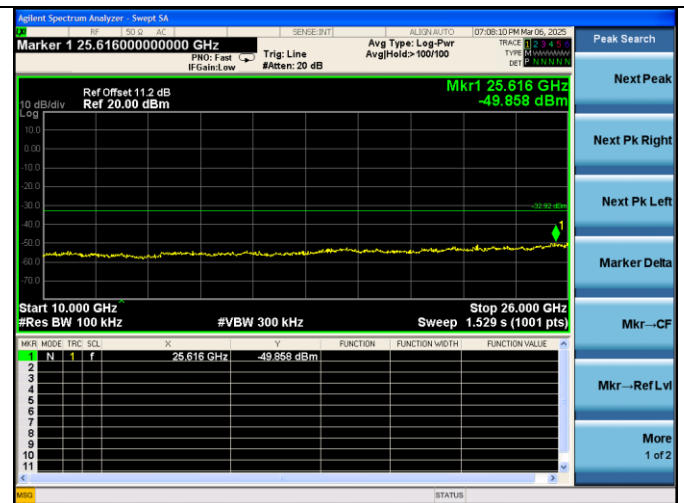
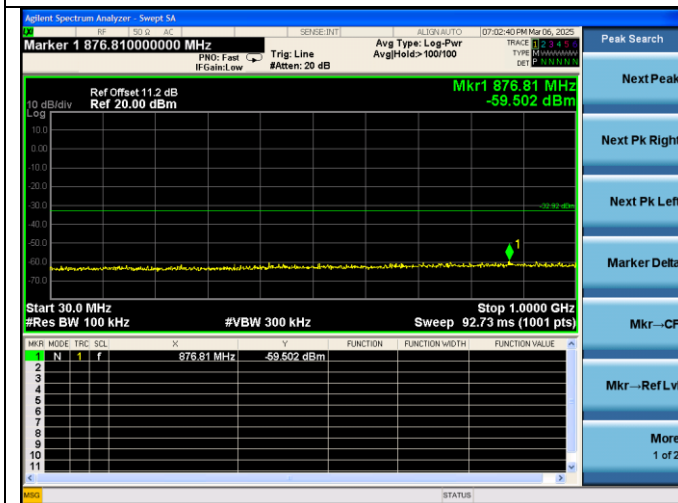
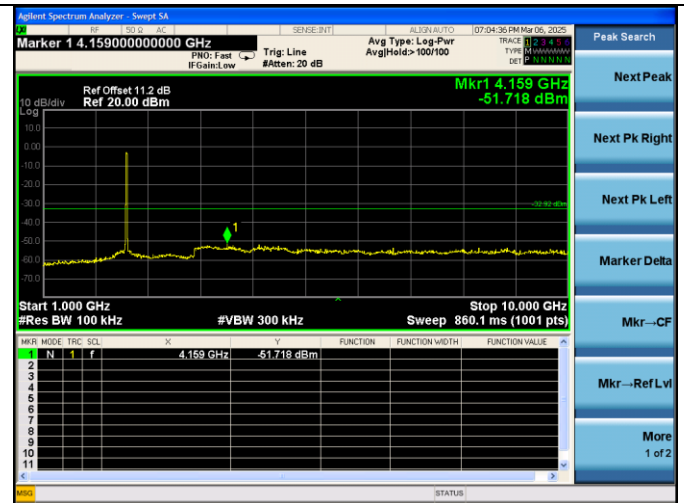
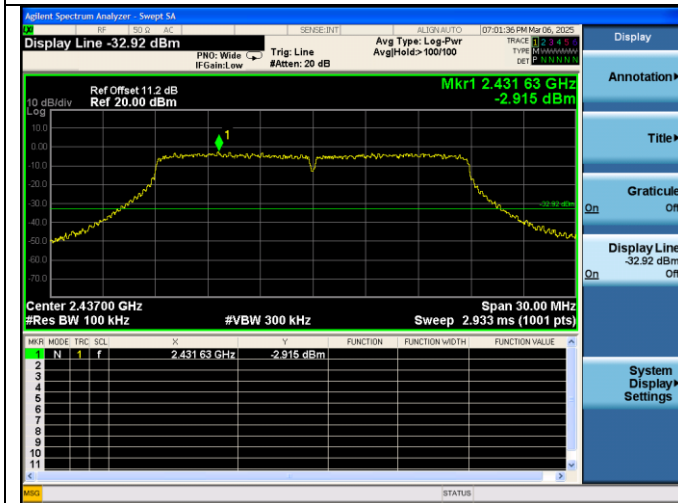
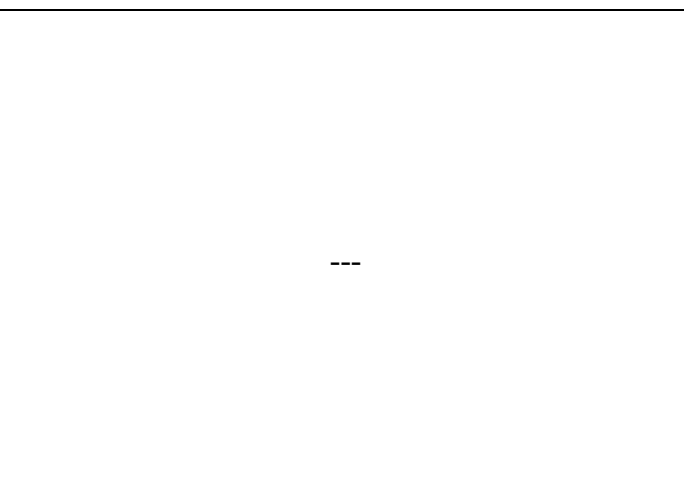
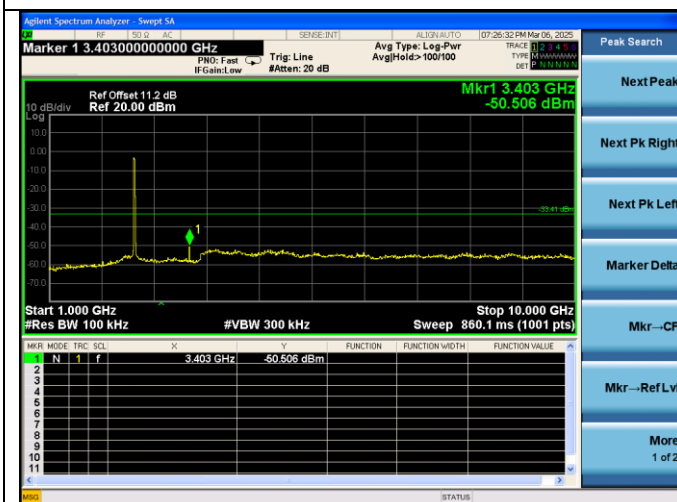
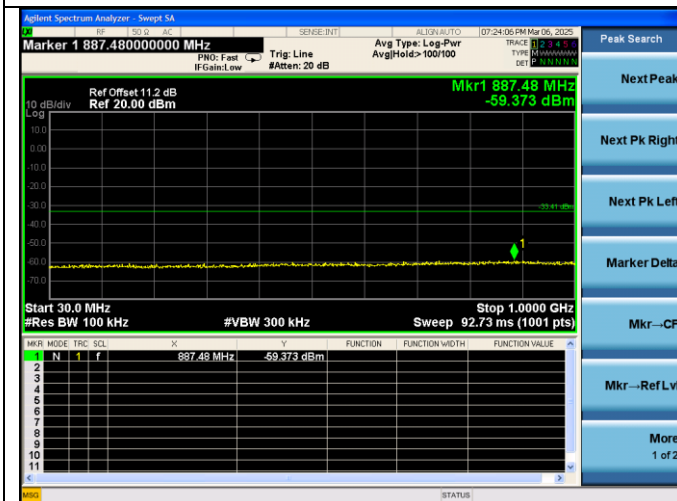
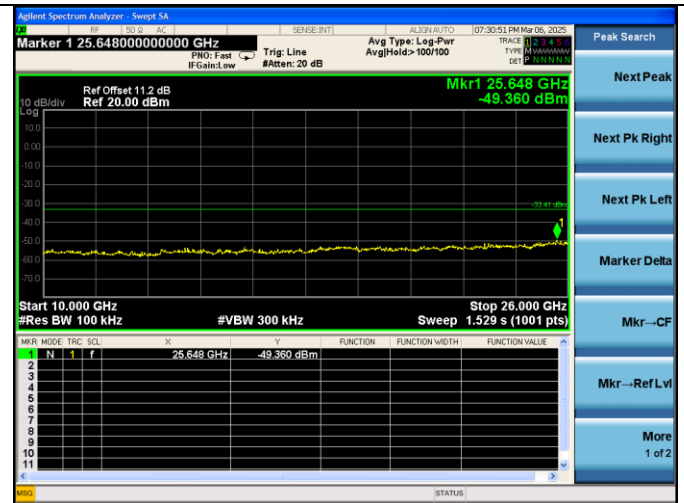
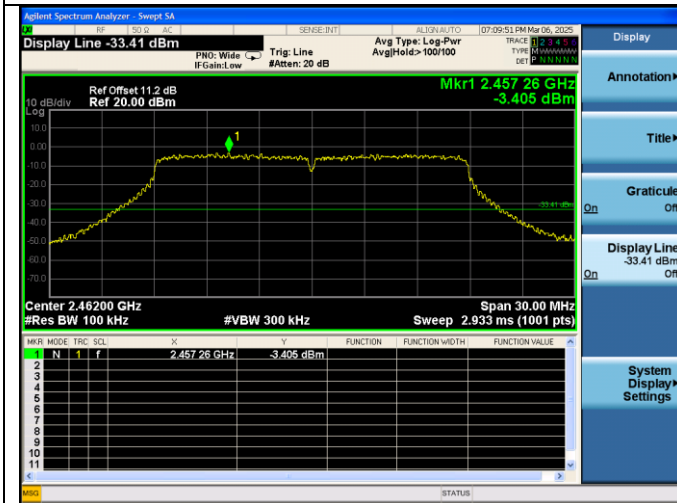


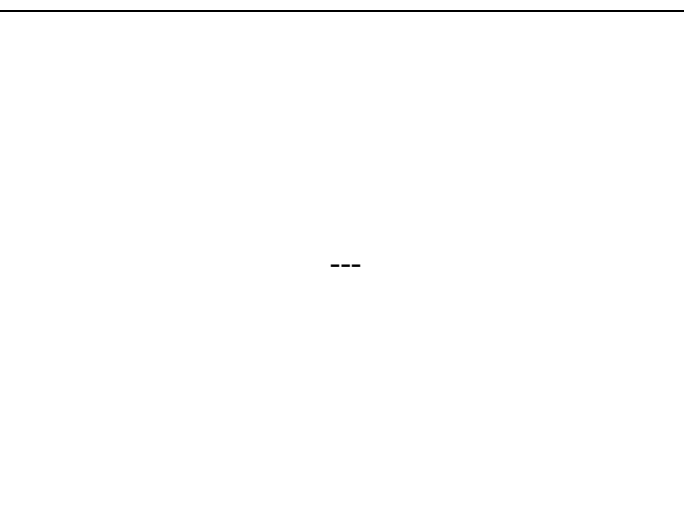
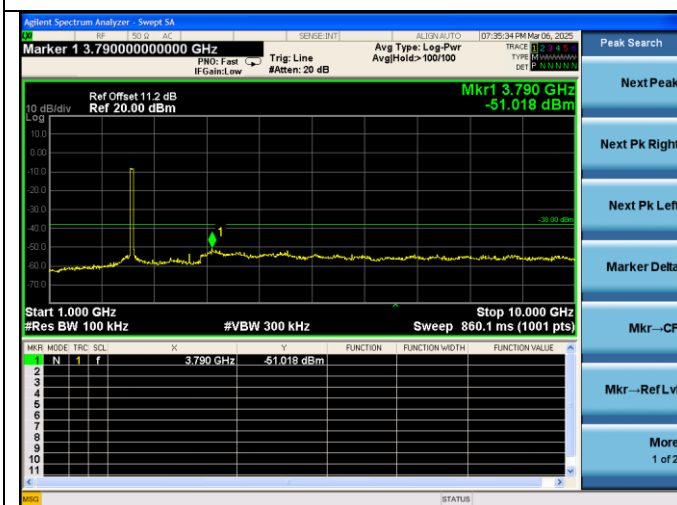
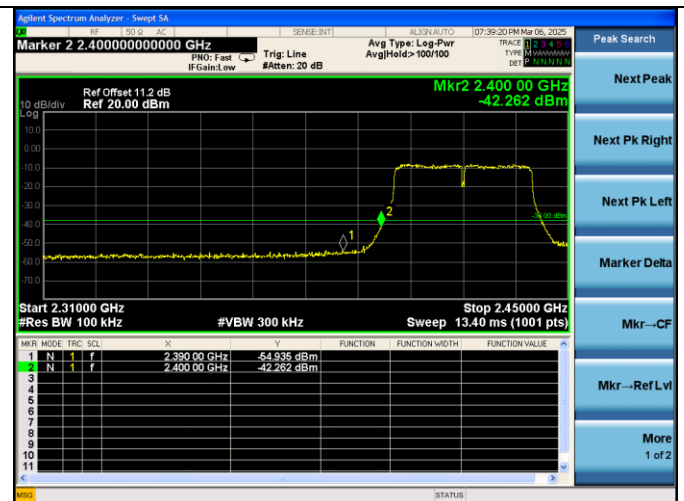
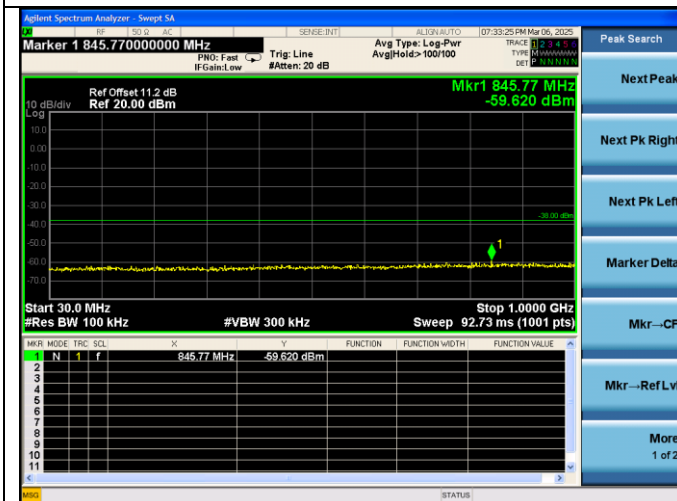
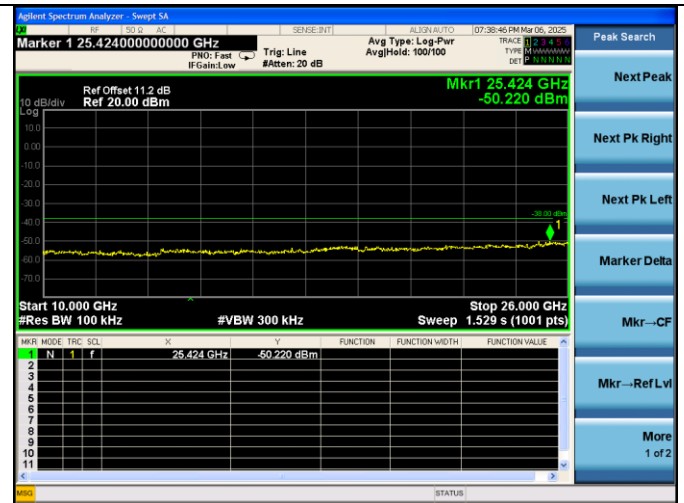
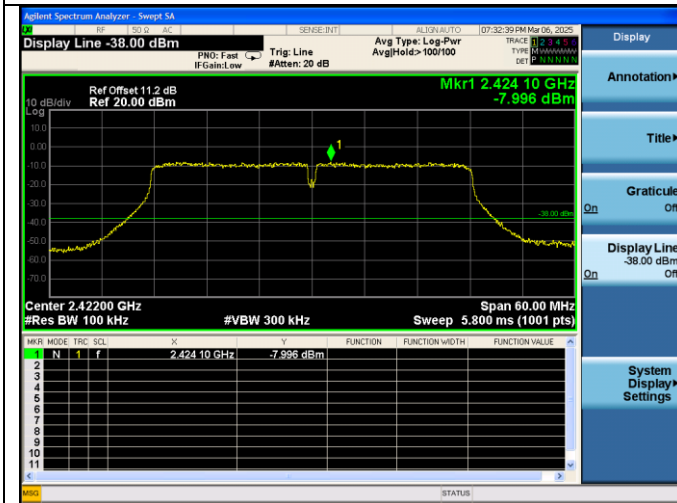
Test CH6: 2437MHz



