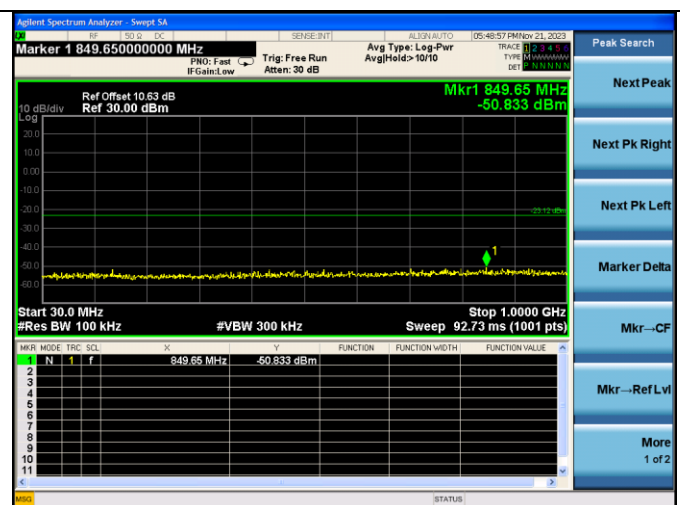
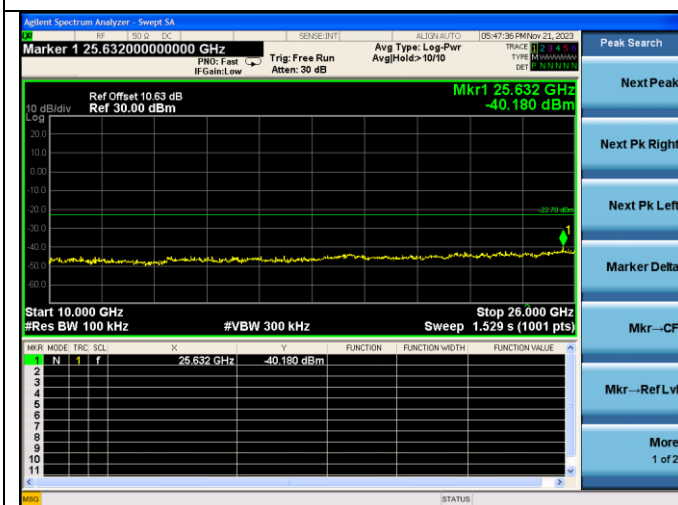
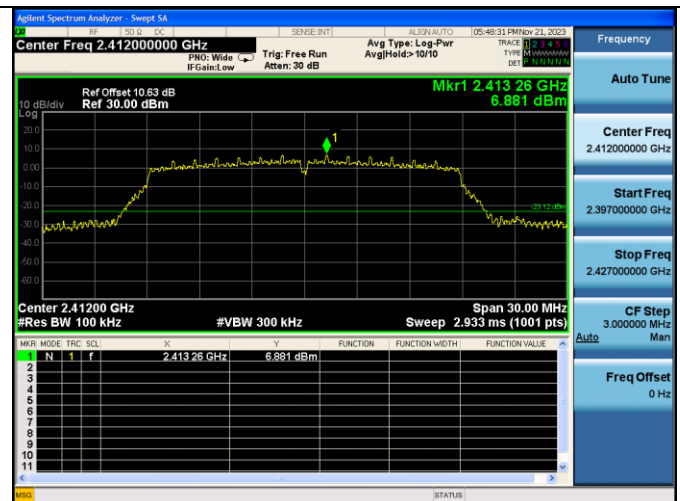
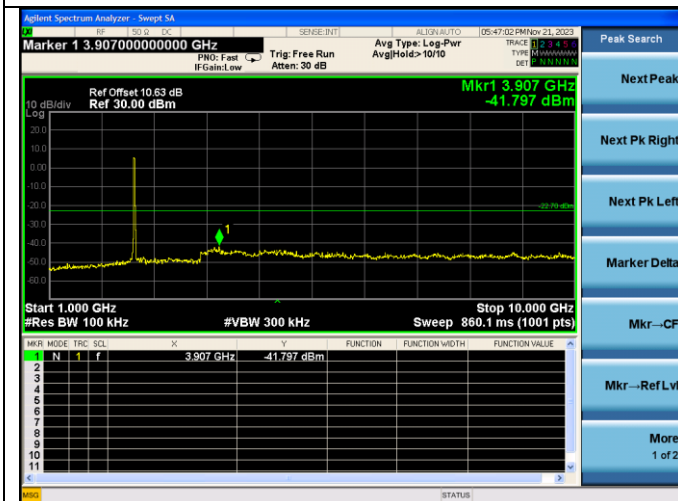
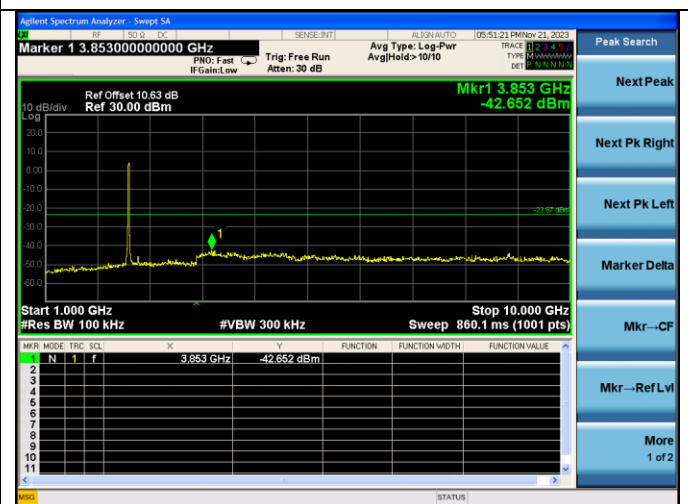
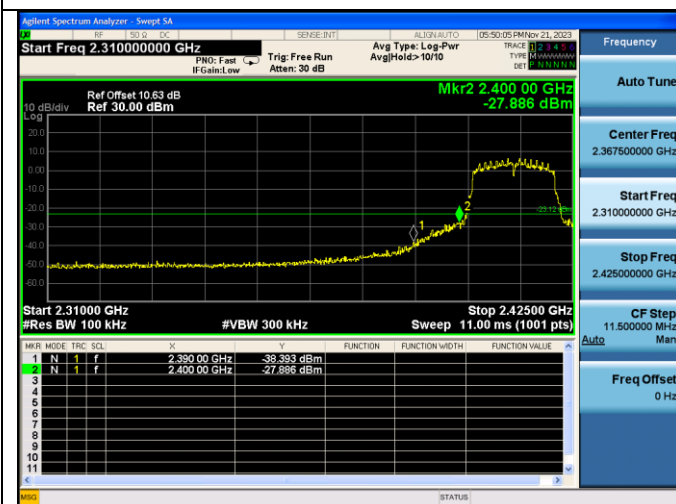
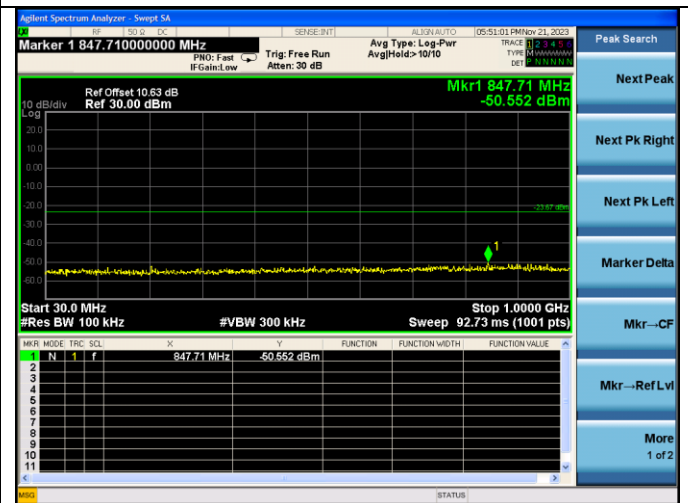
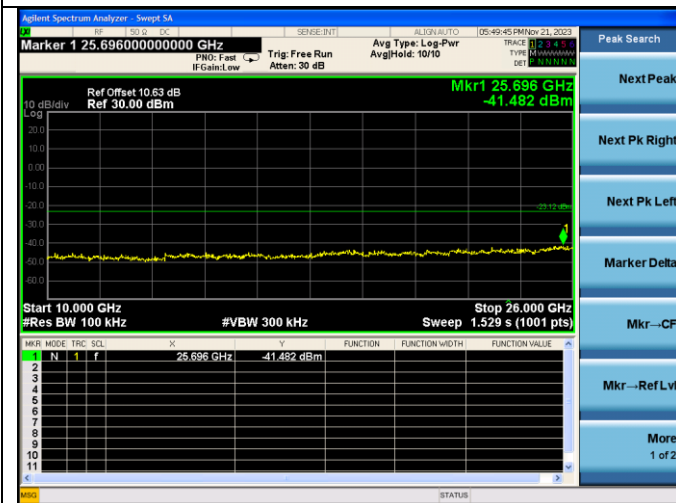
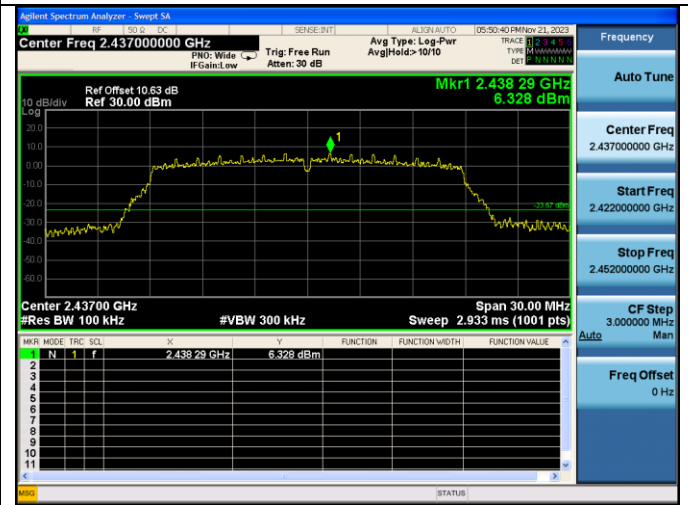
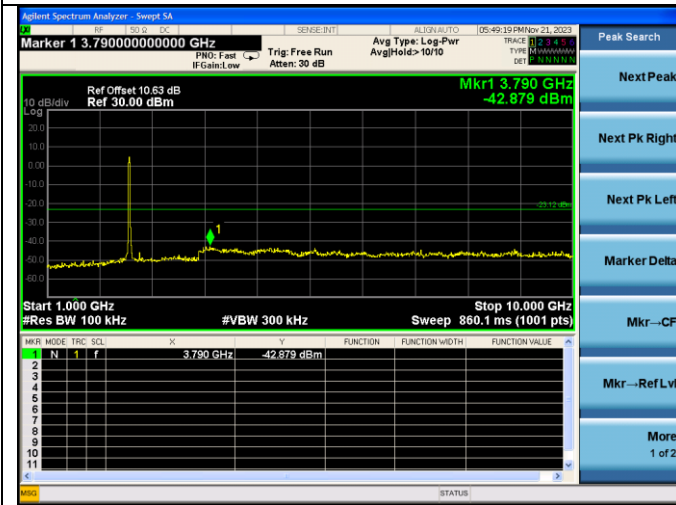
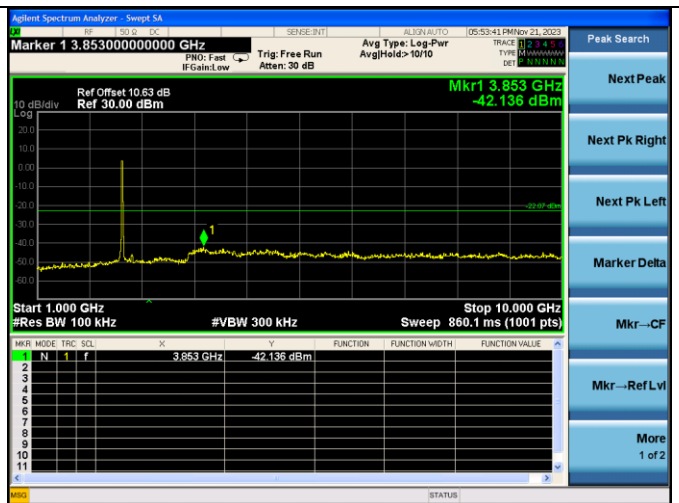
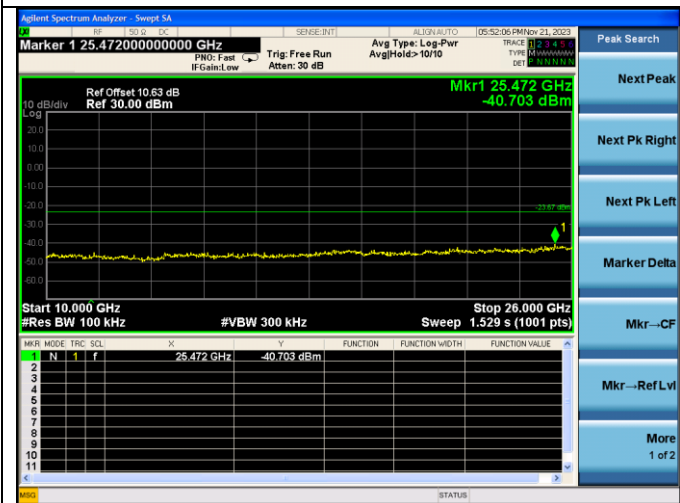


Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz

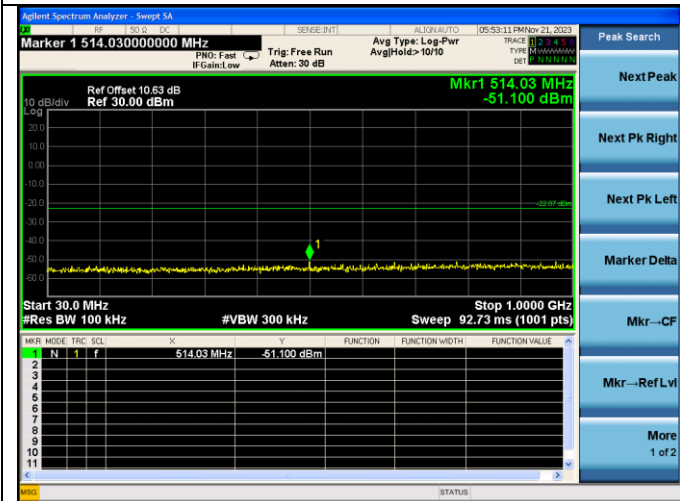
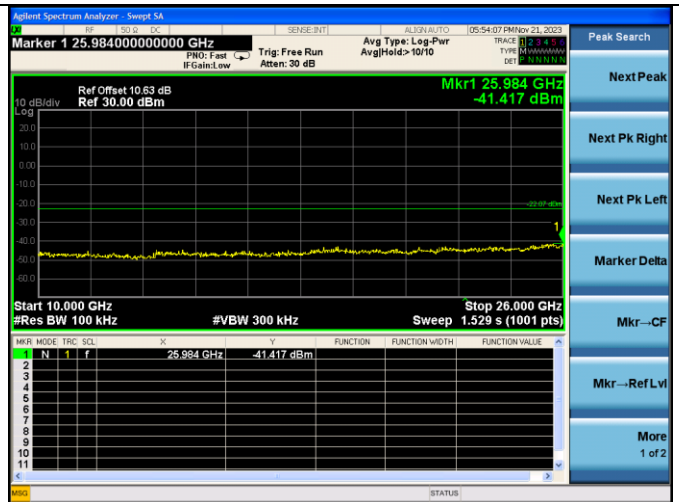
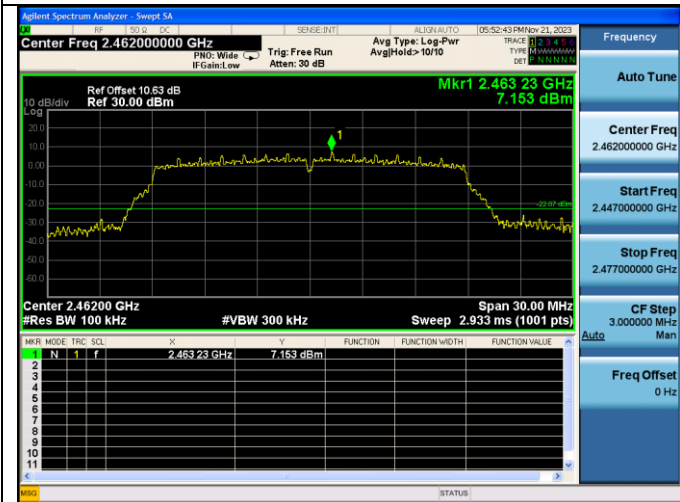


Test CH6: 2437MHz

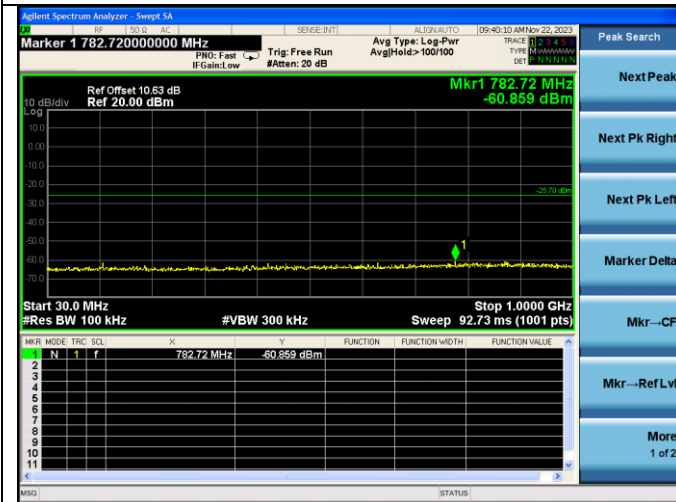
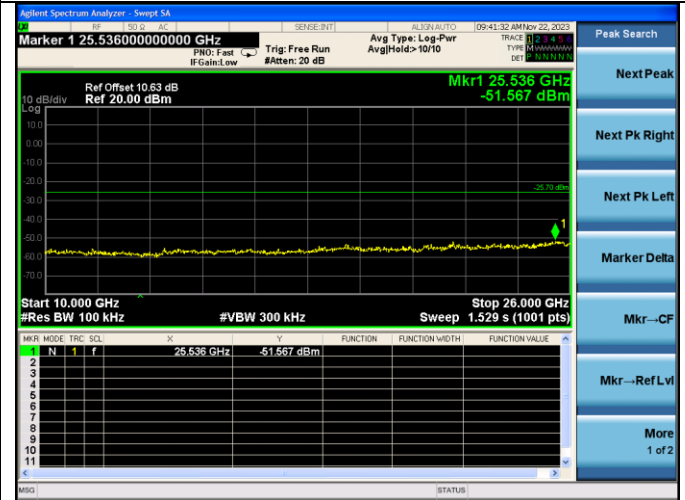
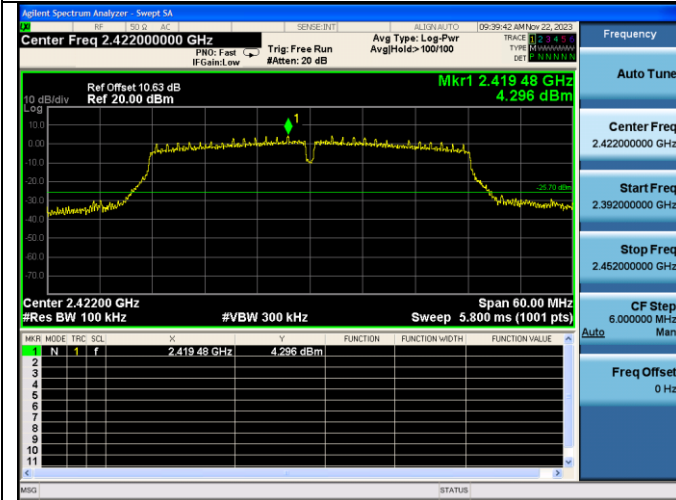




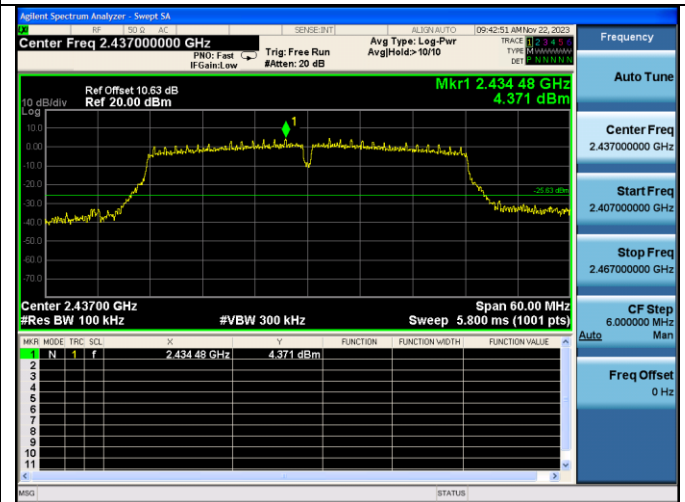
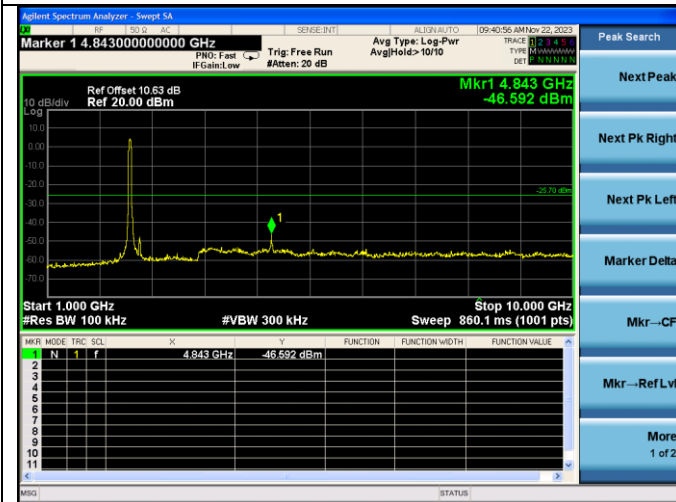
Test CH11: 2462MHz



Test Mode: IEEE 802.11n HT40  
 Test CH3: 2422MHz

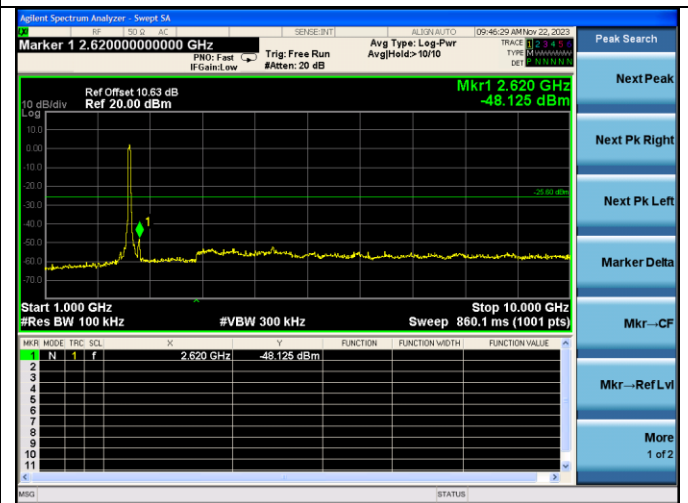
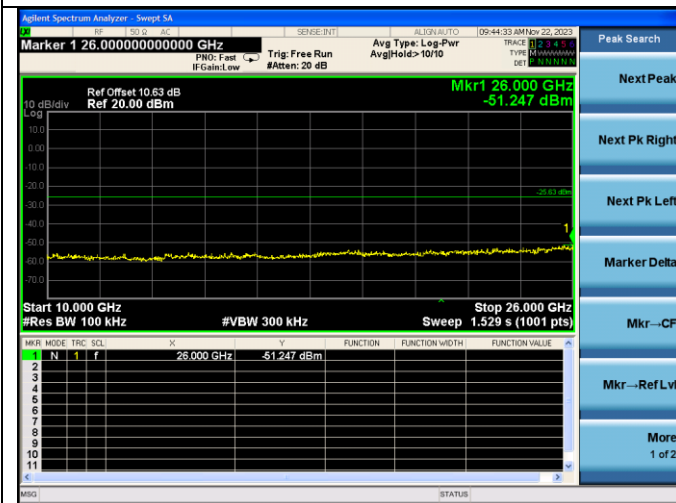
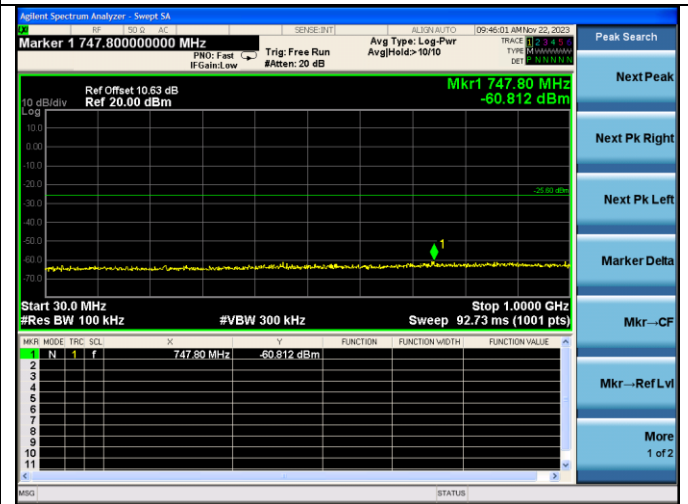
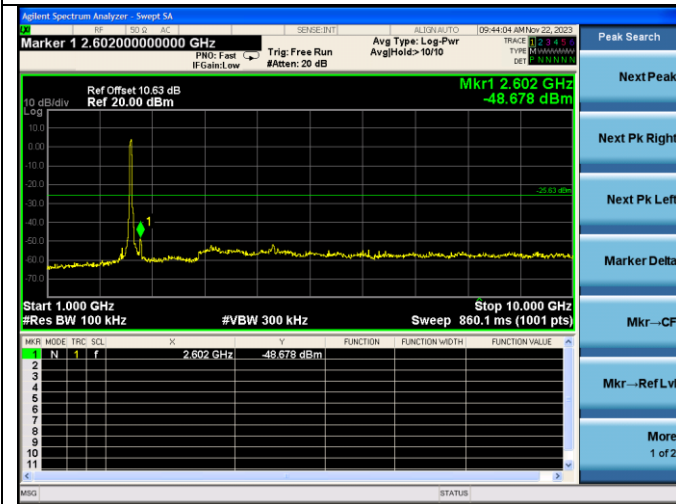
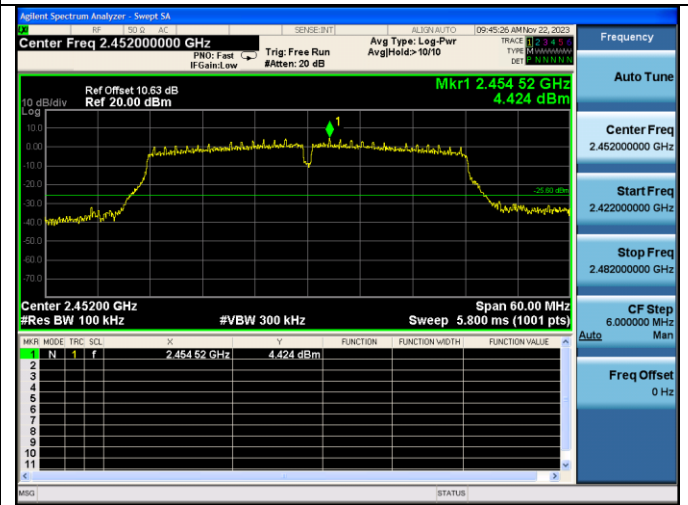
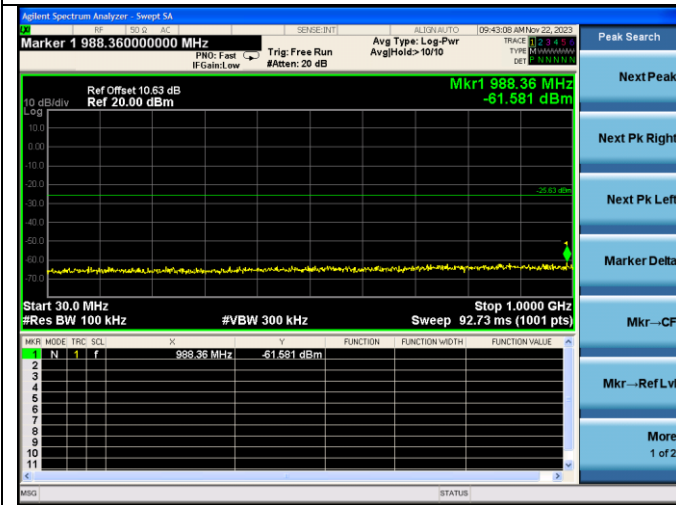


Test CH6: 2437MHz





Test CH9: 2452MHz





## 6. BAND EDGE COMPLIANCE TEST

### 6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3mChamber(Svswr)	AUDIX	N/A	N/A	Aug.09,22	3 Year
2.	3mChamber(SE)	AUDIX	N/A	N/A	Sep.16,22	3 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	104050	Apr.01,23	1 Year
4.	Amplifier	EMCI	EMC0518A45S E	980965	Aug.25,23	1 Year
5.	RF Cable	Shanghai chao yu	SFT205-NMSM- 10.00M	689241	Aug.25,23	1 Year
6.	Test Software	AUDIX	e3	6.100913a	N/A	N/A
7.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	Aug.23,23	1 Year

Note: N/A means Not applicable.

