

99% Occupied Bandwidth

Test Information:

|             |             |              |              |
|-------------|-------------|--------------|--------------|
| Sample No.: | 2WE3-2      | Test Date:   | 2025/03/03   |
| Test Site:  | RF          | Test Mode:   | Transmitting |
| Tester:     | Rainbow Zhu | Test Result: | Pass         |

Environmental Conditions:

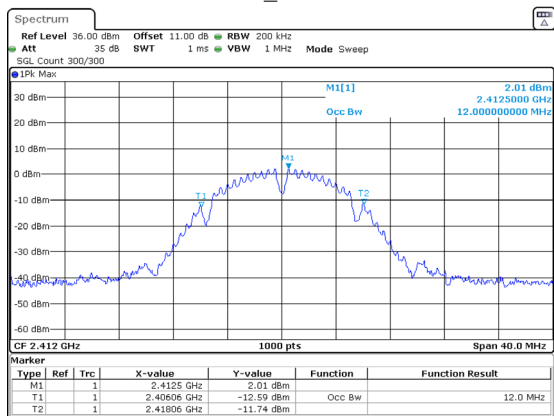
|                      |           |                              |       |                        |             |
|----------------------|-----------|------------------------------|-------|------------------------|-------------|
| Temperature:<br>(°C) | 24.6~25.7 | Relative<br>Humidity:<br>(%) | 44~47 | ATM Pressure:<br>(kPa) | 101.2~101.4 |
|----------------------|-----------|------------------------------|-------|------------------------|-------------|

**Test Data:**

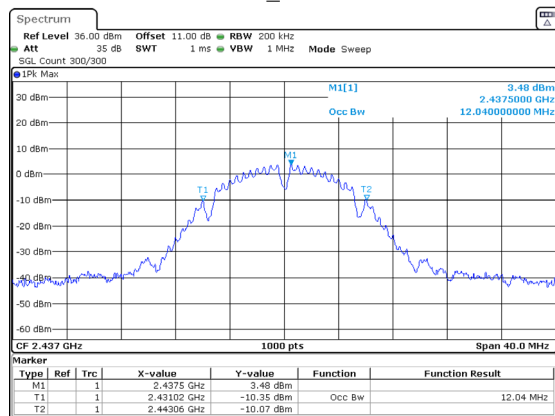
| Mode               | Test Frequency (MHz) | 99% OBW (MHz) |
|--------------------|----------------------|---------------|
| 802.11b            | 2412                 | 12            |
|                    | 2437                 | 12.040        |
|                    | 2462                 | 12.120        |
| 802.11g            | 2412                 | 16.880        |
|                    | 2437                 | 16.800        |
|                    | 2462                 | 16.760        |
| 802.11n20          | 2412                 | 18.080        |
|                    | 2437                 | 18.040        |
|                    | 2462                 | 17.960        |
| 802.11n40          | 2422                 | 36.960        |
|                    | 2437                 | 37.040        |
|                    | 2452                 | 37.040        |
| 802.11ax20_RU_Full | 2412                 | 19.240        |
|                    | 2437                 | 19.200        |
|                    | 2462                 | 19.240        |
| 802.11ax40_RU_Full | 2422                 | <b>38.240</b> |
|                    | 2437                 | 38.160        |
|                    | 2452                 | 38.160        |

