87
2.52	12.98	46.00	33.02	1000.00	9.00	L1	OFF	9.87
4.44	0.73	46.00	45.27	1000.00	9.00	L1	OFF	10.01
7.84	1.43	50.00	48.57	1000.00	9.00	L1	OFF	10.15
8.68	0.60	50.00	49.40	1000.00	9.00	L1	OFF	10.18

Plot 7-8 UNII 8 – Line N

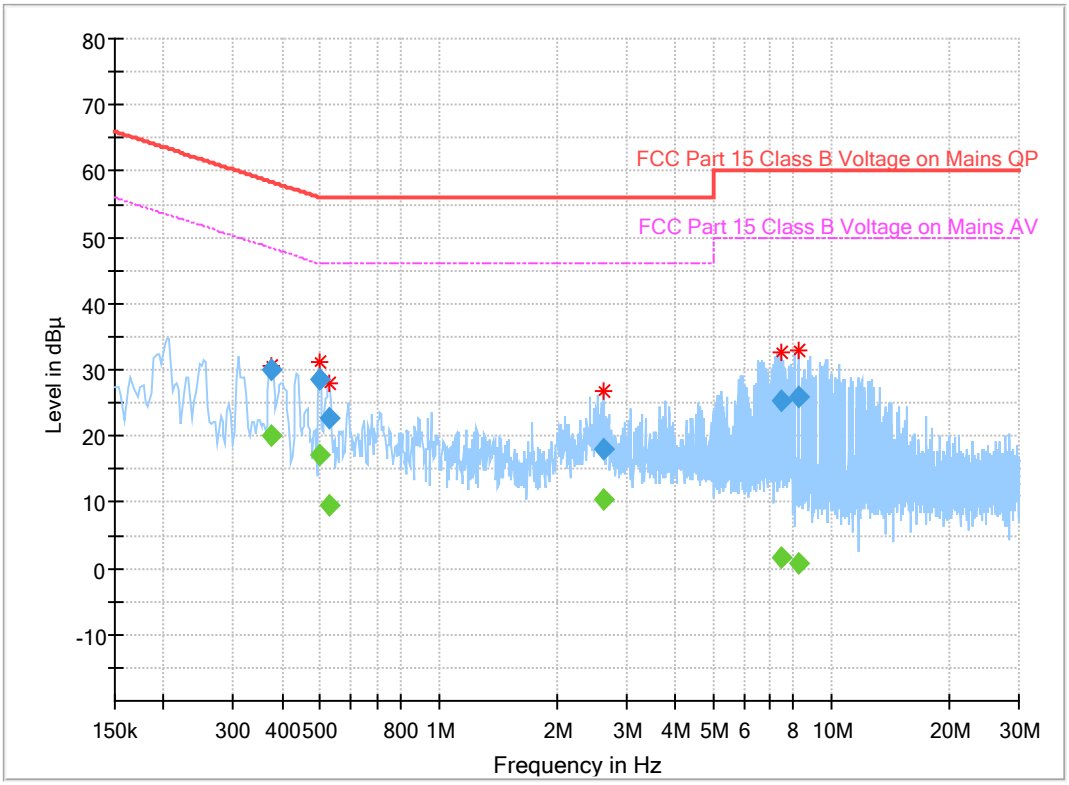


Table 7-8 UNII 8 – Line N

Frequency [MHz]	Quasi-Peak [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.37	30.04	58.41	28.37	1000.00	9.00	N	OFF	9.84
0.50	28.57	56.01	27.44	1000.00	9.00	N	OFF	9.91
0.53	22.62	56.00	33.38	1000.00	9.00	N	OFF	9.91
2.63	18.04	56.00	37.96	1000.00	9.00	N	OFF	9.91
7.48	25.45	60.00	34.55	1000.00	9.00	N	OFF	10.17
8.22	25.86	60.00	34.14	1000.00	9.00	N	OFF	10.19
Frequency [MHz]	Average [dBuV]	Limit [dBuV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. (dB)
0.37	20.07	48.41	28.34	1000.00	9.00	N	OFF	9.84
0.50	17.28	46.01	28.73	1000.00	9.00	N	OFF	9.91
0.53	9.44	46.00	36.56	1000.00	9.00	N	OFF	9.91
2.63	10.54	46.00	35.46	1000.00	9.00	N	OFF	9.91
7.48	1.74	50.00	48.26	1000.00	9.00	N	OFF	10.17
8.22	0.76	50.00	49.24	1000.00	9.00	N	OFF	10.19