### 6.2. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

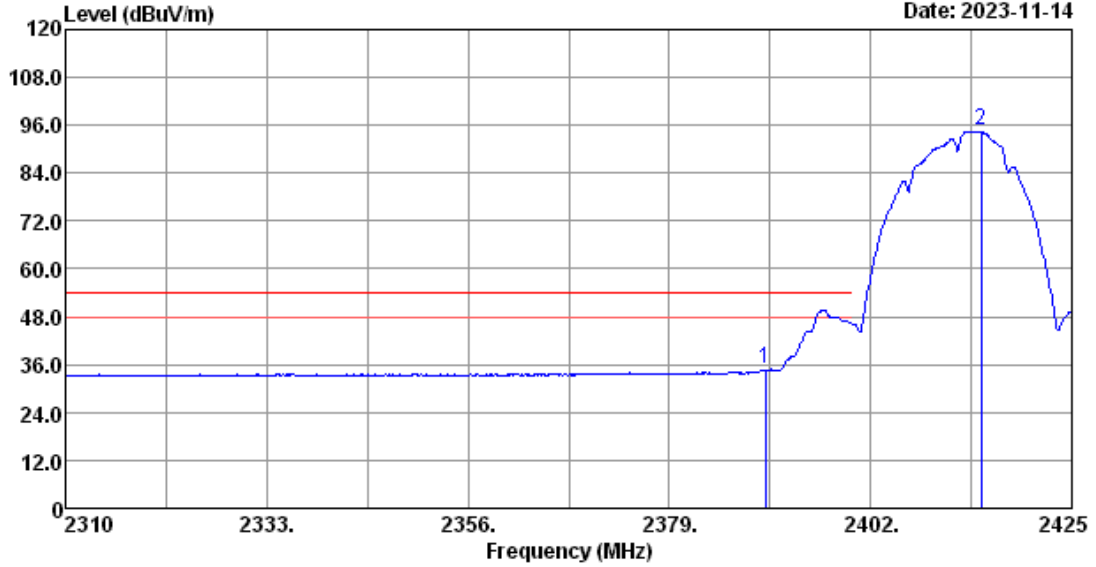
### 6.3. Test Procedure

1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
  - (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

### 6.4. Test Results

Pass (The testing data was attached in the next pages.)

Data: 1 File: F:\2023 Report\CA1Z2310028\A1Z2310028-WIFI2.4G.EM6 (80) Date: 2023-11-14

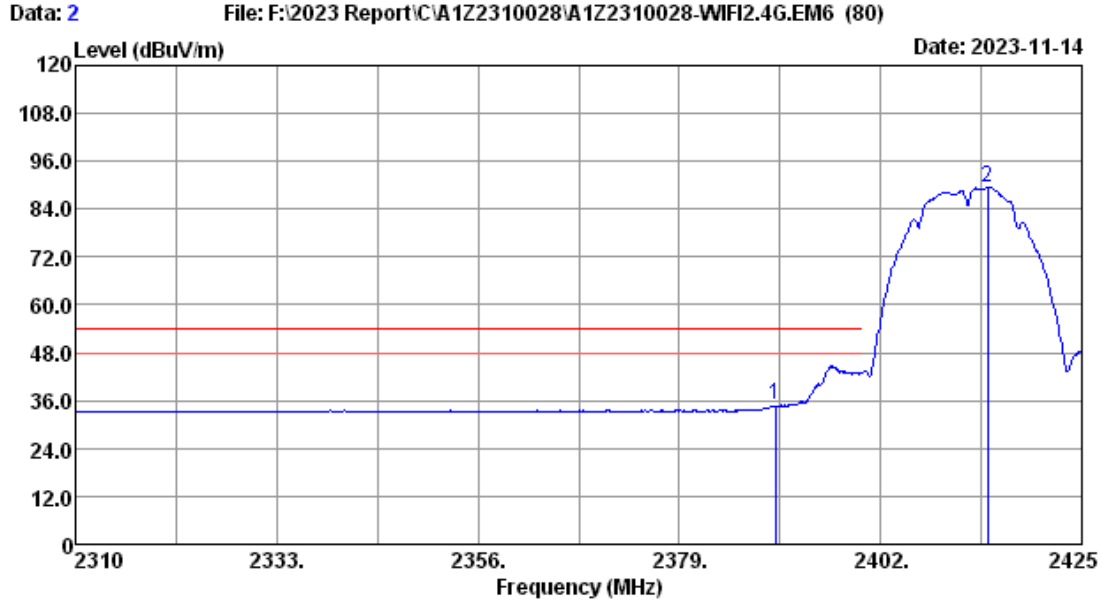


Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Amp factor (dB)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	36.64	32.23	34.86	54.00	19.14	Average
2	2414.65	27.66	2.84	96.48	32.21	94.77	-----	-----	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

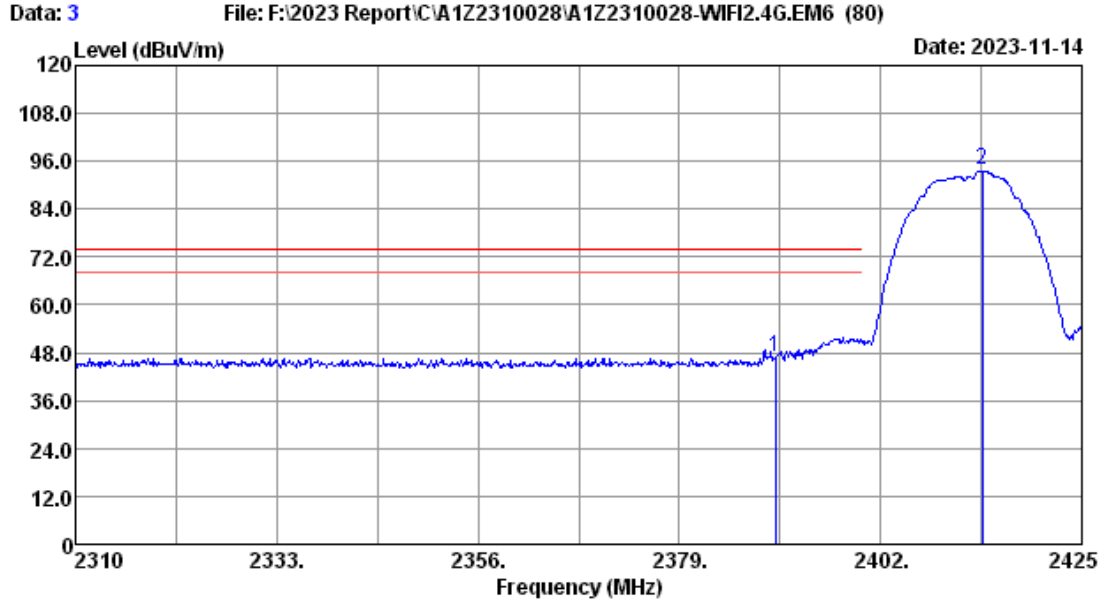




Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	36.60	32.23	34.82	54.00	19.18	Average
2	2414.19	27.66	2.84	91.31	32.21	89.60	-----	-----	Average

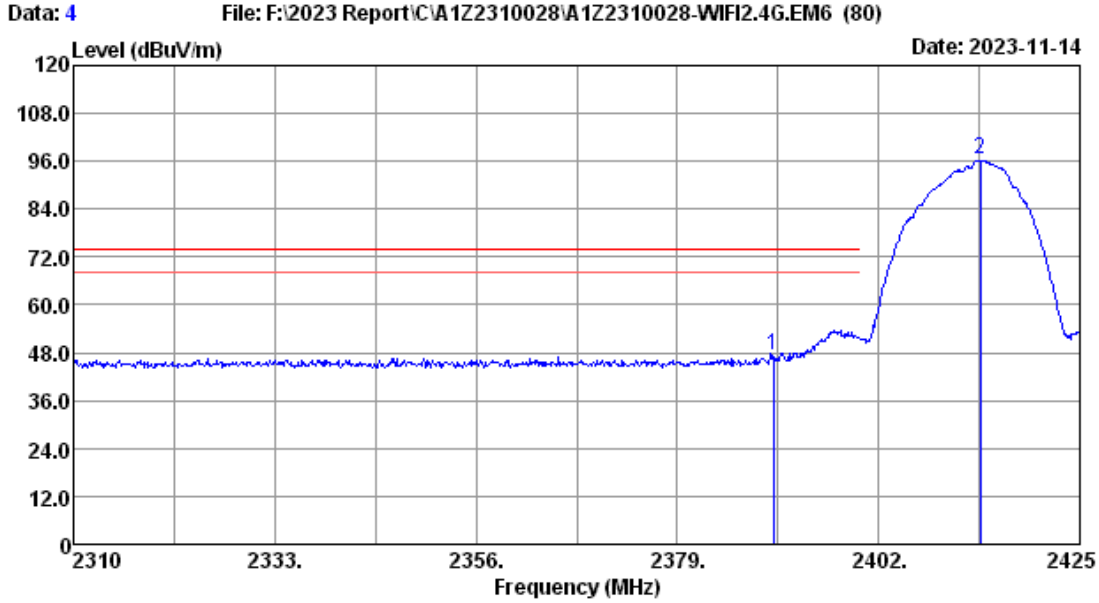
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 3  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	48.76	32.23	46.98	74.00	27.02	Peak
2	2413.62	27.65	2.84	95.59	32.21	93.87	-----	-----	Peak

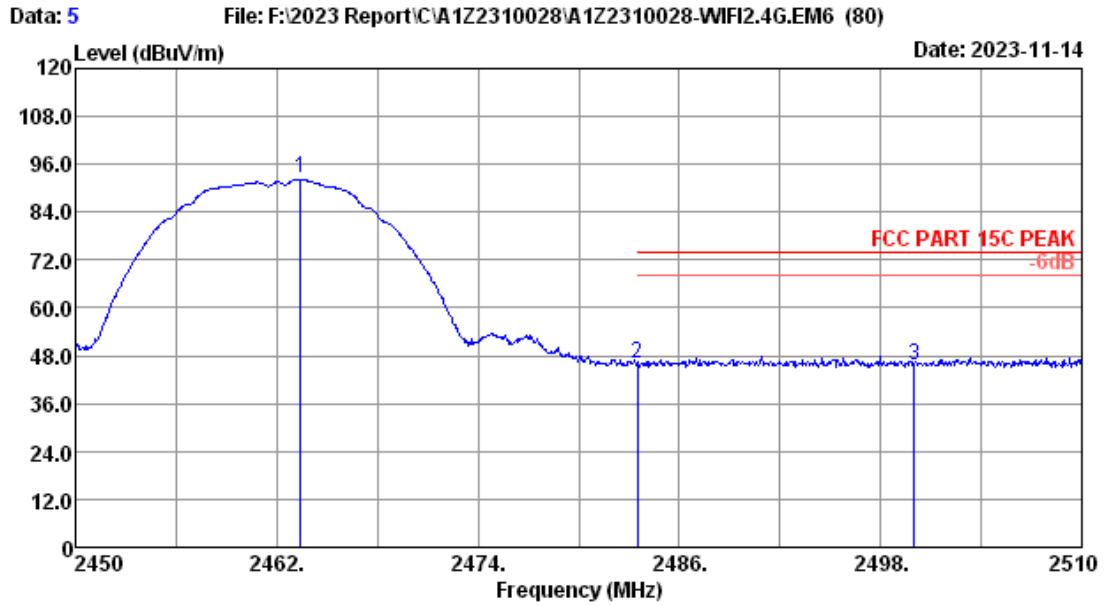
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 4  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	49.14	32.23	47.36	74.00	26.64	Peak
2	2413.62	27.65	2.84	98.28	32.21	96.56	-----	-----	Peak

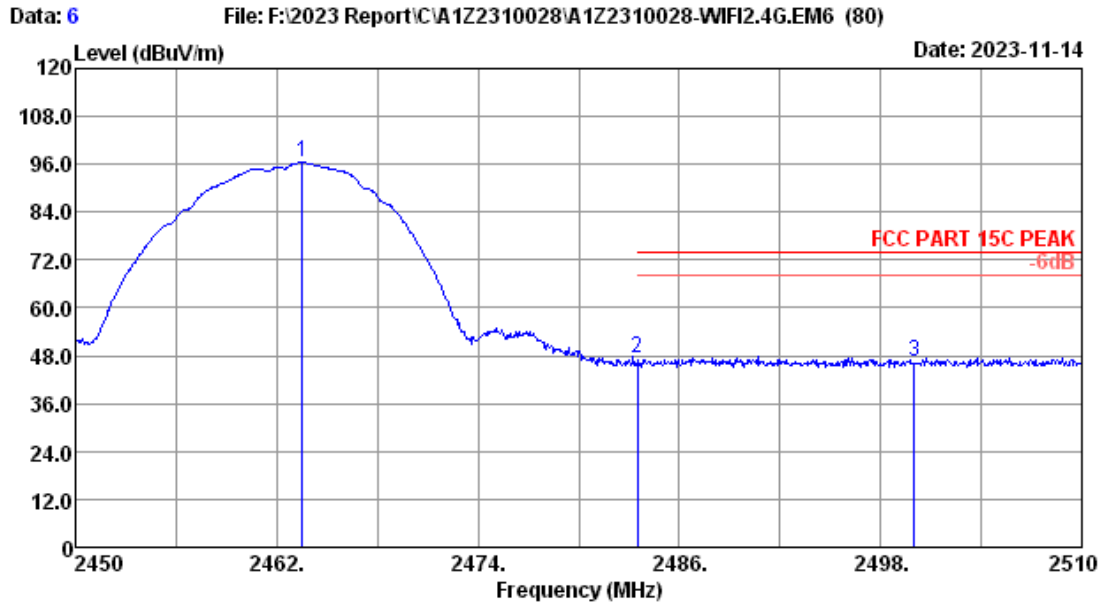
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 5  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.44	27.80	2.87	93.92	32.18	92.41	-----	-----	Peak
2	2483.50	27.80	2.88	47.57	32.16	46.09	74.00	27.91	Peak
3	2500.00	27.80	2.88	47.19	32.15	45.72	74.00	28.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

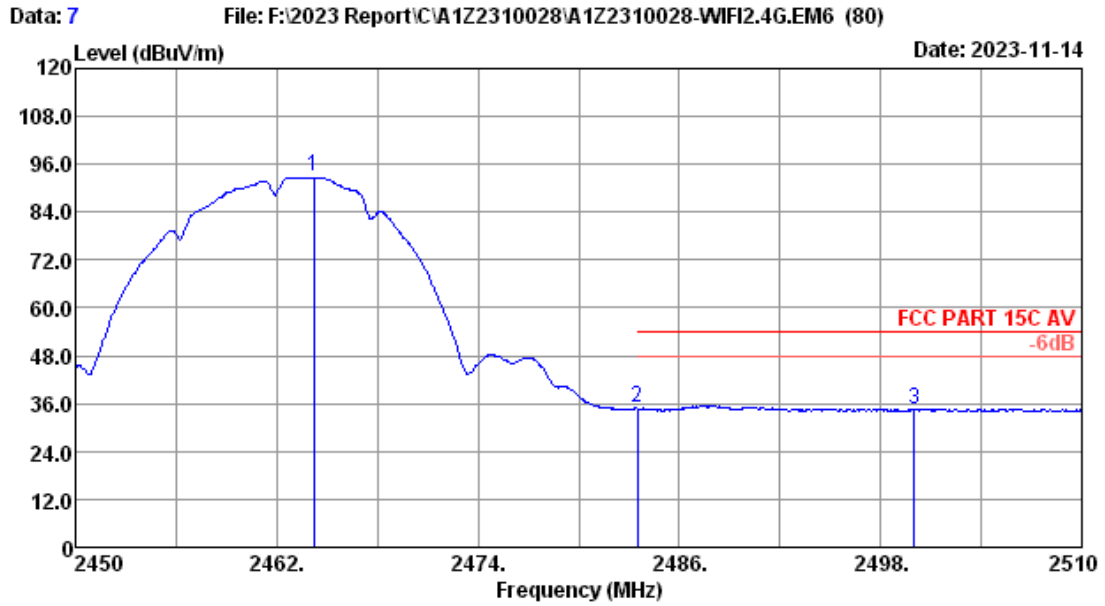


Site no. : 3m Chamber Data no. : 6  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.50	27.80	2.87	98.16	32.18	96.65	-----	-----	Peak
2	2483.50	27.80	2.88	48.77	32.16	47.29	74.00	26.71	Peak
3	2500.00	27.80	2.88	47.94	32.15	46.47	74.00	27.53	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