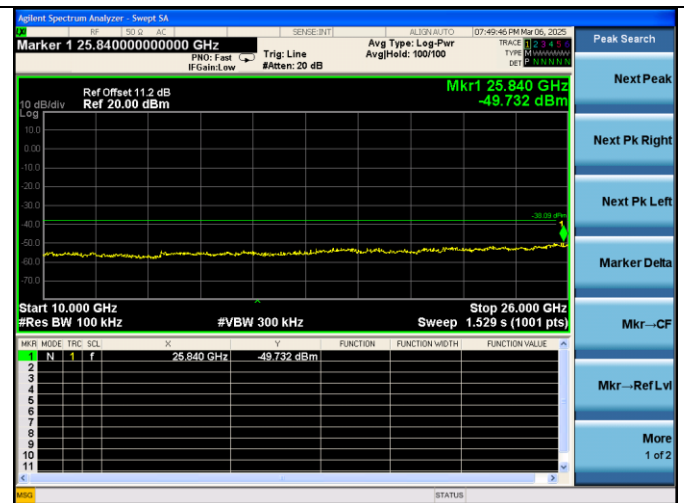
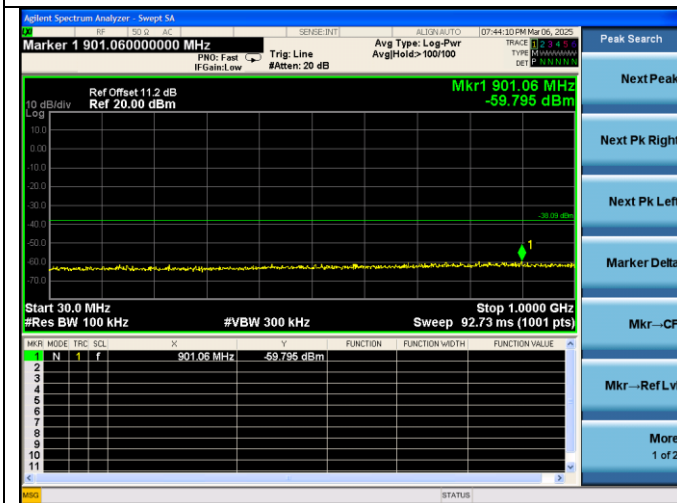
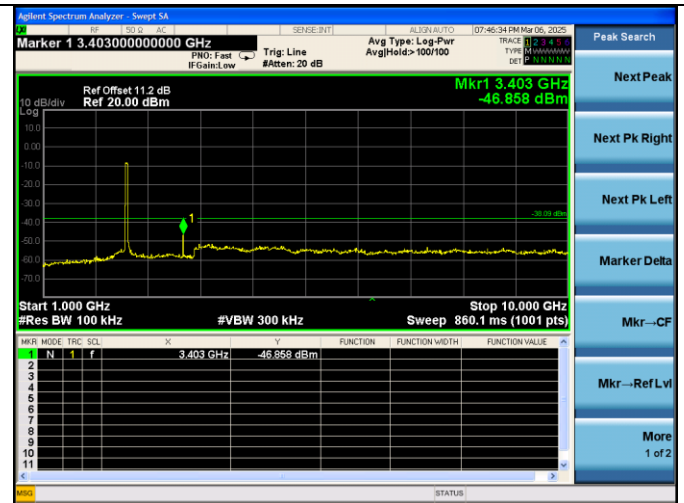
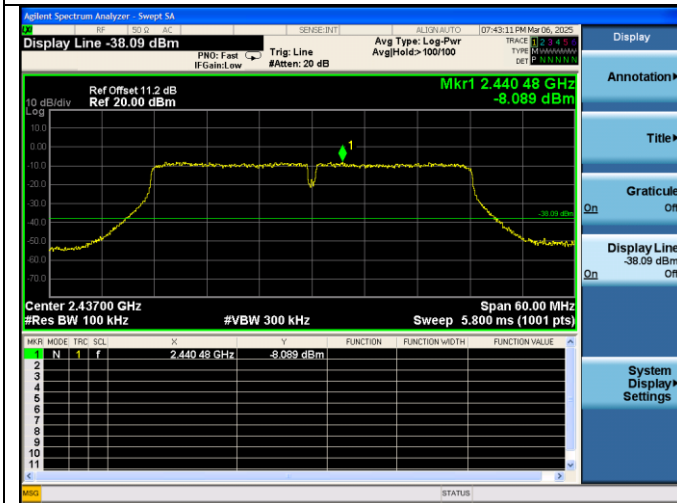
Test CH11: 2462MHz



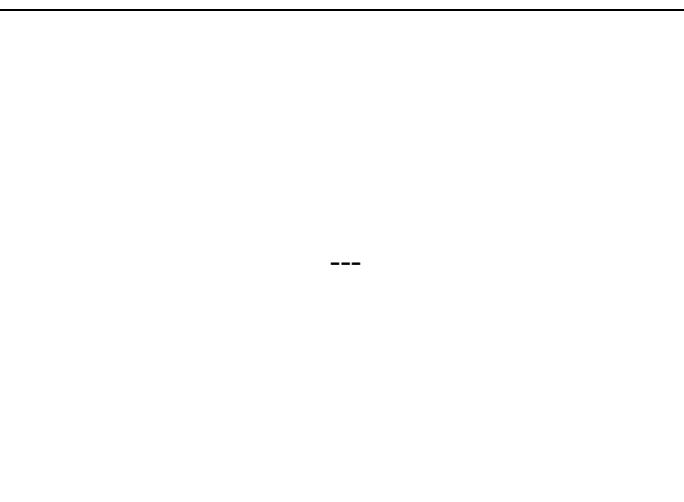
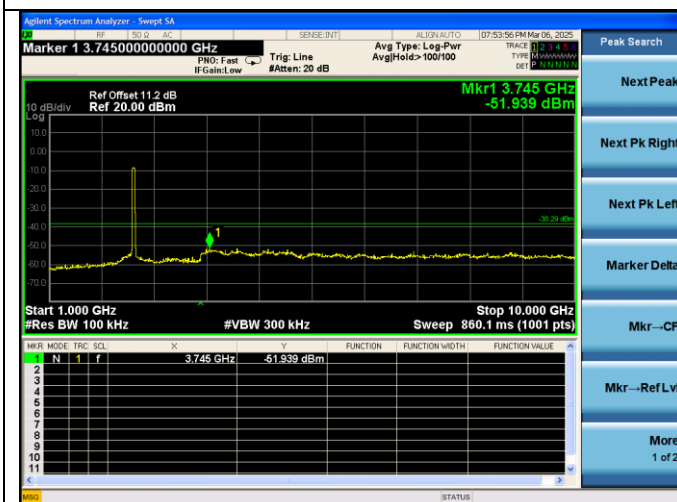
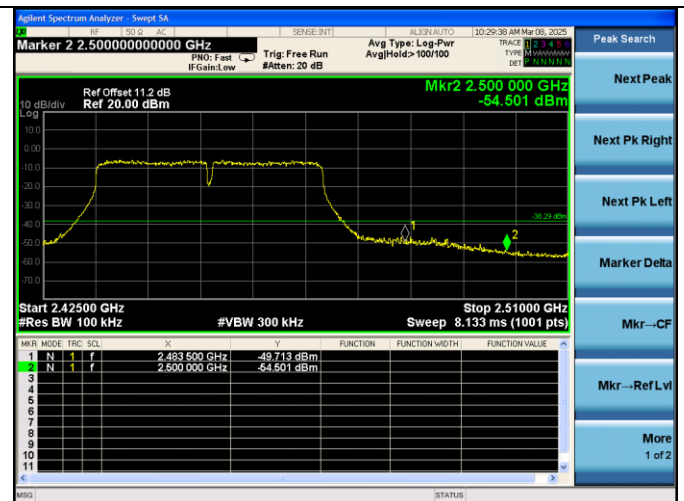
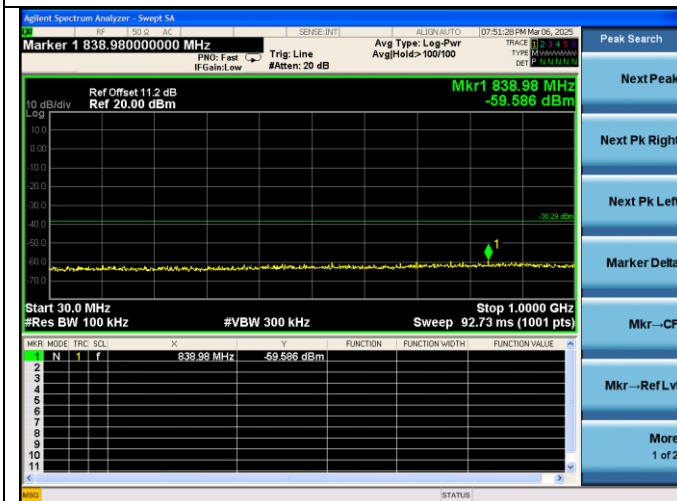
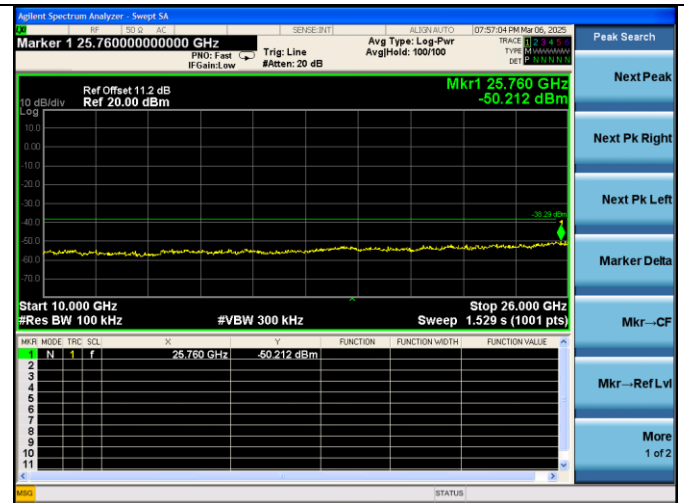
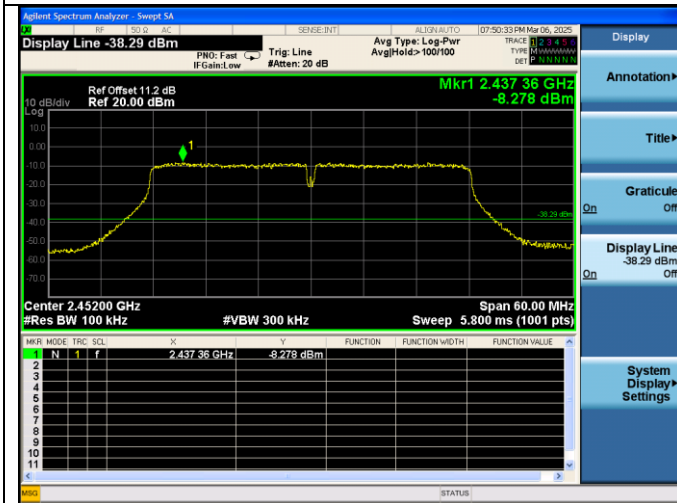
Test Mode: IEEE 802.11n HT40
Test CH1: 2422MHz



Test CH6: 2437MHz



Test CH11: 2452MHz



6. BAND EDGE COMPLIANCE TEST

6.1.Limit

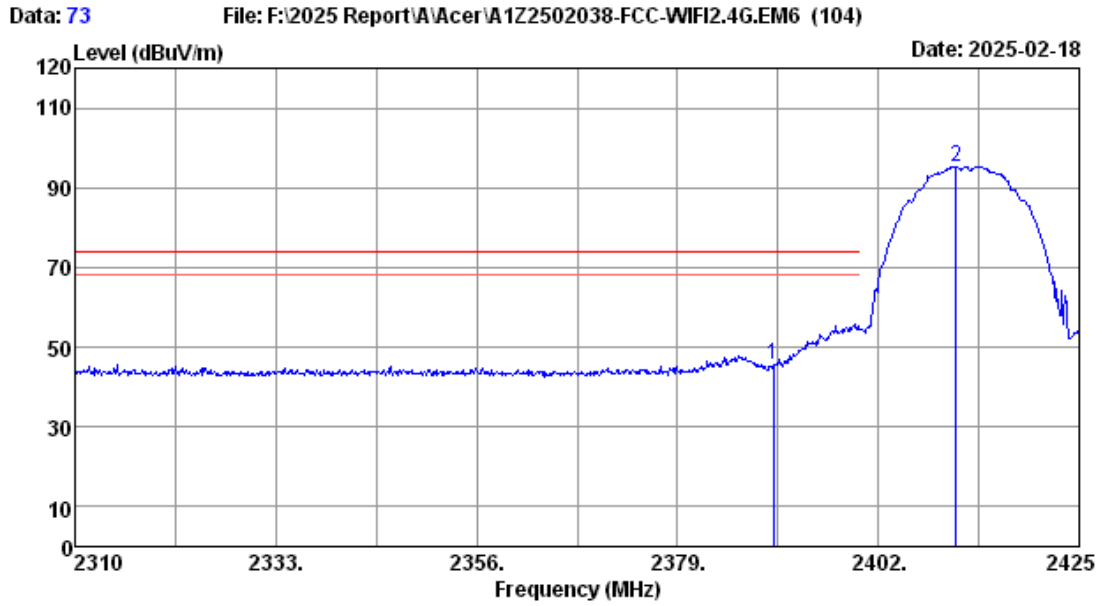
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental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

6.2.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

6.3.Test Results

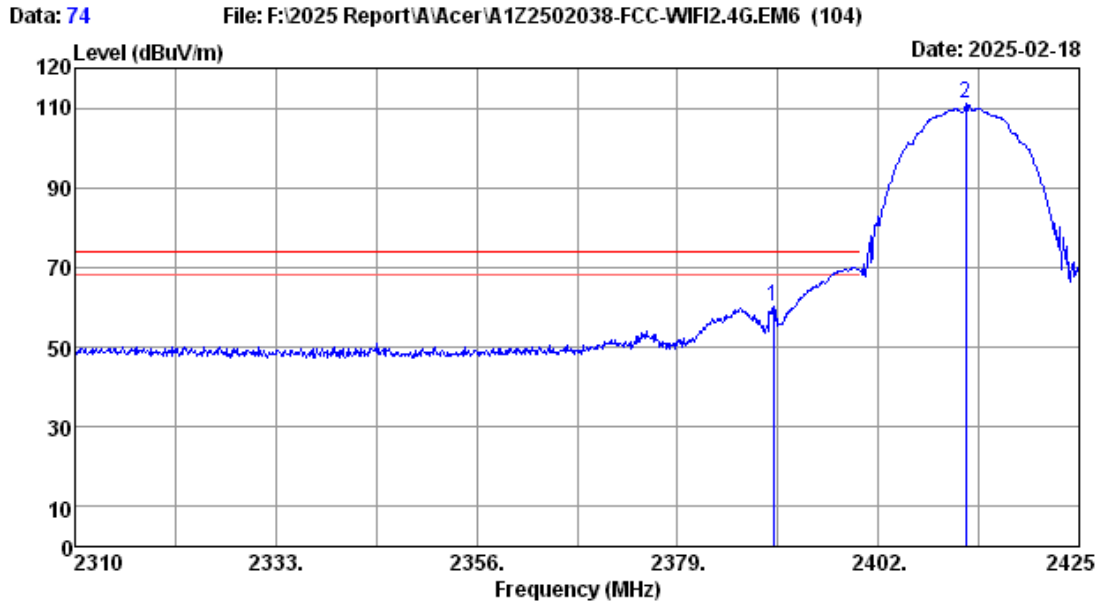
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 73
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	44.31	45.45	74.00	28.55	Peak
2	2410.86	27.70	5.22	31.69	94.17	95.40	-----	-----	Peak

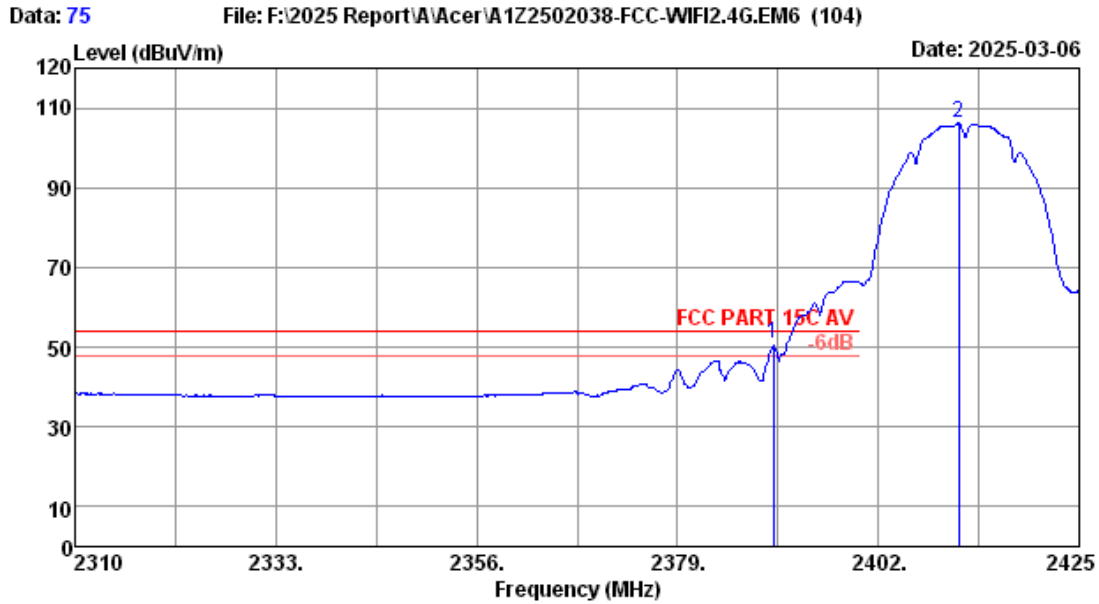
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 74
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	58.86	60.00	74.00	14.00	Peak
2	2412.01	27.70	5.22	31.69	109.89	111.12	-----	-----	Peak

