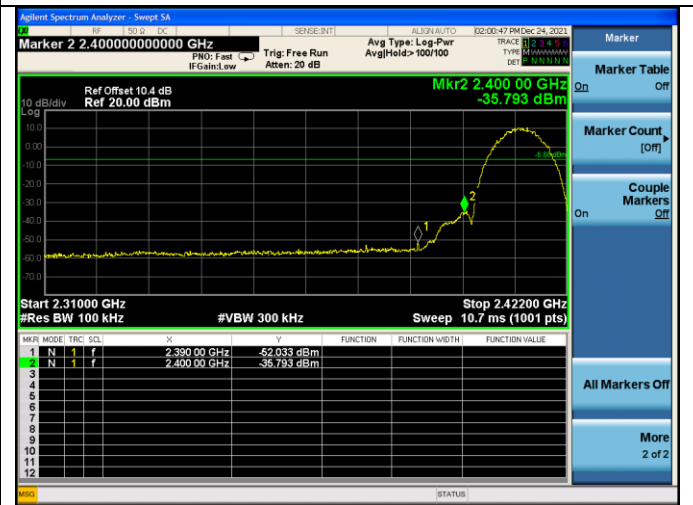
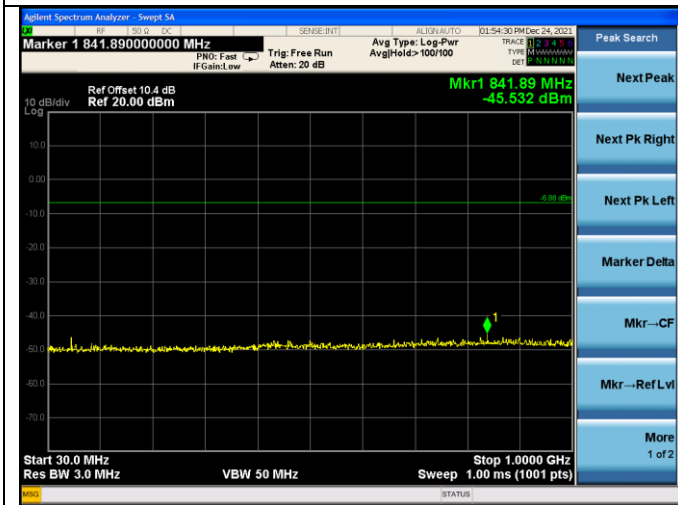


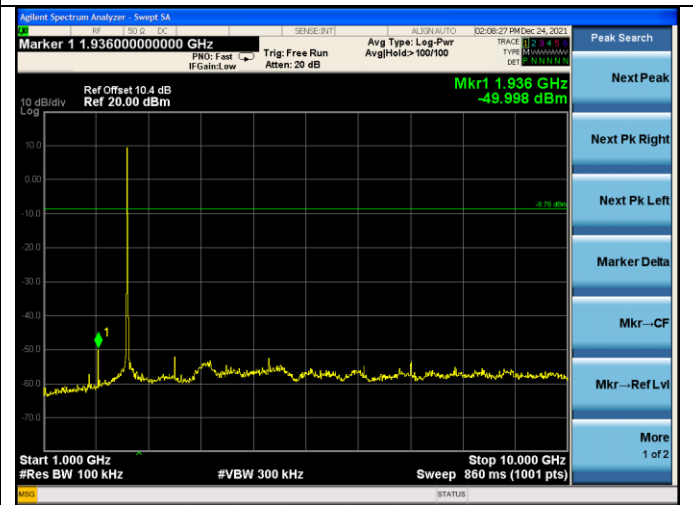
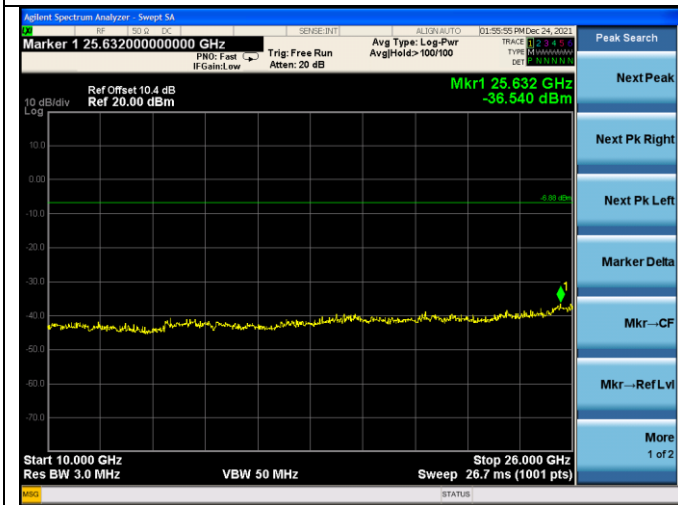
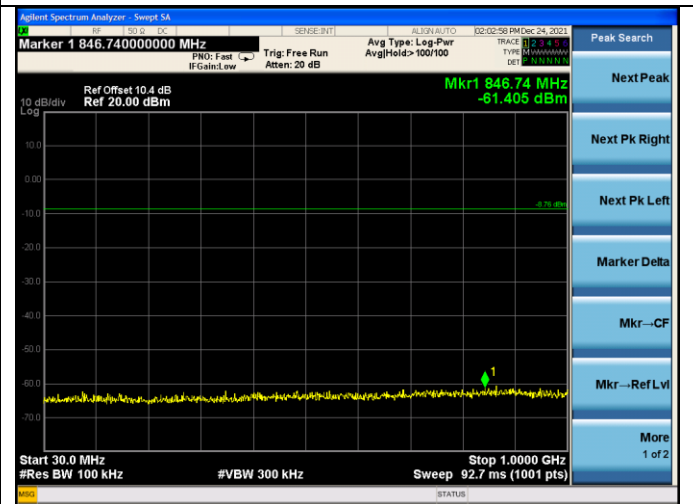
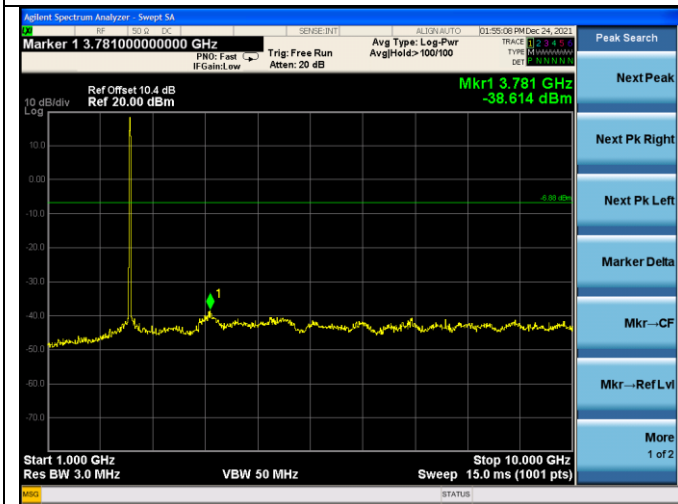
ANTB

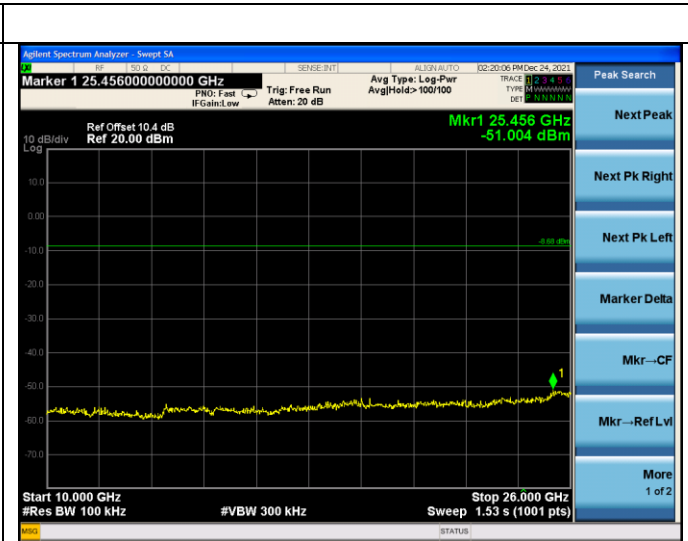
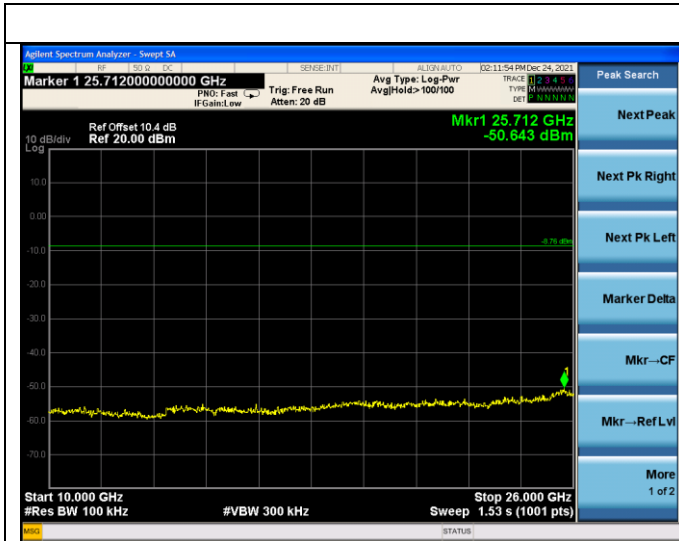
Test Mode: IEEE 802.11b

Test CH1: 2412MHz

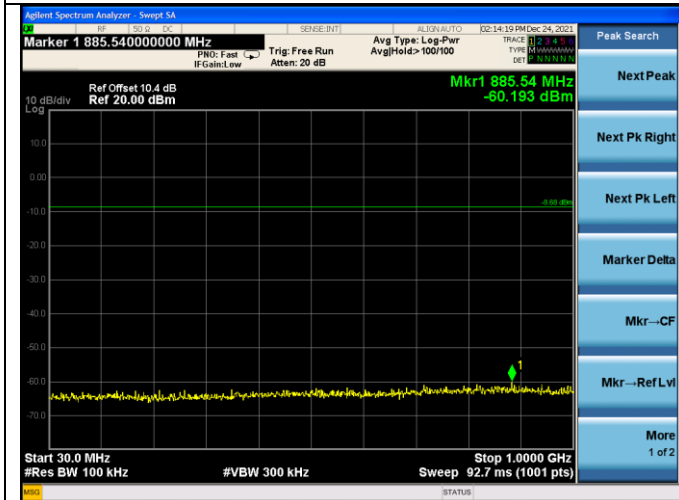


Test CH6: 2437MHz

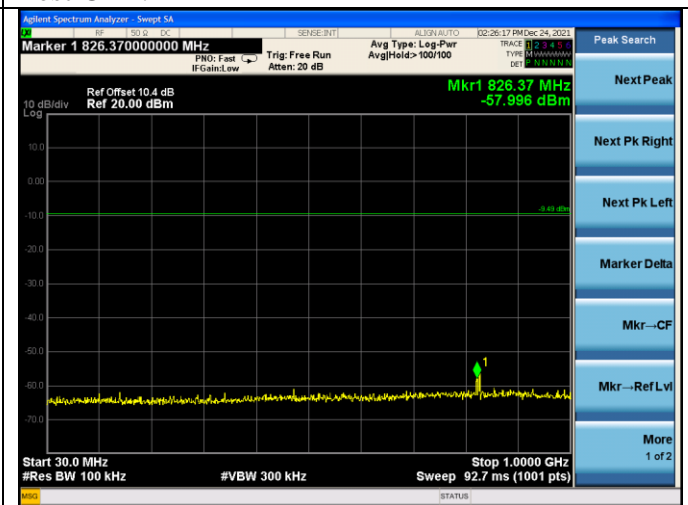
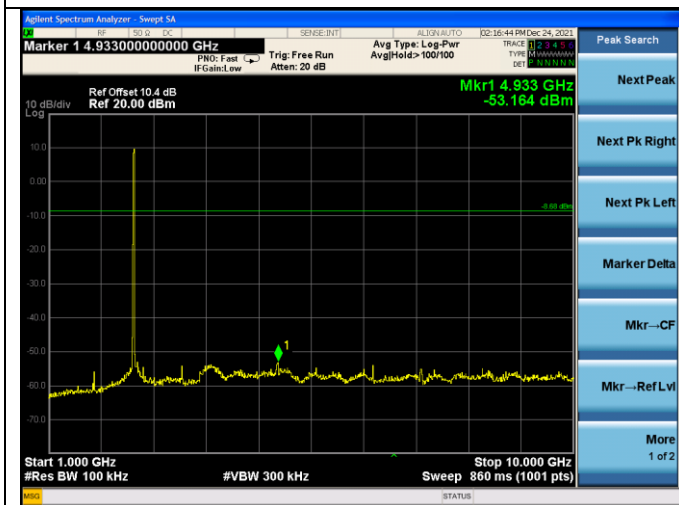




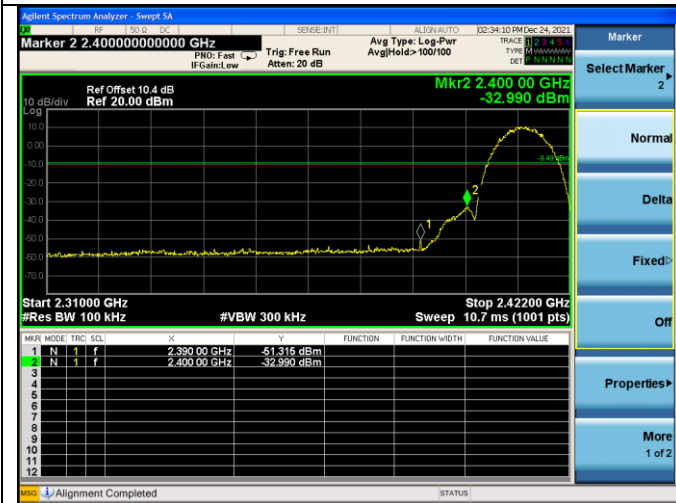
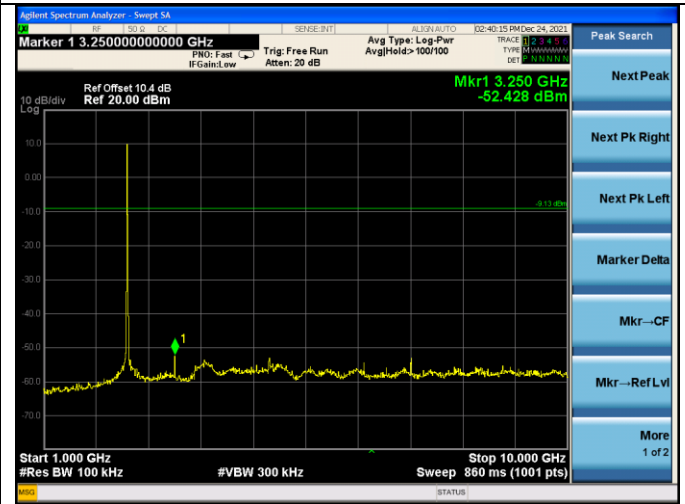
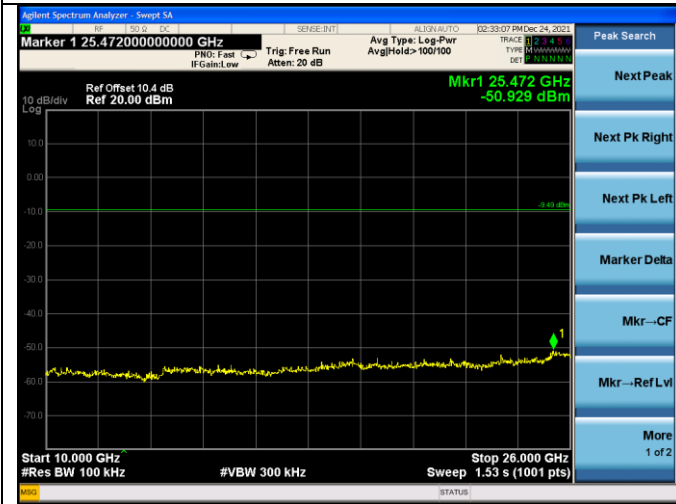
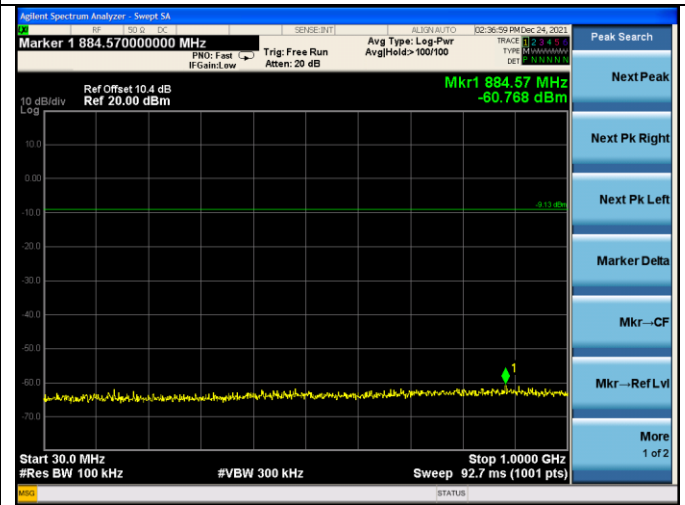
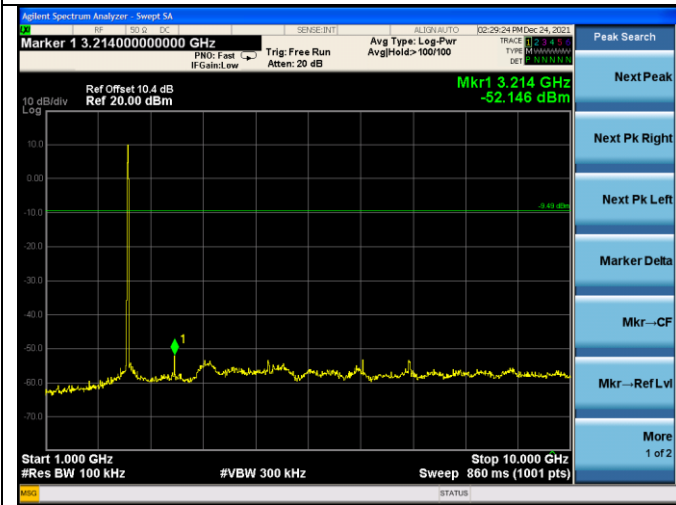
Test CH1: 2462MHz