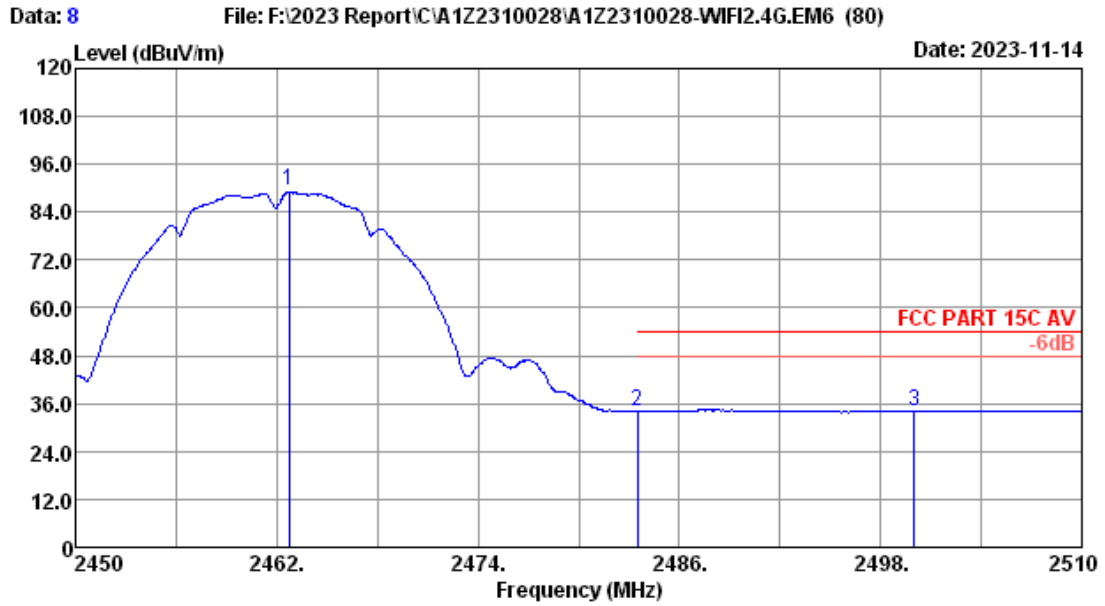




Site no. : 3m Chamber Data no. : 7  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2464.22	27.80	2.87	94.42	32.18	92.91	-----	-----	Average
2	2483.50	27.80	2.88	36.39	32.16	34.91	54.00	19.09	Average
3	2500.00	27.80	2.88	36.04	32.15	34.57	54.00	19.43	Average

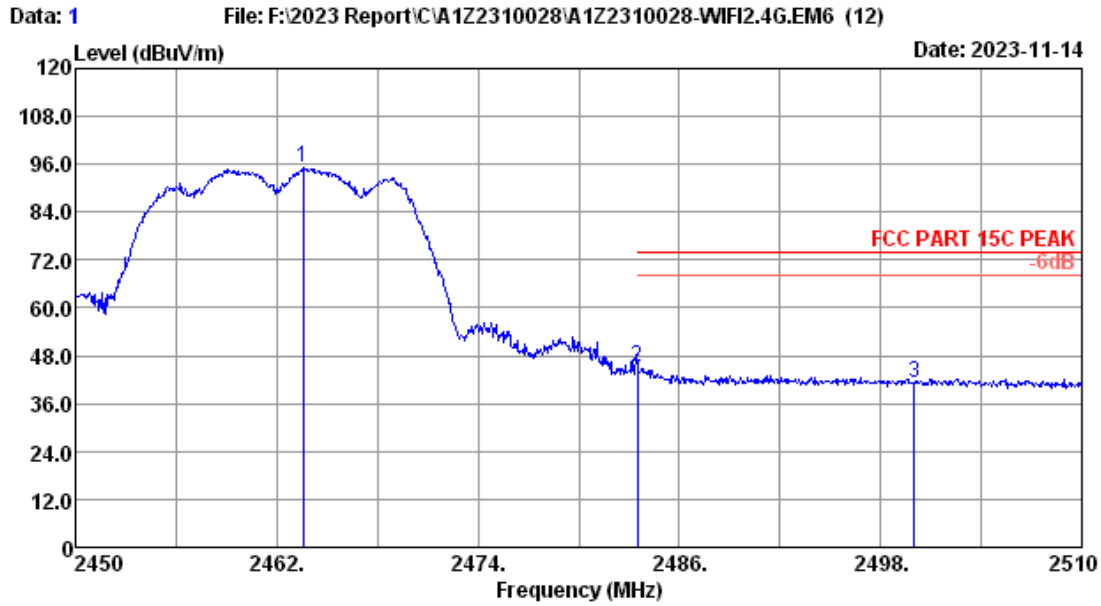
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11b 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.72	27.80	2.87	90.82	32.18	89.31	-----	-----	Average
2	2483.50	27.80	2.88	35.80	32.16	34.32	54.00	19.68	Average
3	2500.00	27.80	2.88	35.78	32.15	34.31	54.00	19.69	Average

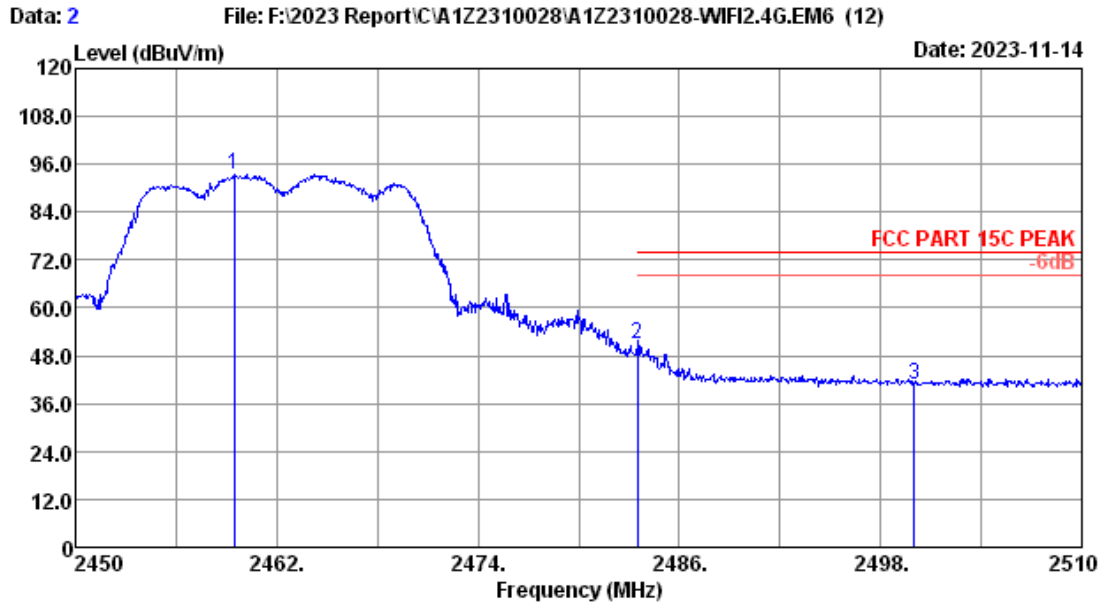
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.56	27.80	2.87	96.75	32.18	95.24	-----	-----	Peak
2	2483.50	27.80	2.88	46.66	32.16	45.18	74.00	28.82	Peak
3	2500.00	27.80	2.88	42.86	32.15	41.39	74.00	32.61	Peak

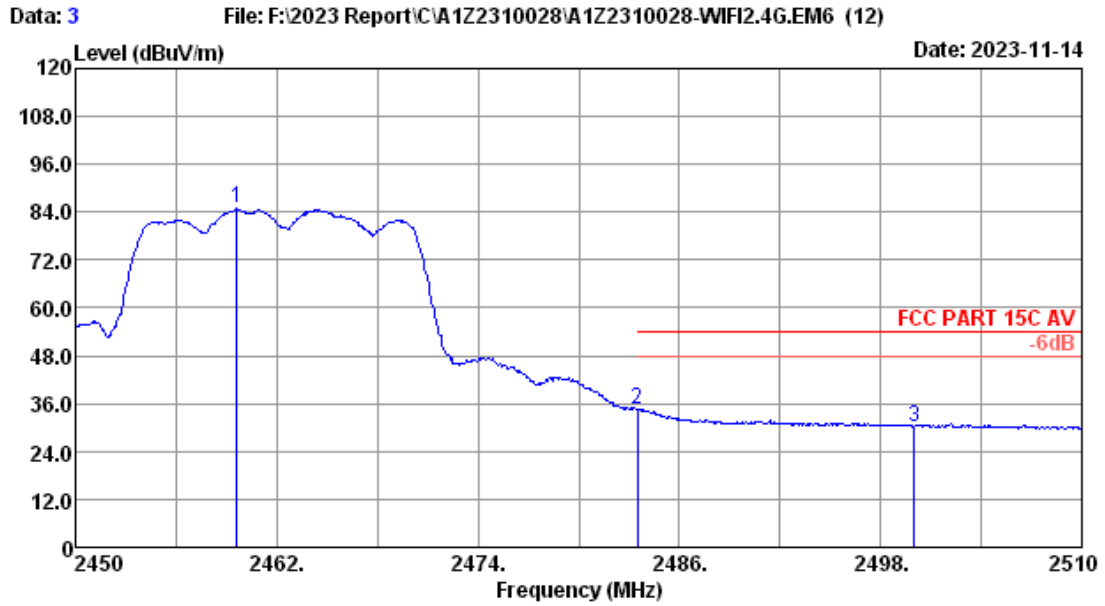
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.48	27.80	2.87	94.82	32.18	93.31	-----	-----	Peak
2	2483.50	27.80	2.88	52.49	32.16	51.01	74.00	22.99	Peak
3	2500.00	27.80	2.88	42.18	32.15	40.71	74.00	33.29	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

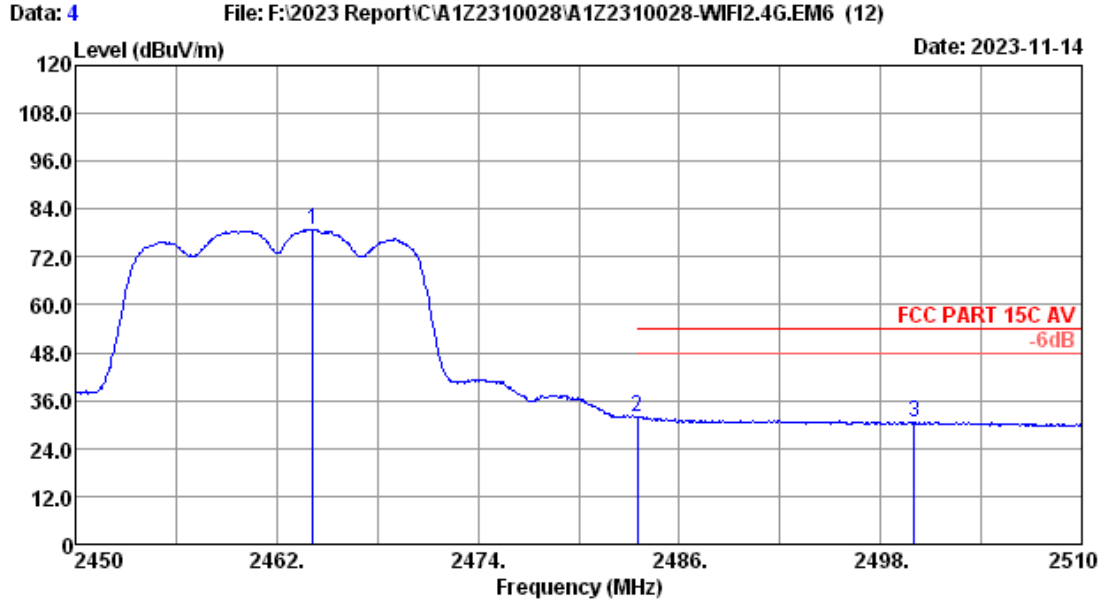


Site no. : 3m Chamber Data no. : 3  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.60	27.80	2.87	86.49	32.18	84.98	-----	-----	Average
2	2483.50	27.80	2.88	36.11	32.16	34.63	54.00	19.37	Average
3	2500.00	27.80	2.88	31.77	32.15	30.30	54.00	23.70	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

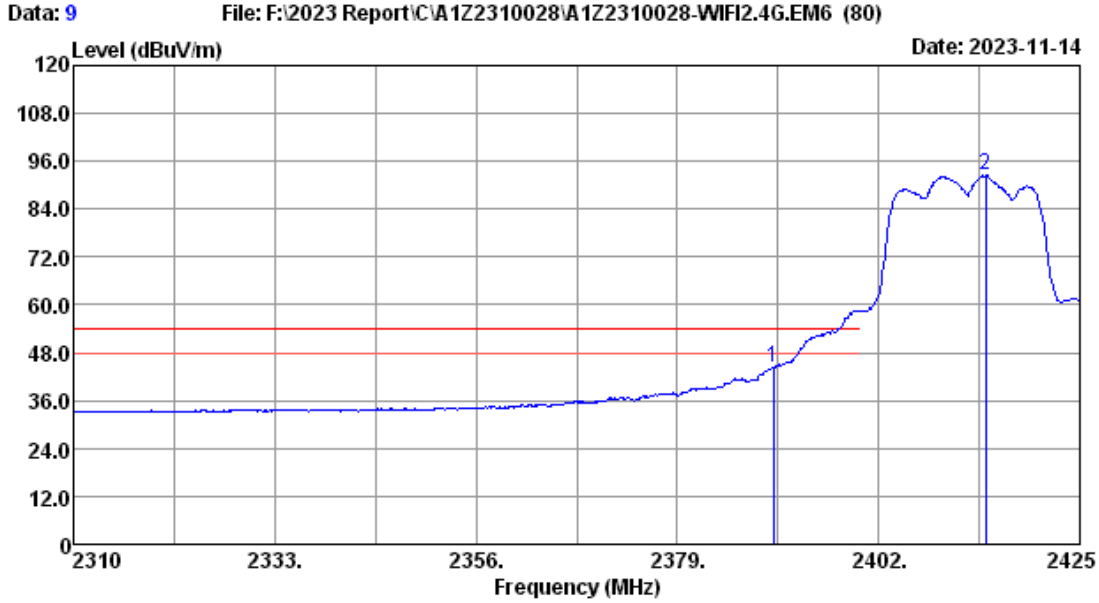




Site no. : 3m Chamber Data no. : 4  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2464.16	27.80	2.87	80.41	32.18	78.90	-----	-----	Average
2	2483.50	27.80	2.88	33.35	32.16	31.87	54.00	22.13	Average
3	2500.00	27.80	2.88	32.21	32.15	30.74	54.00	23.26	Average