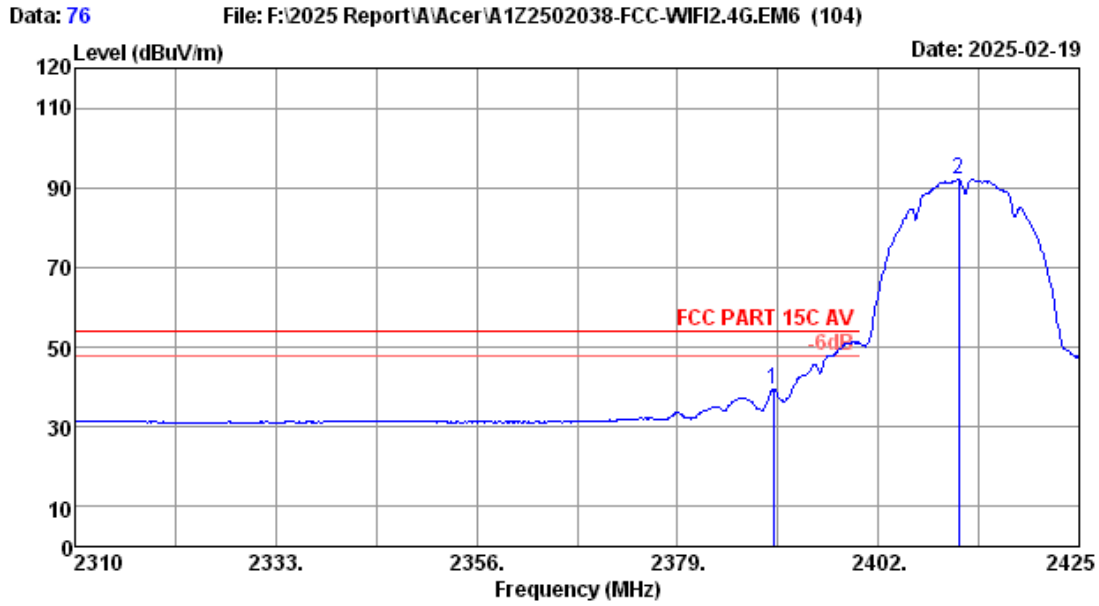
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 75
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	49.74	50.88	54.00	3.12	Average
2	2411.20	27.70	5.22	31.69	104.92	106.15	-----	-----	Average

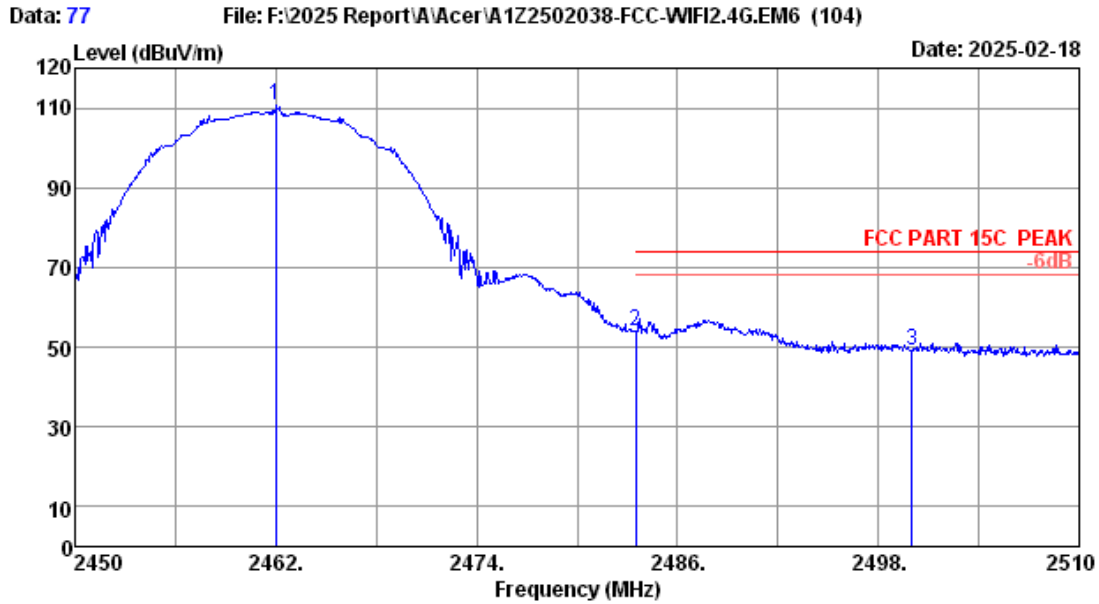
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 76
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	38.21	39.35	54.00	14.65	Average
2	2411.20	27.70	5.22	31.69	90.92	92.15	-----	-----	Average

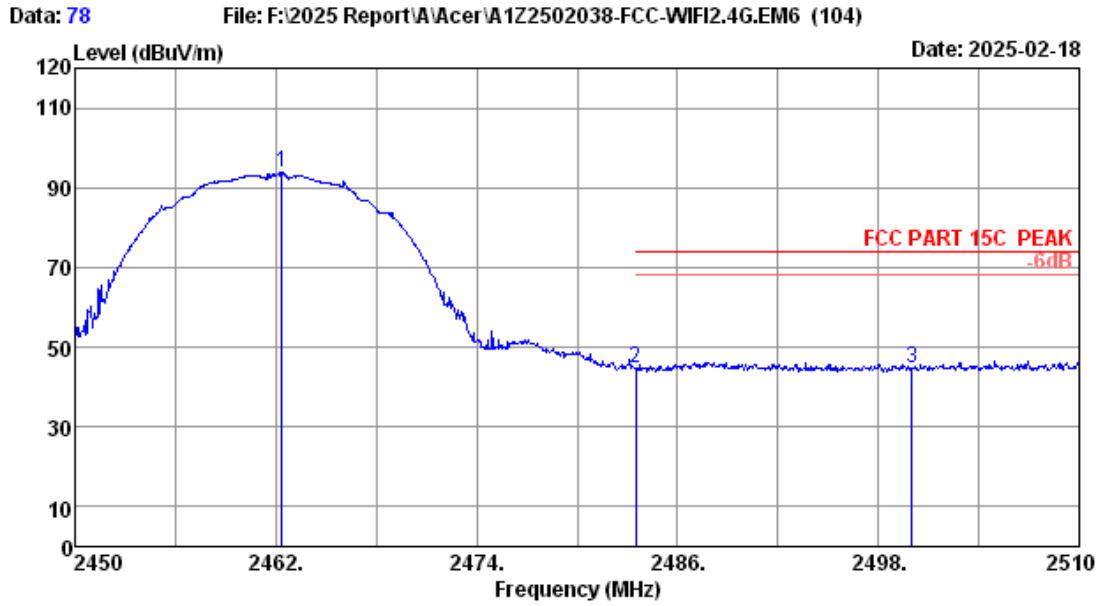
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 77
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2462.00	27.75	5.28	31.67	109.35	110.71	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	52.71	54.18	74.00	19.82	Peak
3	2500.00	27.90	5.32	31.65	47.68	49.25	74.00	24.75	Peak

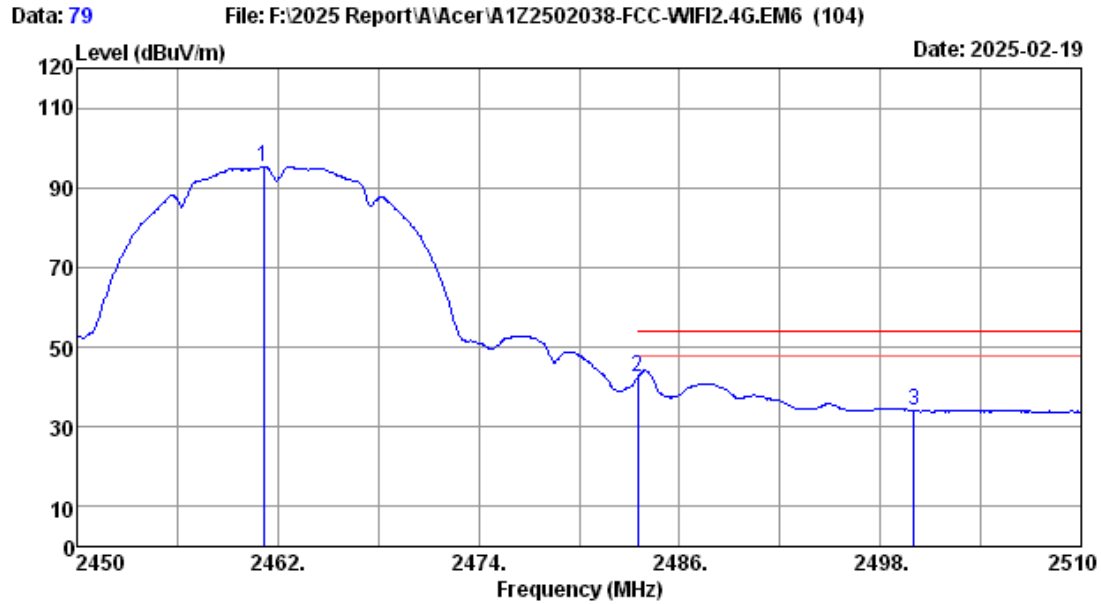
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 78
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2462.36	27.75	5.28	31.67	92.64	94.00	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	43.04	44.51	74.00	29.49	Peak
3	2500.00	27.90	5.32	31.65	43.13	44.70	74.00	29.30	Peak

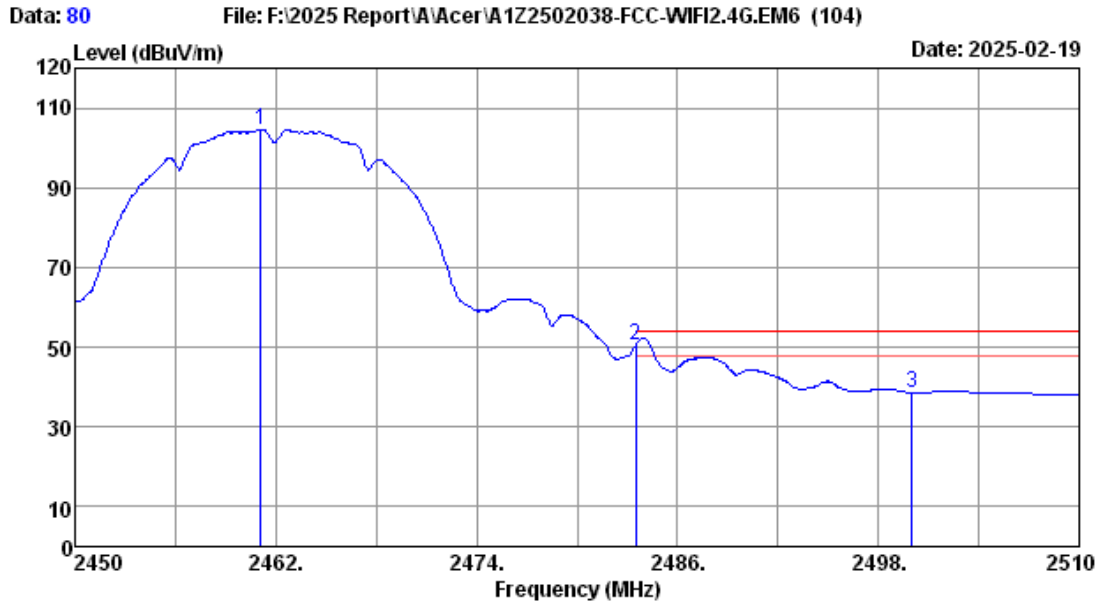
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 79
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2461.16	27.74	5.28	31.67	94.05	95.40	-----	-----	Average
2	2483.50	27.83	5.30	31.66	40.87	42.34	54.00	11.66	Average
3	2500.00	27.90	5.32	31.65	32.45	34.02	54.00	19.98	Average

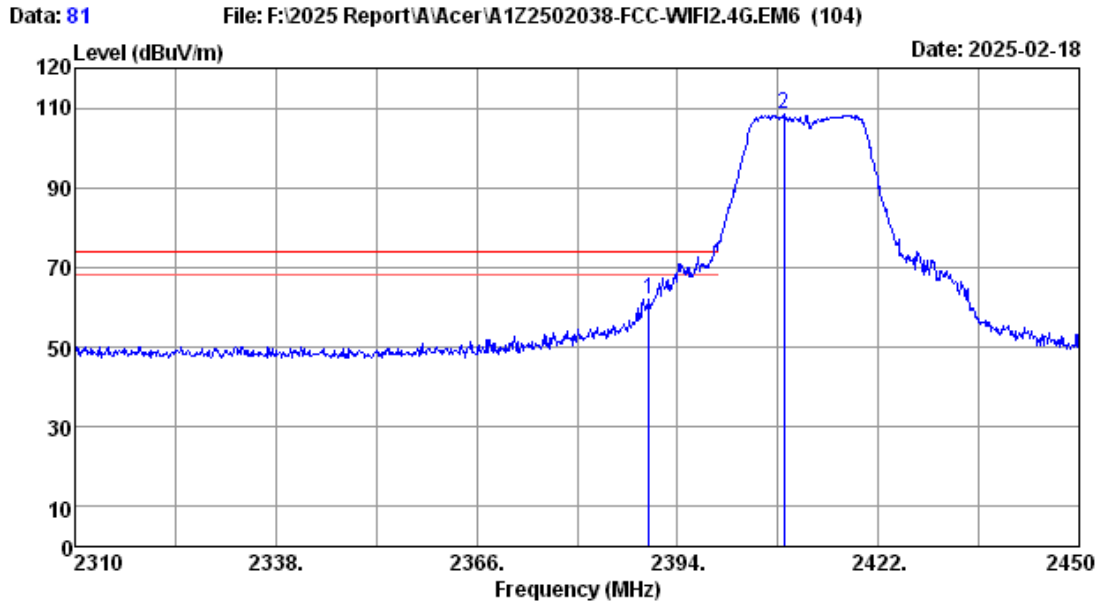
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 80
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11b 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2461.10	27.74	5.28	31.67	103.34	104.69	-----	-----	Average
2	2483.50	27.83	5.30	31.66	48.94	50.41	54.00	3.59	Average
3	2500.00	27.90	5.32	31.65	37.12	38.69	54.00	15.31	Average

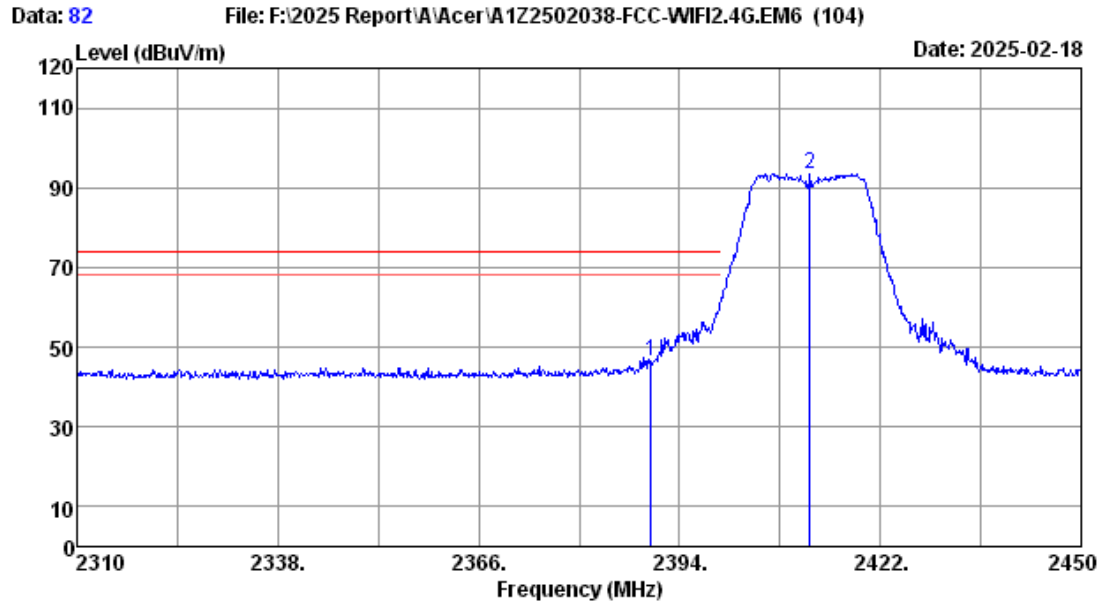
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 81
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	60.64	61.78	74.00	12.22	Peak
2	2408.84	27.70	5.22	31.70	107.18	108.40	-----	-----	Peak