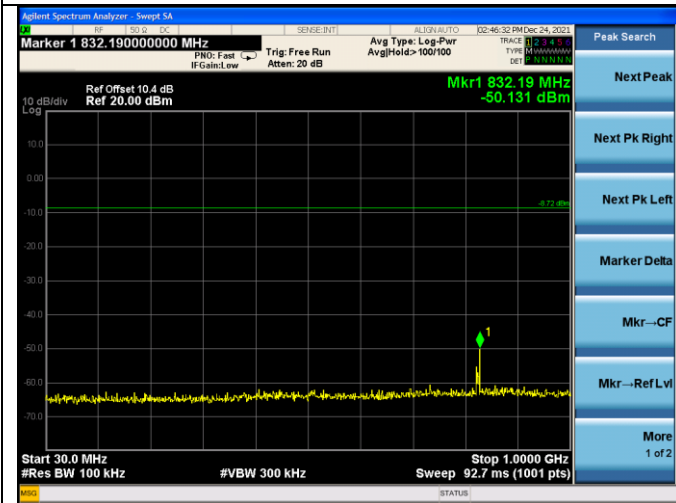
Test Mode: IEEE 802.11g
 Test CH1: 2412MHz



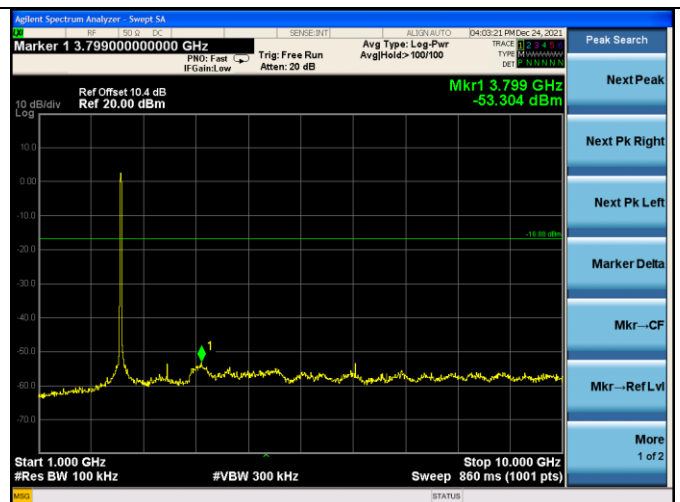
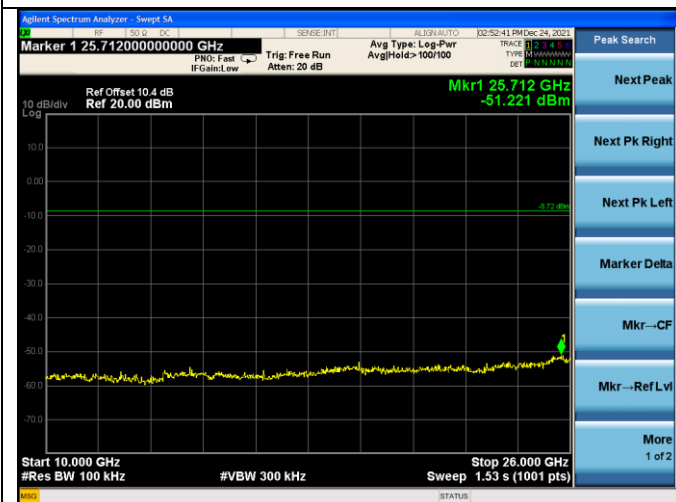
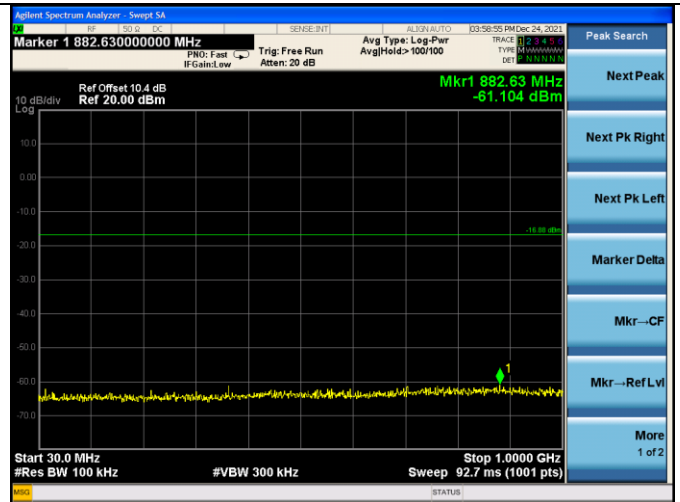
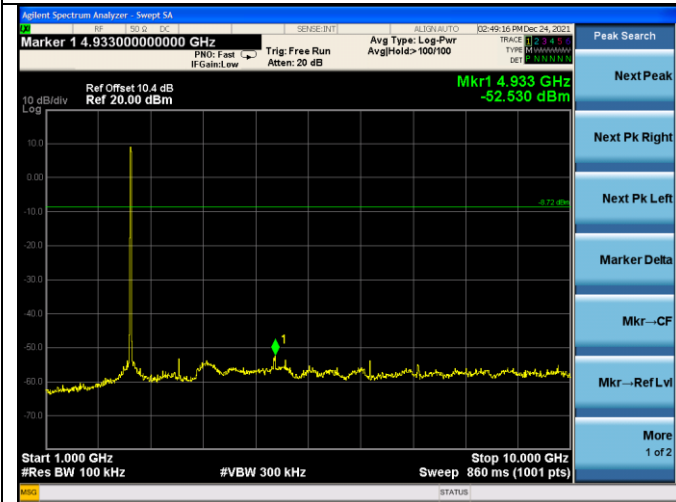
Test CH6: 2437MHz

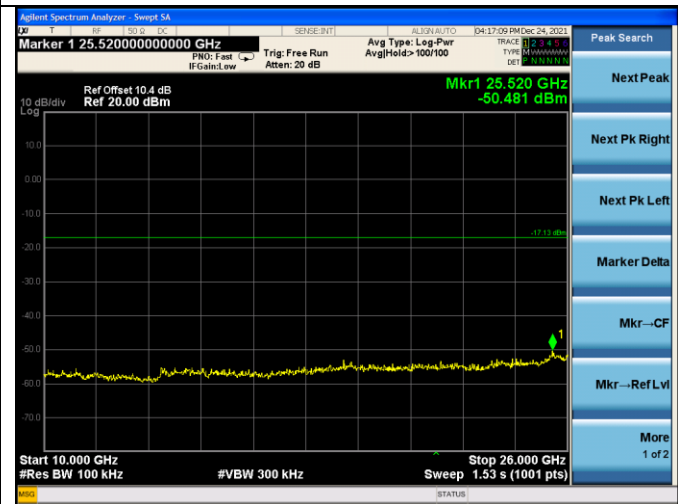
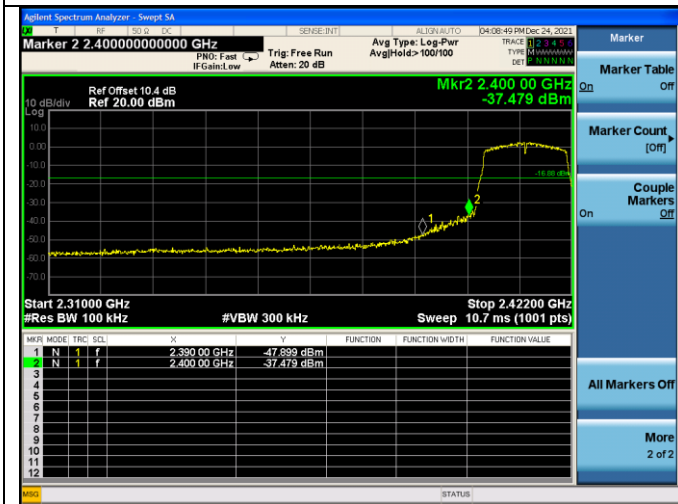
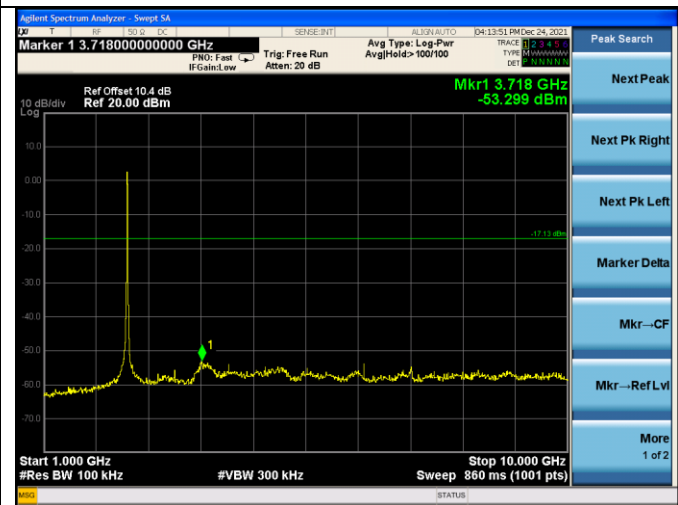
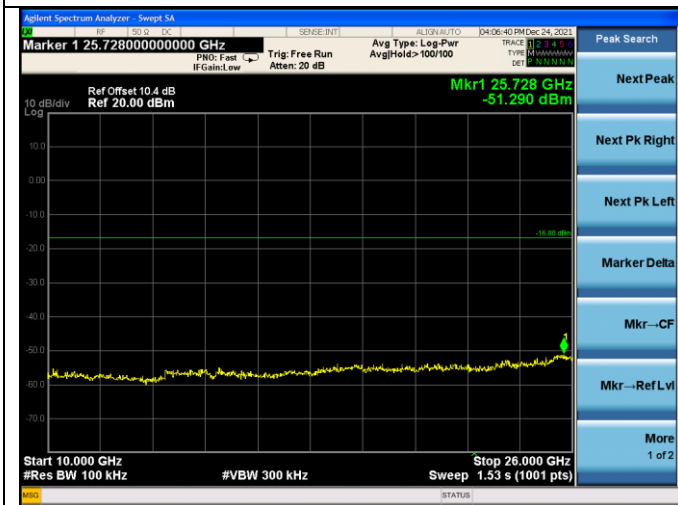


Test CH11: 2462MHz

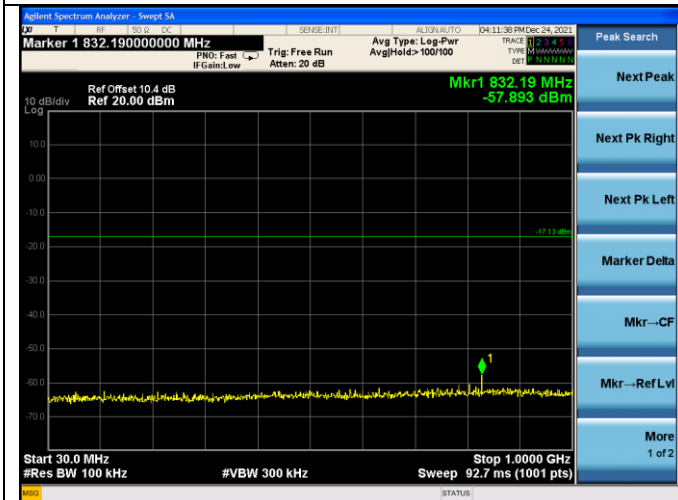


Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

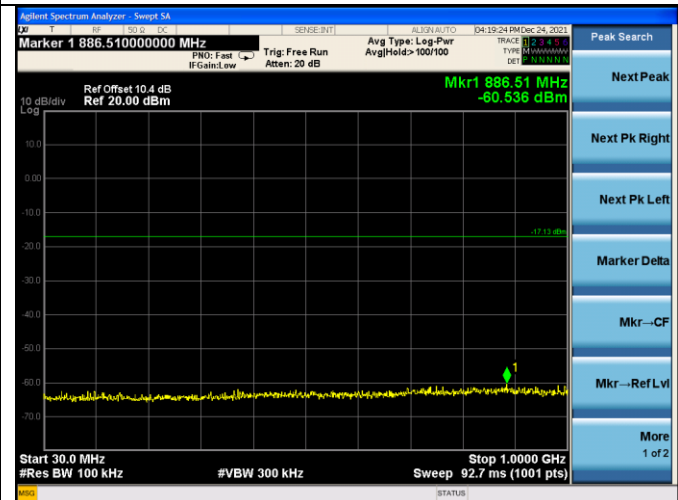




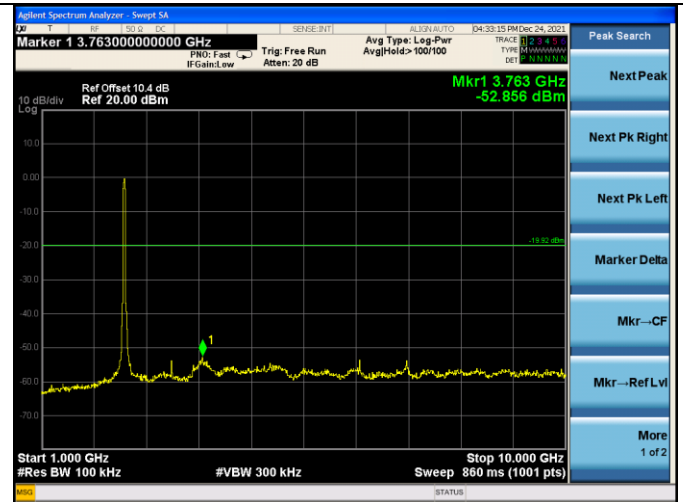
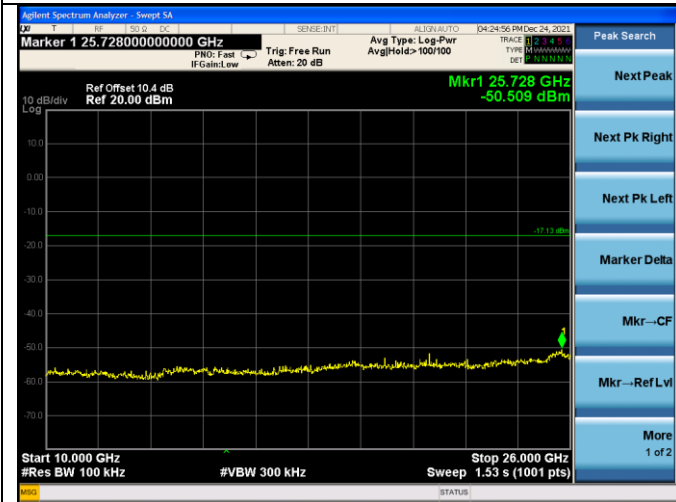
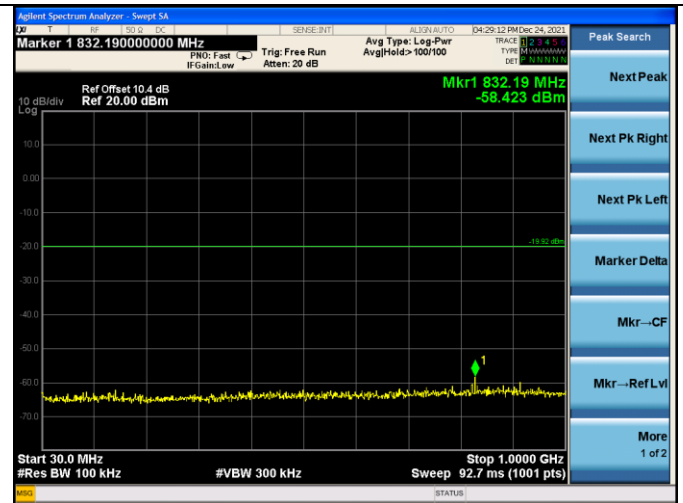
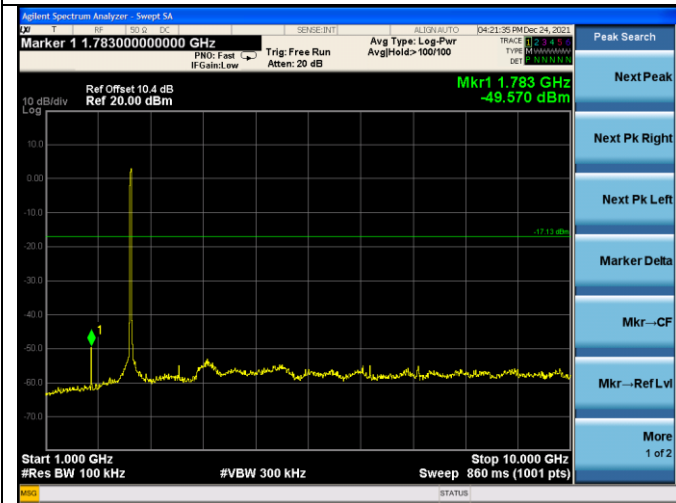
Test CH6: 2437MHz