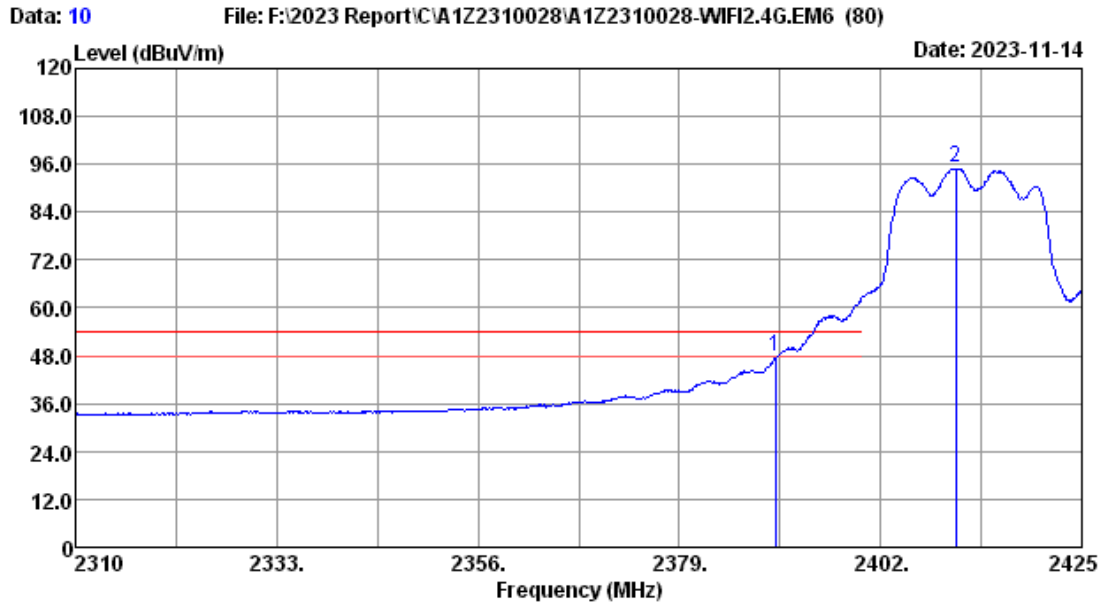
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	46.16	32.23	44.38	54.00	9.62	Average
2	2414.19	27.66	2.84	94.37	32.21	92.66	-----	-----	Average

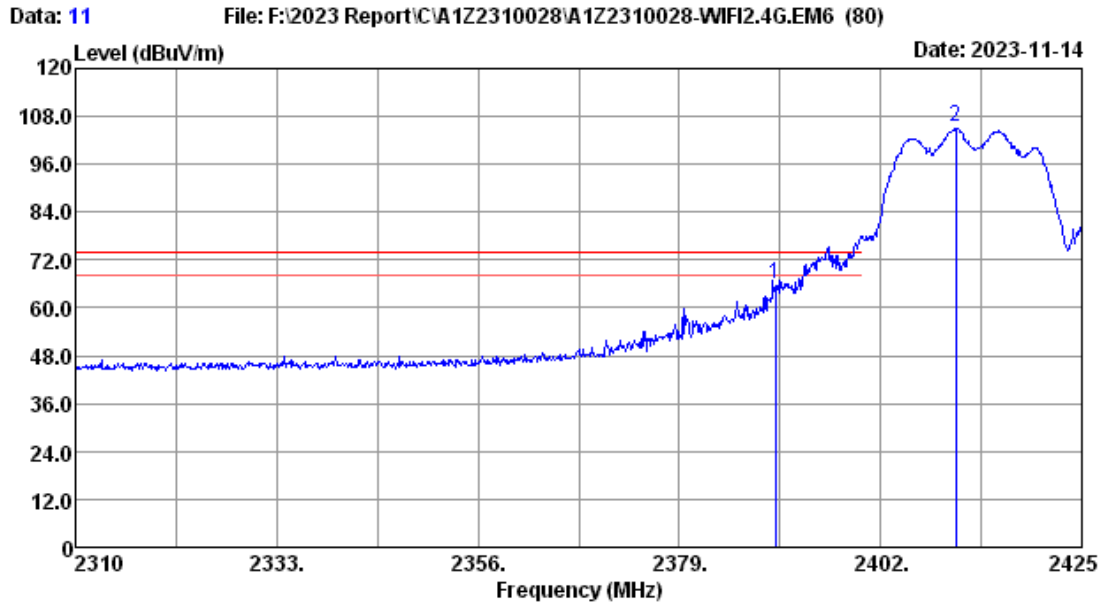
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	49.52	32.23	47.74	54.00	6.26	Average
2	2410.63	27.64	2.84	96.95	32.21	95.22	-----	-----	Average

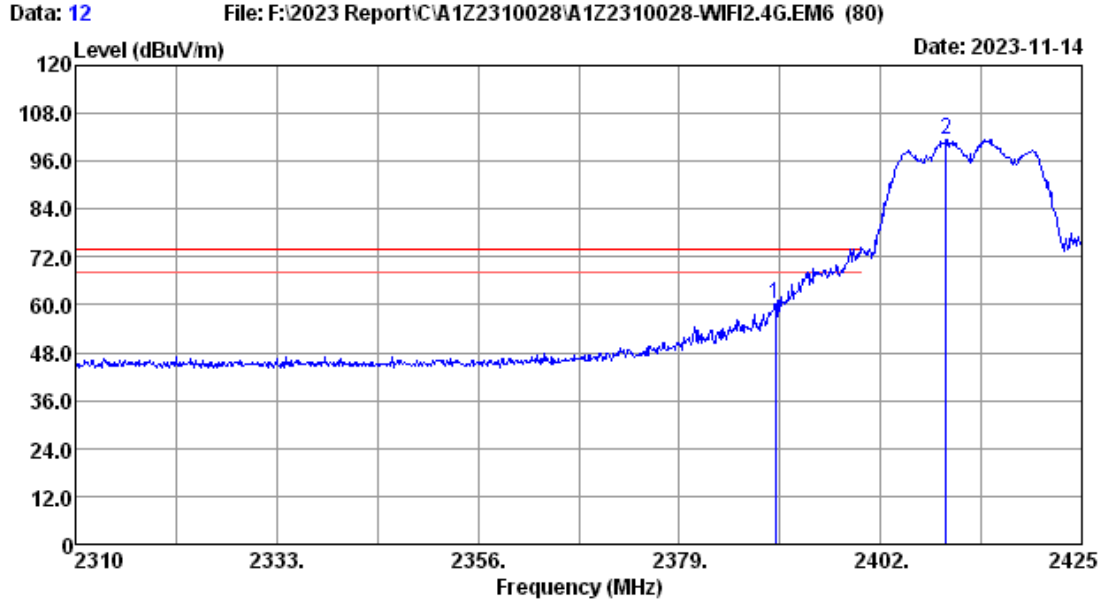
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 11  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	67.69	32.23	65.91	74.00	8.09	Peak
2	2410.63	27.64	2.84	106.94	32.21	105.21	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

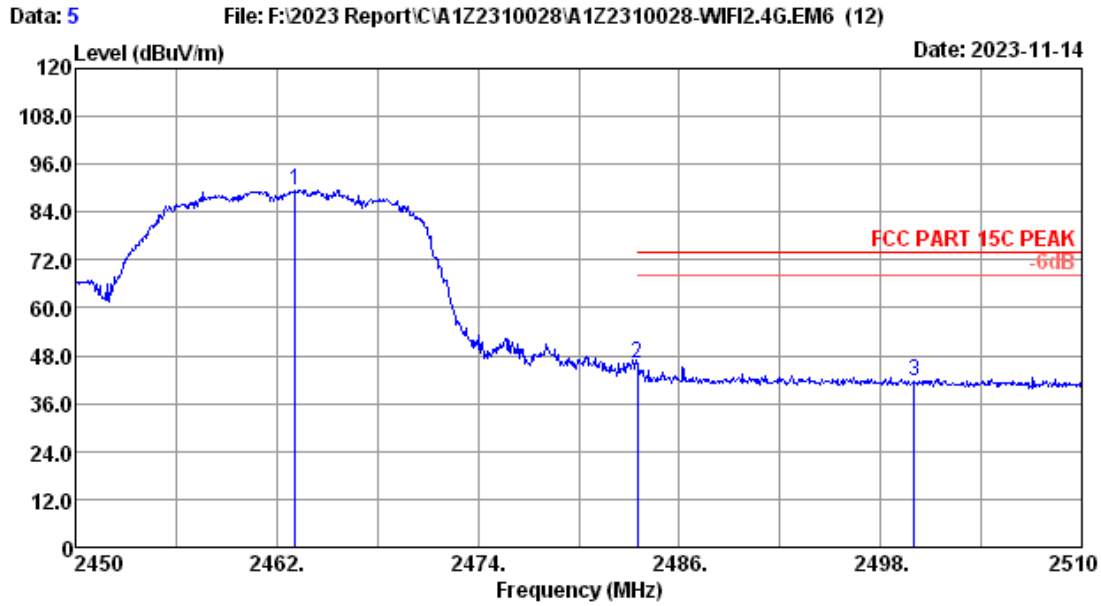


Site no. : 3m Chamber Data no. : 12  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11g 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	61.82	32.23	60.04	74.00	13.96	Peak
2	2409.48	27.64	2.84	103.29	32.21	101.56	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

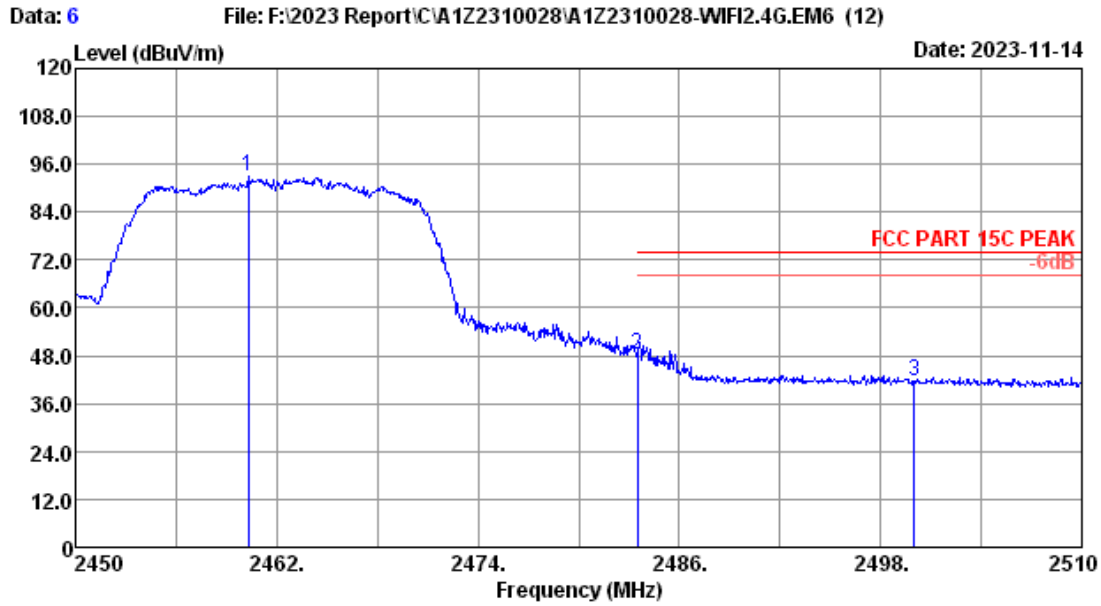




Site no. : 3m Chamber Data no. : 5  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.08	27.80	2.87	91.10	32.18	89.59	-----	-----	Peak
2	2483.50	27.80	2.88	47.73	32.16	46.25	74.00	27.75	Peak
3	2500.00	27.80	2.88	42.89	32.15	41.42	74.00	32.58	Peak

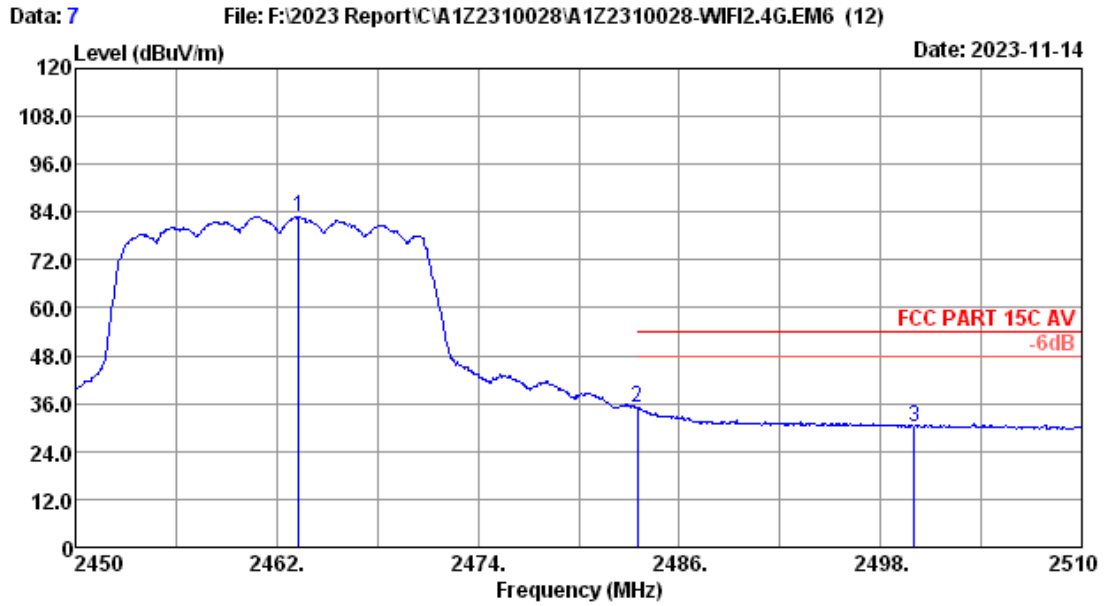
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 6  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.32	27.80	2.87	94.32	32.18	92.81	-----	-----	Peak
2	2483.50	27.80	2.88	49.62	32.16	48.14	74.00	25.86	Peak
3	2500.00	27.80	2.88	43.13	32.15	41.66	74.00	32.34	Peak