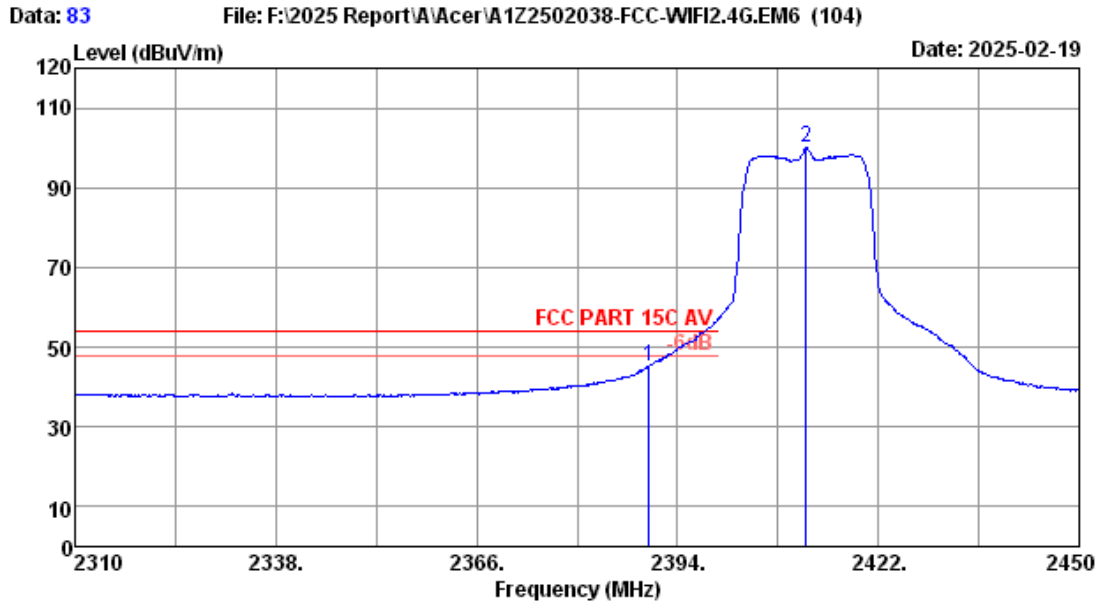
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 82
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	45.28	46.42	74.00	27.58	Peak
2	2412.20	27.70	5.22	31.69	92.22	93.45	-----	-----	Peak

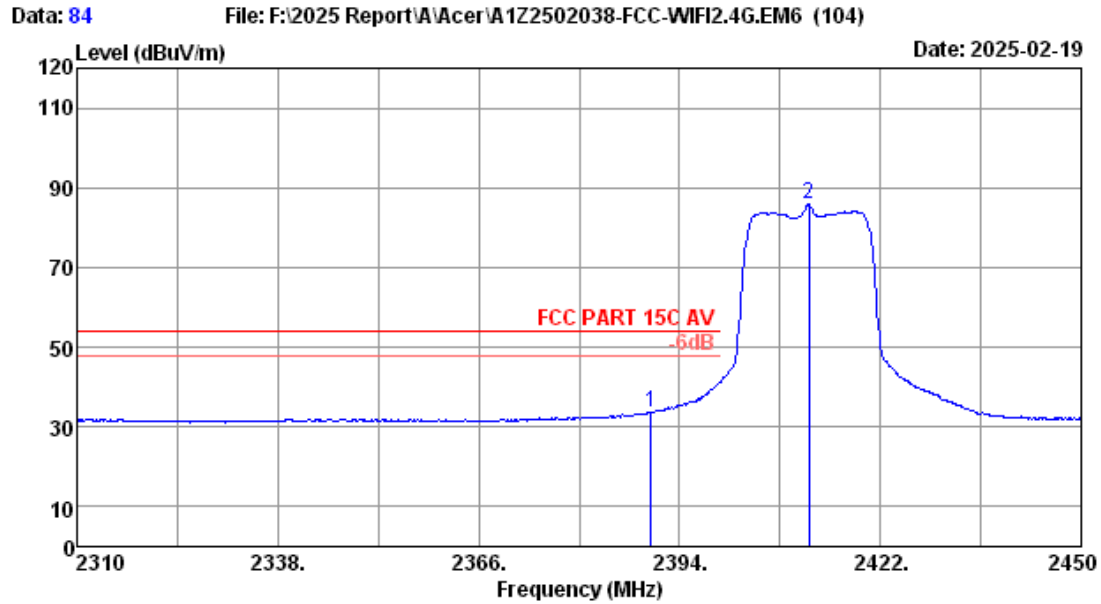
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 83
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2412MHz TX Mode AHT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	43.95	45.09	54.00	8.91	Average
2	2411.92	27.70	5.22	31.69	98.81	100.04	-----	-----	Average

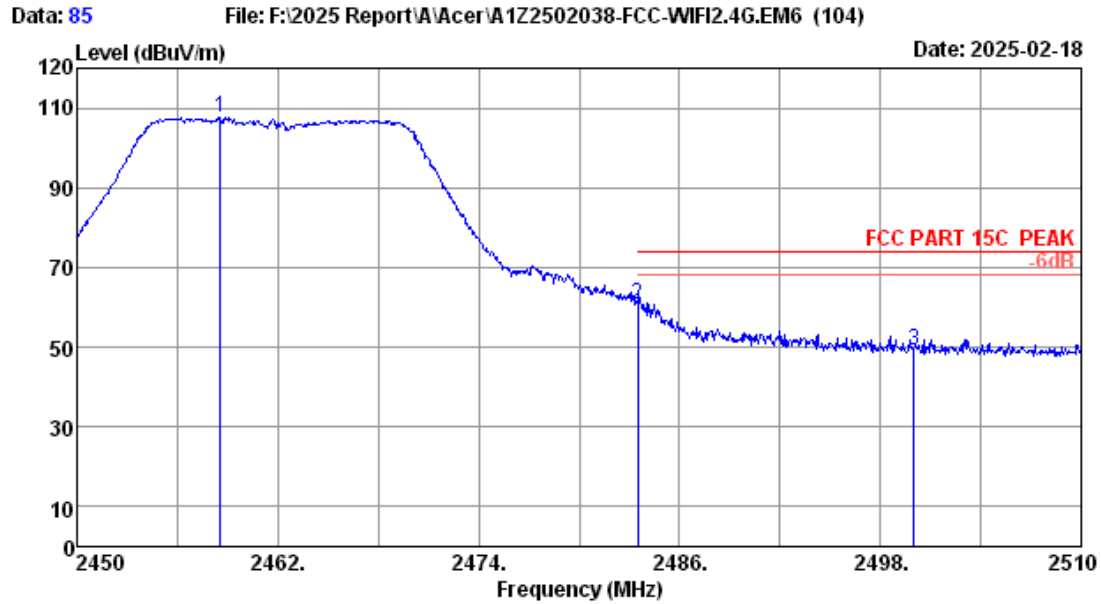
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 84
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	32.45	33.59	54.00	20.41	Average
2	2412.06	27.70	5.22	31.69	84.56	85.79	-----	-----	Average

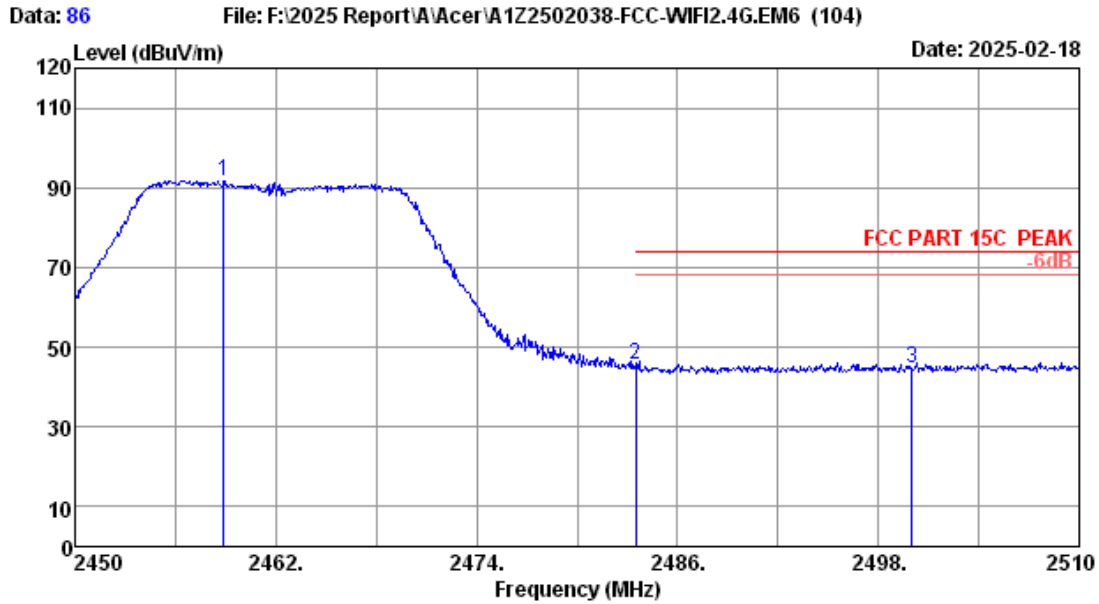
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 85
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2458.58	27.73	5.28	31.67	106.29	107.63	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	59.00	60.47	74.00	13.53	Peak
3	2500.00	27.90	5.32	31.65	47.64	49.21	74.00	24.79	Peak

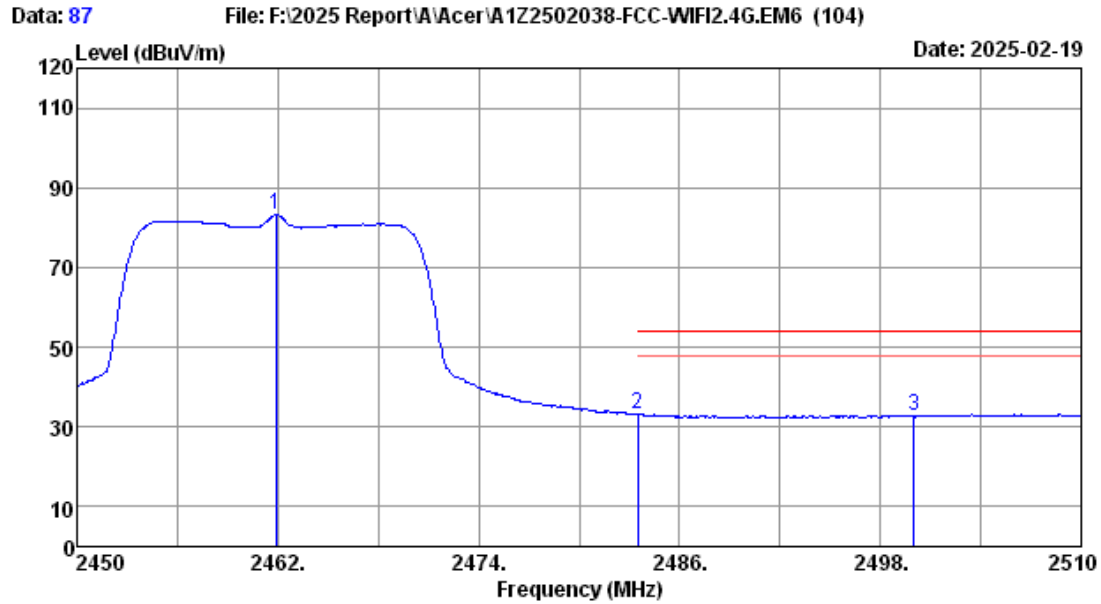
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 86
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2458.88	27.74	5.28	31.67	90.36	91.71	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	44.27	45.74	74.00	28.26	Peak
3	2500.00	27.90	5.32	31.65	42.96	44.53	74.00	29.47	Peak

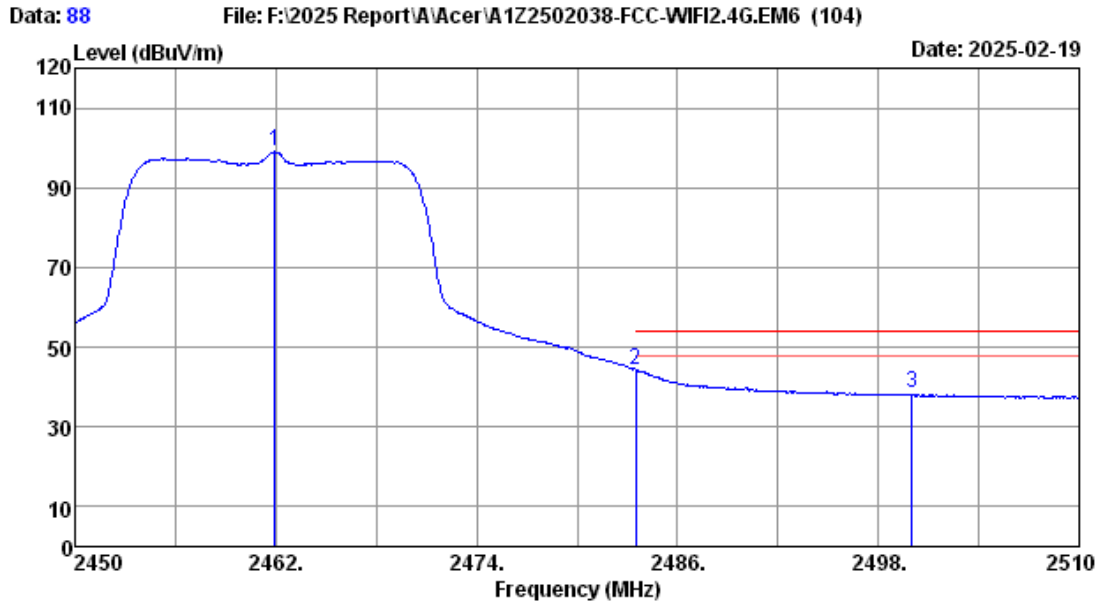
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 87
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2461.88	27.75	5.28	31.67	81.81	83.17	-----	-----	Average
2	2483.50	27.83	5.30	31.66	31.68	33.15	54.00	20.85	Average
3	2500.00	27.90	5.32	31.65	31.12	32.69	54.00	21.31	Average

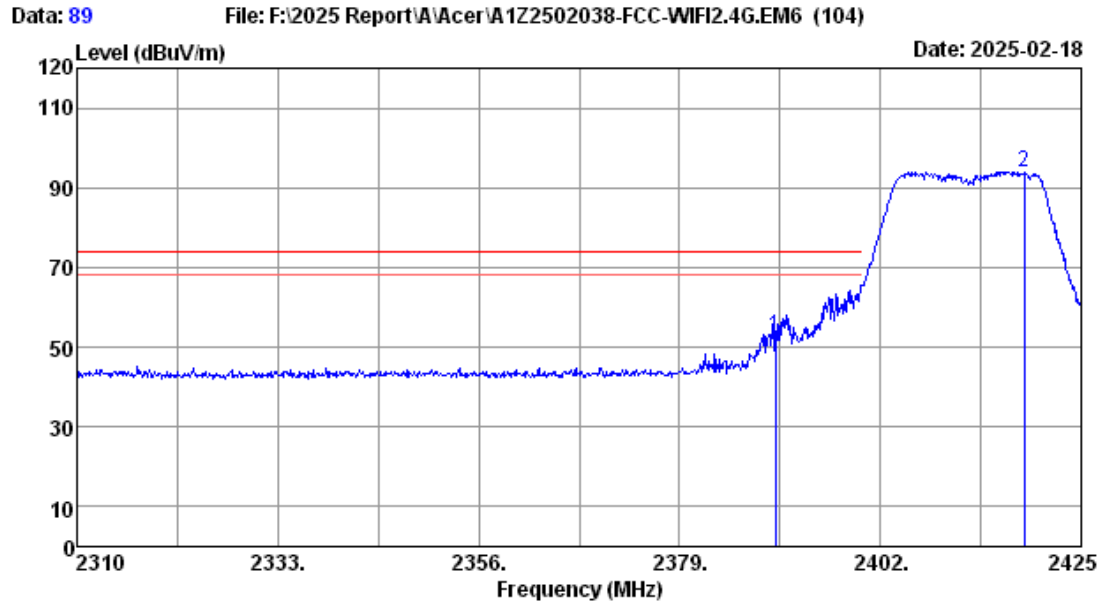
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 88
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11g 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2461.94	27.75	5.28	31.67	97.66	99.02	-----	-----	Average
2	2483.50	27.83	5.30	31.66	42.87	44.34	54.00	9.66	Average
3	2500.00	27.90	5.32	31.65	36.83	38.40	54.00	15.60	Average