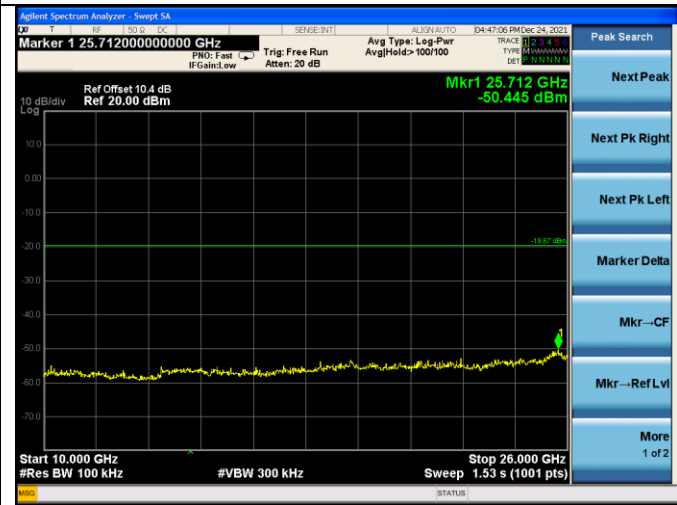
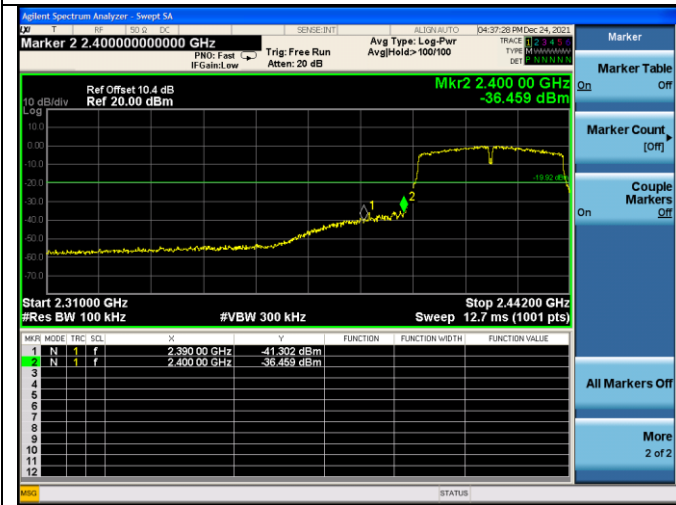


Test CH11: 2462MHz

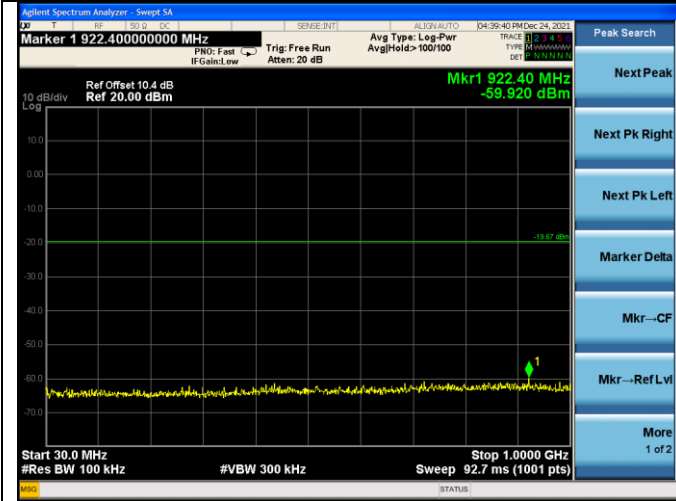


Test Mode: IEEE 802.11n HT40
Test CH1: 2422MHz

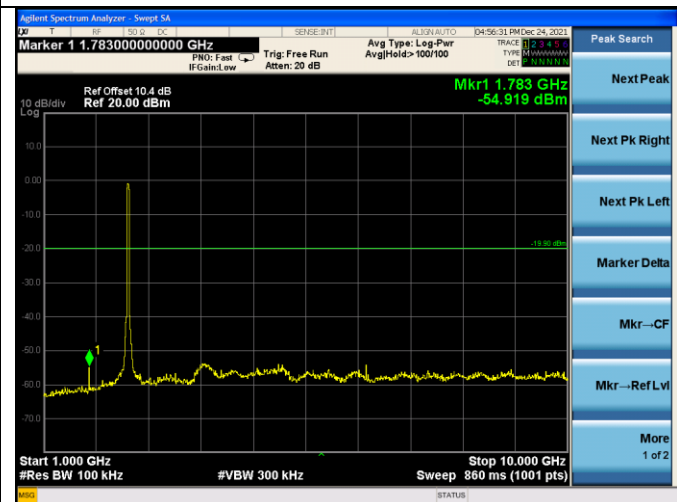
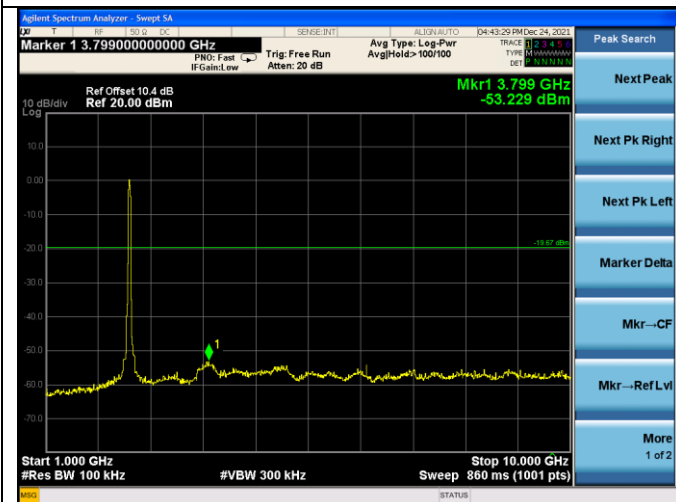
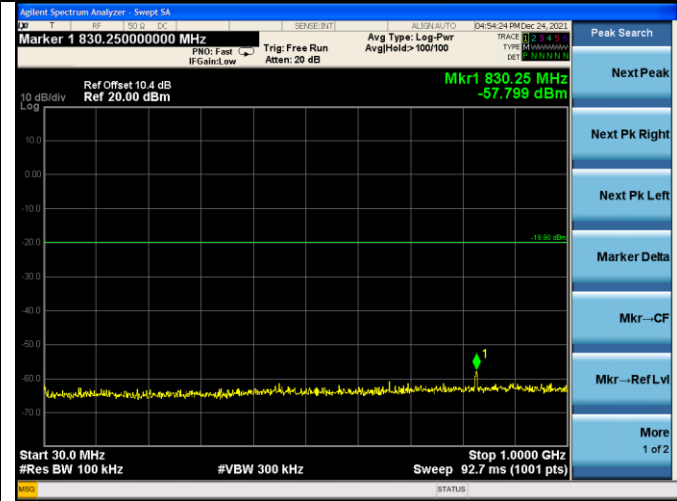


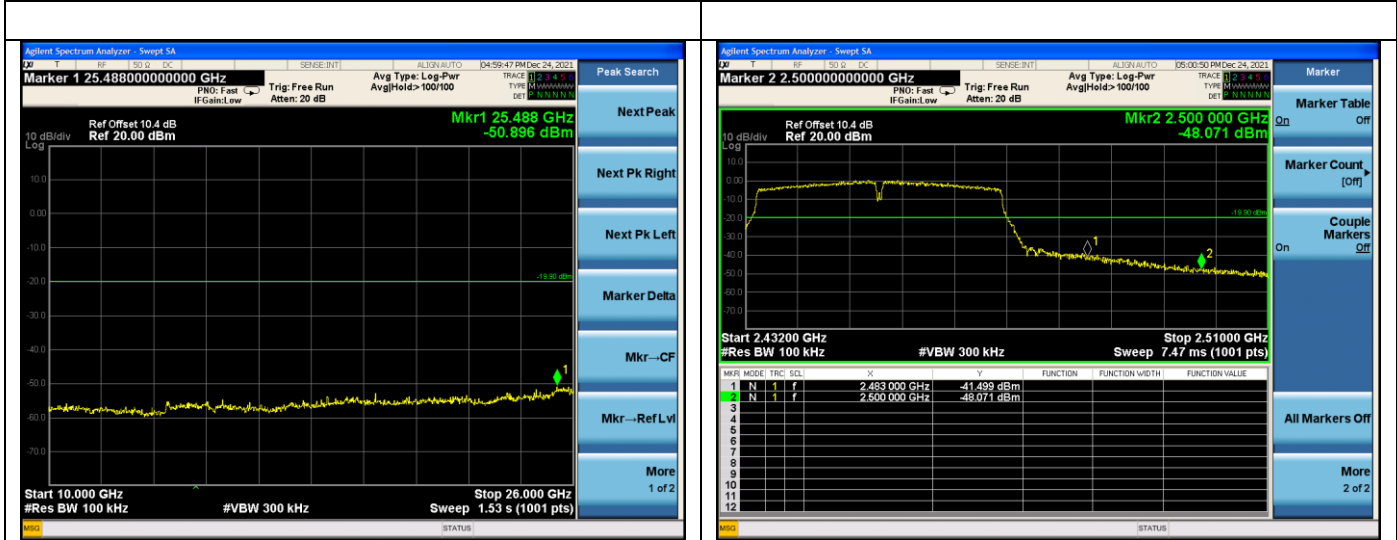


Test CH1: 2437MHz



Test CH1: 2452MHz





6. BAND EDGE COMPLIANCE TEST

6.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.07,21	1 Year
2.	Amplifier	Agilent	8449B	3008A02495	Apr.07,21	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	Jul.26,21	1 Year
4.	RF Cable	HUBER+SUHNER	SUCOFLEX-106	505238/6	Apr.07,21	1 Year

6.2. Limit

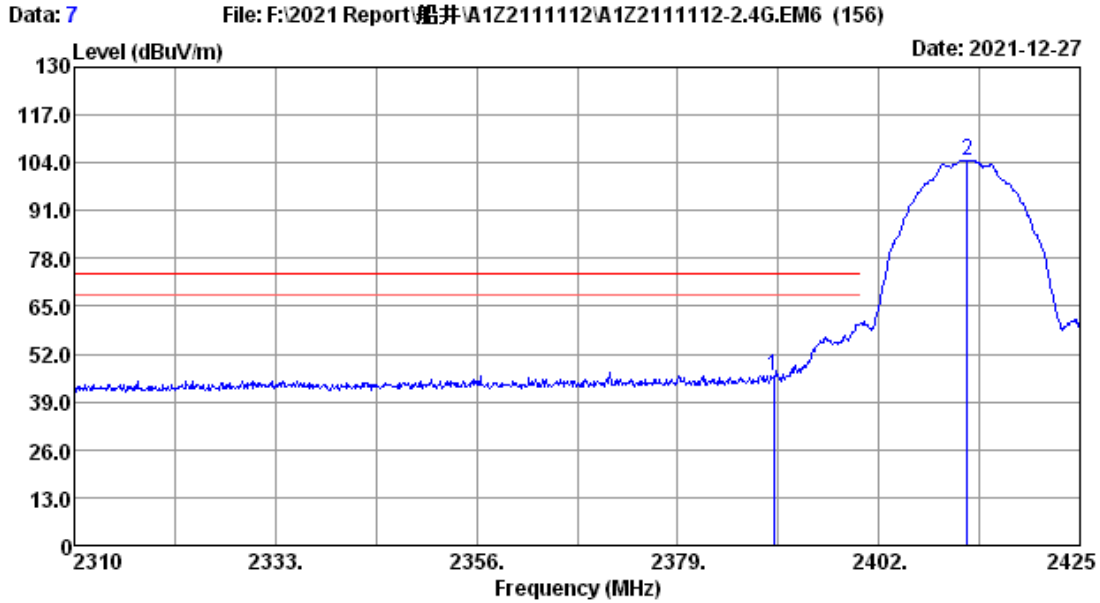
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental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

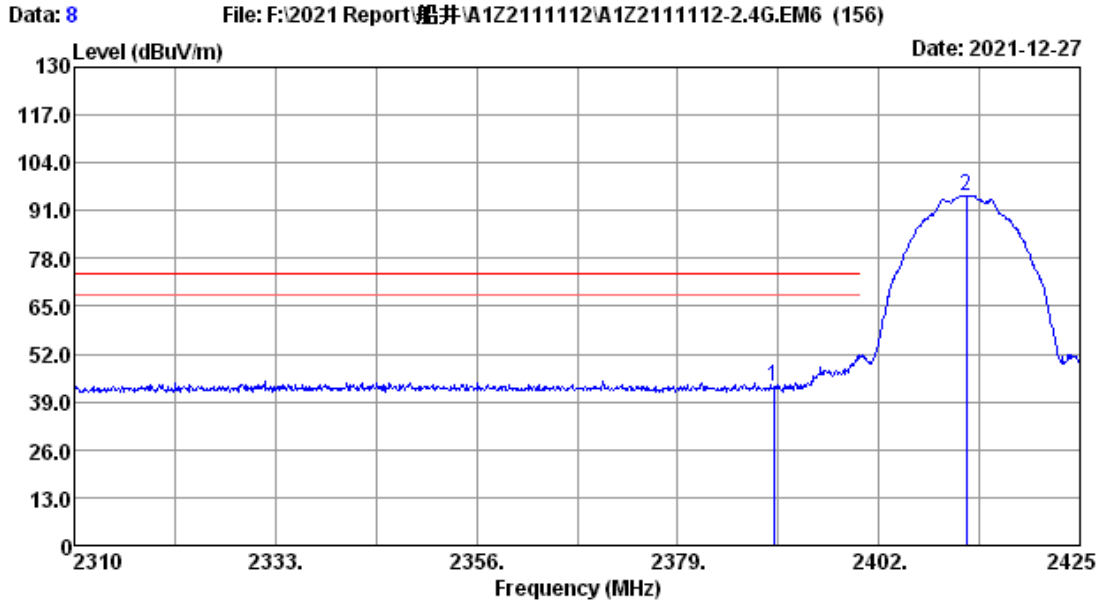
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 7
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	49.92	35.24	46.22	74.00	27.78	Peak
2	2412.12	27.93	3.66	108.40	35.24	104.75	-----	-----	Peak

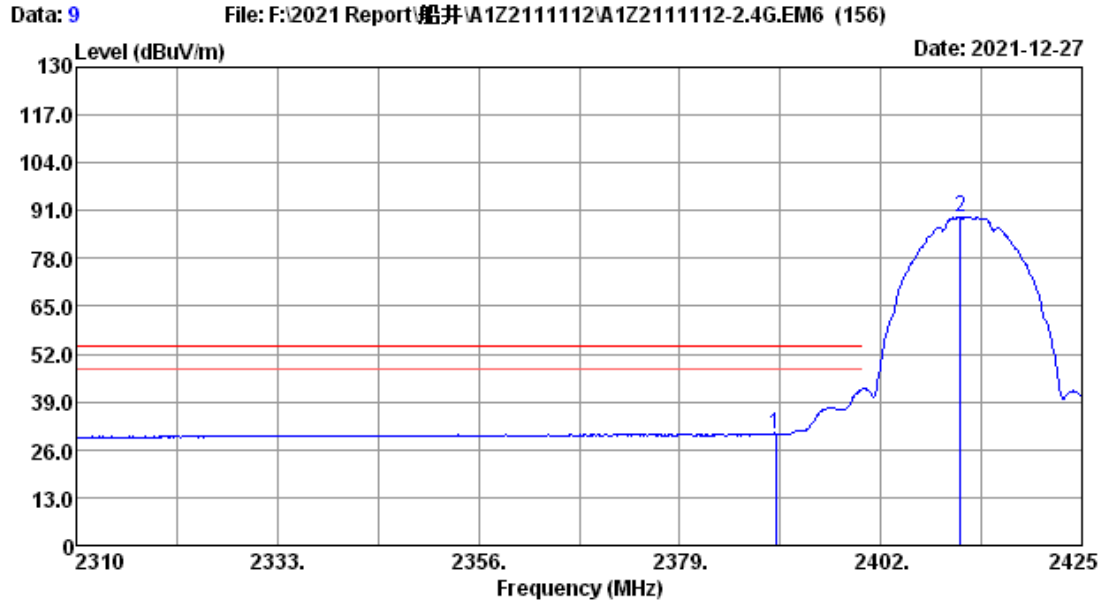
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 8
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	46.72	35.24	43.02	74.00	30.98	Peak
2	2412.01	27.93	3.66	98.85	35.24	95.20	-----	-----	Peak