8. Revision History

Rev.	Issue Date	Revisions	Prepared By
00	07/11/2026	Initial Release	SK Hong
01	07/16/2026	Typo corrections and removal of SP U-NII-6 data	SK Hong
02	07/20/2026	Typographical error corrected	SK Hong
03	07/24/2026	Typographical error corrected	SK Hong
04	08/05/2026	Added the plot for In-band Emissions	SK Hong

9. Measurement Uncertainty

Measurement Items	Frequency Range	Expanded Uncertainty (±)	
Maximum Conducted Output Power	f < 8 GHz	1.06	dB
Conducted Emissions	f < 1 GHz	0.71	dB
Conducted Emissions	f < 18 GHz	2.06	dB
Conducted Emissions	f > 18 GHz	3.12	dB
Radiated Emissions	f < 30 MHz	3.68	dB
Radiated Emissions	f < 1 GHz	4.01	dB
Radiated Emissions	f > 1 GHz	4.41	dB
Radiated Emissions	f > 18 GHz	5.23	dB
AC Line Conducted Emissions	f < 30 MHz	2.66	dB
Occupied Bandwidth		0.43	%
Time		4.8	%

The expanded measurement uncertainty is calculated at an approximate 95% confidence level (k = 2).

✓Note : Measurement uncertainty is for reference only. Based on Simple Acceptance, compliance is determined by directly comparing the measured data against applicable limits.

10. Equipment List

All test equipment used for the measurements was within its valid calibration interval. All test antennas were calibrated in accordance with ANSI C63.5-2017, and all test cables were calibrated in-house prior to testing. The calibration dates presented in the tables below apply only to equipment calibrated by an accredited calibration laboratory.

Table 10-1 Test Equipment and Calibration Date

Equipment Name	Manufacturer	Model	Serial Number	Cal. Date	Next Cal.
Signal & Spectrum Analyzer	Rohde & Schwarz	FSW43	103432	2026-02-13	2027-02-13
Signal & Spectrum Analyzer	Keysight	N9010B	MY56460241	2025-12-18	2026-12-18
Signal & Spectrum Analyzer	Keysight	N9040B	MY62480133	2026-01-23	2027-01-23
Signal & Spectrum Analyzer	Keysight	N9020A	MY54482751	2025-10-16	2026-10-16
Signal & Spectrum Analyzer	Keysight	N9020A	MY54480472	2026-02-24	2027-02-24
Power Sensor	Rohde & Schwarz	NRP-Z85	102404	2026-01-19	2027-01-19
EMI Test Receiver	Rohde & Schwarz	ESU40	100469	2026-01-07	2027-01-07
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101318	2026-01-19	2027-01-19
Bi-log Antenna	Schwarzbeck	VULB9163	01843	2026-01-06	2027-01-06
Horn Antenna	RF SPIN	DRH18S	CE2F08A18S	2026-01-08	2027-01-08
Horn Antenna	Rohde & Schwarz	DRH40G20K	101356	2026-01-23	2027-01-23
Call Simulator	Rohde & Schwarz	CMX500	100198	2025-09-30	2026-09-30
Vector Signal Generator	Rohde & Schwarz	SMM100A	101593	2026-01-05	2027-01-05
Signal Generator	Rohde & Schwarz	SMC100A	104214	2026-02-10	2027-02-10
Temperature&Humidity Chamber	ENEX	EN-STH-604_1K	EN202510-03	2026-01-10	2027-01-10
DC Power supply	Rohde & Schwarz	NGC101	100740	2026-01-07	2027-01-07
Two-Line V-Network	Rohde & Schwarz	ENV216	103321	2026-01-09	2027-01-09
Temperature & Humidity Meter	TESTO	608-H2	86293672	2026-04-02	2027-04-02
Vector Network Analyzer	Rohde & Schwarz	ZNL20	101202	2026-01-28	2027-01-28
Conducted Test System	Various				
Radiated Test System	Various				