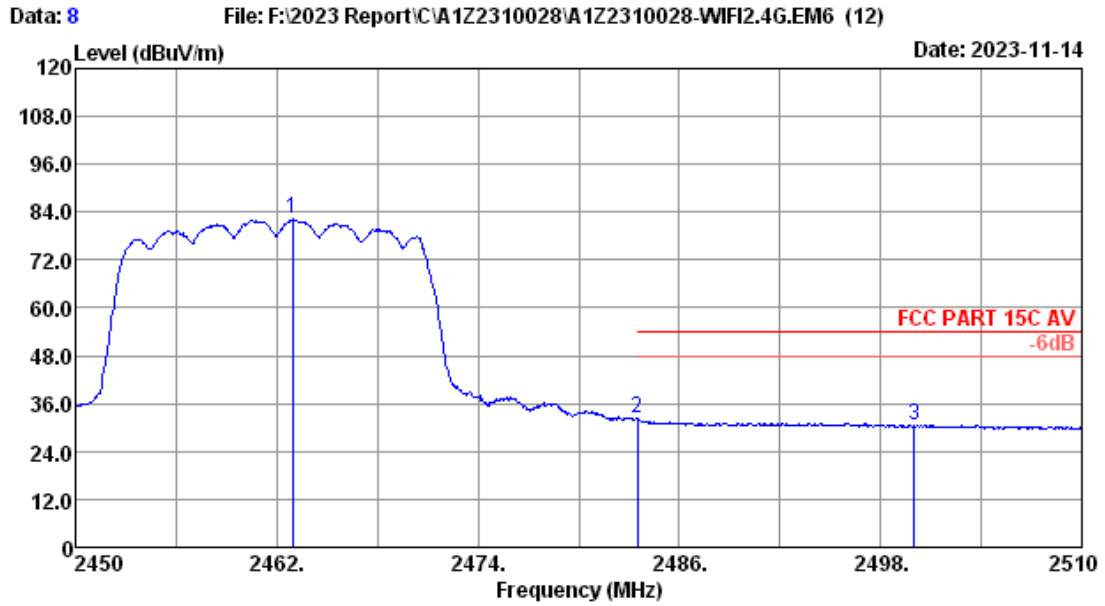
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 7  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.32	27.80	2.87	84.43	32.18	82.92	-----	-----	Average
2	2483.50	27.80	2.88	36.34	32.16	34.86	54.00	19.14	Average
3	2500.00	27.80	2.88	31.70	32.15	30.23	54.00	23.77	Average

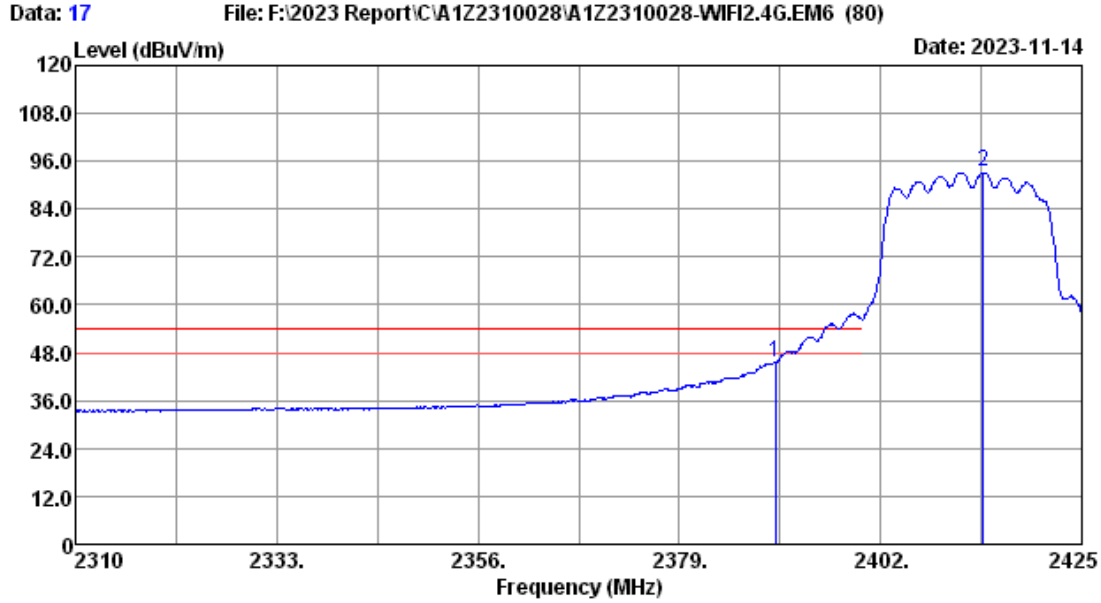
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2462MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.96	27.80	2.87	83.71	32.18	82.20	-----	-----	Average
2	2483.50	27.80	2.88	33.90	32.16	32.42	54.00	21.58	Average
3	2500.00	27.80	2.88	31.85	32.15	30.38	54.00	23.62	Average

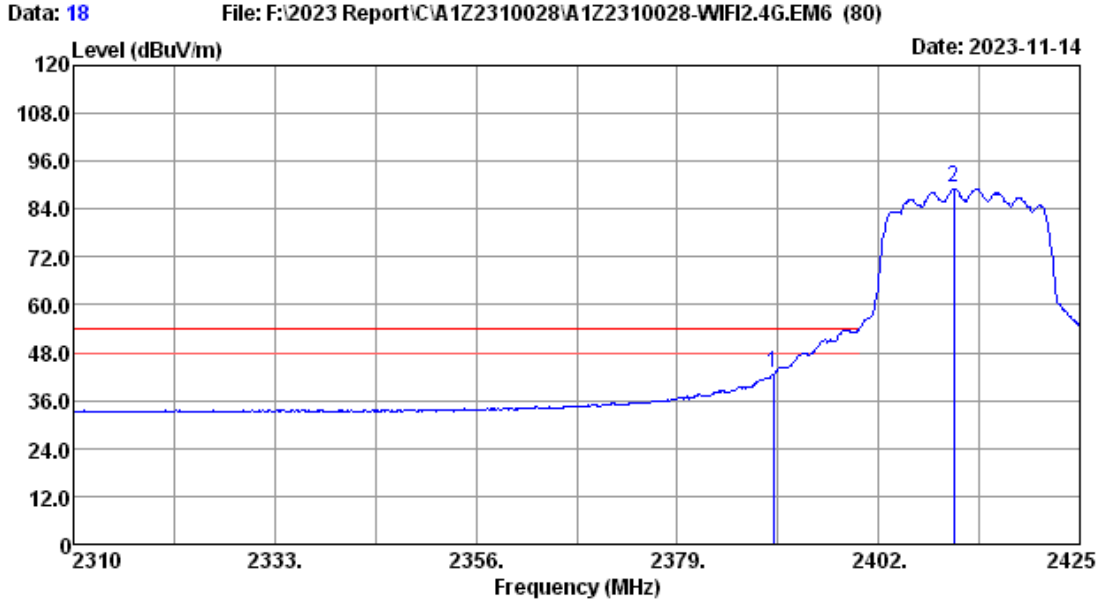
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 17  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	47.58	32.23	45.80	54.00	8.20	Average
2	2413.73	27.65	2.84	95.14	32.21	93.42	-----	-----	Average

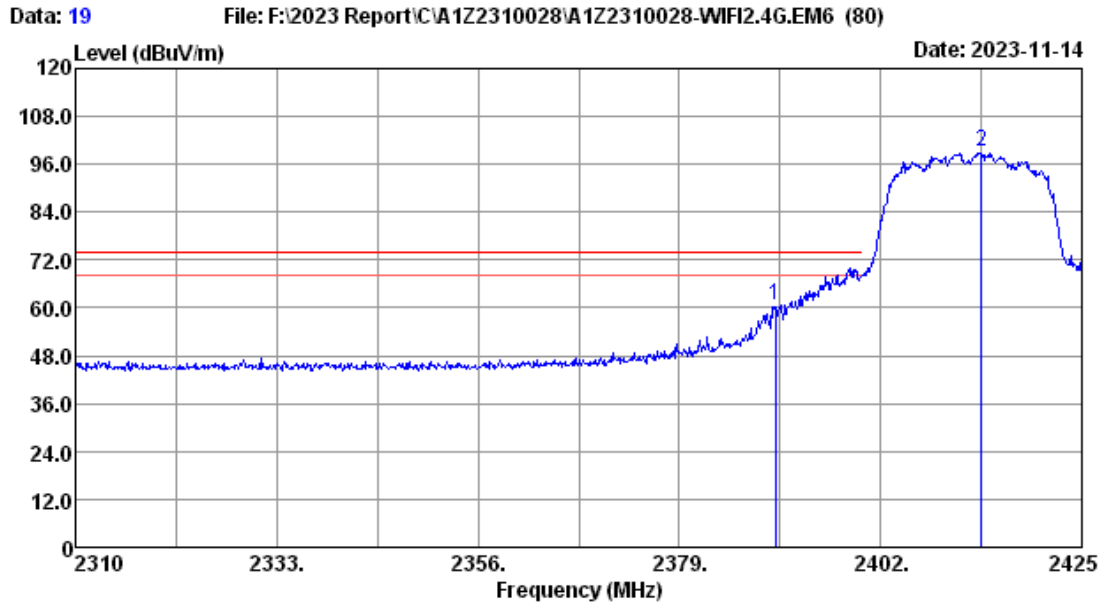
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 18  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	44.70	32.23	42.92	54.00	11.08	Average
2	2410.63	27.64	2.84	91.10	32.21	89.37	-----	-----	Average

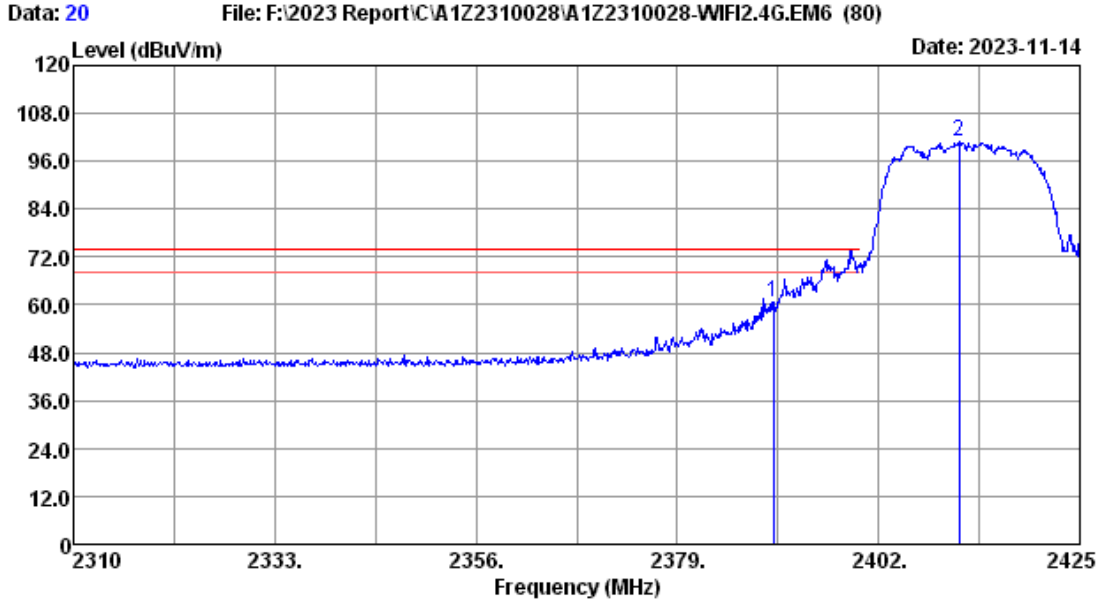
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 19  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	62.23	32.23	60.45	74.00	13.55	Peak
2	2413.50	27.65	2.84	100.90	32.21	99.18	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

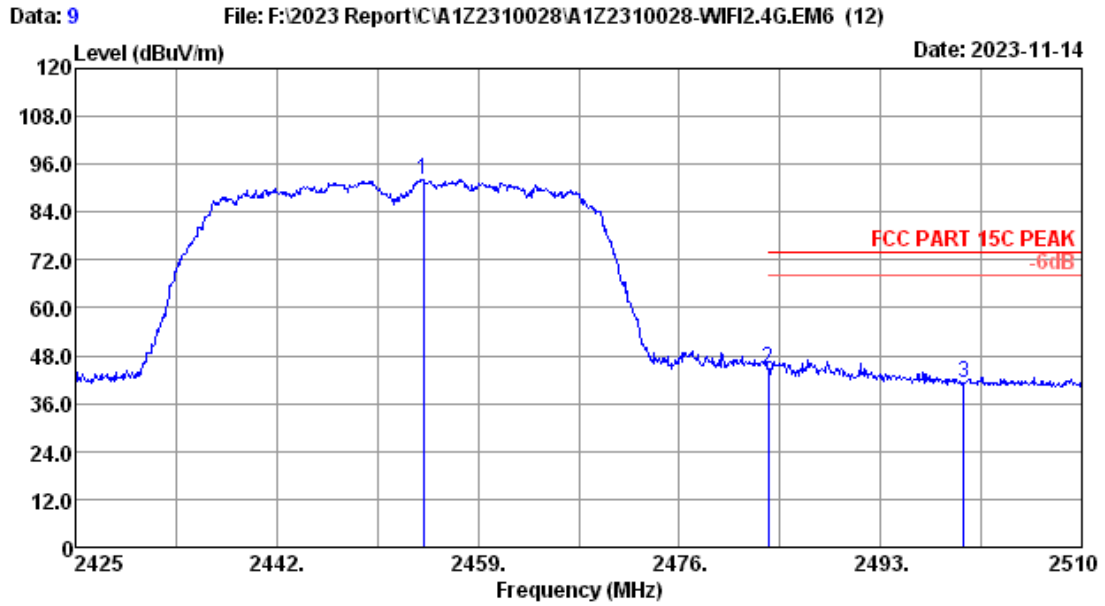


Site no. : 3m Chamber Data no. : 20  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n20 2412MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	62.55	32.23	60.77	74.00	13.23	Peak
2	2411.20	27.64	2.84	102.89	32.21	101.16	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

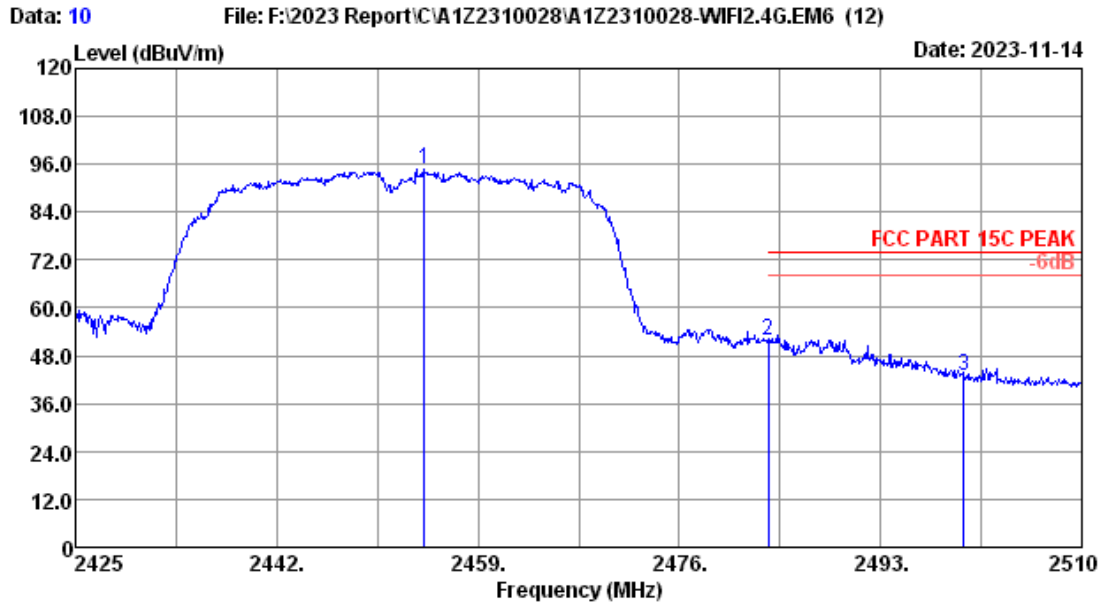




Site no. : 3m Chamber Data no. : 9  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2452MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2454.41	27.80	2.86	93.55	32.18	92.03	-----	-----	Peak
2	2483.50	27.80	2.88	46.30	32.16	44.82	74.00	29.18	Peak
3	2500.00	27.80	2.88	42.47	32.15	41.00	74.00	33.00	Peak