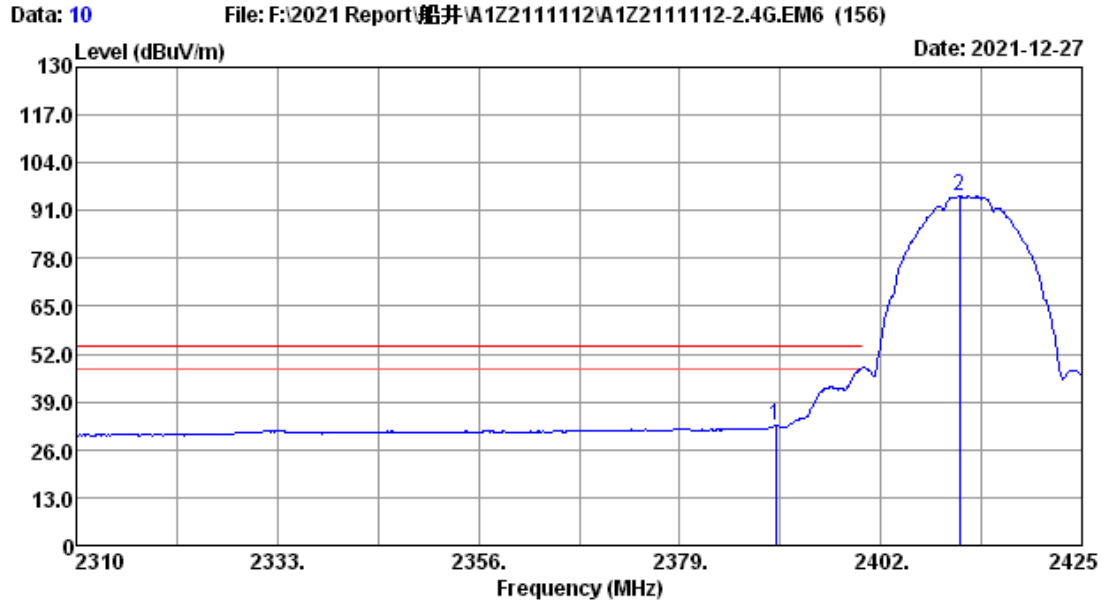
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	34.12	35.24	30.42	54.00	23.58	Average
2	2411.09	27.93	3.66	93.01	35.24	89.36	-----	-----	Average

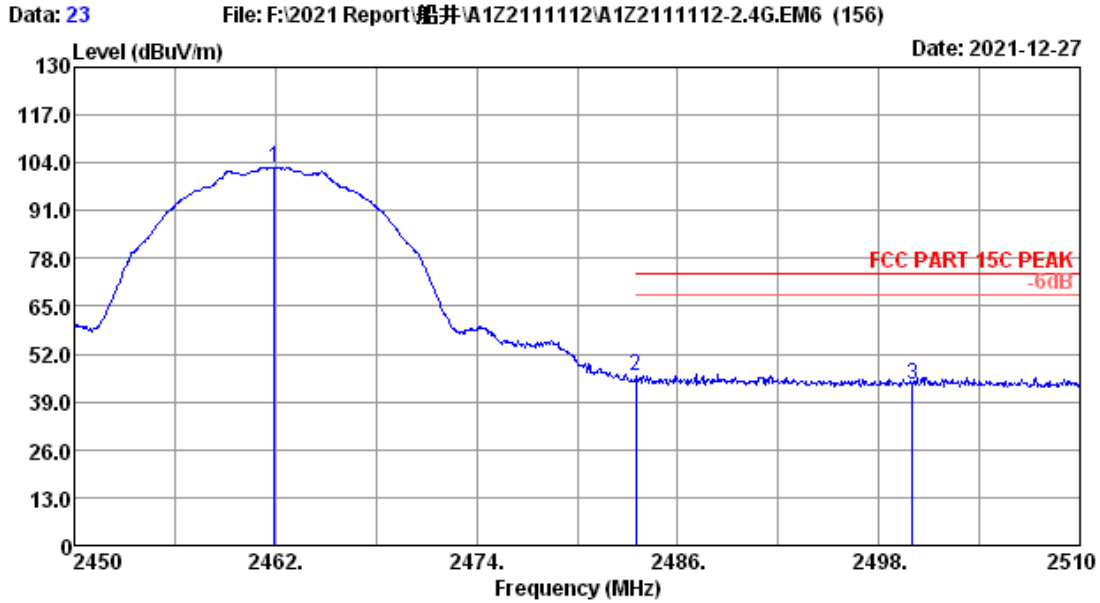
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 10
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	36.22	35.24	32.52	54.00	21.48	Average
2	2410.97	27.93	3.66	98.58	35.24	94.93	-----	-----	Average

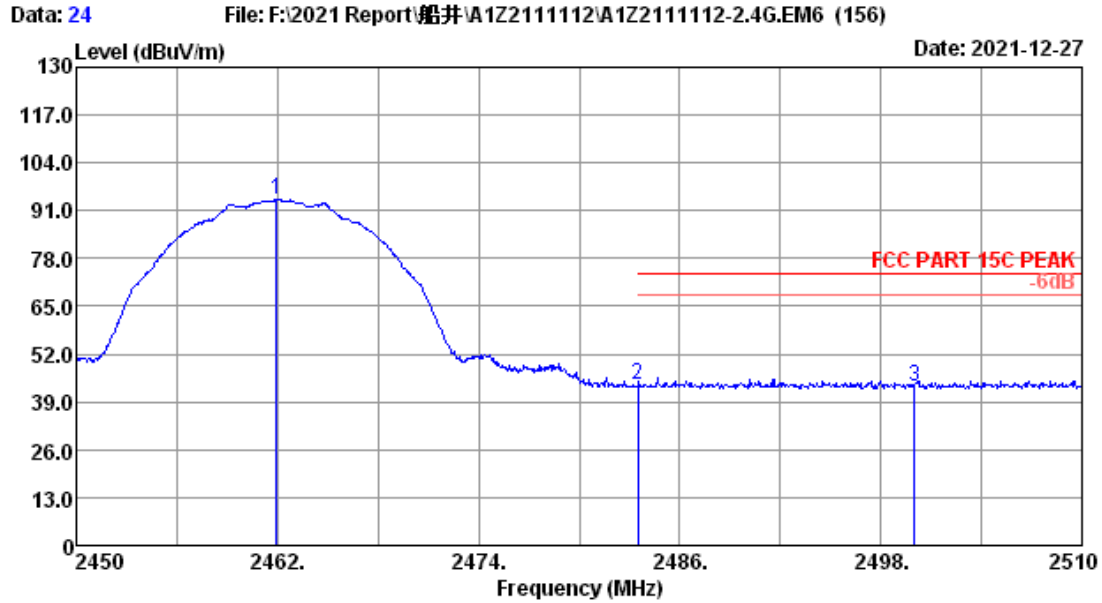
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 23
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2461.94	28.03	3.70	106.22	35.25	102.70	-----	-----	Peak
2	2483.50	28.07	3.71	49.47	35.25	46.00	74.00	28.00	Peak
3	2500.00	28.10	3.72	47.11	35.25	43.68	74.00	30.32	Peak

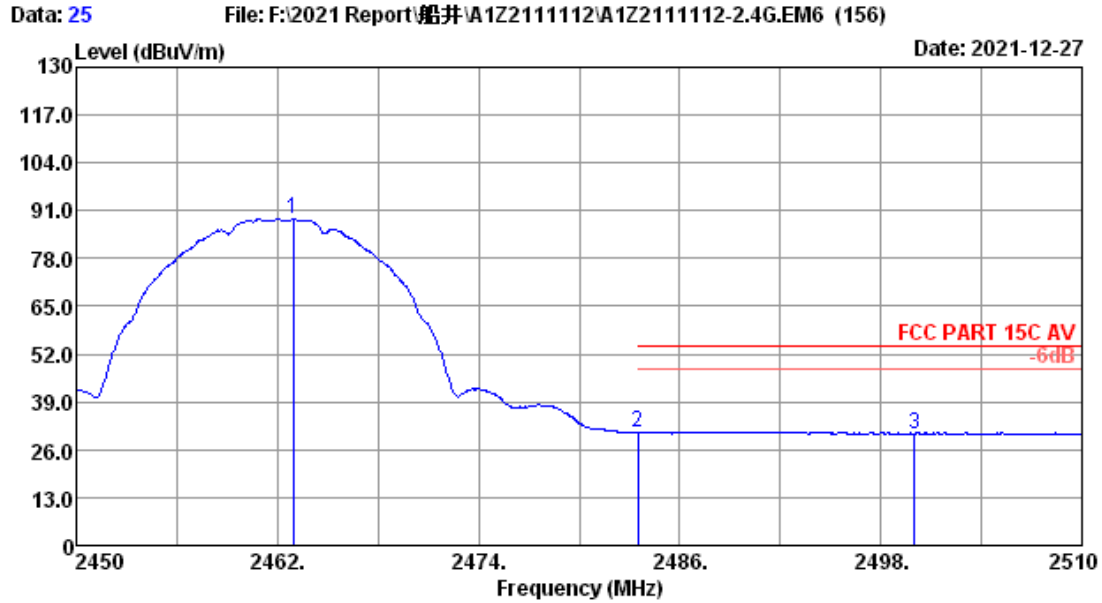
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no.	: 24
Dis. / Ant.	: 3m 2021 MCTD1209-3006	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 22.1°C/51.5%	Engineer	: Lynn
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	2461.94	28.03	3.70	97.54	35.25	94.02	-----	-----	Peak
2	2483.50	28.07	3.71	47.01	35.25	43.54	74.00	30.46	Peak
3	2500.00	28.10	3.72	46.80	35.25	43.37	74.00	30.63	Peak

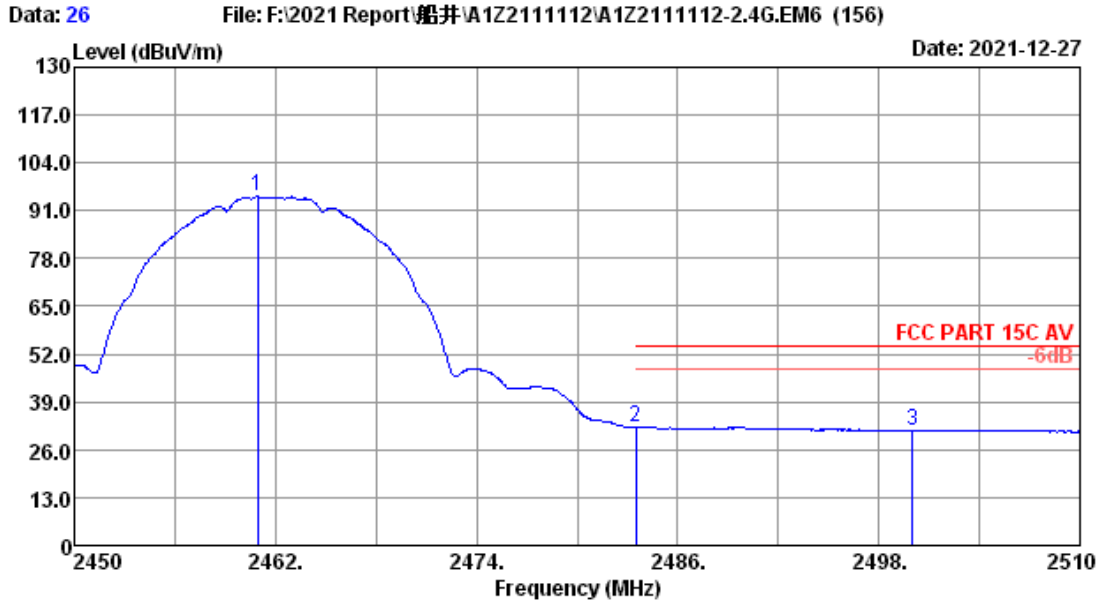
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 25
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2462.96	28.03	3.70	92.23	35.25	88.71	-----	-----	Average
2	2483.50	28.07	3.71	34.19	35.25	30.72	54.00	23.28	Average
3	2500.00	28.10	3.72	33.81	35.25	30.38	54.00	23.62	Average

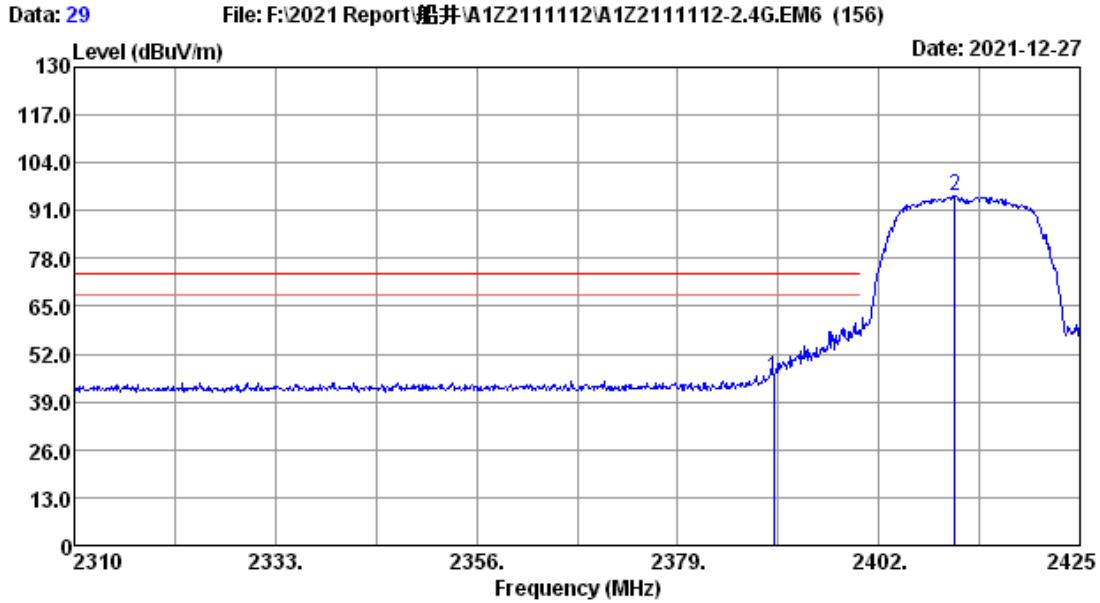
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 26
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2460.92	28.03	3.70	98.41	35.25	94.89	-----	-----	Average
2	2483.50	28.07	3.71	35.55	35.25	32.08	54.00	21.92	Average
3	2500.00	28.10	3.72	34.75	35.25	31.32	54.00	22.68	Average

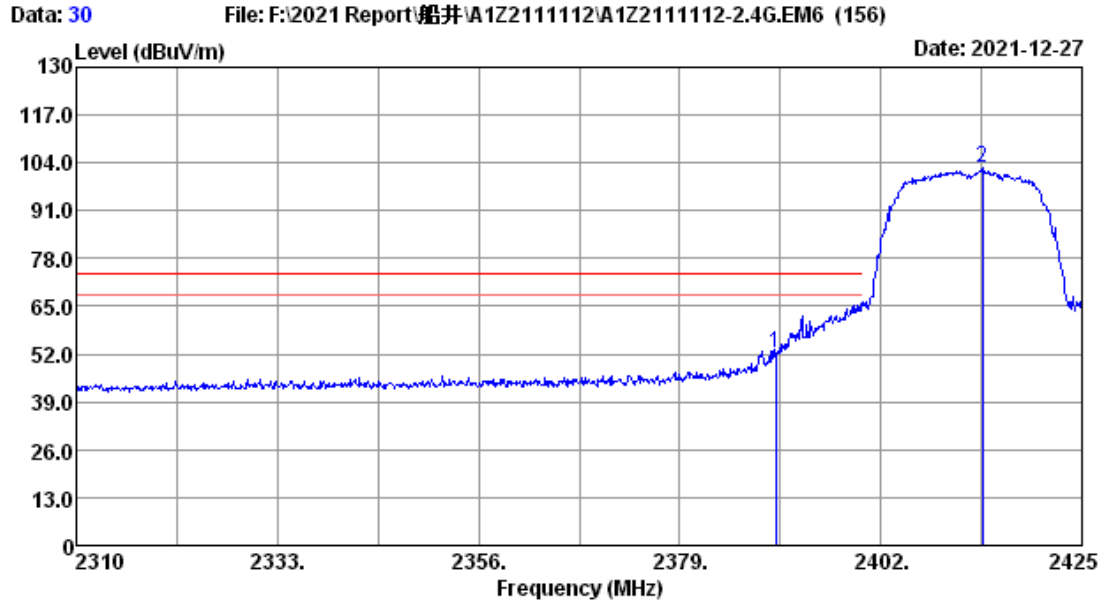
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 29
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	49.11	35.24	45.41	74.00	28.59	Peak
2	2410.74	27.93	3.66	98.54	35.24	94.89	-----	-----	Peak