Table 10-2 Conducted Test System

Equipment Name	Manufacturer	Model	Serial Number	Cal. Date	Next Cal.
Power Splitter	Mini-Circuits	ZFRSC-183-S+	FA46402540-1	2026-01-16	2027-01-16
Power Splitter	Mini-Circuits	ZFRSC-183-S+	FA46402540-2	2026-01-16	2027-01-16
DC coupler	EXYNOD	EXDC-00504000	251201	2026-01-16	2027-01-16
DC coupler	EXYNOD	EXDC-00504000	251202	2026-01-16	2027-01-16
RF Attenuator	EXYNOD	10A	008	2026-01-05	2027-01-05
RF Attenuator	EXYNOD	SN0609	0609	2026-01-05	2027-01-05
RF Cable	OSI	PLH16D-EXD	RF Cable 1	-	-
RF Cable	OSI	PLH16D-EXD	RF Cable 2	-	-
RF Cable	OSI	PLH16D-EXD	RF Cable 3	-	-
RF Cable	OSI	PLH16D-EXD	RF Cable 4	-	-
RF Cable	Rosenberger	LU7	0062	-	-
RF Cable	Rosenberger	LU7	0083	-	-

Table 10-3 Radiated Test System

Equipment Name	Manufacturer	Model	Serial Number	Cal. Date	Next Cal.
Amplifier	EXYNOD	ELNA01-40D	631307	2026-01-05	2027-01-05
Amplifier	EXYNOD	ELNA18	33686	2026-01-05	2027-01-05
Amplifier	EXYNOD	ELNA40-50	631308	2026-01-05	2027-01-05
9000 MHz High Pass Filter	Mini-Circuits	ZHFW-K9000	2537	2026-01-29	2027-01-29
18000 MHz High Pass Filter	Mini-Circuits	ZHSS-K18G+	2546	2026-01-29	2027-01-29
RF Cable	OSI	LH18-EXD	AP_X1	-	-
RF Cable	OSI	LH18-EXD	AP_X2	-	-
RF Cable	OSI	E31-EXD	AP_X3	-	-
RF Cable	OSI	E31-EXD	AP_X4	-	-
RF Cable	OSI	PLH16D-EXD	RF Cable 5	-	-

Table 10-4 Test Accessories

Test Accessories Name	Brand	Model No.	Used For
Power Adapter	SamSung	EP-TA865	AC Line Conducted
Charger Cable (C-type)	SamSung	EP-DN980	AC Line Conducted

11. Conclusion

The RF evaluation indicates that the DUT is capable of compliance with the applicable FCC&ISED technical requirements for all parameters subject to this test. These measurements were performed under worst-case operating conditions to ensure representative results. Appropriate laboratory procedures were applied to ensure the repeatability and reliability of the measurements. The results and statements relate only to the item(s) tested.

12. Data Referencing Spot-Checks

12.1. Test Guidance Applied

KDB 484596 D01 Referencing test data

The spot-check for the variant device were conducted in accordance with FCC KDB 484596 D01. Using the same test procedures and configurations as the parent device, the results show that both devices perform approximately the same.

12.2. Parent Model Information

Parent Model FCC ID : A3LSMS741U

12.3. Variant Model Sample

Conducted Samples S/M(s) : ZDR3014M

Radiated Samples S/N(s) : ZDR2977M

12.4. Test Results Summary

The following is the spot-check data for the variant model based on the worst-case scenario of the parent model. Please refer to each test section for the worst-case configuration.

Table 12-1 Data Referencing Spot-checks Summary

Test Item	Unit	Variant level V_{dB}	Parent level R_{dB}	Difference d_{dB}	Margin M_{dB}	Limit $d_{dBMax}(M_{dB})$	Pass Criterion [Pass / Fail]
Maximum Counducted Output Power[SP]	dBm	15.44	15.62	0.18	14.38	3.72	Pass
Maximum Counducted Output Power[LPI]	dBm	10.82	11.04	0.22	12.96	3.65	Pass
Maximum Counducted Output Power[VLP]	dBm	4.43	4.75	0.32	9.25	3.46	Pass
6dB Bandwidth	MHz	23.21	22.70	0.51	NA	N/A	Pass
Maximum Power Spectral Density	dBm/MHz	-1.54	-1.42	0.12	4.84	3.24	Pass
Contention-based protocol	dBm	-71.90	-71.60	0.30	1.72	3.09	Pass
Radiated Spurious Emissions	dBuV/m	40.19	40.70	0.51	18.85	3.94	Pass
Radiated Band Edge	dBuV/m	86.19	86.20	0.01	2.00	3.10	Pass