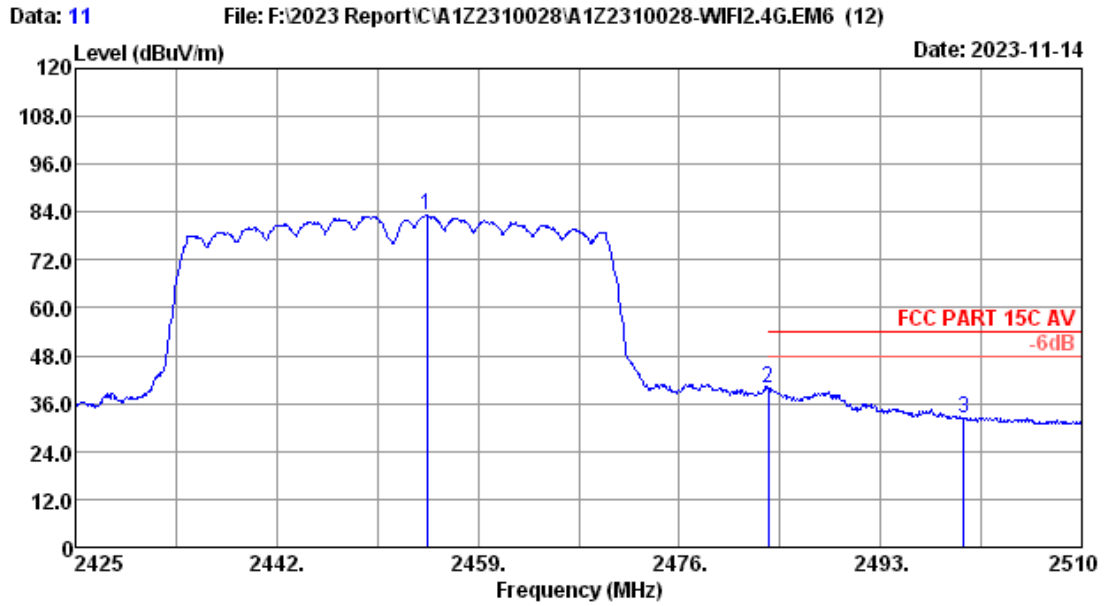
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2452MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2454.50	27.80	2.86	96.39	32.18	94.87	-----	-----	Peak
2	2483.50	27.80	2.88	53.49	32.16	52.01	74.00	21.99	Peak
3	2500.00	27.80	2.88	44.41	32.15	42.94	74.00	31.06	Peak

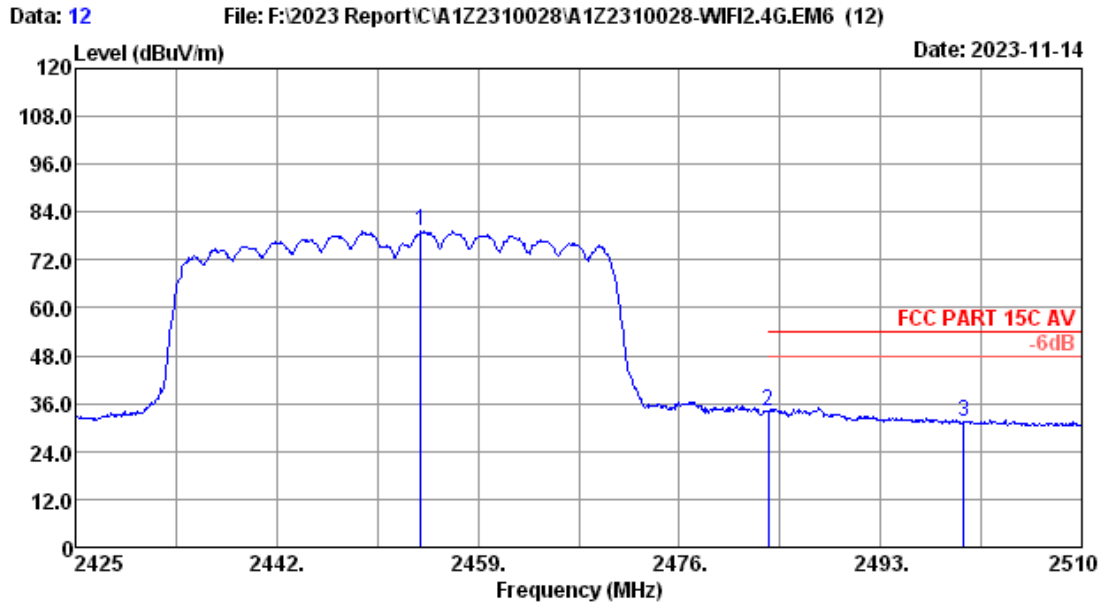
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 11  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2452MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2454.67	27.80	2.86	84.75	32.18	83.23	-----	-----	Average
2	2483.50	27.80	2.88	41.17	32.16	39.69	54.00	14.31	Average
3	2500.00	27.80	2.88	33.63	32.15	32.16	54.00	21.84	Average

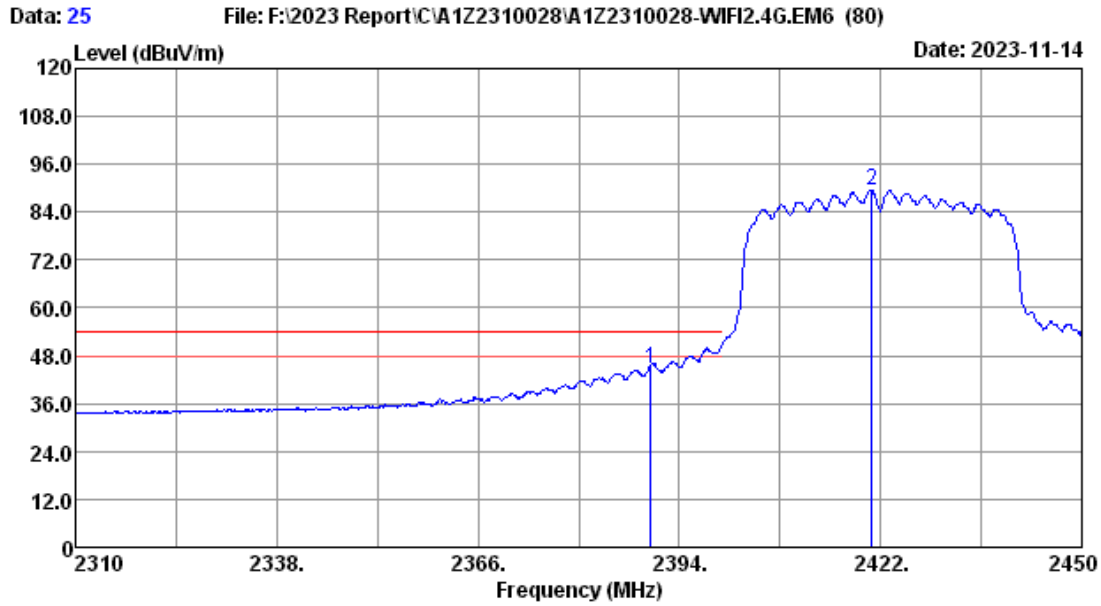
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 12  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2452MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2454.16	27.80	2.86	80.70	32.18	79.18	-----	-----	Average
2	2483.50	27.80	2.88	35.45	32.16	33.97	54.00	20.03	Average
3	2500.00	27.80	2.88	32.81	32.15	31.34	54.00	22.66	Average

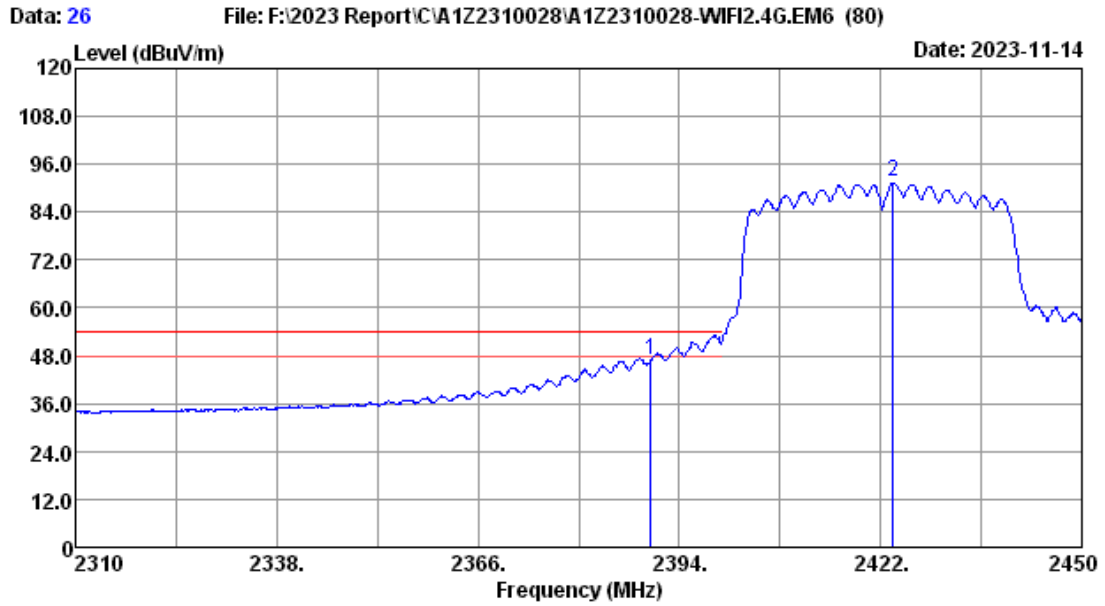
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 25  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2422MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	46.64	32.23	44.86	54.00	9.14	Average
2	2420.74	27.68	2.85	91.28	32.21	89.60	-----	-----	Average

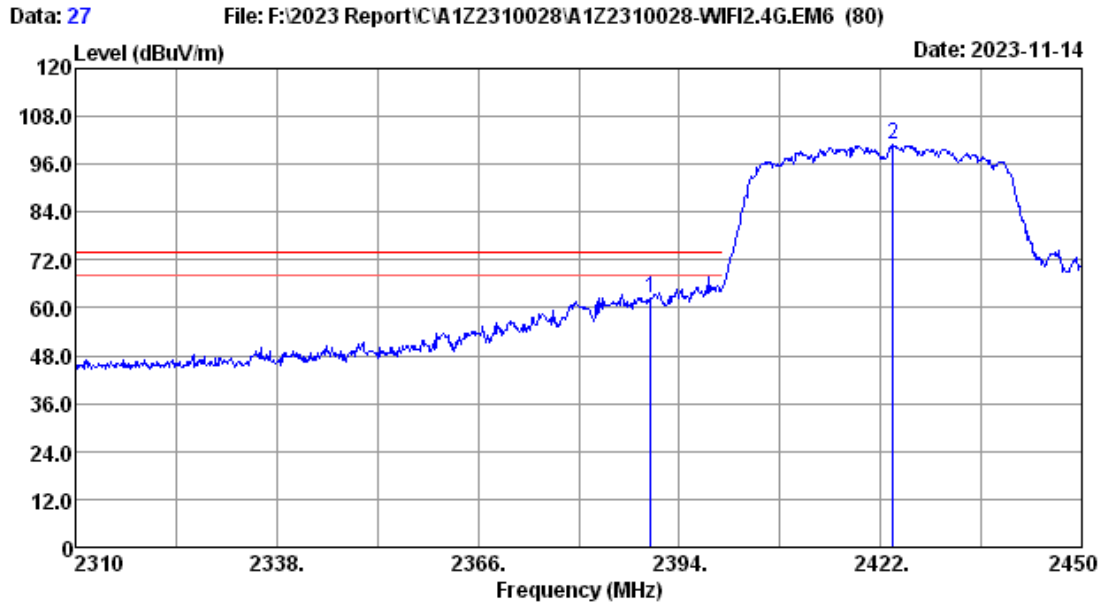
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 26  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2422MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	48.50	32.23	46.72	54.00	7.28	Average
2	2423.68	27.69	2.85	93.31	32.20	91.65	-----	-----	Average

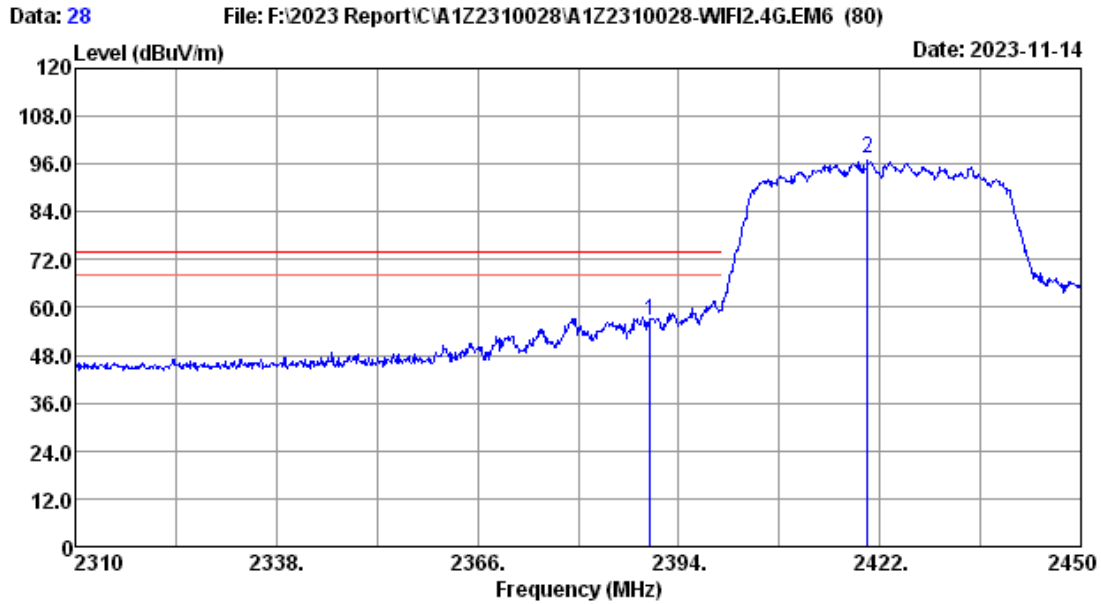
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 27  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2422MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	64.37	32.23	62.59	74.00	11.41	Peak
2	2423.68	27.69	2.85	102.84	32.20	101.18	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 28  
 Dis. / Ant. : 3m 2023 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 20.2°C/52.1% Engineer : nier  
 Test Mode : WIFI 2.4G 11n40 2422MHz TX