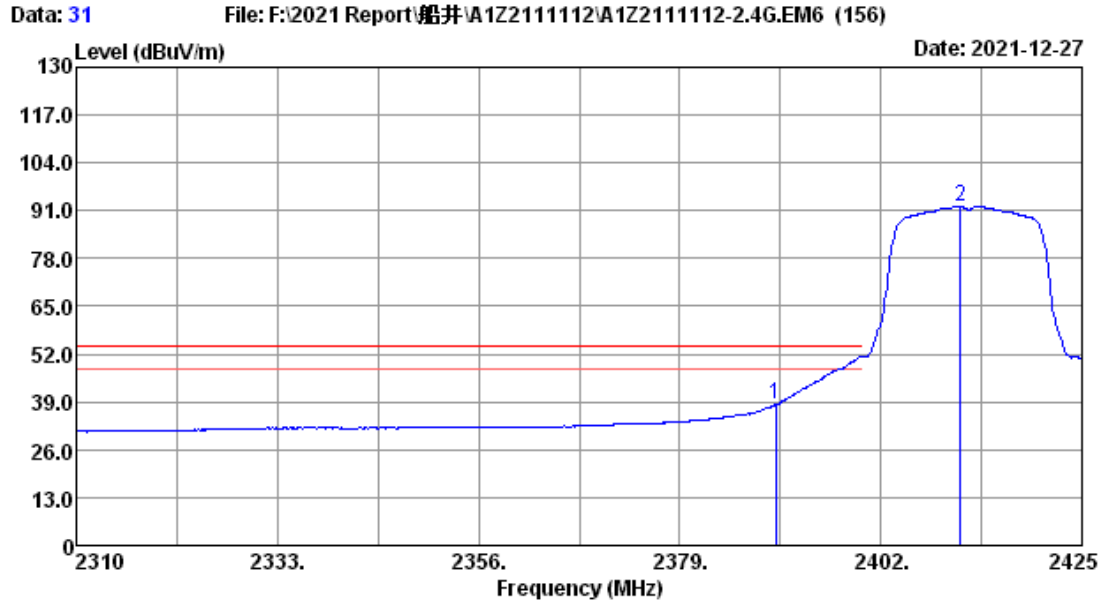
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 30
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	56.08	35.24	52.38	74.00	21.62	Peak
2	2413.62	27.93	3.66	106.13	35.24	102.48	-----	-----	Peak

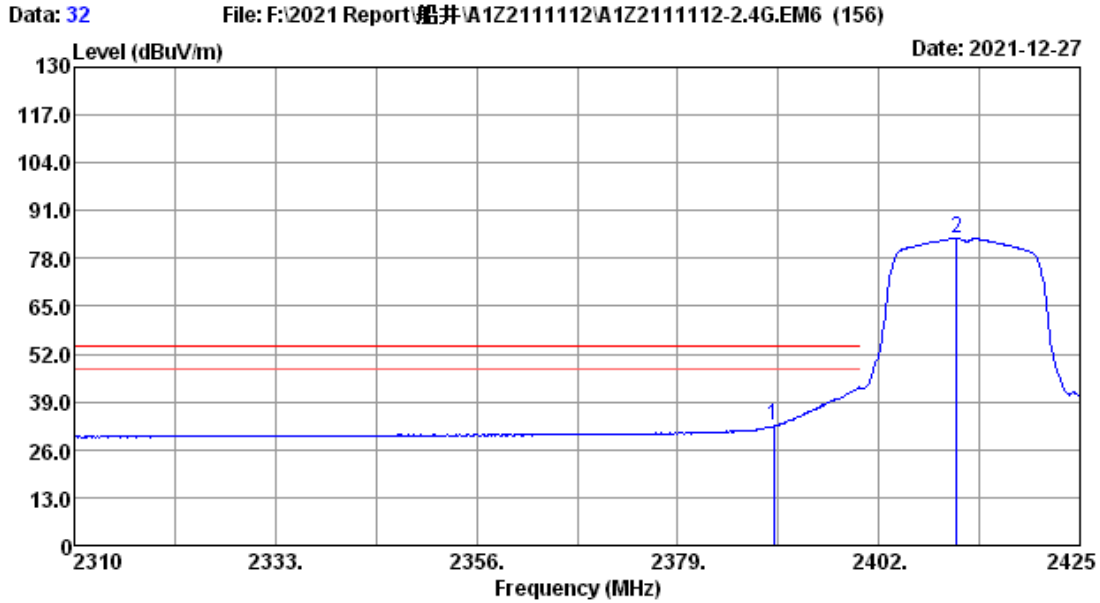
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	42.10	35.24	38.40	54.00	15.60	Average
2	2411.09	27.93	3.66	95.90	35.24	92.25	-----	-----	Average

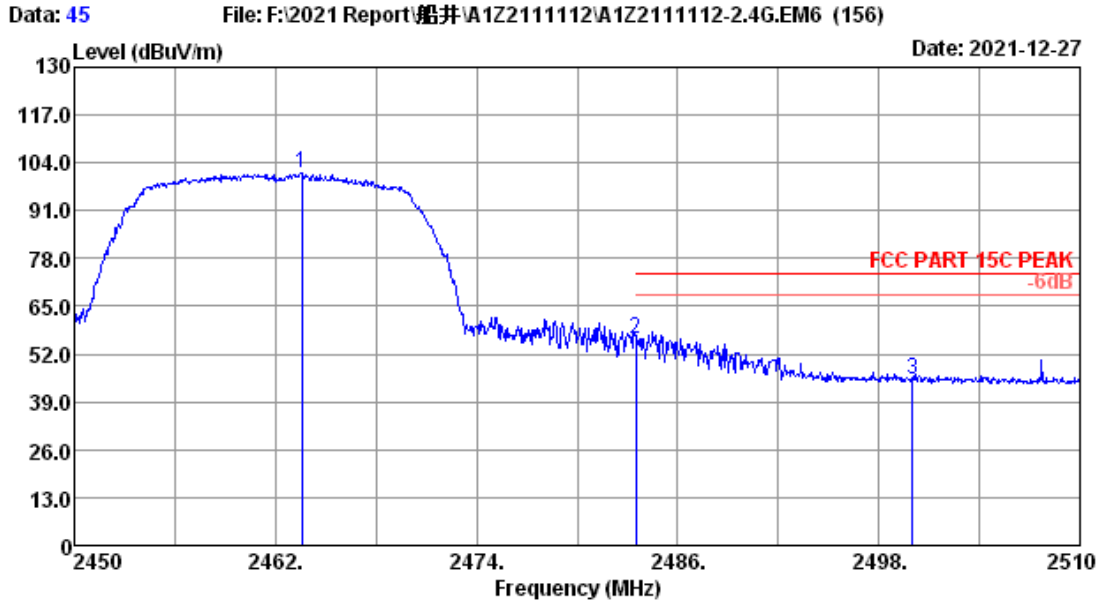
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 32
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	36.12	35.24	32.42	54.00	21.58	Average
2	2410.86	27.93	3.66	87.19	35.24	83.54	-----	-----	Average

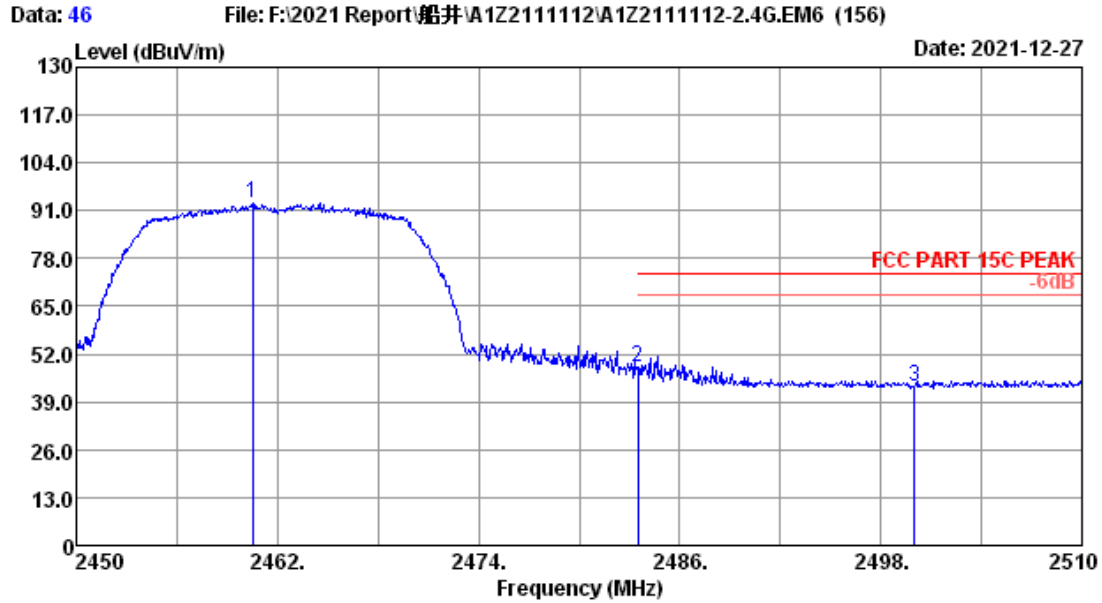
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 45
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	28.03	3.70	104.77	35.25	101.25	-----	-----	Peak
2	2483.50	28.07	3.71	59.58	35.25	56.11	74.00	17.89	Peak
3	2500.00	28.10	3.72	48.33	35.25	44.90	74.00	29.10	Peak

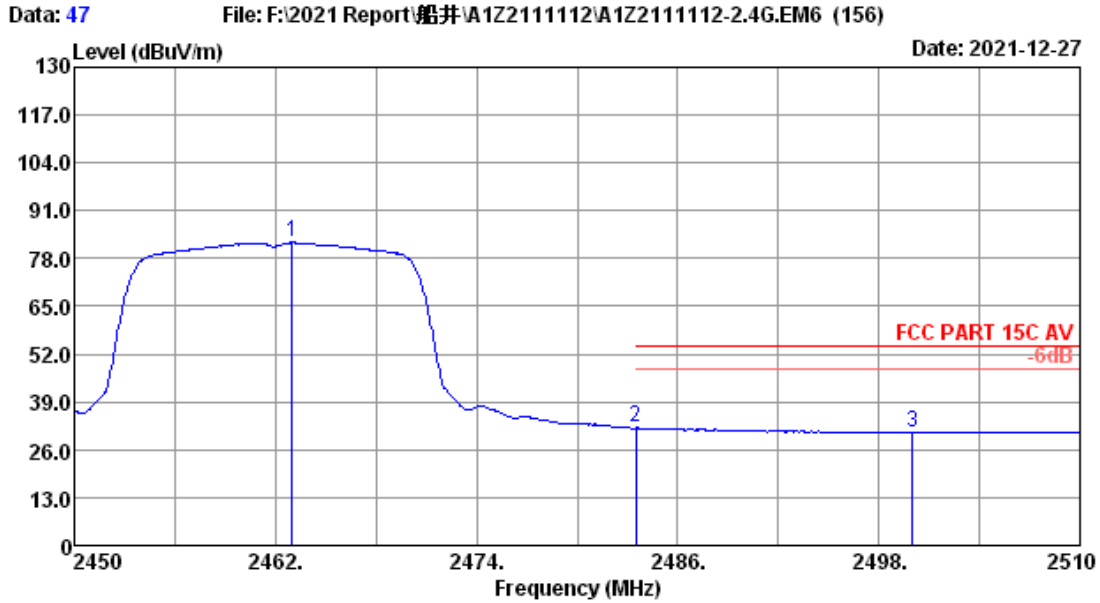
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor.
 2. The emission levels that are 20dB below the official
 limit are not reported.



Site no. : 3m Chamber Data no. : 46
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2460.50	28.03	3.70	96.55	35.25	93.03	-----	-----	Peak
2	2483.50	28.07	3.71	52.04	35.25	48.57	74.00	25.43	Peak
3	2500.00	28.10	3.72	46.78	35.25	43.35	74.00	30.65	Peak

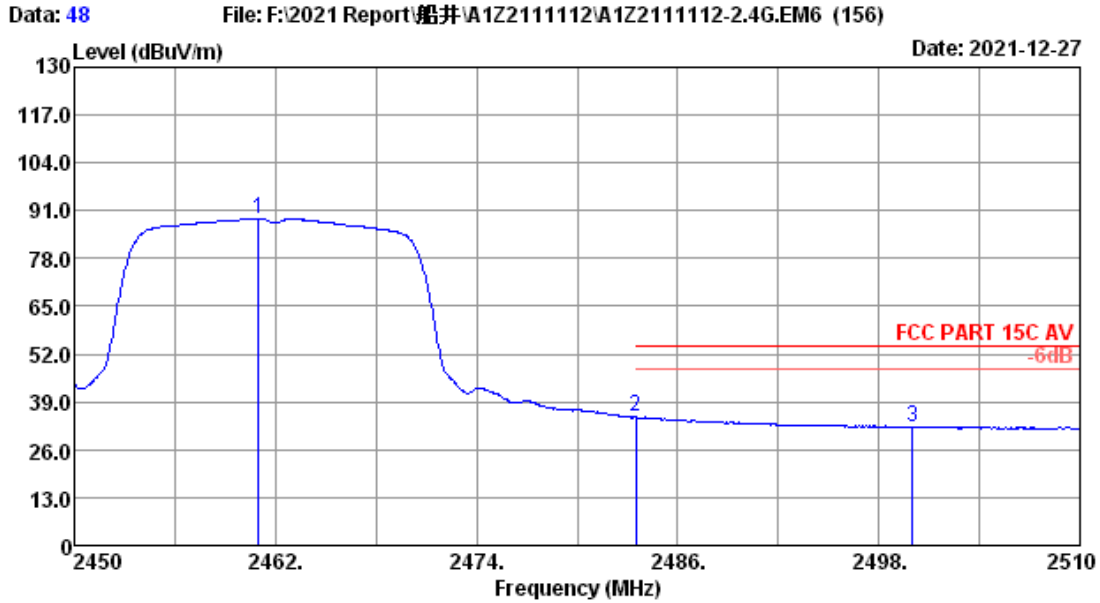
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 47
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2463.02	28.03	3.70	85.85	35.25	82.33	-----	-----	Average
2	2483.50	28.07	3.71	35.40	35.25	31.93	54.00	22.07	Average
3	2500.00	28.10	3.72	34.17	35.25	30.74	54.00	23.26	Average

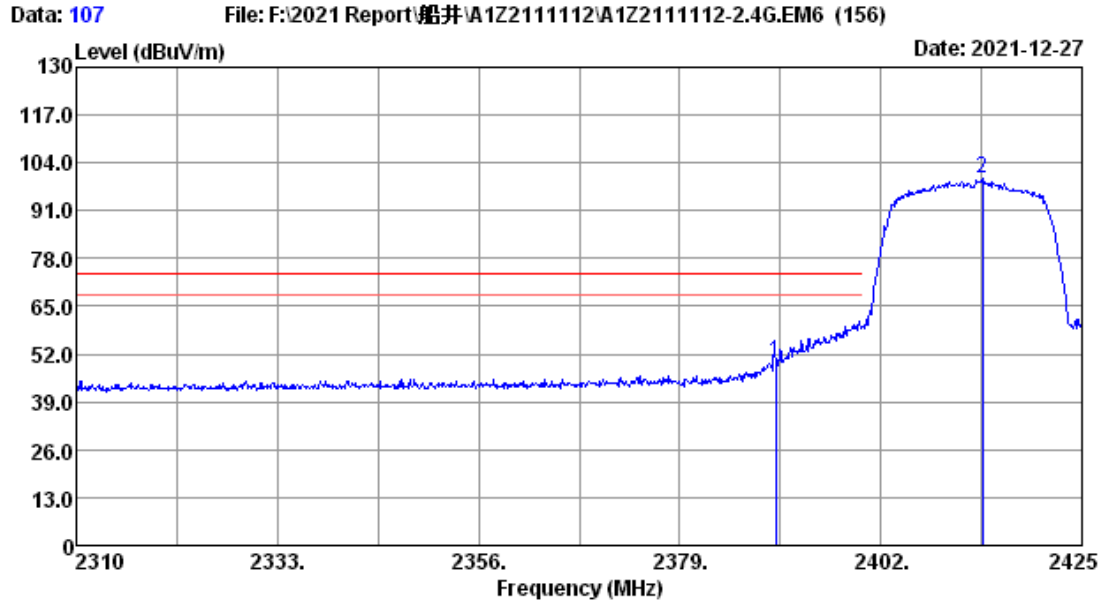
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 48
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2460.98	28.03	3.70	92.42	35.25	88.90	-----	-----	Average
2	2483.50	28.07	3.71	38.25	35.25	34.78	54.00	19.22	Average
3	2500.00	28.10	3.72	35.55	35.25	32.12	54.00	21.88	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.