12.5. Test Results

12.5.1. The Maximum Output Power e.i.r.p

Table 12-2 Maximum e.i.r.p – [SP]

Mode	Frequency [MHz]	Channel	EIRP [dBm]		Dev. [dB]
			Parent	**Variant**	
			MIMO	MIMO	
ax20	6175	45	15.62	15.44	0.18

Table 12-3 Maximum e.i.r.p – [LPI]

Mode	Frequency [MHz]	Channel	EIRP [dBm]		Dev. [dB]
			Parent	**Variant**	
			MIMO	MIMO	
ax20	6175	45	11.04	10.82	0.22

Table 12-4 Maximum e.i.r.p – [VLP]

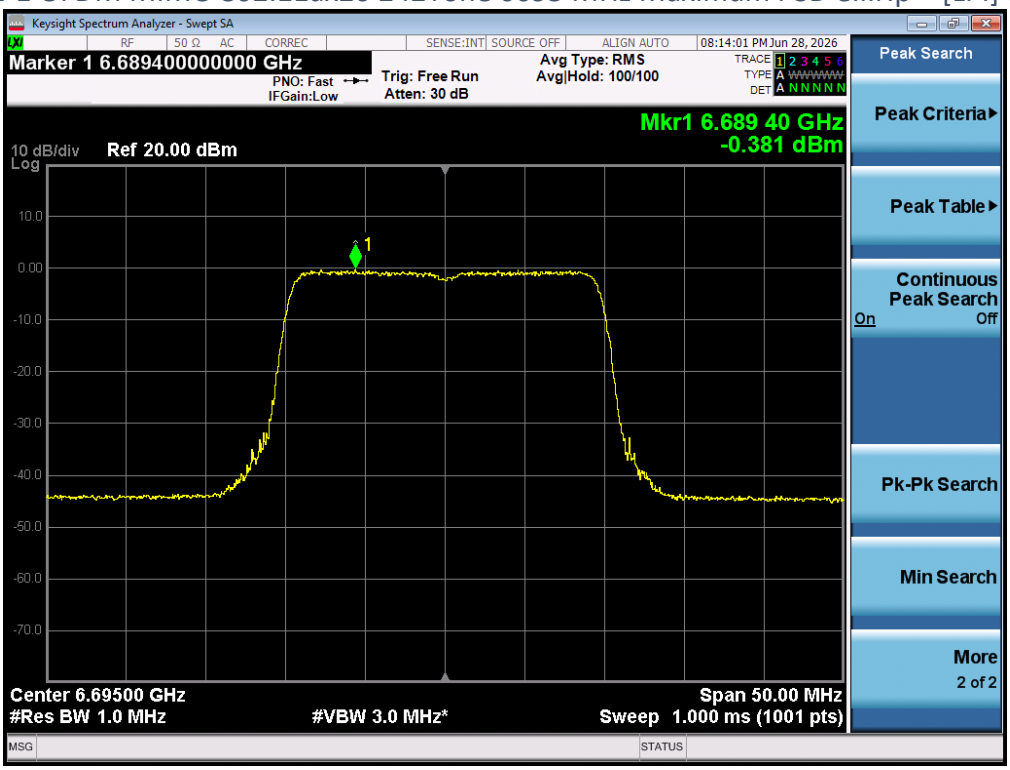
Mode	Frequency [MHz]	Channel	EIRP [dBm]		Dev. [dB]
			Parent	**Variant**	
			MIMO	MIMO	
ax80	5985	7	4.75	4.43	0.32