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	27.62	2.83	58.30	32.23	56.52	74.00	17.48	Peak
2	2420.32	27.68	2.85	99.03	32.21	97.35	-----	-----	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



## 7. 6DB BANDWIDTH TEST

### 7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.01,23	1 Year
2.	RF Cable	HUBER+SUHNER	SUCOFLE X-106	505238/6	Apr.02,23	1 Year

### 7.2. Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 7.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

### 7.4. Test Results

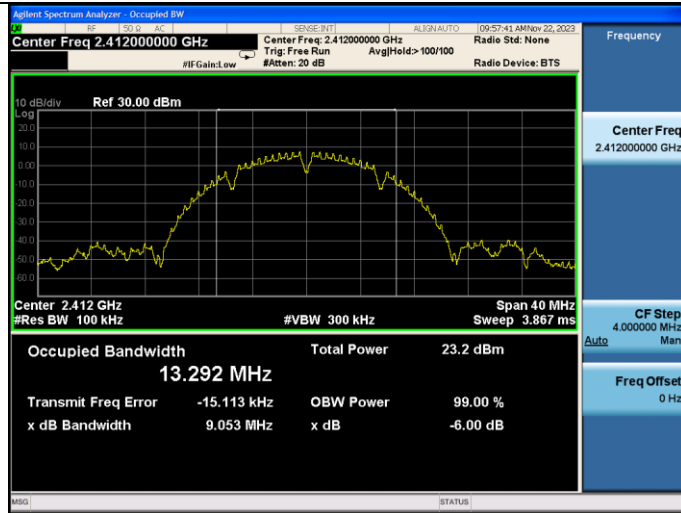
EUT: Wi-Fi Module		
M/N: U9W44		
Test date: 2023-11-21~22	Pressure: 103.1±1.0 kpa	Humidity: 51.5±3.0%
Tested by: lili	Test site: RF site	Temperature: 22.5±0.6 °C

Test Mode	CH	-6dBBandwidth (MHz)		Limit (KHz)
		ANT1	ANT2	
11b	CH1	9.053	9.054	≥ 500
	CH6	8.095	7.114	
	CH11	8.598	8.579	
11g	CH1	15.12	15.15	≥ 500
	CH6	14.83	15.06	
	CH11	15.16	15.15	
11n HT20	CH1	15.13	15.91	≥ 500
	CH6	15.12	15.73	
	CH11	15.15	15.74	
11n HT40	CH3	35.13	35.14	≥ 500
	CH6	35.14	35.14	
	CH9	35.13	35.14	

Conclusion: PASS

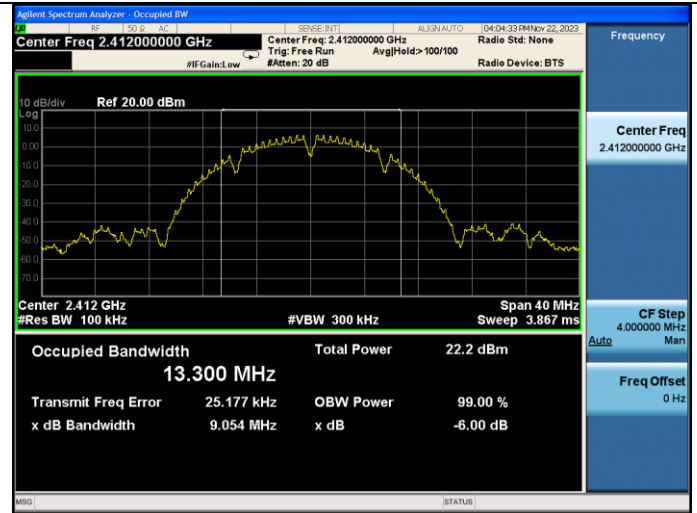
**ANTA:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz

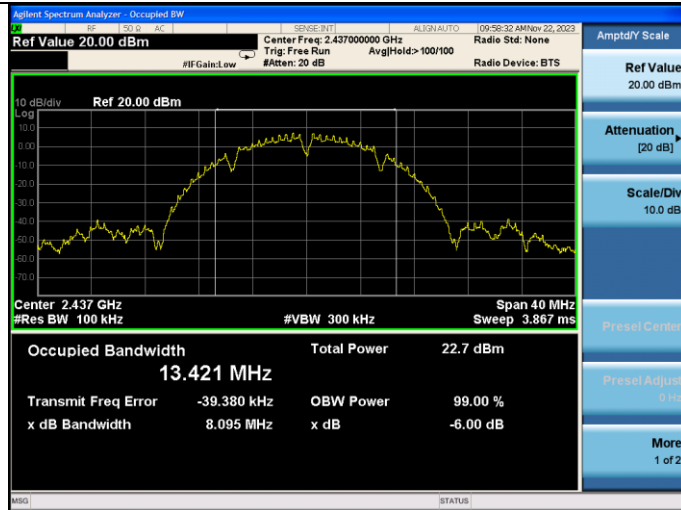


**ANTB:**

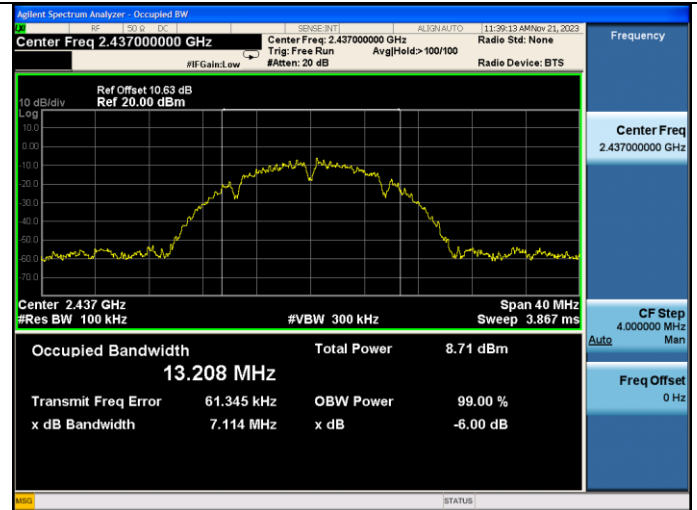
Test Mode: IEEE 802.11b  
Test CH1: 2412MHz



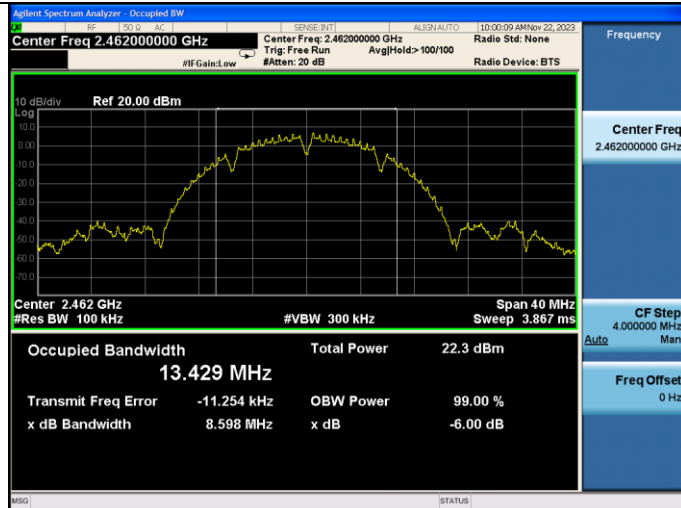
**Test CH6: 2437MHz**



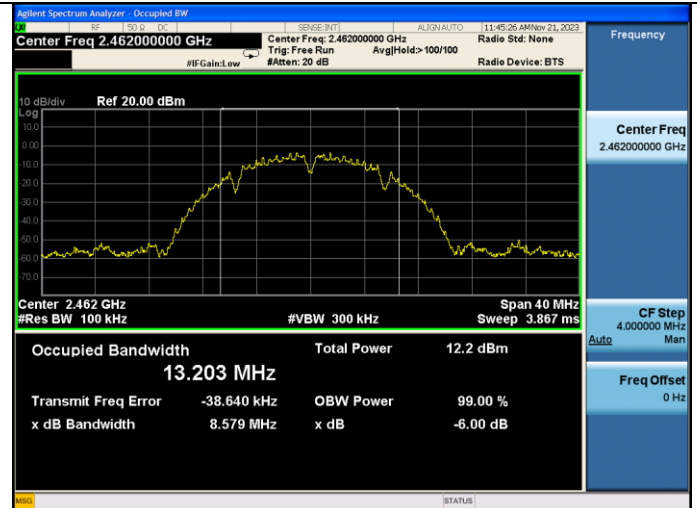
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**

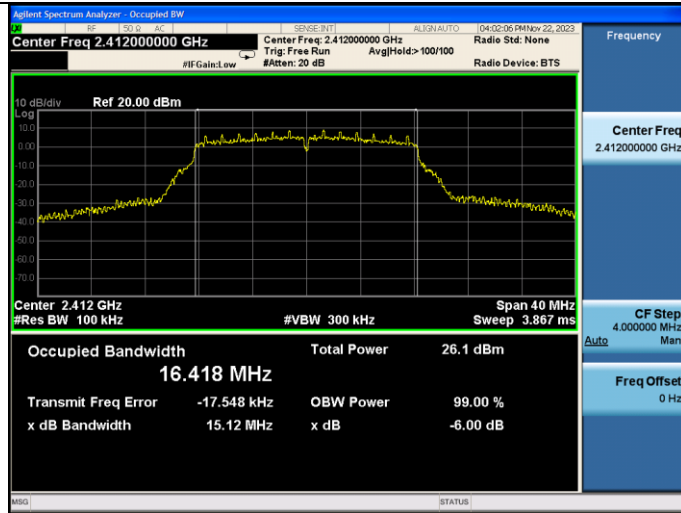


**Test CH11: 2462MHz**



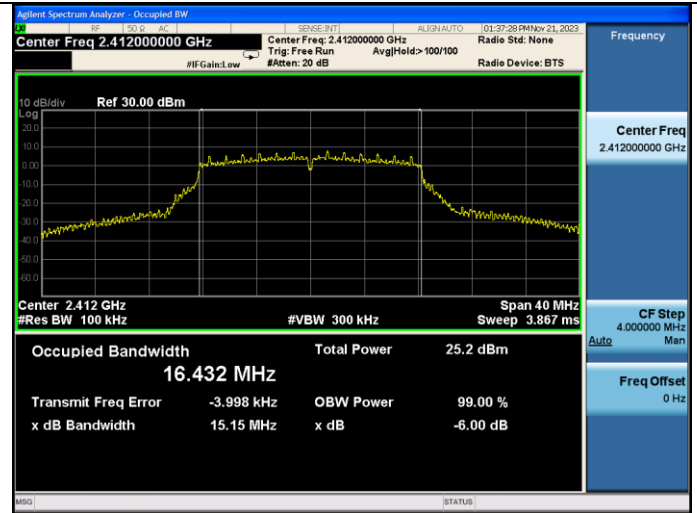
**ANTA:**

Test Mode: IEEE 802.11g  
Test CH1: 2412MHz

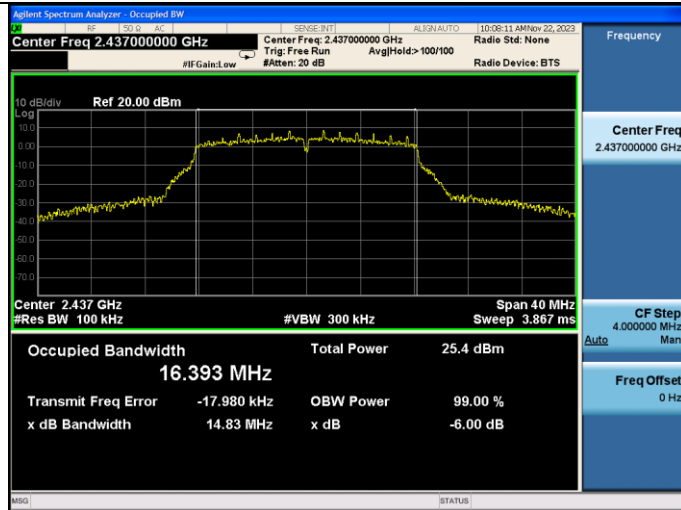


**ANTB:**

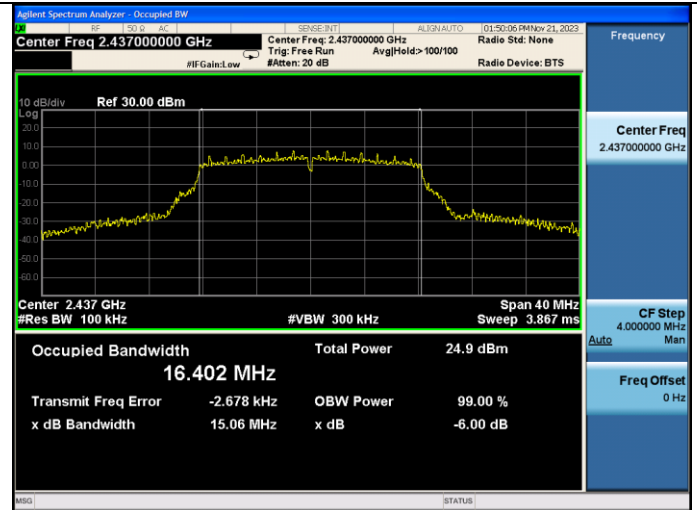
Test Mode: IEEE 802.11g  
Test CH1: 2412MHz



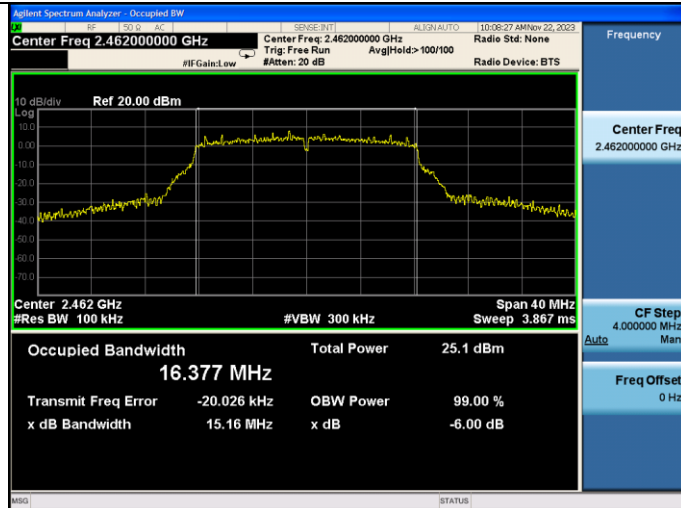
**Test CH6: 2437MHz**



**Test CH6: 2437MHz**



**Test CH11: 2462MHz**



**Test CH11: 2462MHz**