2.4G

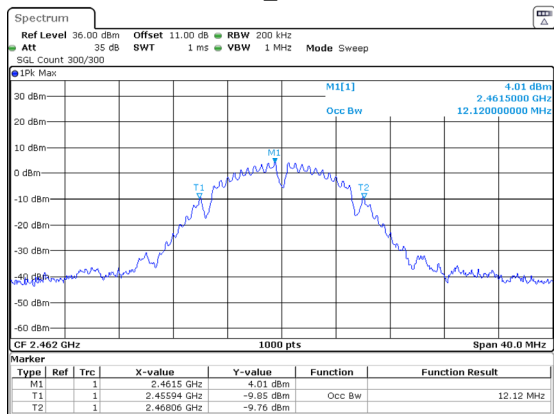
802.11b\_2412MHz



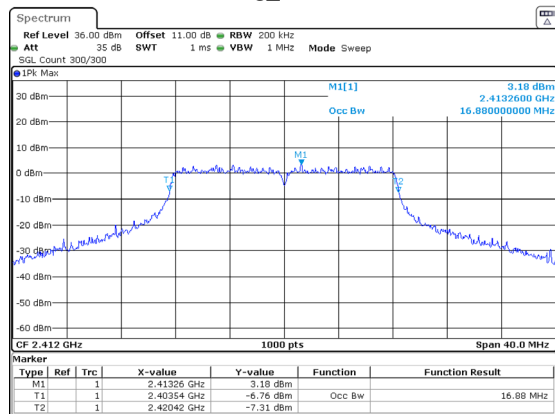
802.11b\_2437MHz



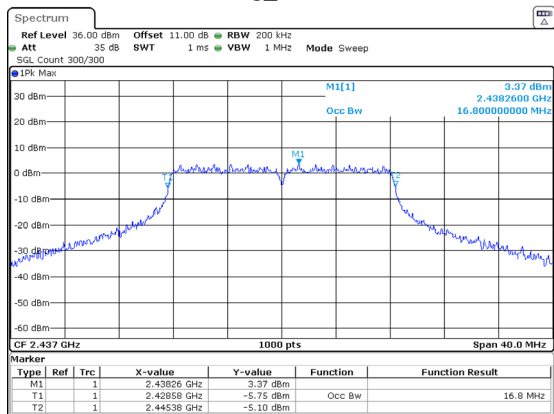
802.11b\_2462MHz



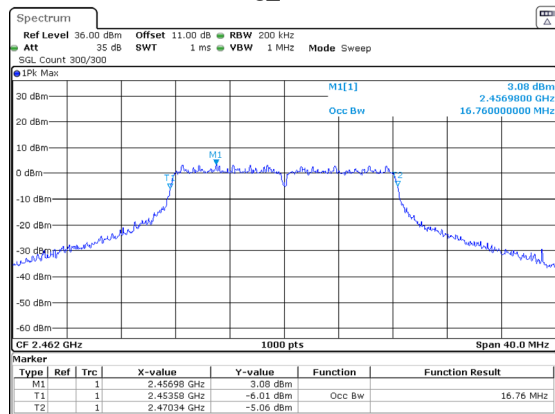
802.11g\_2412MHz



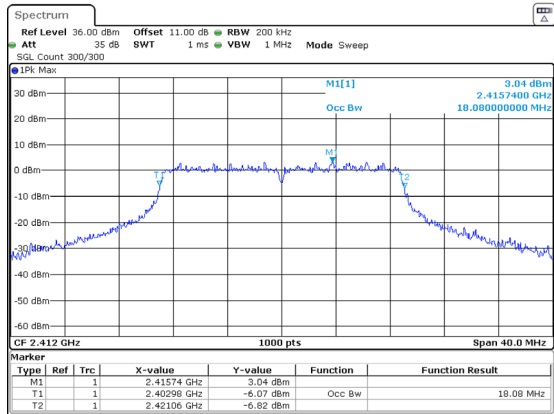
802.11g\_2437MHz



802.11g\_2462MHz

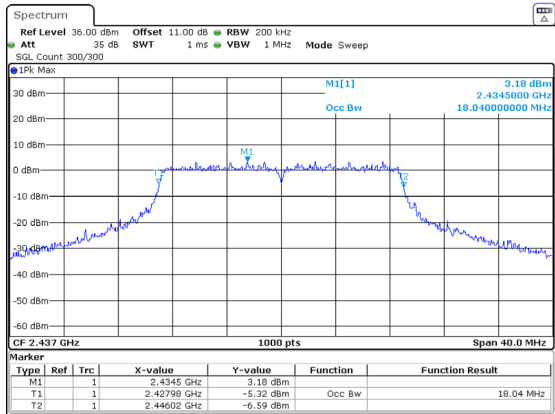


802.11n20\_2412MHz



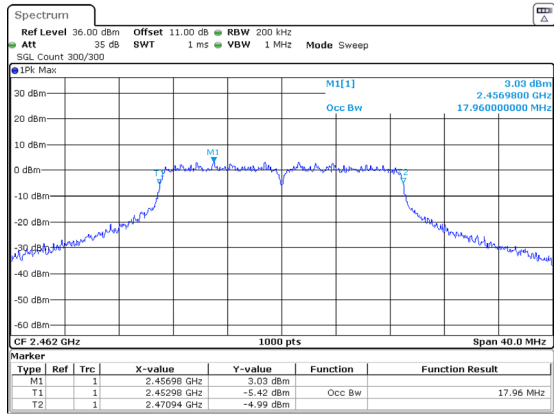
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:44:31