12.5.2. Maximum Power Spectral Density e.i.r.p

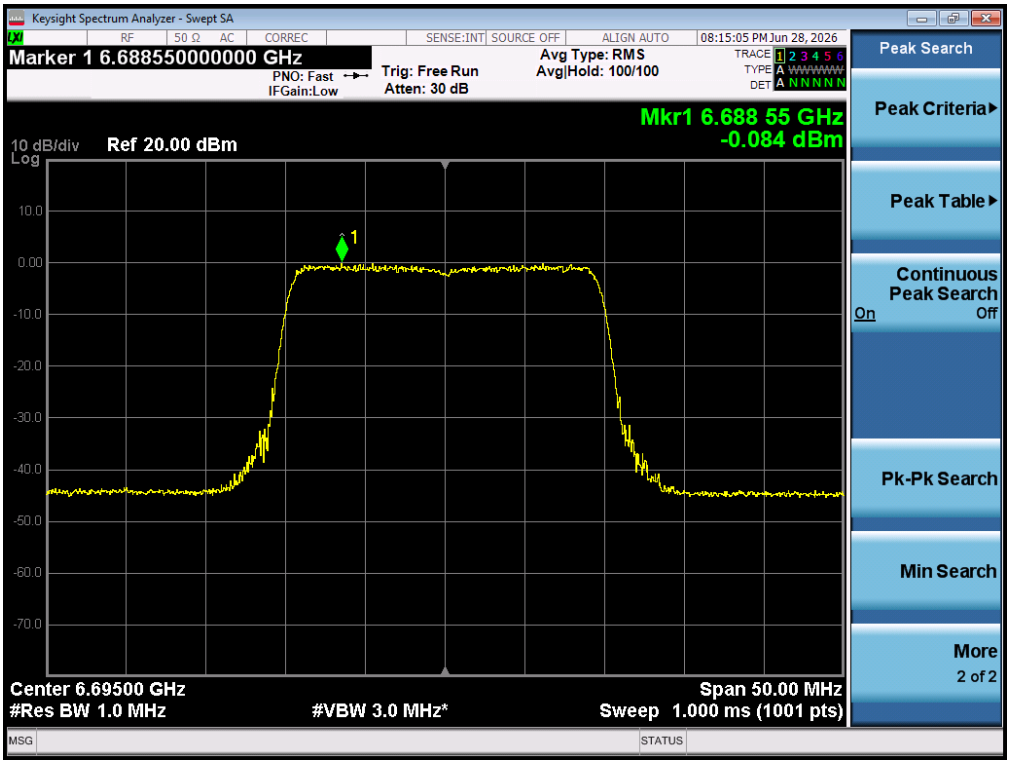
Table 12-5 Maximum PSD e.i.r.p – [LPI]

Mode	Frequency [MHz]	Channel	PSD [dBm/MHz]		Dev. [dB]
			Parent	**Variant**	
			MIMO	MIMO	
ax20_242T	6695	149	-1.42	-1.54	0.12

Plot 12-1 OFDM MIMO 802.11ax20 242Tone 6695 MHz Maximum PSD e.i.r.p – [LPI] (Ant 1)



Plot 12-2 OFDM MIMO 802.11ax20 242Tone 6695 MHz Maximum PSD e.i.r.p – [LPI] (Ant 2)