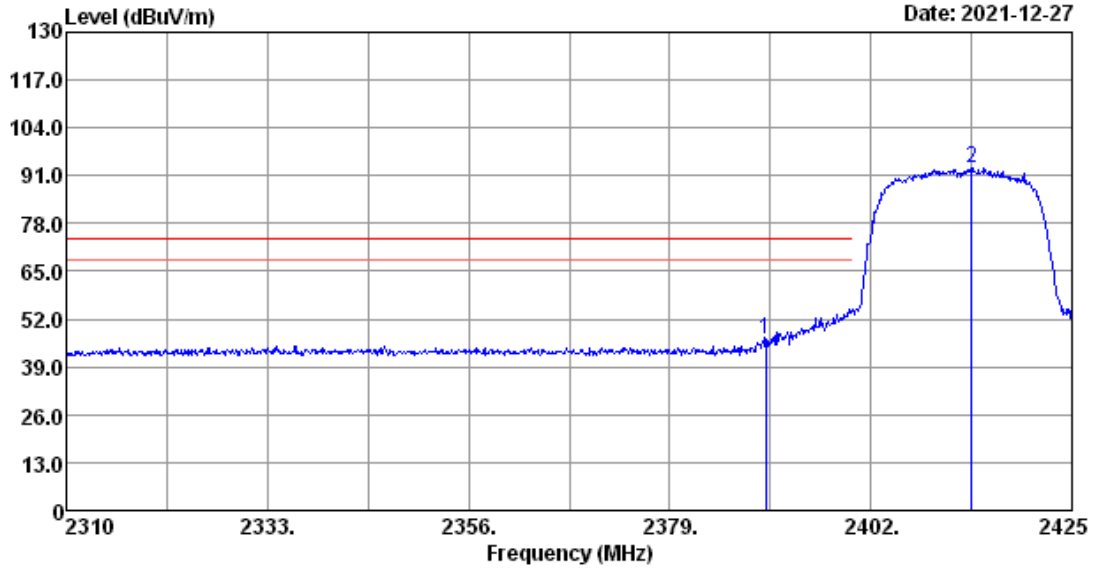


Site no. : 3m Chamber Data no. : 107
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n20 2412MHz Tx

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	27.89	3.65	53.42	35.24	49.72	74.00	24.28	Peak
2	2413.62	27.93	3.66	103.54	35.24	99.89	-----	-----	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.

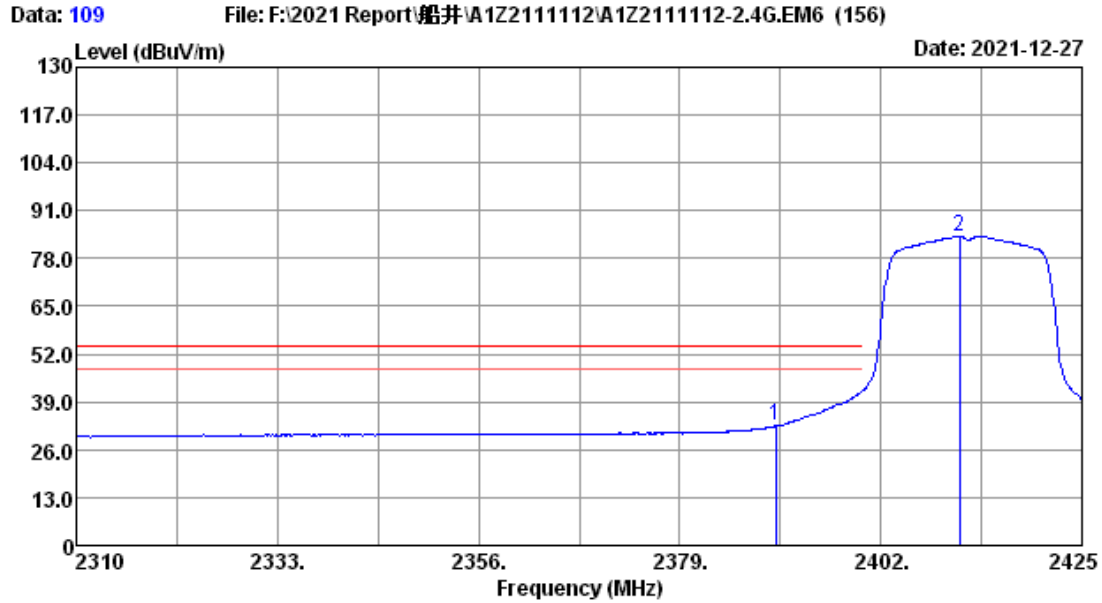
Data: 108 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-27



Site no. : 3m Chamber Data no. : 108
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	50.18	35.24	46.48	74.00	27.52	Peak
2	2413.50	27.93	3.66	96.81	35.24	93.16	-----	-----	Peak

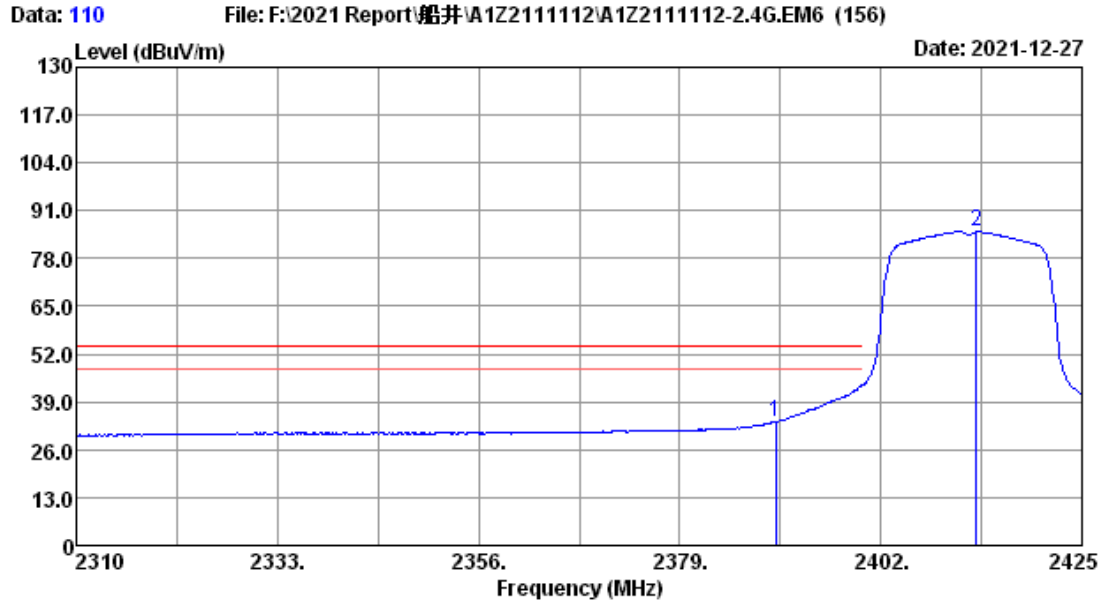
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 109
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	27.89	3.65	36.13	35.24	32.43	54.00	21.57	Average
2	2410.97	27.93	3.66	87.64	35.24	83.99	-----	-----	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.

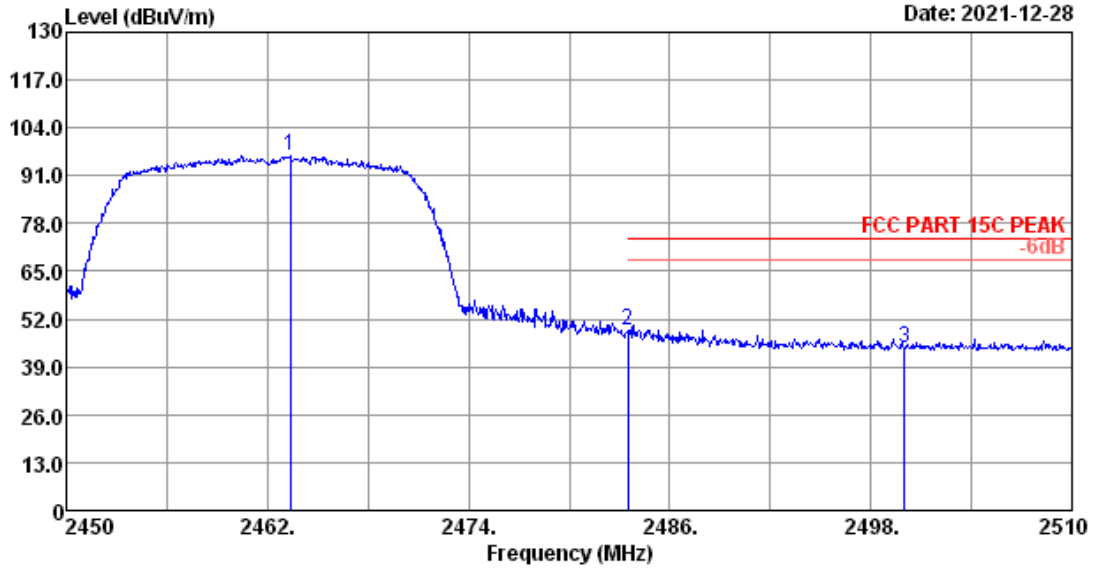


Site no. : 3m Chamber Data no. : 110
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n20 2412MHz Tx

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	27.89	3.65	37.29	35.24	33.59	54.00	20.41	Average
2	2412.93	27.93	3.66	88.98	35.24	85.33	-----	-----	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.

Data: 123 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

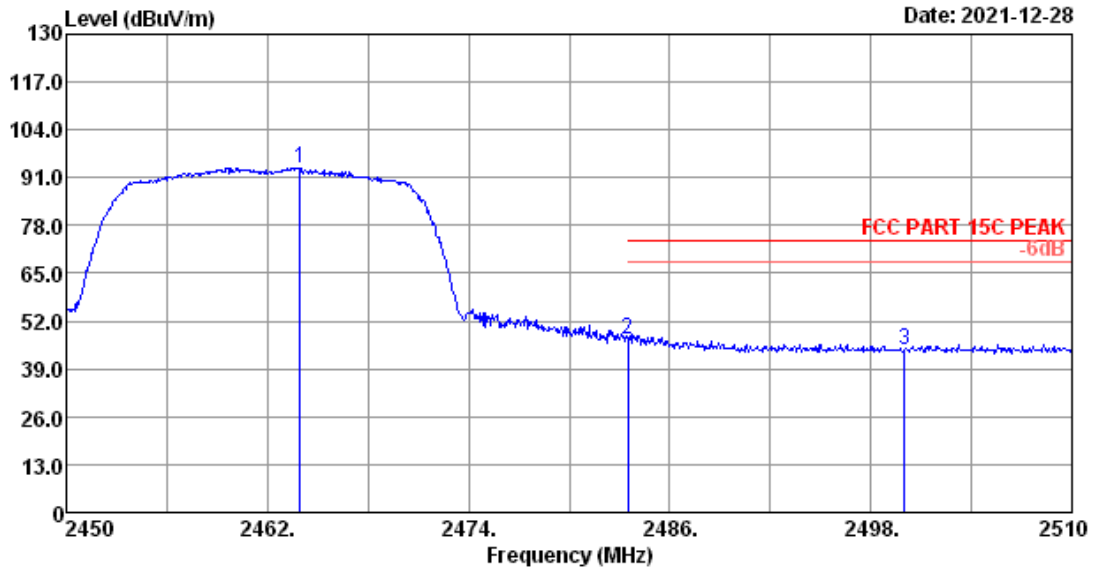


Site no. : 3m Chamber Data no. : 123
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n20 2462MHz Tx

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	2463.38	28.03	3.70	99.92	35.25	96.40	-----	-----	Peak
2	2483.50	28.07	3.71	52.18	35.25	48.71	74.00	25.29	Peak
3	2500.00	28.10	3.72	47.47	35.25	44.04	74.00	29.96	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.

Data: 124 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

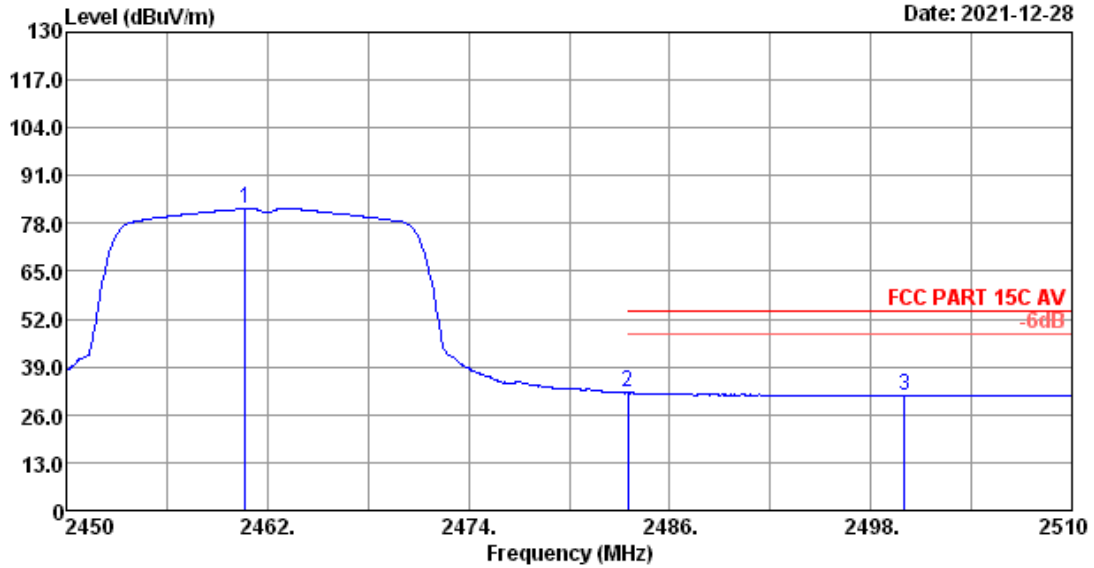


Site no. : 3m Chamber Data no. : 124
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n20 2462MHz Tx

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	2463.92	28.03	3.70	97.18	35.25	93.66	-----	-----	Peak
2	2483.50	28.07	3.71	50.59	35.25	47.12	74.00	26.88	Peak
3	2500.00	28.10	3.72	47.53	35.25	44.10	74.00	29.90	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.

Data: 125 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

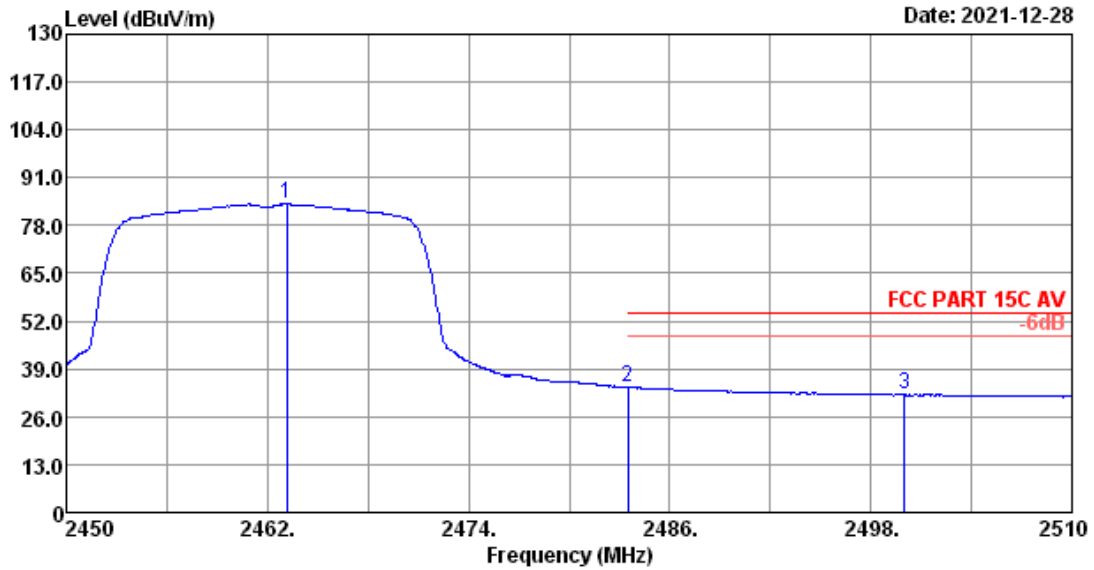


Site no. : 3m Chamber Data no. : 125
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n20 2462MHz Tx

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	2460.68	28.03	3.70	85.64	35.25	82.12	-----	-----	Average
2	2483.50	28.07	3.71	35.40	35.25	31.93	54.00	22.07	Average
3	2500.00	28.10	3.72	34.64	35.25	31.21	54.00	22.79	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.