802.11n20\_2437MHz



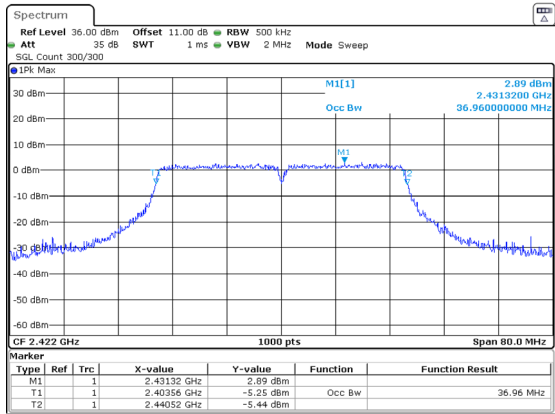
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:49:09

802.11n20\_2462MHz



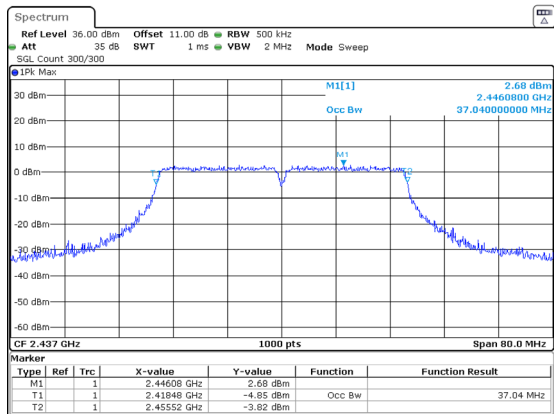
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:53:29

802.11n40\_2422MHz



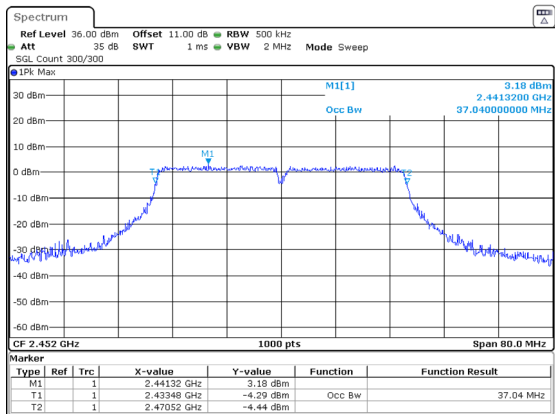
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:57:25

802.11n40\_2437MHz



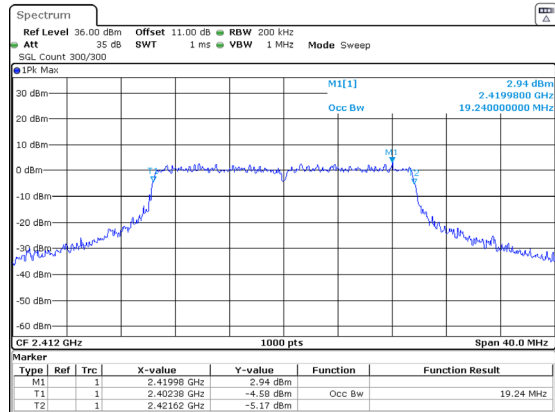
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:01:51

802.11n40\_2452MHz



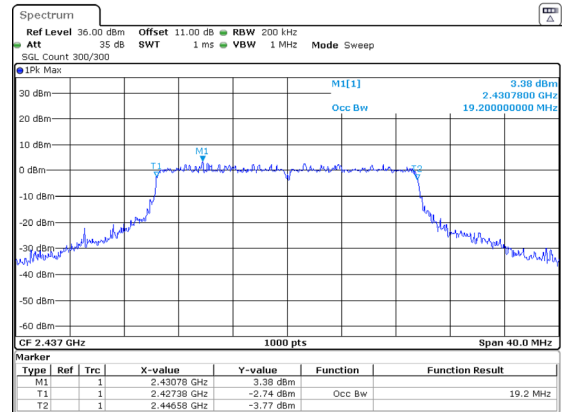
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:06:22