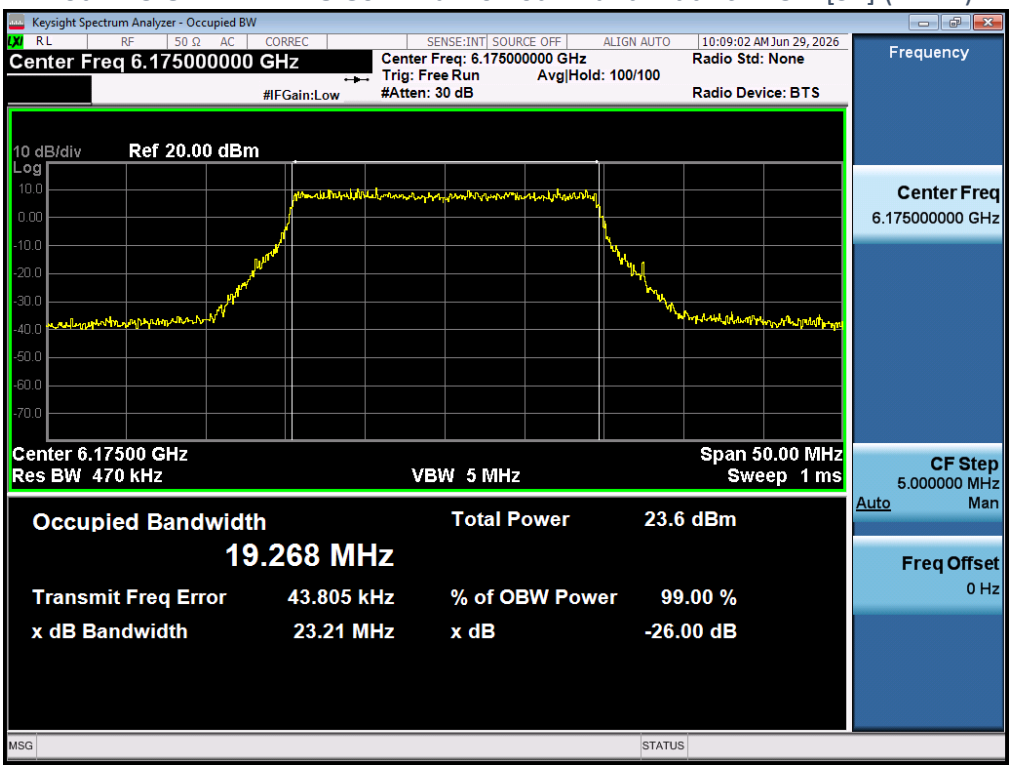


12.5.3. 26dB Bandwidth

Table 12-6 OFDM MIMO Ant2 26dB Bandwidth – [SP]

Mode	Frequency [MHz]	Channel	26 dB Bandwidth [MHz]		Dev. [dB]
			Parent	**Variant**	
			Ant2	Ant2	
ax20	6175	45	22.7	23.21	0.51

Plot 12-3 OFDM MIMO 802.11ax20 26dB Bandwidth ch.45 – [SP] (ANT2)

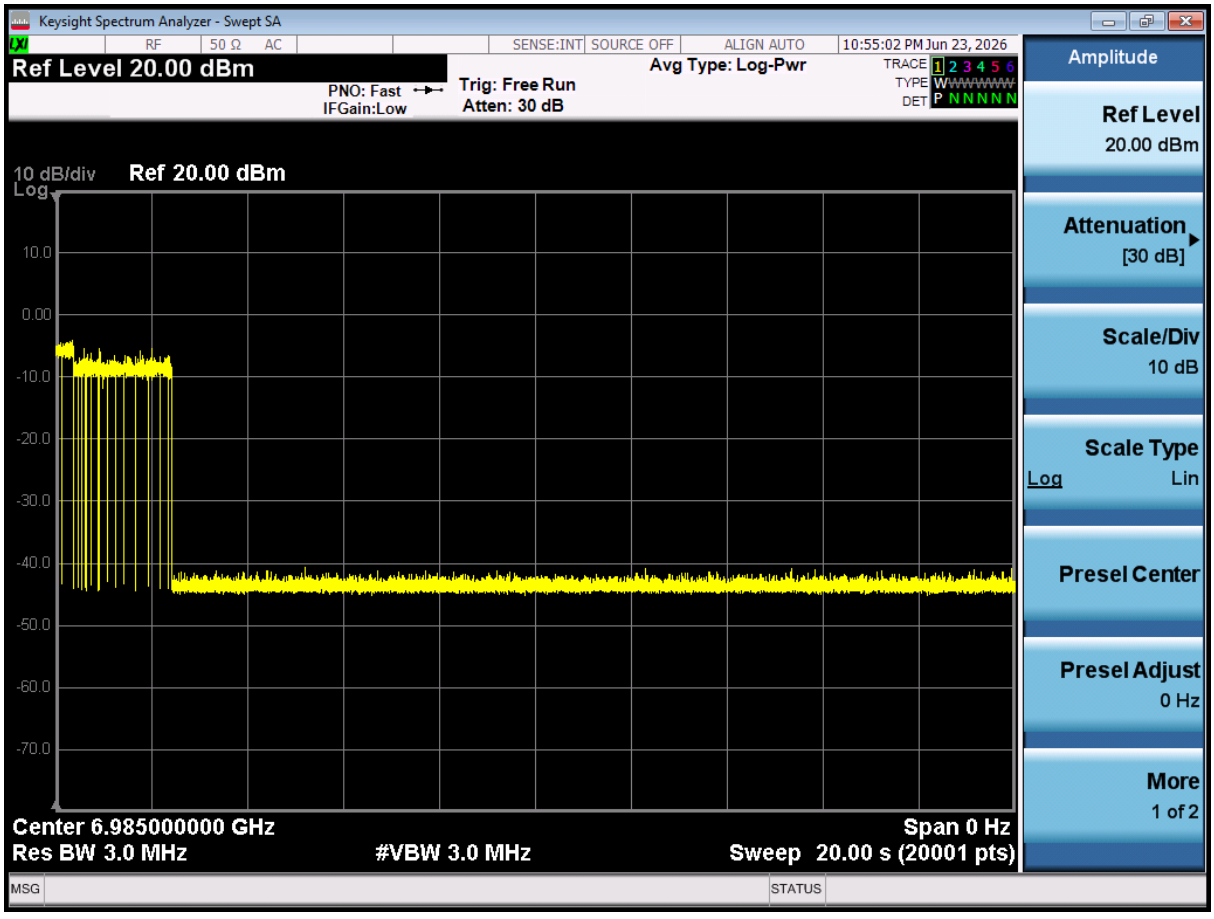


12.5.4. Contention-based protocol

Table 12-7 Contention-based protocol AWGN Detection Results [LPI]