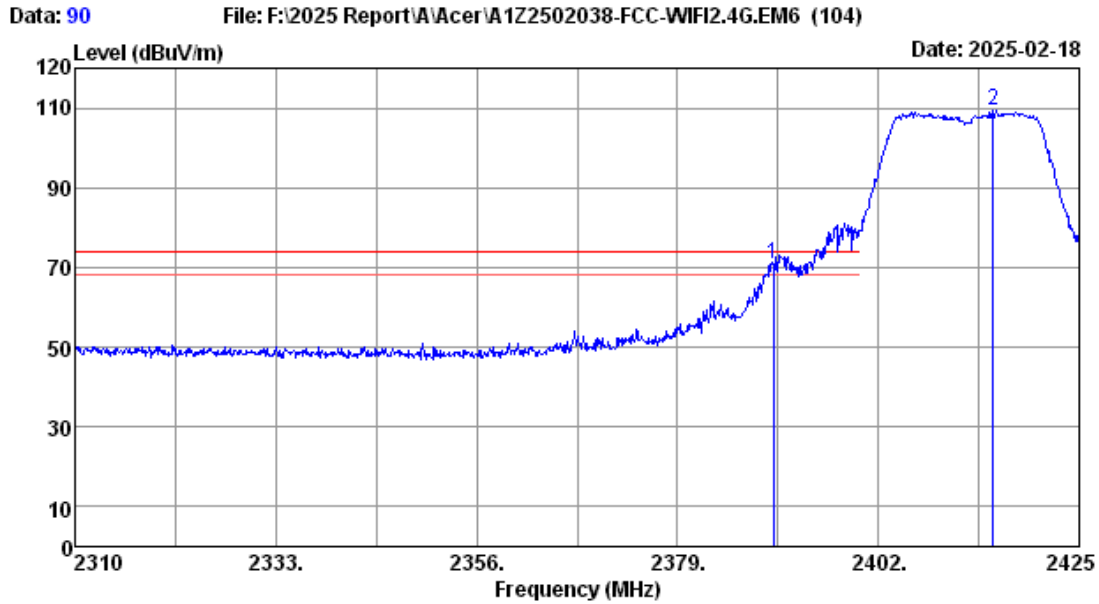
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 89
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	51.41	52.55	74.00	21.45	Peak
2	2418.45	27.70	5.24	31.69	92.80	94.05	-----	-----	Peak

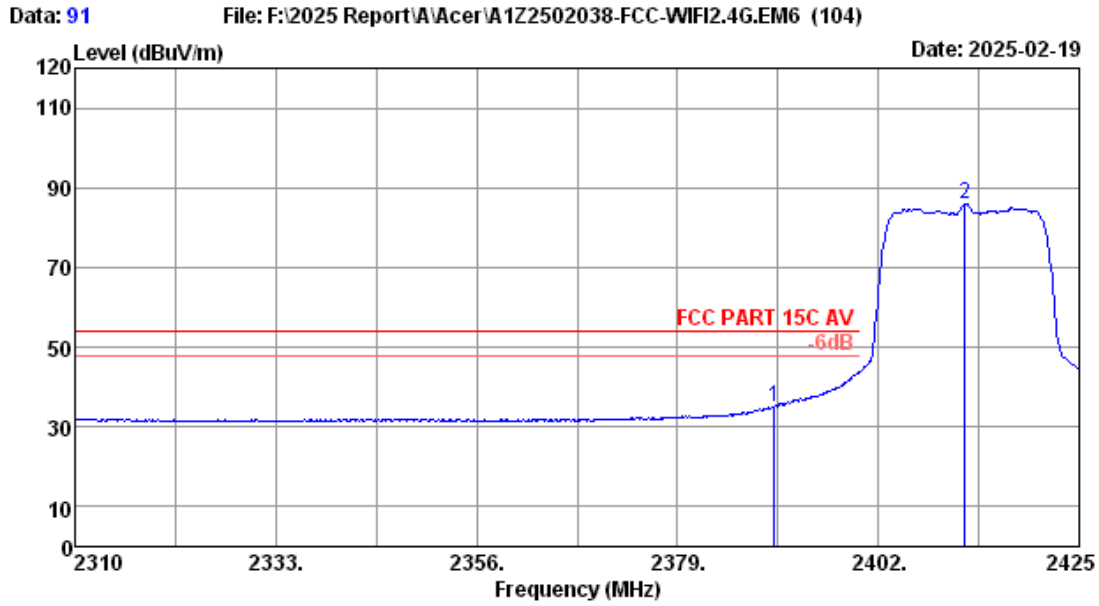
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 90
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	69.69	70.83	74.00	3.17	Peak
2	2415.11	27.70	5.22	31.69	108.18	109.41	-----	-----	Peak

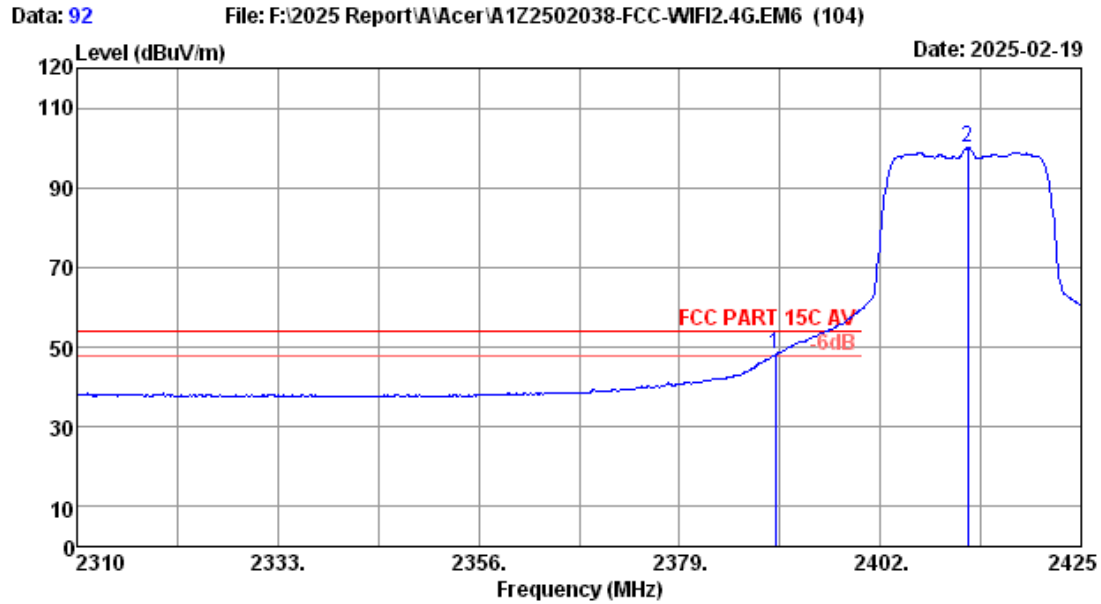
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 91
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.04	27.64	5.20	31.70	33.71	34.85	54.00	19.15	Average
2	2411.89	27.70	5.22	31.69	84.85	86.08	-----	-----	Average

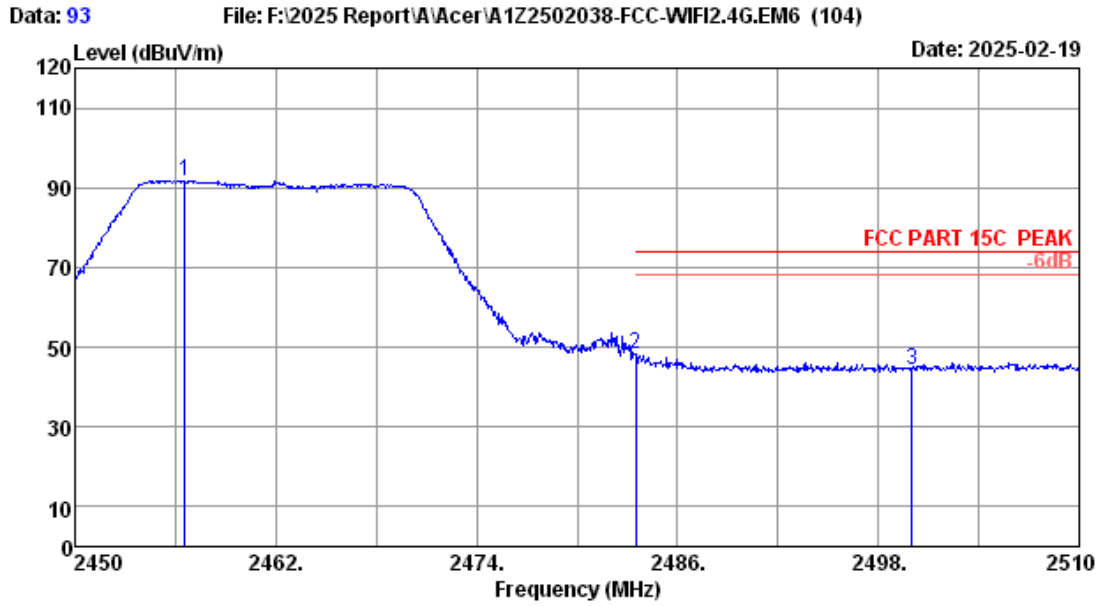
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 92
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2412MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	47.26	48.40	54.00	5.60	Average
2	2412.01	27.70	5.22	31.69	98.88	100.11	-----	-----	Average

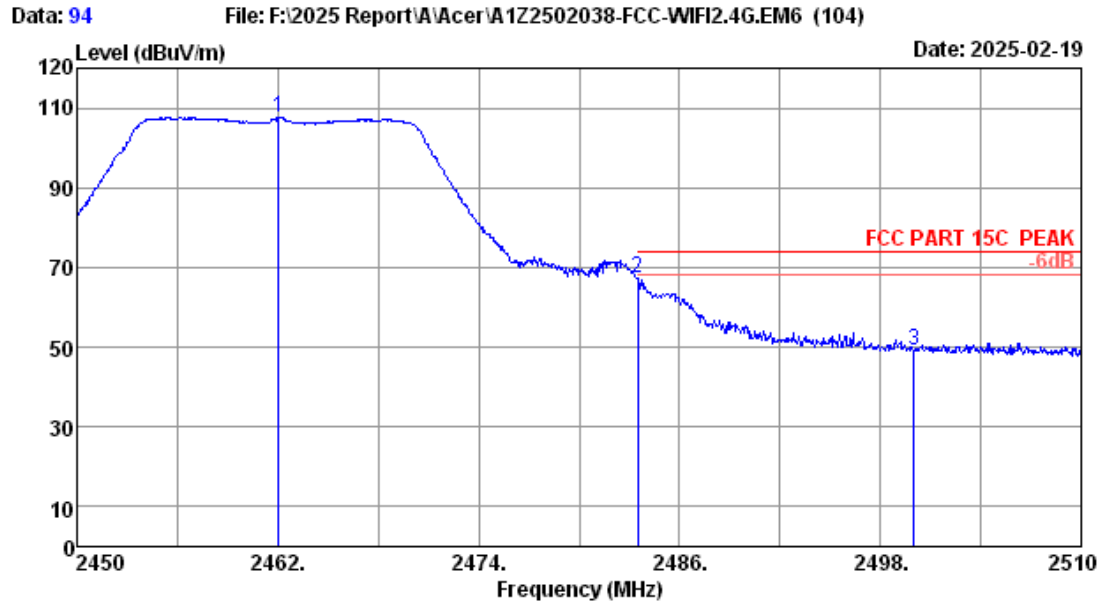
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 93
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2456.54	27.73	5.28	31.67	90.41	91.75	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	46.91	48.38	74.00	25.62	Peak
3	2500.00	27.90	5.32	31.65	42.79	44.36	74.00	29.64	Peak

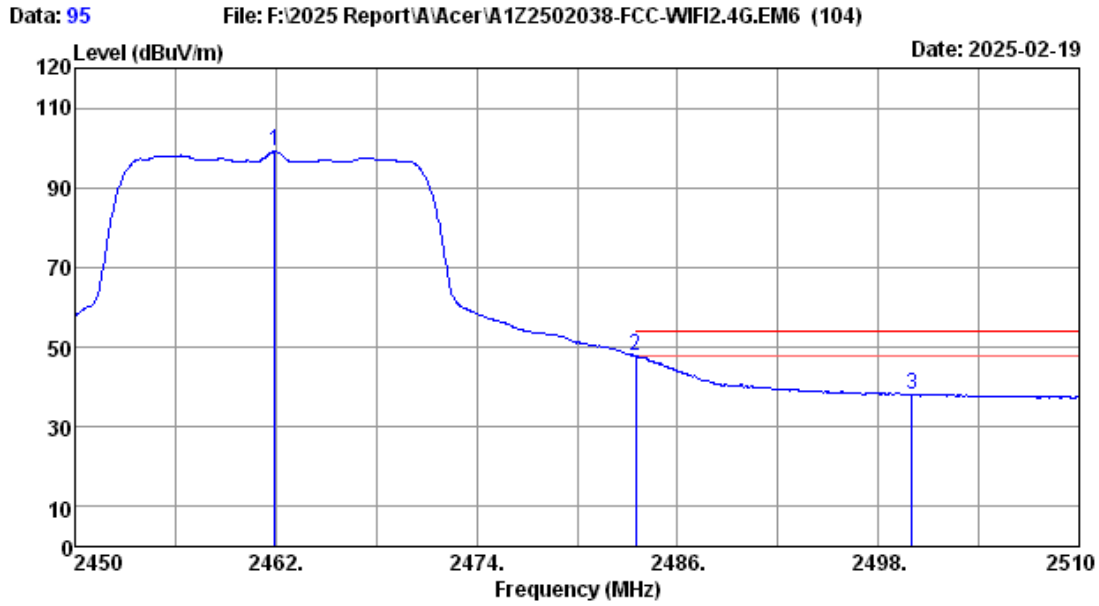
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 94
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2462.06	27.75	5.28	31.67	106.39	107.75	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	65.98	67.45	74.00	6.55	Peak
3	2500.00	27.90	5.32	31.65	47.63	49.20	74.00	24.80	Peak

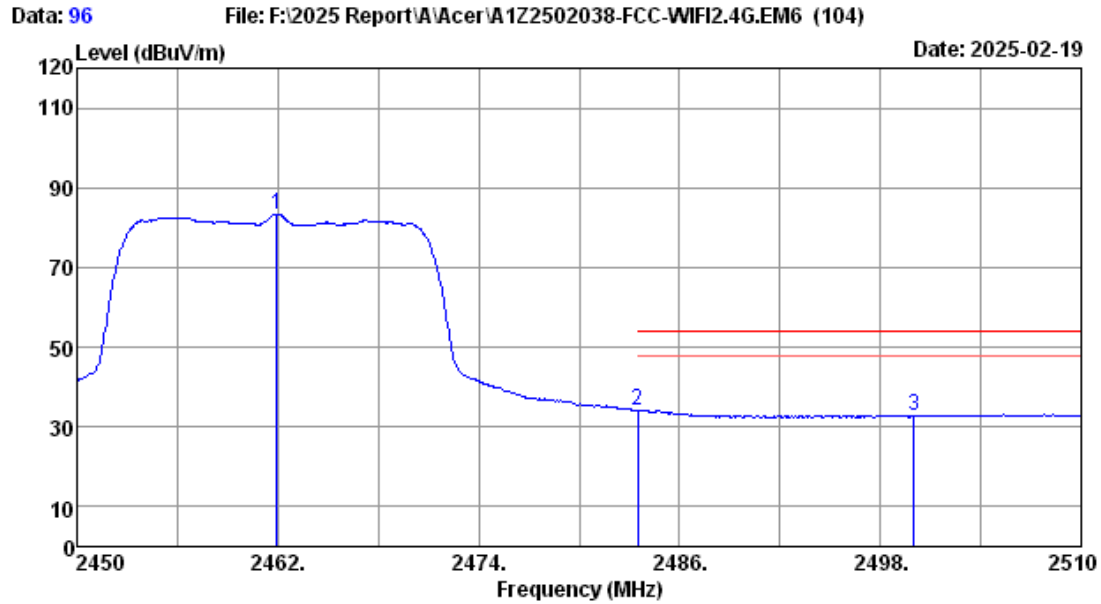
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 95
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2461.94	27.75	5.28	31.67	97.75	99.11	-----	-----	Average
2	2483.50	27.83	5.30	31.66	46.37	47.84	54.00	6.16	Average
3	2500.00	27.90	5.32	31.65	36.45	38.02	54.00	15.98	Average