Data: 126 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

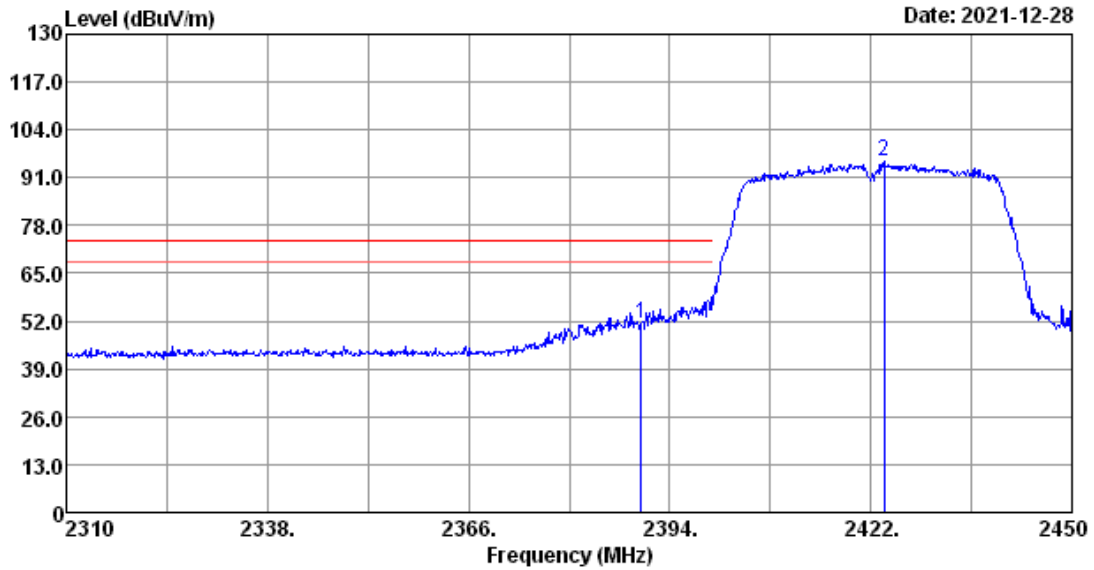


Site no. : 3m Chamber Data no. : 126
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n20 2462MHz Tx

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	2463.14	28.03	3.70	87.38	35.25	83.86	-----	-----	Average
2	2483.50	28.07	3.71	37.30	35.25	33.83	54.00	20.17	Average
3	2500.00	28.10	3.72	35.38	35.25	31.95	54.00	22.05	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.

Data: 137 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

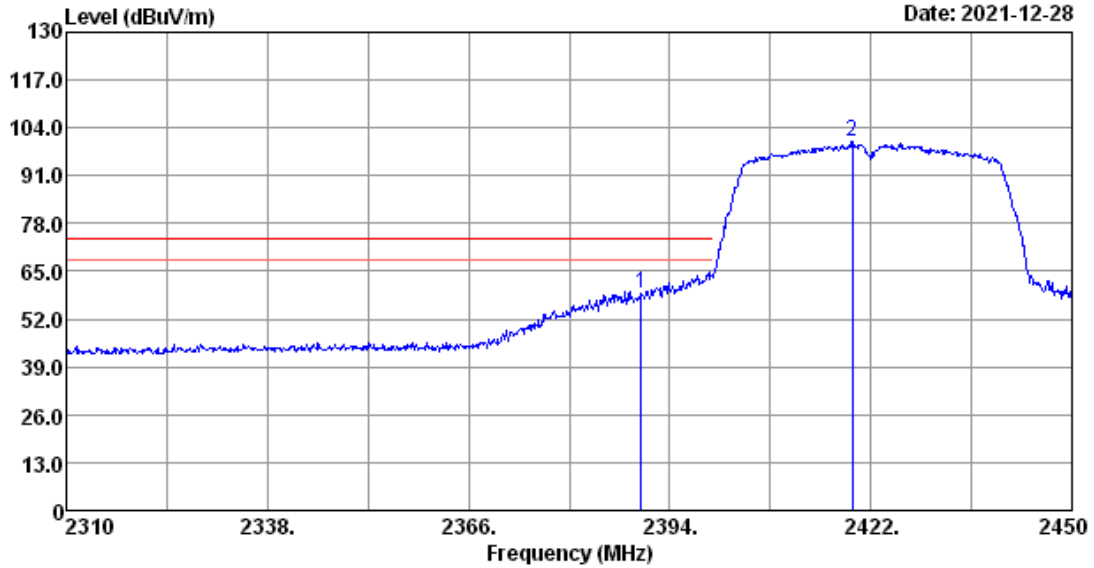


Site no. : 3m Chamber Data no. : 137
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n40 2422MHz Tx

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	27.89	3.65	55.09	35.24	51.39	74.00	22.61	Peak
2	2423.82	27.96	3.67	99.20	35.24	95.59	-----	-----	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.

Data: 138 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

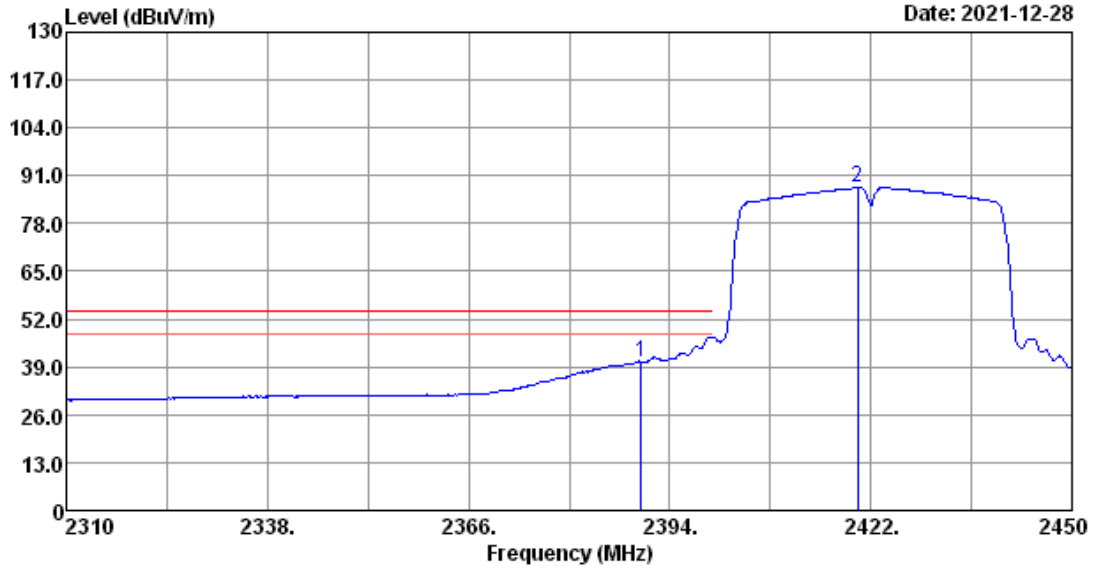


Site no. : 3m Chamber Data no. : 138
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n40 2422MHz Tx

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	27.89	3.65	62.81	35.24	59.11	74.00	14.89	Peak
2	2419.48	27.93	3.67	103.82	35.24	100.18	-----	-----	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.

Data: 139 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

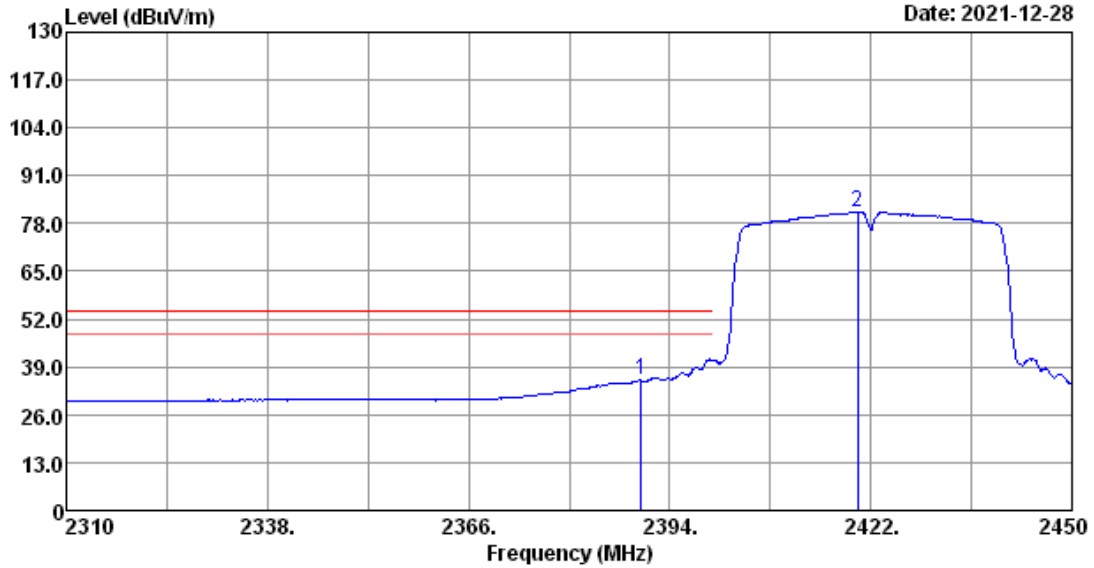


Site no. : 3m Chamber Data no. : 139
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n40 2422MHz Tx

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	27.89	3.65	44.22	35.24	40.52	54.00	13.48	Average
2	2420.18	27.96	3.67	91.42	35.24	87.81	-----	-----	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.

Data: 140 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

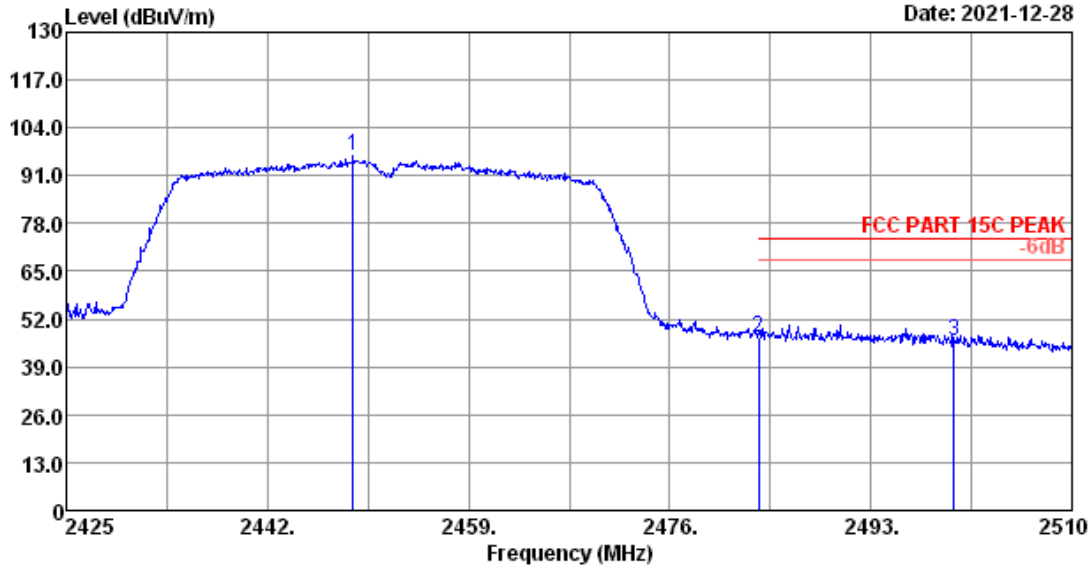


Site no. : 3m Chamber Data no. : 140
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n40 2422MHz Tx

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	27.89	3.65	39.00	35.24	35.30	54.00	18.70	Average
2	2420.18	27.96	3.67	84.78	35.24	81.17	-----	-----	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.

Data: 153 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

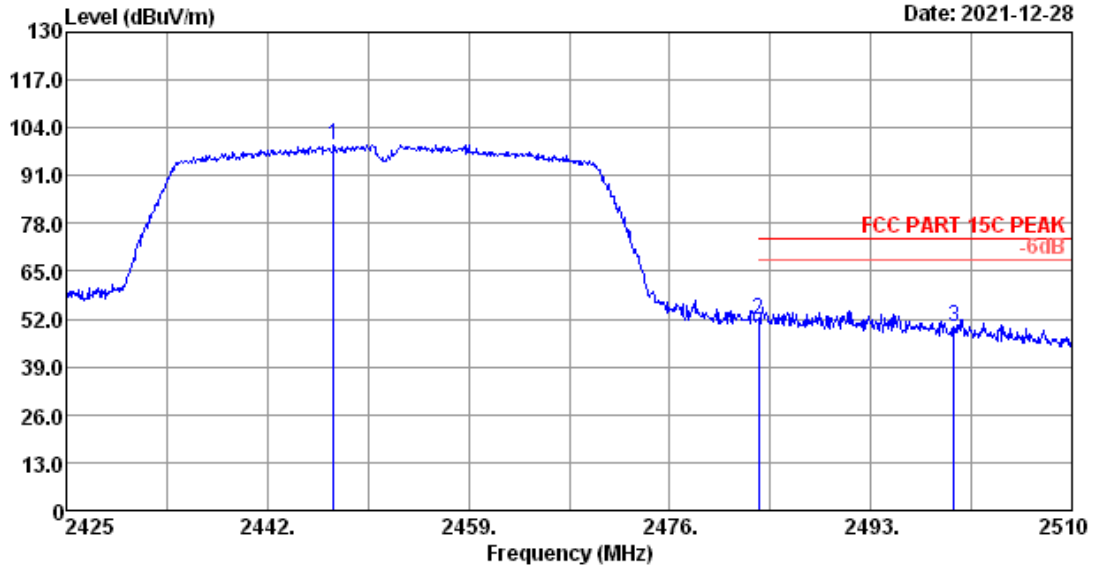


Site no. : 3m Chamber Data no. : 153
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n40 2452MHz Tx

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	2449.23	28.00	3.68	99.80	35.25	96.23	-----	-----	Peak
2	2483.50	28.07	3.71	50.46	35.25	46.99	74.00	27.01	Peak
3	2500.00	28.10	3.72	49.28	35.25	45.85	74.00	28.15	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.

Data: 154 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28

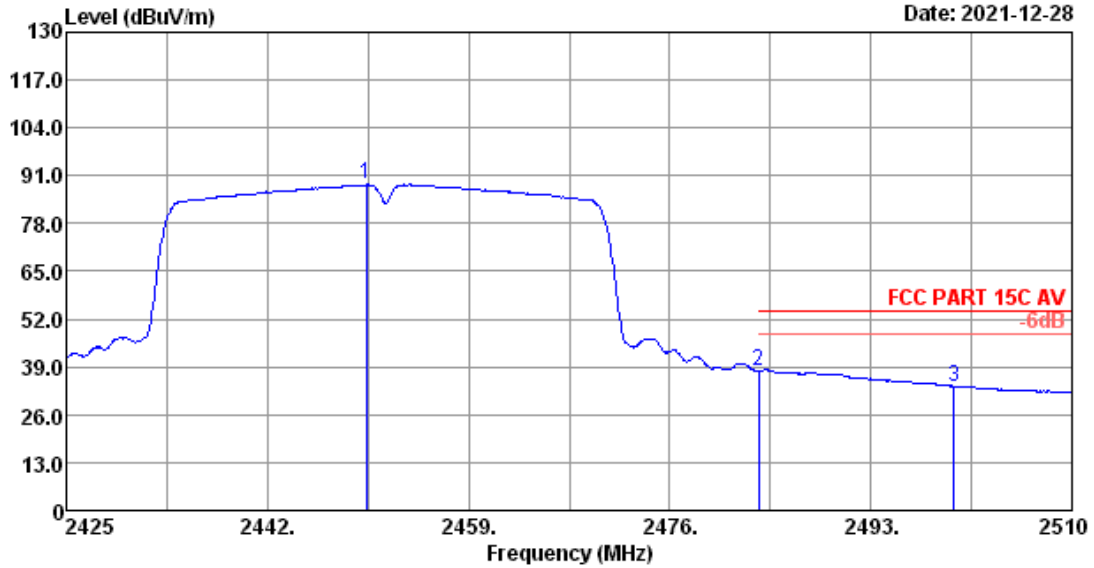


Site no. : 3m Chamber Data no. : 154
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 Test Mode : WIFI 2.4G 11n40 2452MHz Tx

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	2447.61	28.00	3.68	103.00	35.25	99.43	-----	-----	Peak
2	2483.50	28.07	3.71	55.35	35.25	51.88	74.00	22.12	Peak
3	2500.00	28.10	3.72	53.25	35.25	49.82	74.00	24.18	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.