Mode	Frequency [MHz]	Channel	ICUM [MHz]	Ceased [dBm]		Dev. [dB]
				Parent	Variant	
				Ant1	Ant1	
ax160	6985	207	6910	-72.8	-72.7	0.1
			6985	-71.6	-71.9	0.3
			7060	-75.4	-74.8	0.6

Plot 12-4 CBP UNII 8 6985 MHz 160MHz [LPI] – EUT Status OFF



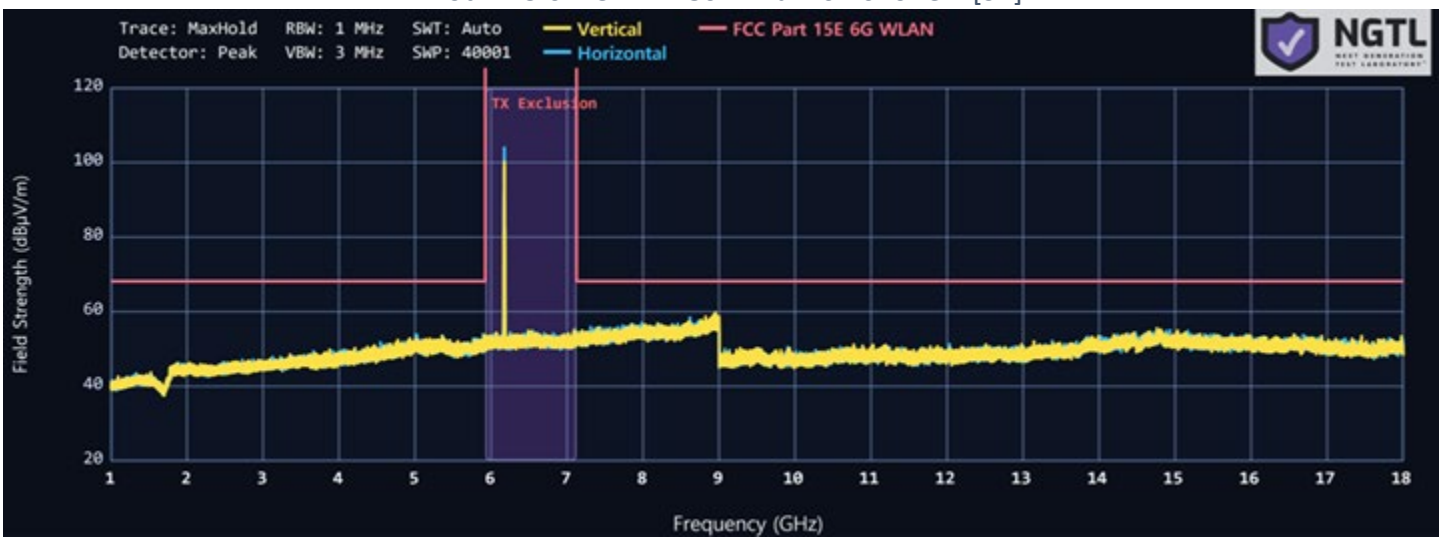
Band	BW [MHz]	freq. [MHz]	CH.	ICUM [MHz]	Nomal [dBm]	Minimal [dBm]	Ceased [dBm]	ANT Gain [dBi]	Detect Limit [dBm]	Limit w/ Ant Gain [dBm]	Margin [dB]
UNII 8	160M	6985	207	6910	-84.7	-77.8	-72.7	-7.88	-62	-69.88	-2.82
				6985	-84.3	-77.4	-71.9	-7.88	-62	-69.88	-2.02
				7060	-86.4	-80.1	-74.8	-7.88	-62	-69.88	-4.92