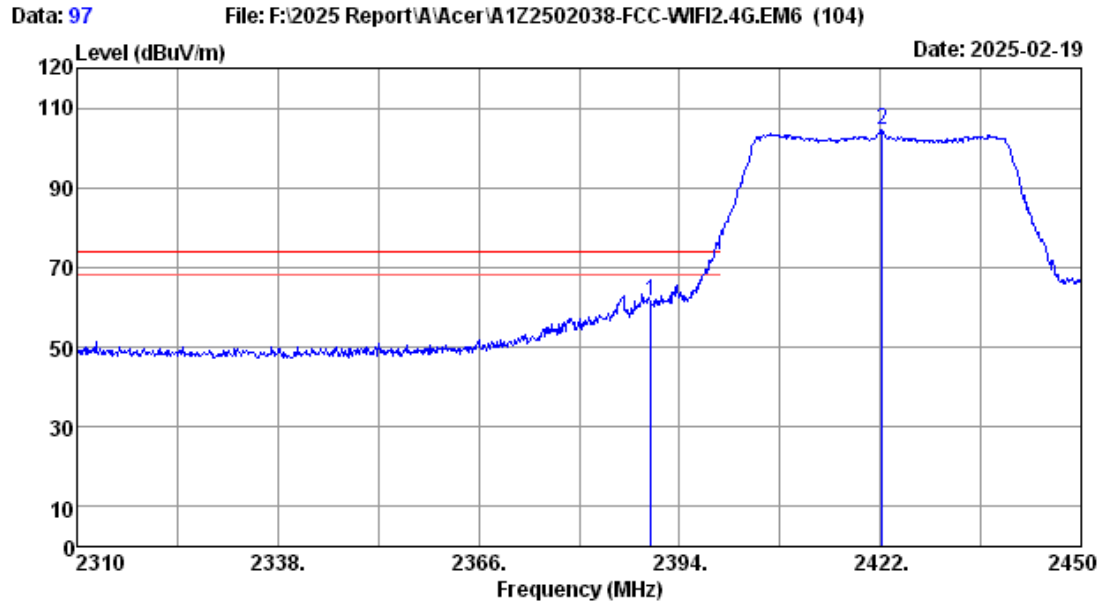
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 96
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT20 2462MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2461.94	27.75	5.28	31.67	82.03	83.39	-----	-----	Average
2	2483.50	27.83	5.30	31.66	32.73	34.20	54.00	19.80	Average
3	2500.00	27.90	5.32	31.65	31.00	32.57	54.00	21.43	Average

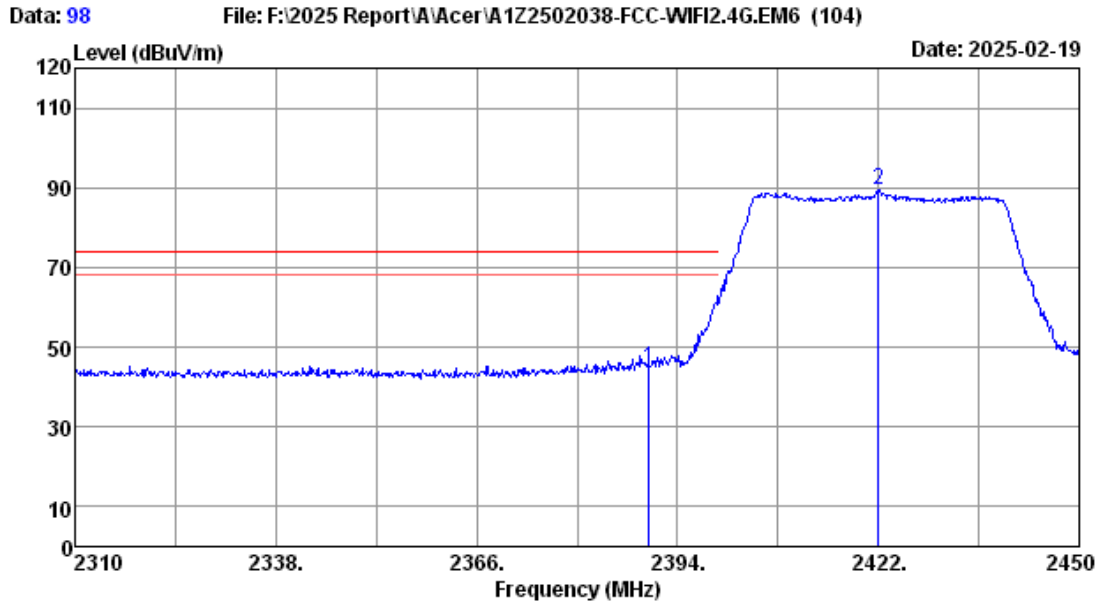
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 97
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2422MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	60.57	61.71	74.00	12.29	Peak
2	2422.28	27.70	5.24	31.69	103.06	104.31	-----	-----	Peak

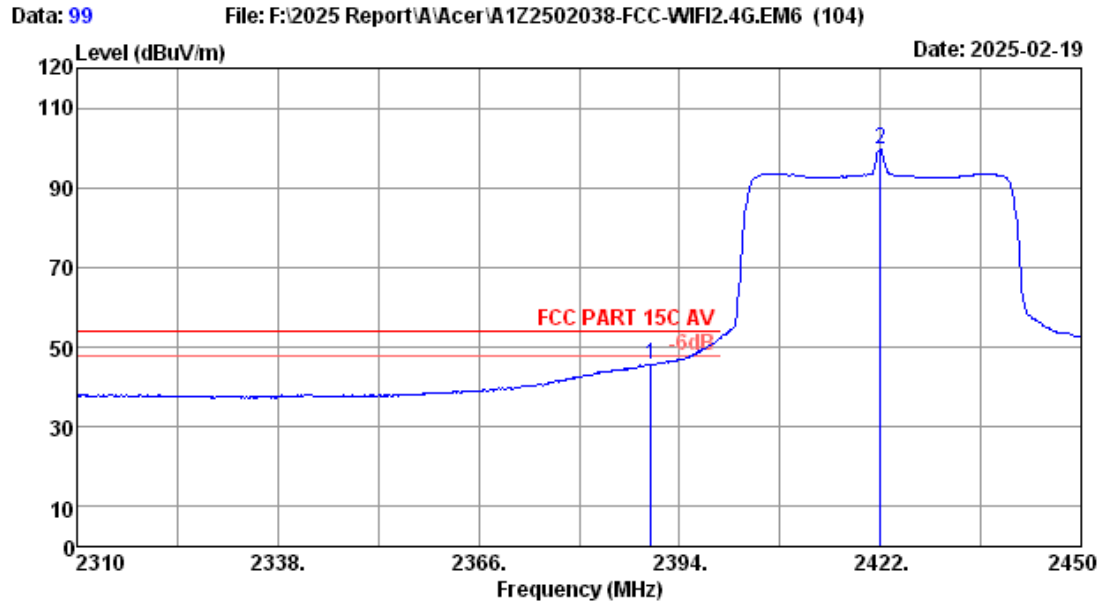
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 98
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2422MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	43.69	44.83	74.00	29.17	Peak
2	2422.00	27.70	5.24	31.69	88.32	89.57	-----	-----	Peak

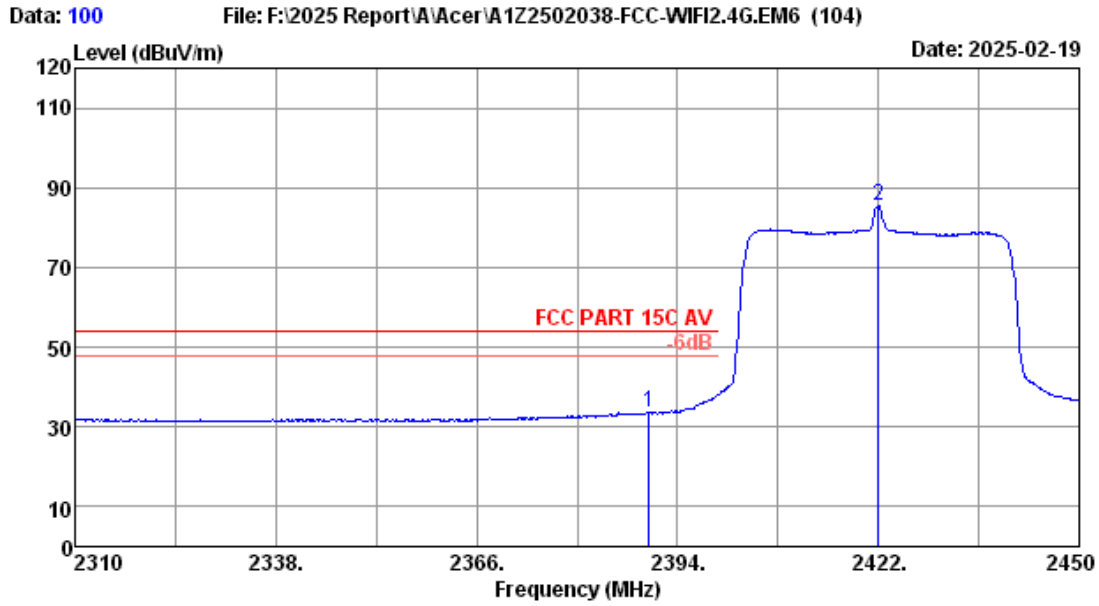
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 99
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2422MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	44.37	45.51	54.00	8.49	Average
2	2422.00	27.70	5.24	31.69	98.23	99.48	-----	-----	Average

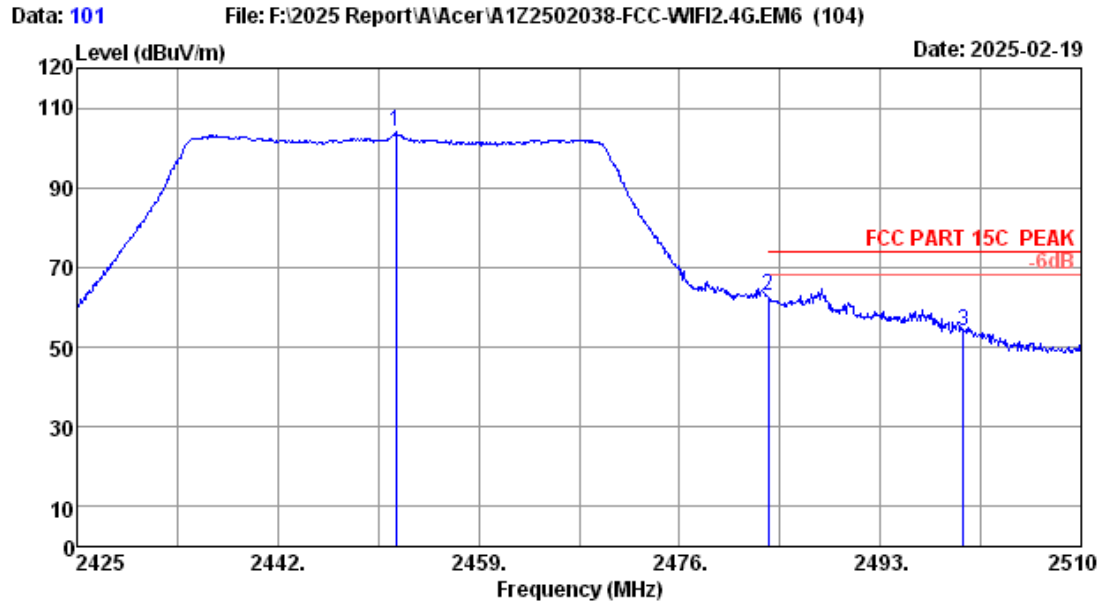
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 100
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2422MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2390.00	27.64	5.20	31.70	32.42	33.56	54.00	20.44	Average
2	2422.00	27.70	5.24	31.69	84.31	85.56	-----	-----	Average

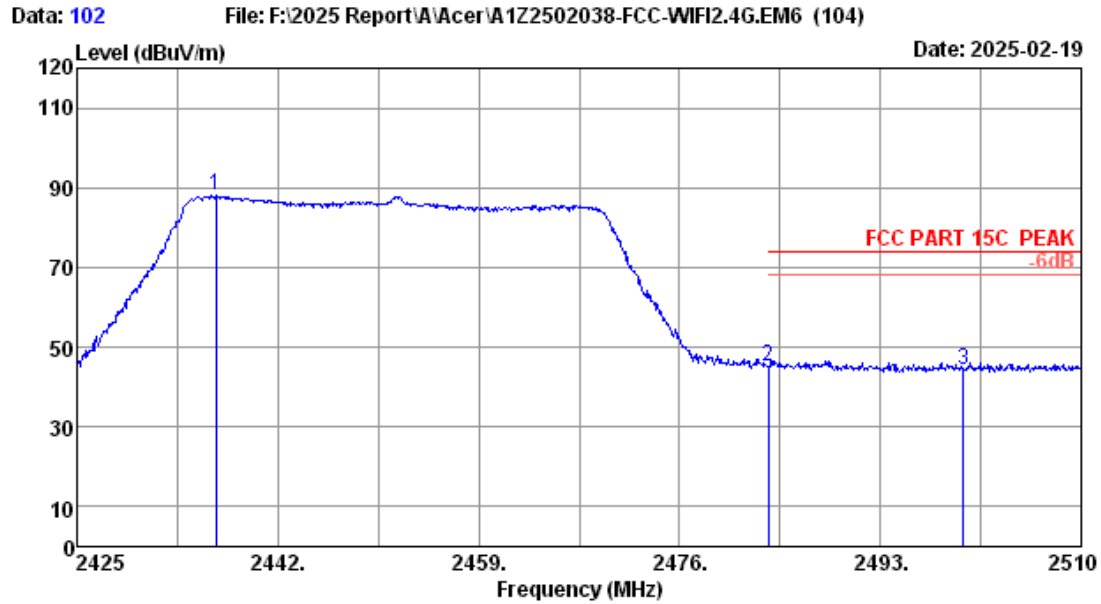
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 101
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2452MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin Limits (dB)	Remark
1	2452.03	27.71	5.26	31.67	102.60	103.90	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	61.47	62.94	74.00	11.06	Peak
3	2500.00	27.90	5.32	31.65	52.31	53.88	74.00	20.12	Peak

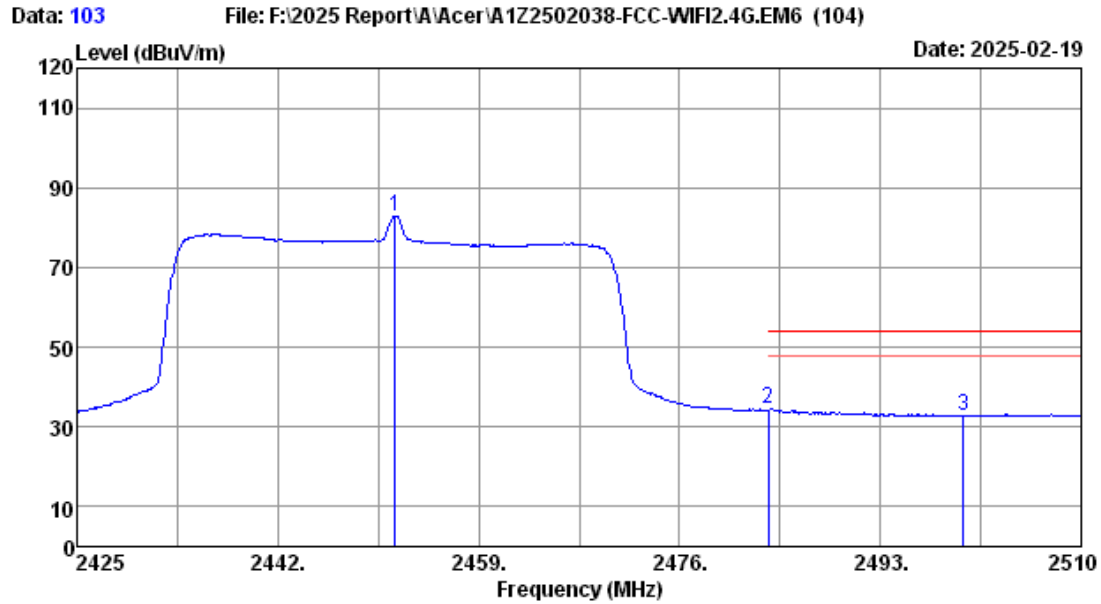
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 102
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2452MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2436.73	27.70	5.26	31.68	86.65	87.93	-----	-----	Peak
2	2483.50	27.83	5.30	31.66	43.84	45.31	74.00	28.69	Peak
3	2500.00	27.90	5.32	31.65	42.68	44.25	74.00	29.75	Peak

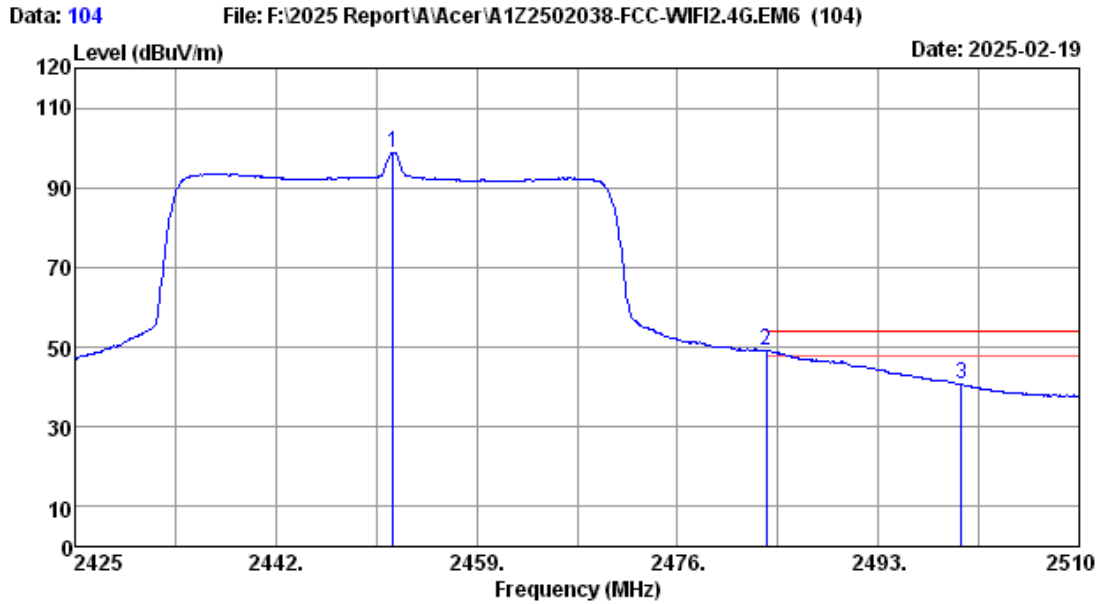
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
 -Amp factor(Peak)
 2. The emission levels that are 20dB below the official
 limit are not reported