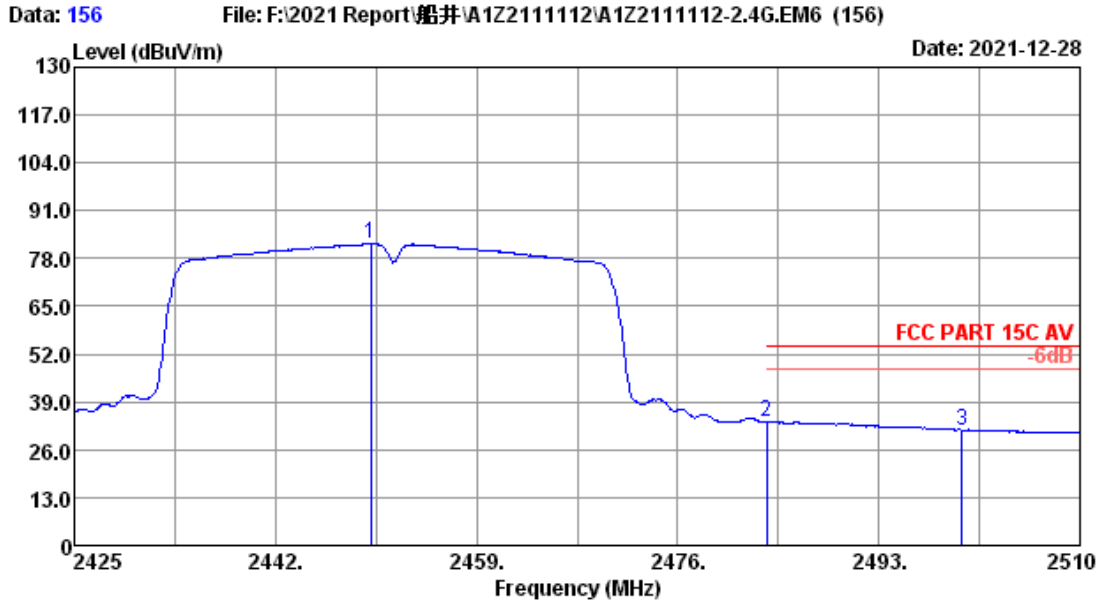
Data: 155 File: F:\2021 Report\船井\A1Z2111112\A1Z2111112-2.4G.EM6 (156) Date: 2021-12-28



Site no. : 3m Chamber Data no. : 155
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2450.33	28.00	3.68	92.15	35.25	88.58	-----	-----	Average
2	2483.50	28.07	3.71	41.37	35.25	37.90	54.00	16.10	Average
3	2500.00	28.10	3.72	37.20	35.25	33.77	54.00	20.23	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. : 156
 Dis. / Ant. : 3m 2021 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 22.1°C/51.5% Engineer : Lynn
 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	2450.08	28.00	3.68	85.56	35.25	81.99	-----	-----	Average
2	2483.50	28.07	3.71	36.91	35.25	33.44	54.00	20.56	Average
3	2500.00	28.10	3.72	34.81	35.25	31.38	54.00	22.62	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.

7. 6dB Bandwidth Test

7.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.07,21	1 Year
2.	RF Cable	HUBER+SUHNER	SUCOFLE X-106	505238/6	Apr.07,21	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.

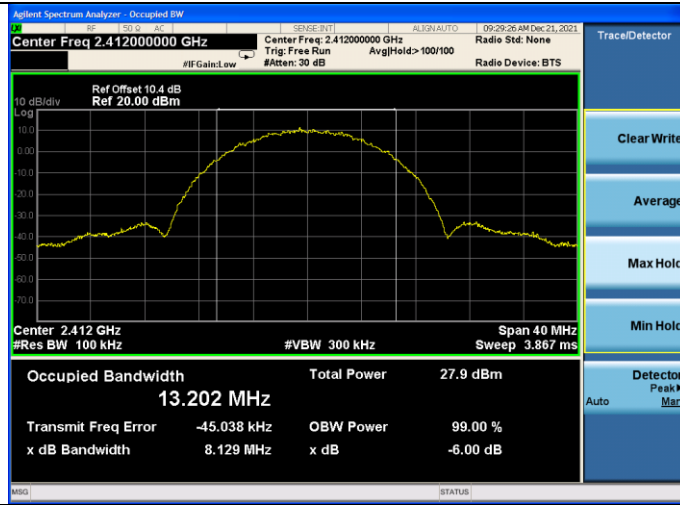
7.4. Test Results

EUT: WiFi module		
M/N: U9W43		
Test date: 2021-12-21	Pressure: 101.2 ±1.0 kpa	Humidity: 52.1 ±3.0%
Tested by: Winter	Test site: RF site	Temperature: 22.4 ±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)		Limit (kHz)
		ANTA	ANTB	
11b	CH1	8.129	8.410	≥ 500
	CH6	8.609	8.025	≥ 500
	CH11	8.498	8.354	≥ 500
11g	CH1	16.37	16.37	≥ 500
	CH6	16.39	16.36	≥ 500
	CH11	16.36	16.39	≥ 500
11n HT20	CH1	17.67	17.68	≥ 500
	CH6	17.69	17.67	≥ 500
	CH11	17.71	17.70	≥ 500
11n HT40	CH3	36.39	36.39	≥ 500
	CH6	36.40	36.44	≥ 500
	CH9	36.35	36.42	≥ 500
Conclusion : PASS				

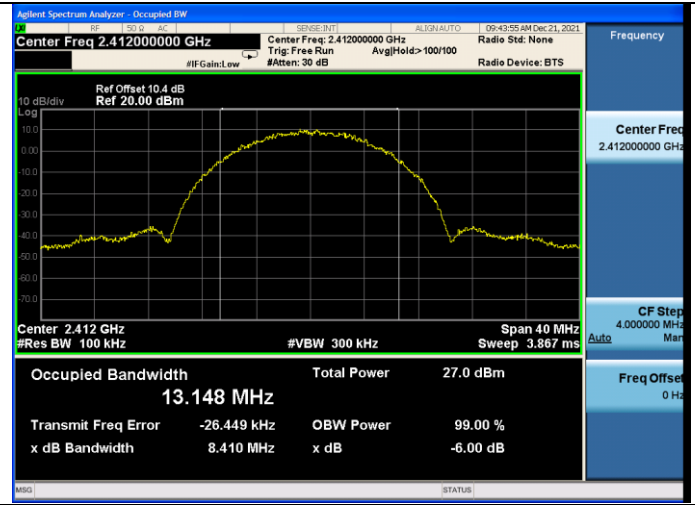
ANTA:

Test Mode: IEEE 802.11b
Test CH1: 2412MHz

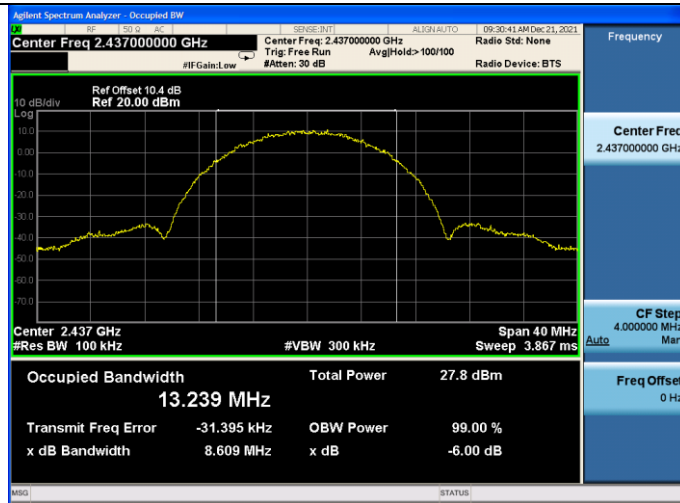


ANTB:

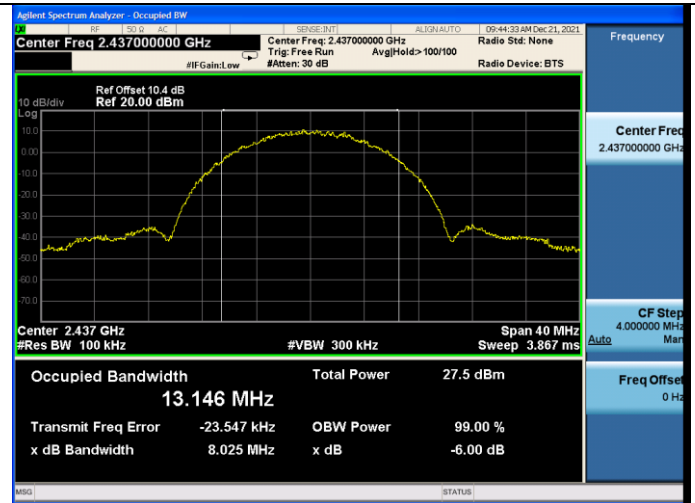
Test Mode: IEEE 802.11b
Test CH1: 2412MHz



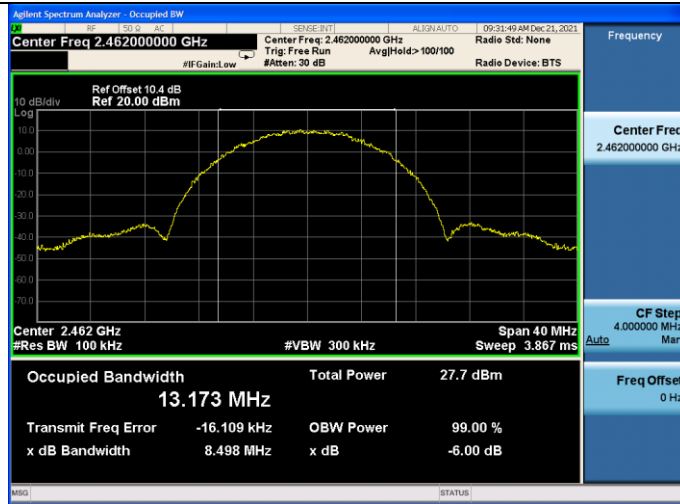
Test CH6: 2437MHz



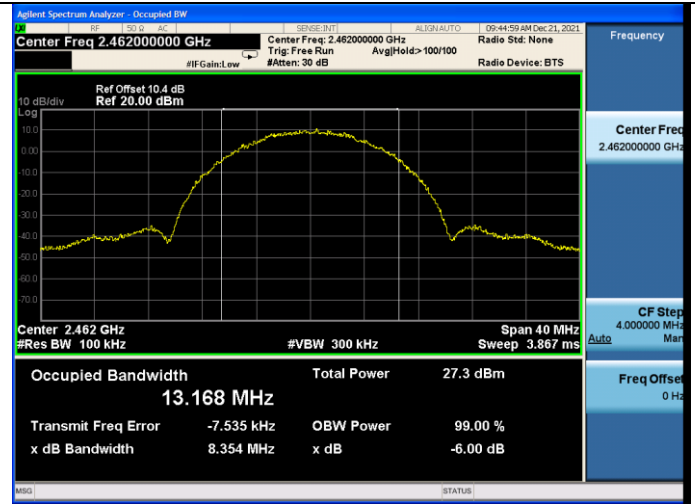
Test CH6: 2437MHz



Test CH11: 2462MHz

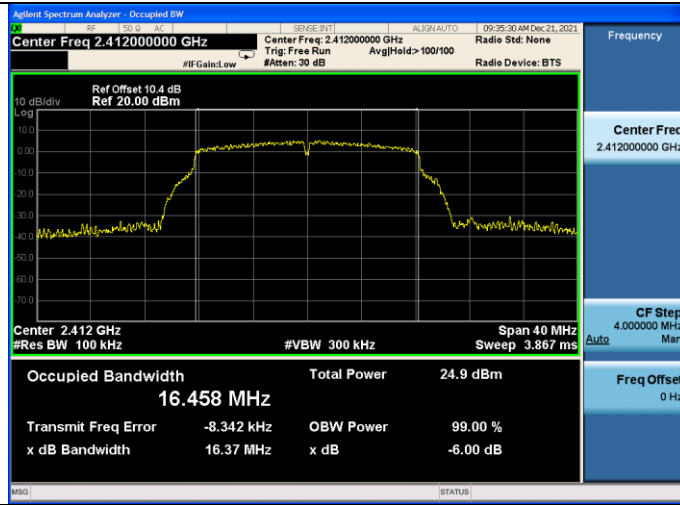


Test CH11: 2462MHz



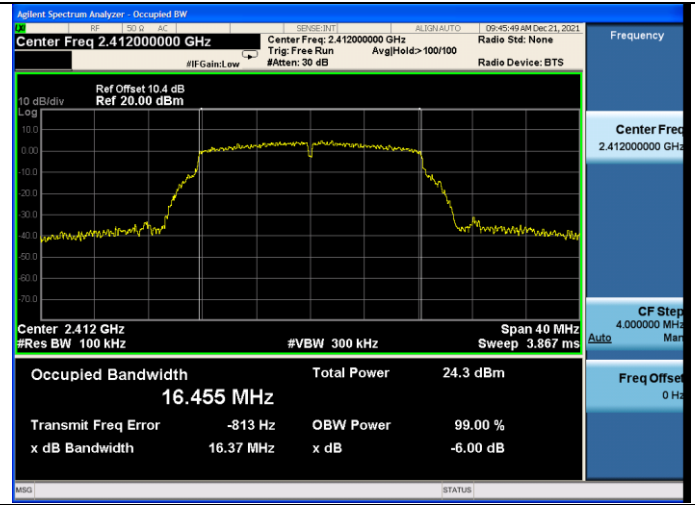
ANTA:

Test Mode: IEEE 802.11g
Test CH1: 2412MHz

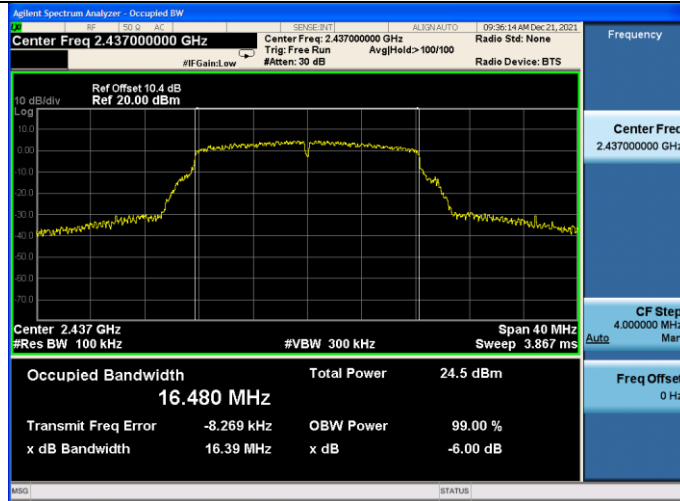


ANTB:

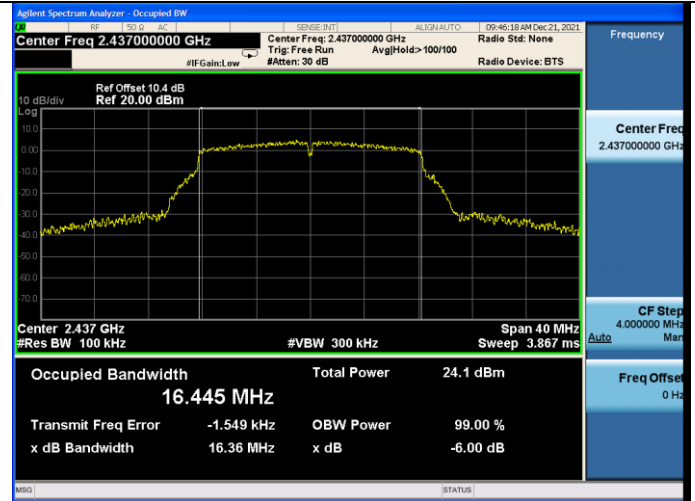
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



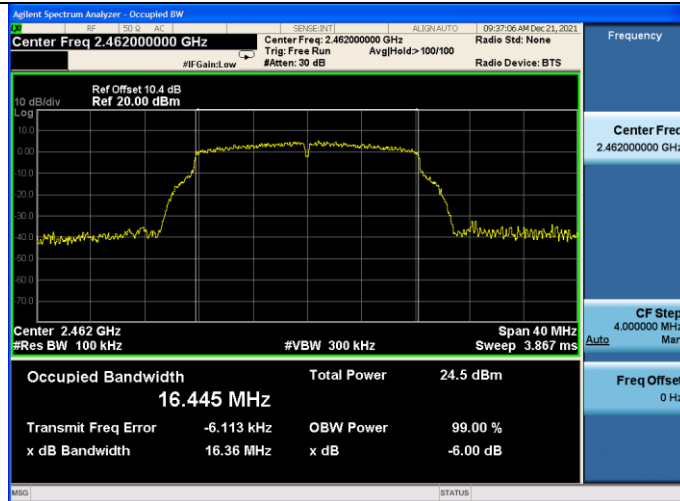
Test CH6: 2437MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH11: 2462MHz