12.5.5. Radiated Spurious Emission

Table 12-8 OFDM MIMO Ant2 26dB Bandwidth – [SP]

Mode	Frequency [MHz]	Channel	RSE [dBµV/m]		Dev. [dB]
			Parent	**Variant**	
			MIMO	MIMO	
ax20 26T	6175	45	40.70	40.19	0.51

Plot 12-5 6175 MHz 802.11ax20 26Tone – [SP]



Test mode	Tested Frequency [MHz]	Frequency [MHz]	Detector Mode	Reading Value [dBµV]	AFCL [dB/m]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]
ax20 26T	6175	12351.95	AV	34.89	5.30	40.19	54.00	-13.81

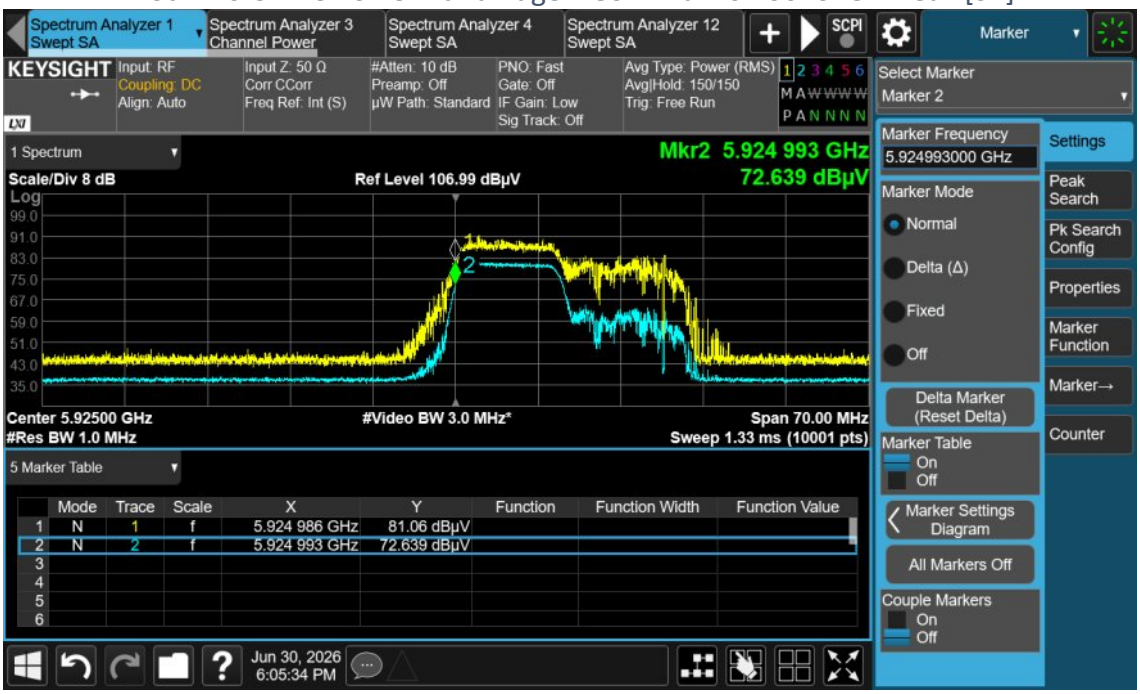
* AFCL (dB/m) = DCCF (dB) + Antenna Factor (dB/m)+ Total Loss [Cable Loss (dB) – Preamp Gain (dB)]

12.5.6. Radiated Band Edge

Table 12-9 OFDM MIMO Ant2 26dB Bandwidth – [SP]

Mode	Frequency [MHz]	Channel	RBE [dBµV/m]		Dev. [dB]
			Parent	**Variant**	
			MIMO	MIMO	
ax20 26T	5935	2	86.20	86.19	0.01

Plot 12-6 UNII 5 Lower Band Edge – 802.11ax20 106Tone – Peak [SP]



Test mode	Tested Frequency [MHz]	Frequency [MHz]	Detector Mode	Reading Value [dBµV]	AFCL [dB/m]	Result [dBµV/m]	Limit [dBµV/m]	Margin [dB]
ax20 106T	5935	5924.99	PK	81.06	5.13	86.19	88.20	-2.01

* AFCL (dB/m) = DCCF (dB) + Antenna Factor (dB/m)+ Total Loss [Cable Loss (dB) – Preamp Gain (dB)]

End of Test Report.