Site no. : 3m Chamber Data no. : 103
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2452MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2451.95	27.71	5.26	31.67	81.61	82.91	-----	-----	Average
2	2483.50	27.83	5.30	31.66	32.87	34.34	54.00	19.66	Average
3	2500.00	27.90	5.32	31.65	31.14	32.71	54.00	21.29	Average

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



Site no. : 3m Chamber Data no. : 104
 Dis. / Ant. : 3m 2024 MCTD1209-3006 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Engineer : Epoch
 Env. / Ins. : 23.2°C/52.6%
 Test Mode : WIFI2.4G 11n HT40 2452MHz TX Mode ANT2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin Limits (dB)	Remark
1	2451.95	27.71	5.26	31.67	97.64	98.94	-----	-----	Average
2	2483.50	27.83	5.30	31.66	47.64	49.11	54.00	4.89	Average
3	2500.00	27.90	5.32	31.65	39.13	40.70	54.00	13.30	Average

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

7. 6dB & 99% Bandwidth Test

7.1.Limit

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

7.2.Test Procedure

Use the test method described in ANSI C63.10 Section 11.8:

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., $RBW = 100$ kHz, $VBW \geq 3 \times RBW$, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

Use the test method described in ANSI C63.10 Section 6.9.2:

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

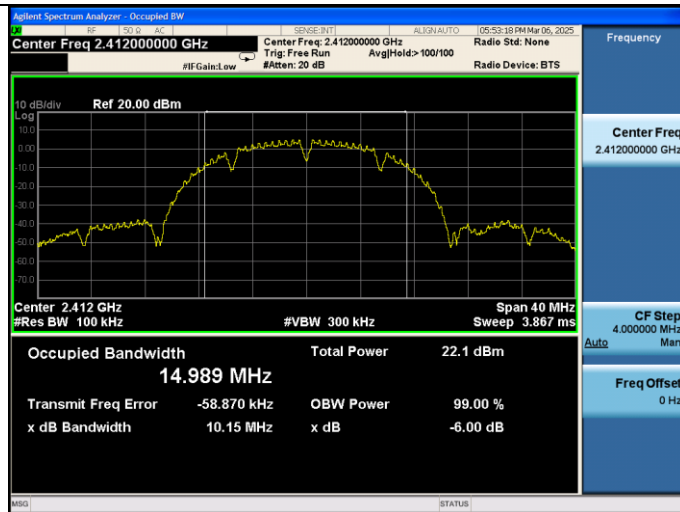
- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

7.3.Test Results

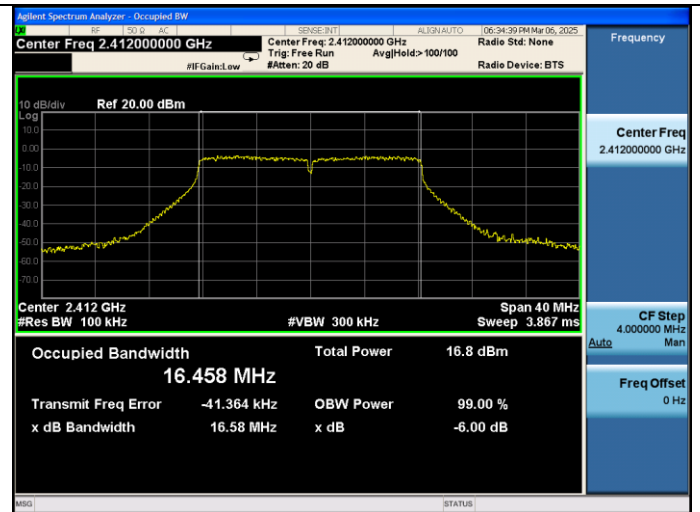
EUT: Notebook Computer		
M/N: N24G4		
Test date: 2025-03-06	Pressure: 102.6±1.0 kpa	Humidity: 53.5±3.0%
Tested by: Epoch	Test site: RF site	Temperature: 22.4±0.6℃

Test Mode	CH	6dBBandwidth (MHz)	Limit (KHz)
11b	CH1	10.15	≥ 500
	CH6	10.15	
	CH11	10.15	
11g	CH1	16.58	≥ 500
	CH6	16.58	
	CH11	16.59	
11n HT20	CH1	17.72	≥ 500
	CH6	17.74	
	CH11	17.71	
11n HT40	CH3	36.53	≥ 500
	CH6	36.55	
	CH9	36.54	
Conclusion: Pass			

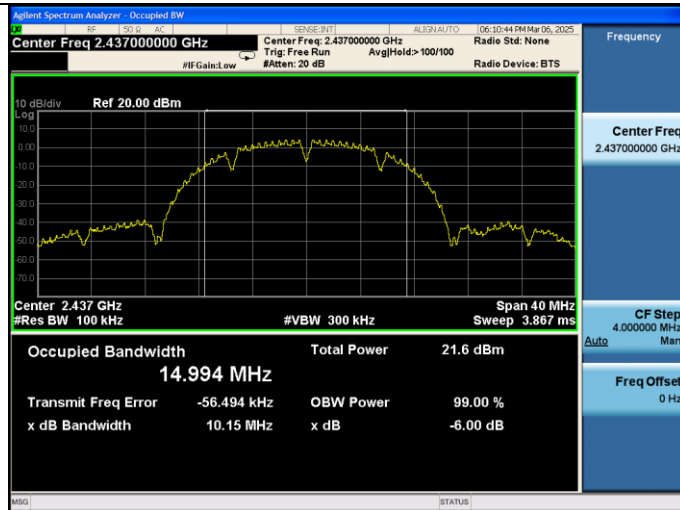
Test Mode: IEEE 802.11b
Test CH1: 2412MHz



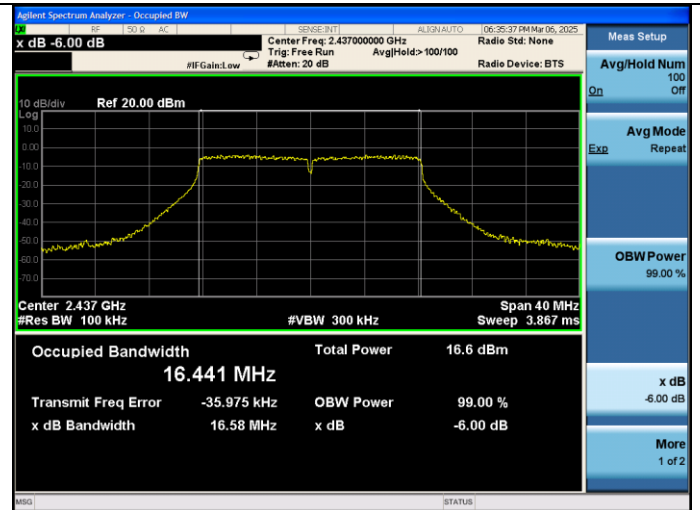
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



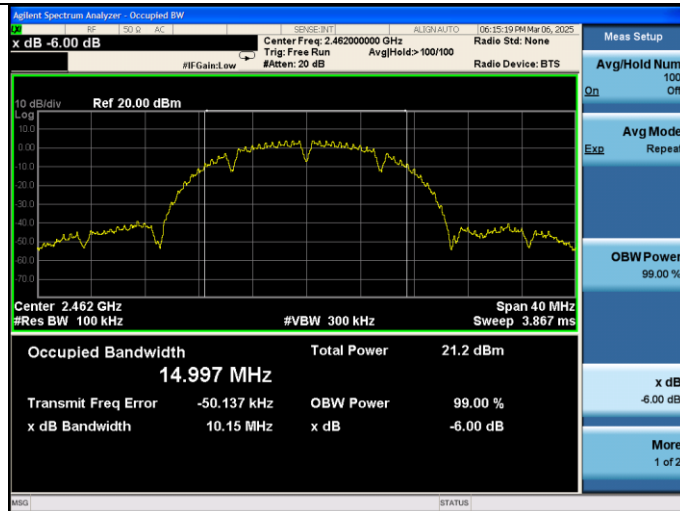
Test CH6: 2437MHz



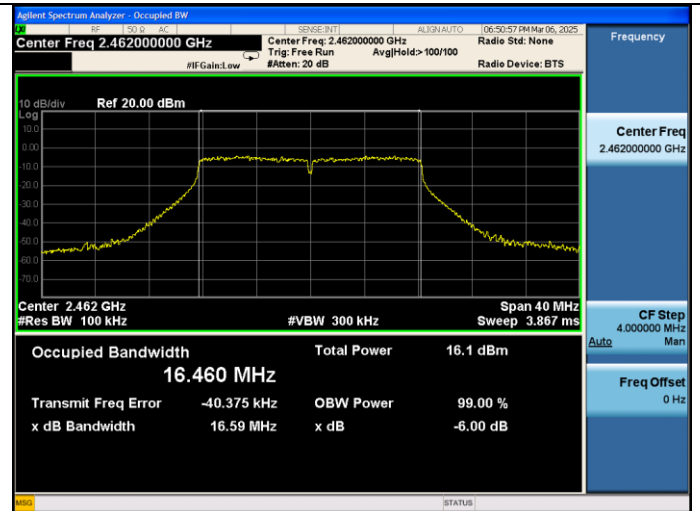
Test CH6: 2437MHz



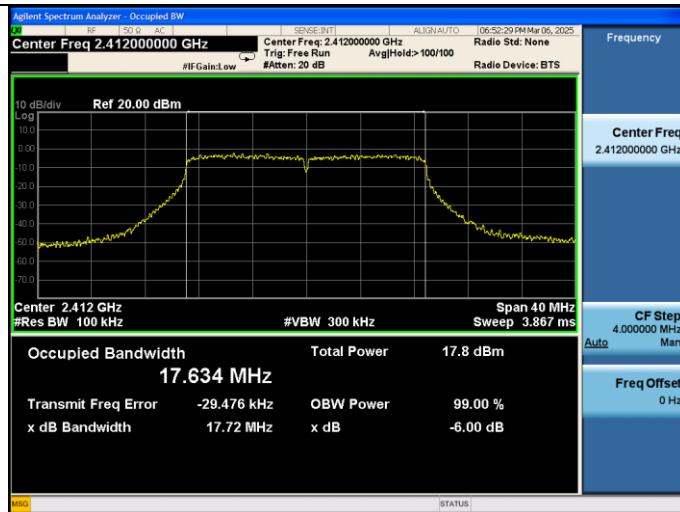
Test CH11: 2462MHz



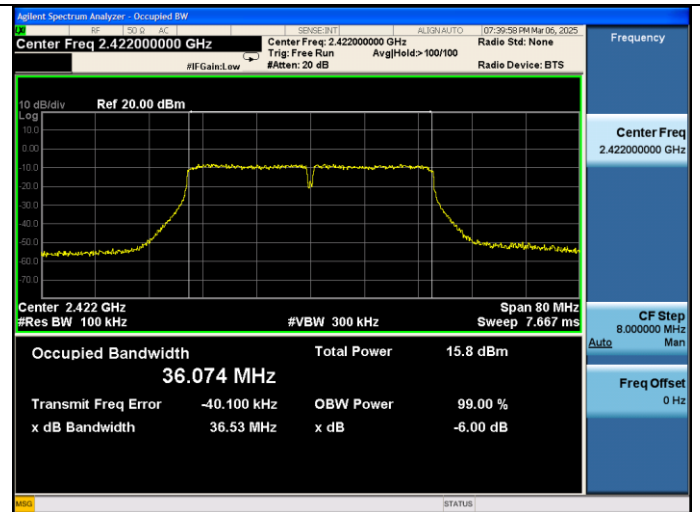
Test CH11: 2462MHz



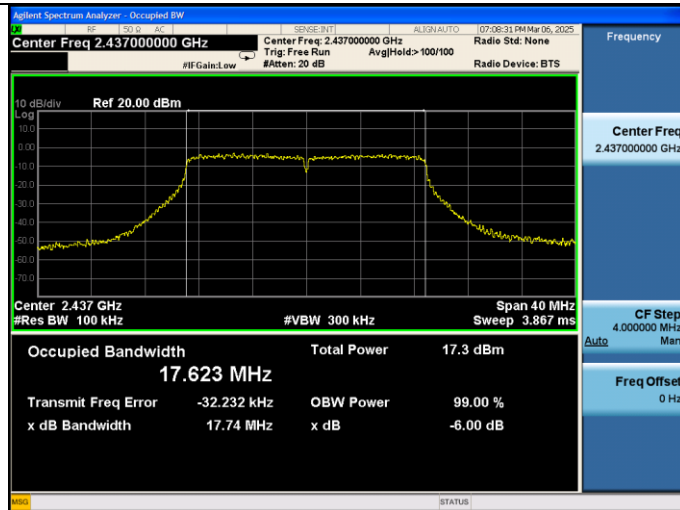
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



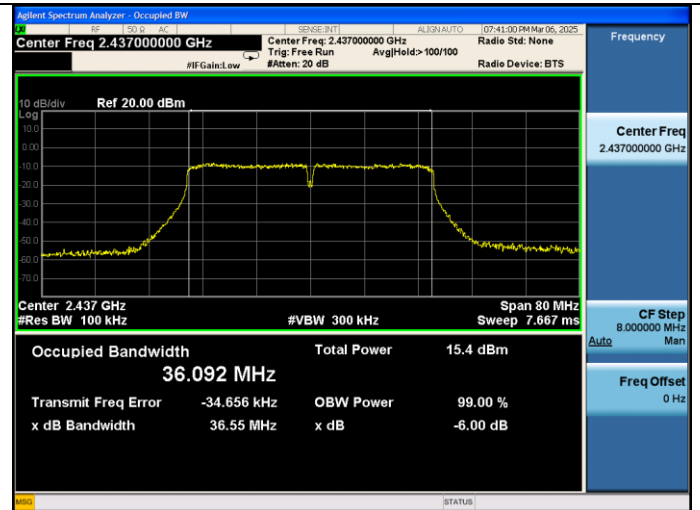
Test Mode: IEEE 802.11n HT40
Test CH1: 2422MHz



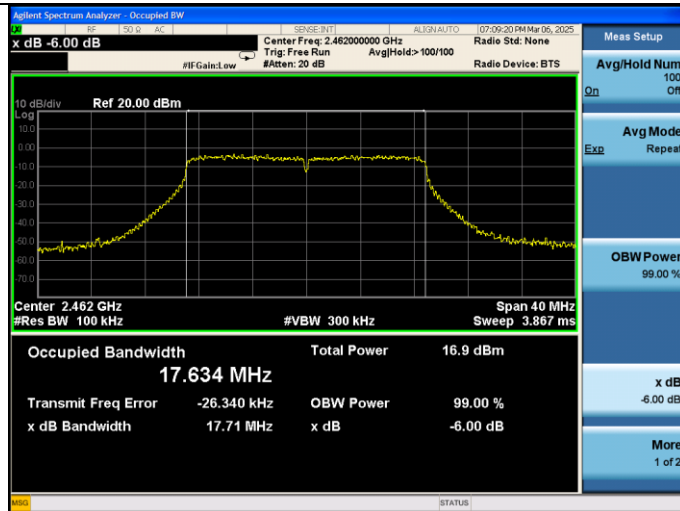
Test CH6: 2437MHz



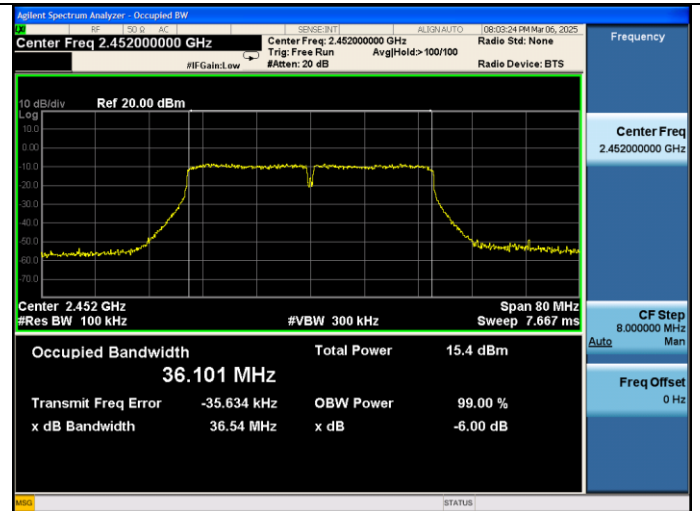
Test CH6: 2437MHz



Test CH11: 2462MHz



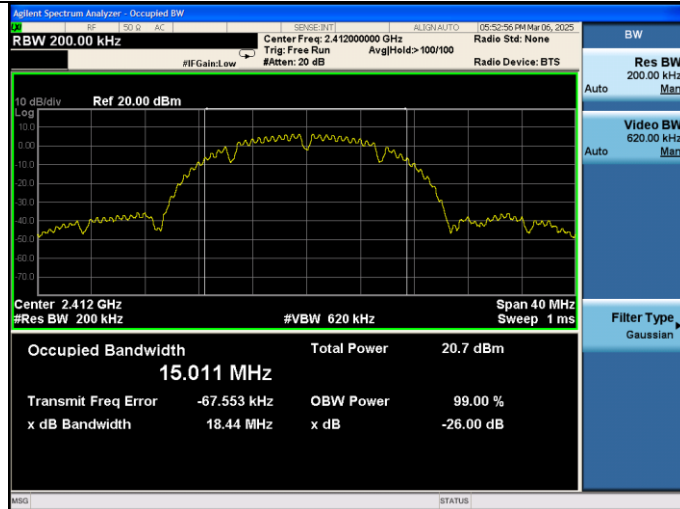
Test CH11: 2452MHz



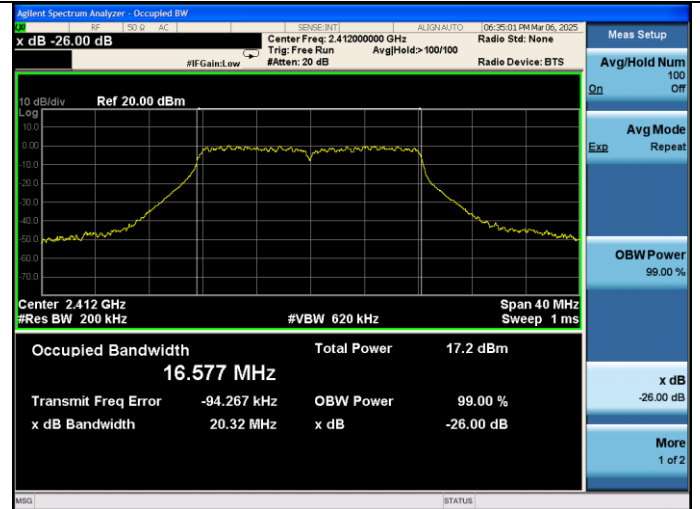
EUT: Notebook Computer		
M/N: N24G4		
Test date: 2025-03-06	Pressure: 102.5±1.0 kpa	Humidity: 53.6±3.0%
Tested by: Epoch	Test site: RF site	Temperature: 22.4±0.6℃

Test Mode	CH	99%Bandwidth (MHz)	Limit (MHz)
11b	CH1	15.011	N/A
	CH6	15.020	
	CH11	15.015	
11g	CH1	16.577	N/A
	CH6	16.526	
	CH11	16.604	
11n HT20	CH1	17.692	N/A
	CH6	17.692	
	CH11	17.702	
11n HT40	CH3	36.254	N/A
	CH6	36.246	
	CH9	36.270	
Conclusion: Pass			

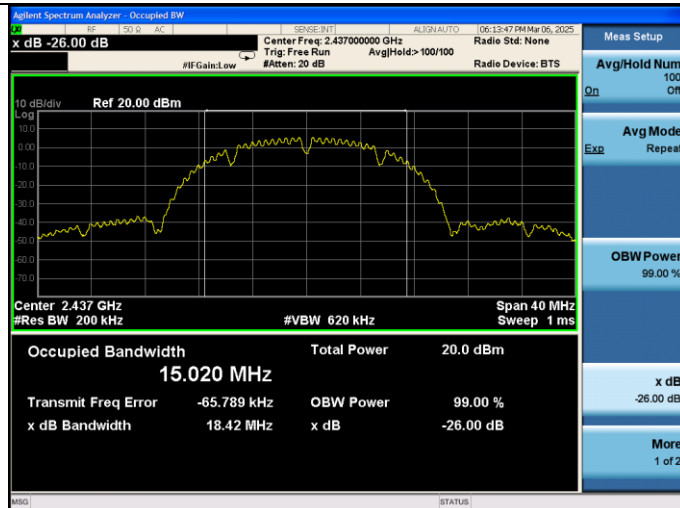
Test Mode: IEEE 802.11b
Test CH1: 2412MHz



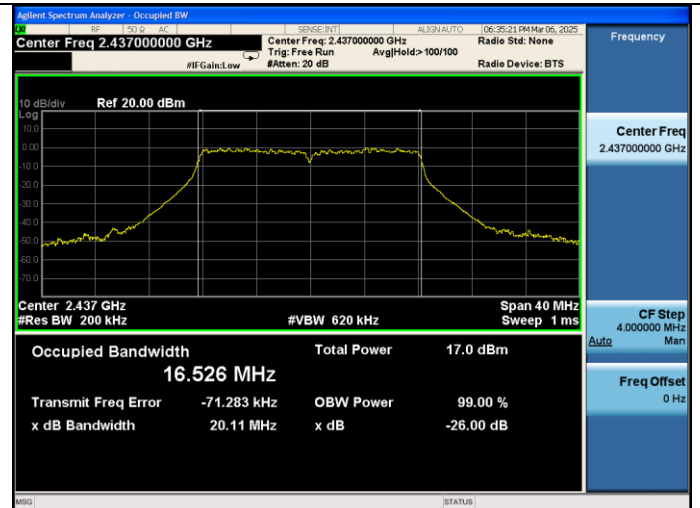
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



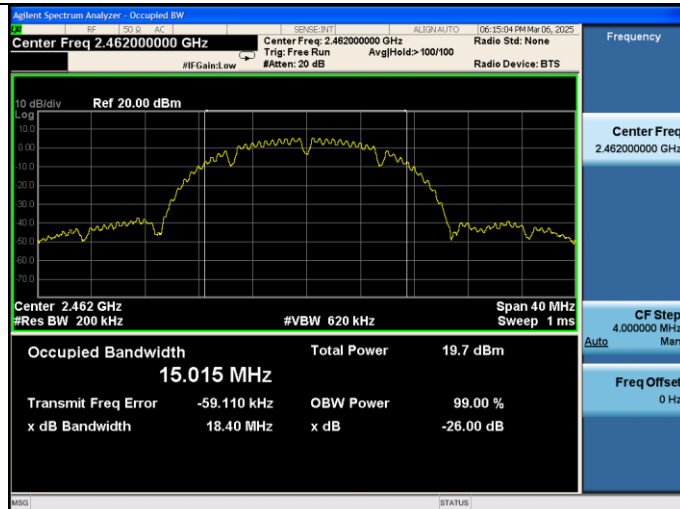
Test CH6: 2437MHz



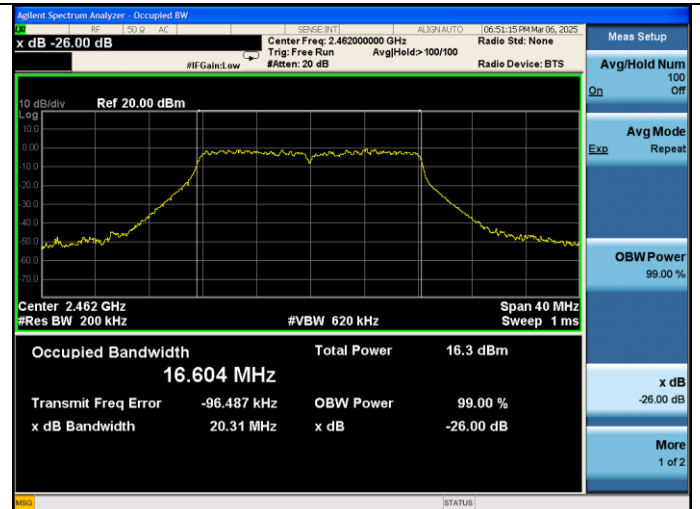
Test CH6: 2437MHz



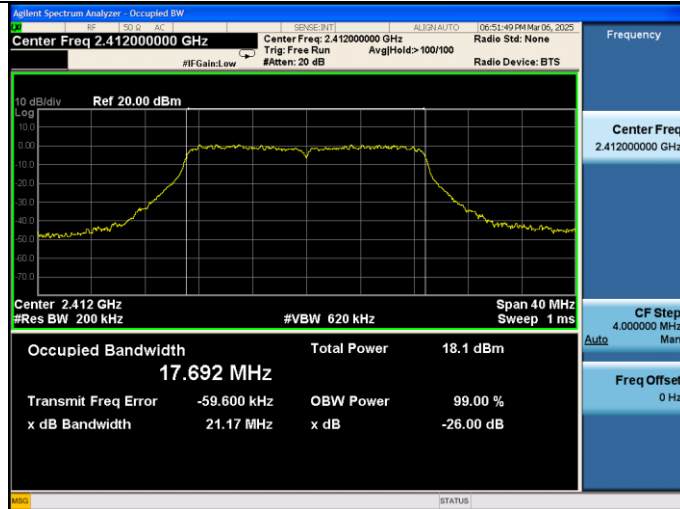
Test CH11: 2462MHz



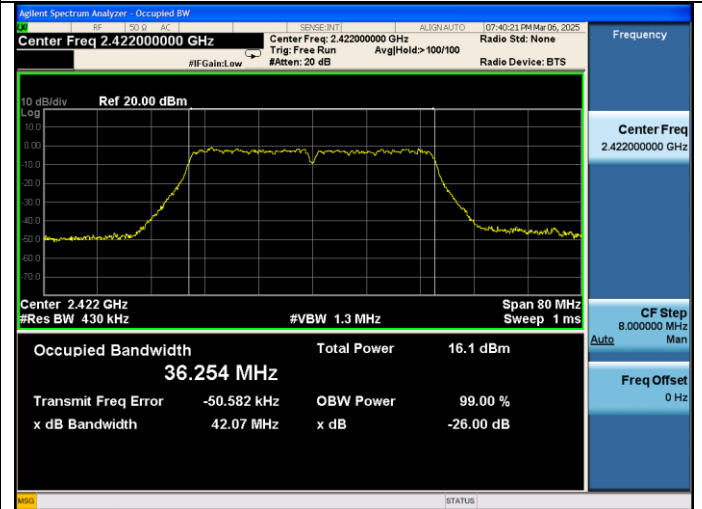
Test CH11: 2462MHz



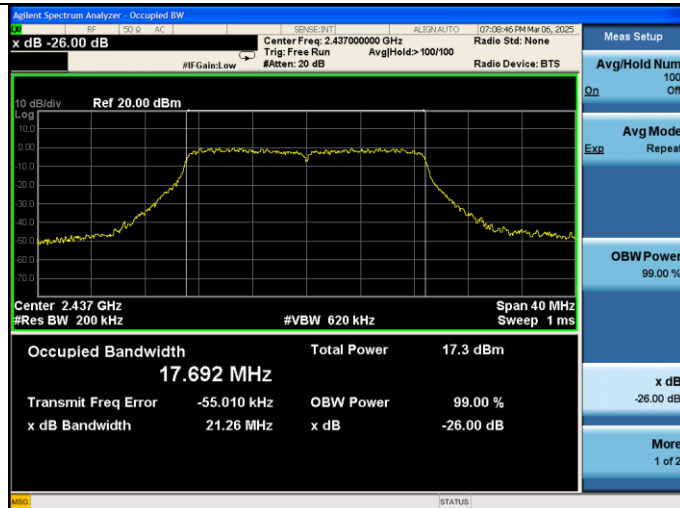
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



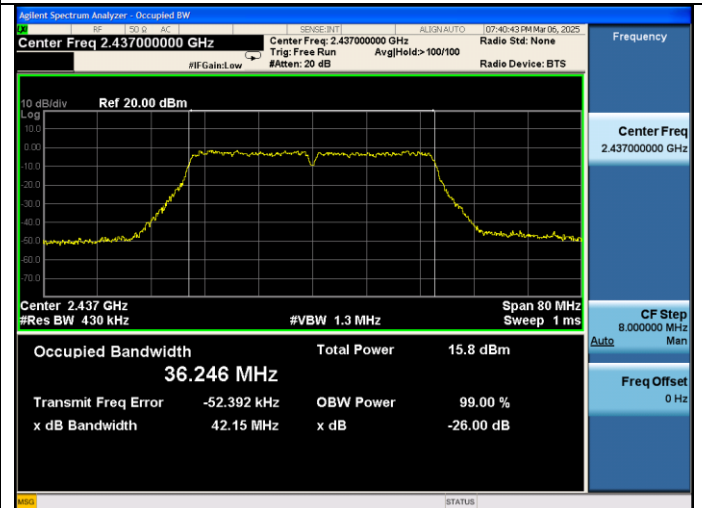
Test Mode: IEEE 802.11n HT40
Test CH1: 2422MHz



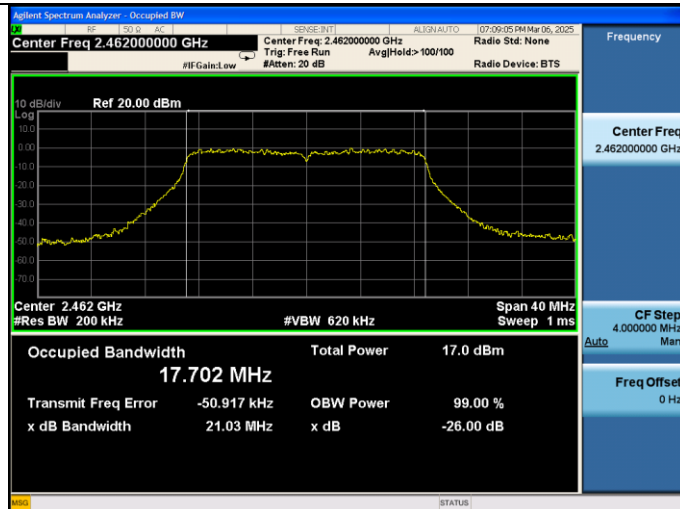
Test CH6: 2437MHz



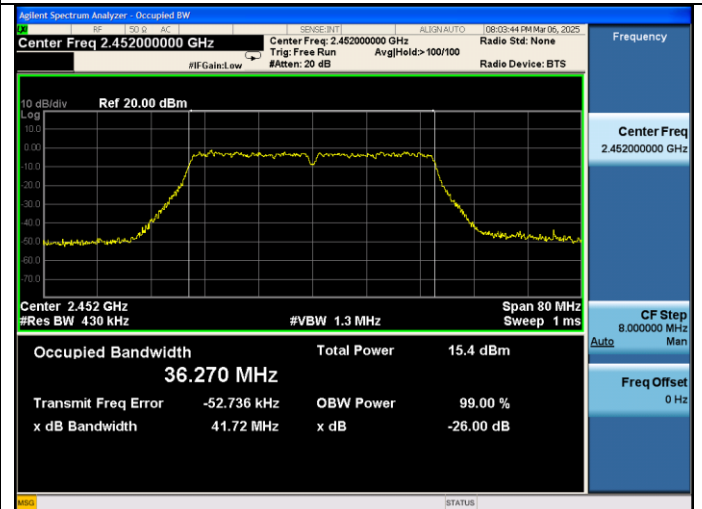
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH11: 2452MHz



8. OUTPUT POWER TEST

8.1.Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak output Power shall not exceed 1W(30dBm), As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level.

8.2.Test Procedure

- 1, Connected the EUT's antenna port to measure device by 10dB attenuator.
- 2, Use the test method described in ANSI C63.10 clause 11.9.2.2.2 Method AVGSA-1.
 - 1) Set span to at least 1.5 times the OBW.
 - 2) Set RBW = 1% to 5% of the OBW, not to exceed 1 MHz.
 - 3) Set VBW $\geq [3 \times \text{RBW}]$.
 - 4) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
 - 5) Sweep time = auto.
 - 6) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
 - 7) If transmit duty cycle $< 98\%$, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at the maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFF intervals) or at duty cycle $\geq 98\%$, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
 - 8) Trace average at least 100 traces in power averaging (rms) mode.
 - 9) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

8.3.Test Results

EUT: Notebook Computer		
M/N: N24G4		
Test date: 2025-02-19	Pressure: 103.1±1.0 kpa	Humidity: 51.5±3.0%
Tested by: Epoch	Test site: RF site	Temperature: 22.5±0.6°C

Test Mode	CH	Power Setting	Duty factor (dB)	Output Power (dBm)	Limit (dBm)
11b	CH1	43	0	16.940	30
	CH6	43	0	16.620	
	CH11	43	0	16.390	
11g	CH1	43	0	11.820	30
	CH6	43	0	11.440	
	CH11	43	0	11.310	
11n HT20	CH1	45	0	12.450	30
	CH6	45	0	12.200	
	CH11	45	0	11.900	
11n HT40	CH3	40	0	10.270	30
	CH6	40	0	10.170	
	CH9	40	0	10.070	
Conclusion: Pass					