802.11ax20\_2412MHz\_RU\_Full



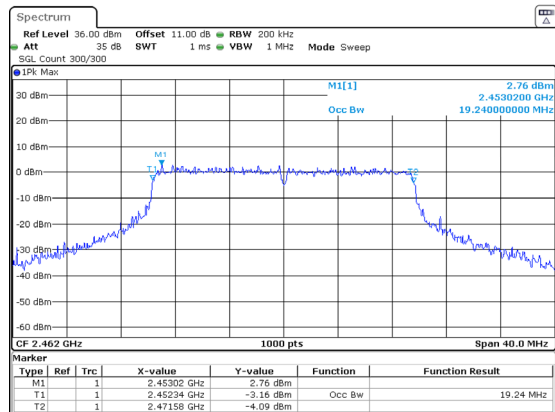
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Date: 3.MAR.2025 11:12:29

802.11ax20\_2437MHz\_RU\_Full



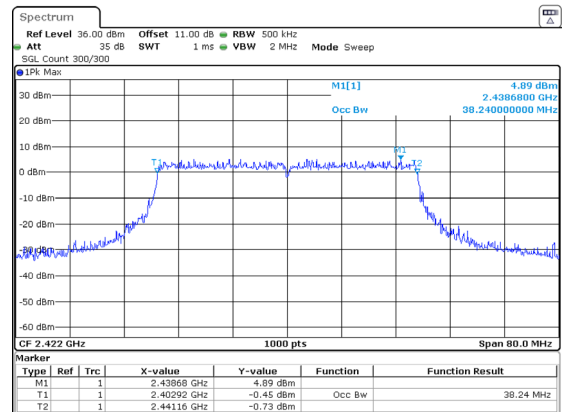
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:17:08

802.11ax20\_2462MHz\_RU\_Full



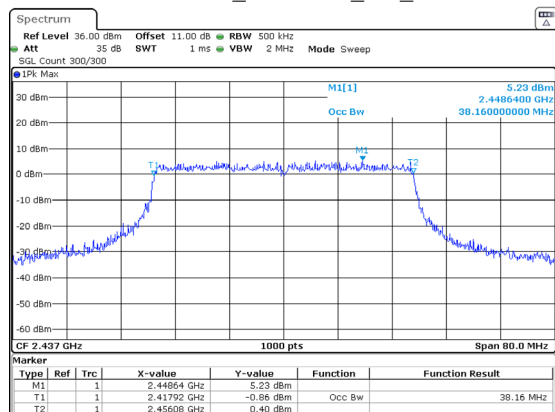
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:24:22

802.11ax40\_2422MHz\_RU\_Full



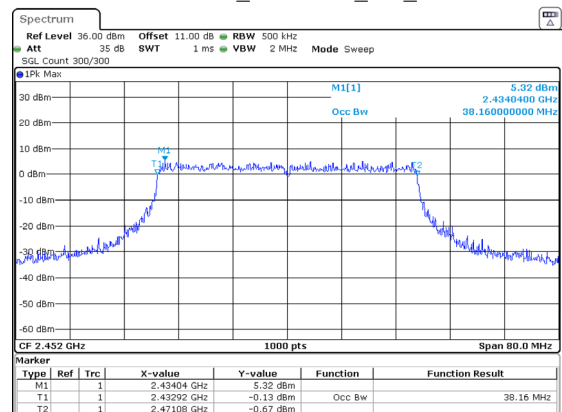
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:28:23

802.11ax40\_2437MHz\_RU\_Full



ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:32:59

802.11ax40\_2452MHz\_RU\_Full



ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:37:50

**Maximum Conducted Output Power****Test Information:**

|                    |             |                     |              |
|--------------------|-------------|---------------------|--------------|
| <b>Sample No.:</b> | 2WE3-2      | <b>Test Date:</b>   | 2025/03/03   |
| <b>Test Site:</b>  | RF          | <b>Test Mode:</b>   | Transmitting |
| <b>Tester:</b>     | Rainbow Zhu | <b>Test Result:</b> | Pass         |

**Environmental Conditions:**

|                              |           |                                       |       |                                |             |
|------------------------------|-----------|---------------------------------------|-------|--------------------------------|-------------|
| <b>Temperature:<br/>(°C)</b> | 24.6~25.7 | <b>Relative<br/>Humidity:<br/>(%)</b> | 44~47 | <b>ATM Pressure:<br/>(kPa)</b> | 101.2~101.4 |
|------------------------------|-----------|---------------------------------------|-------|--------------------------------|-------------|

**Test Data:**

| Mode               | Test Frequency (MHz) | Peak Output Power(dBm) | Limit (dBm) | Verdict |
|--------------------|----------------------|------------------------|-------------|---------|
| 802.11b            | 2412                 | 12.73                  | 30          | Pass    |
|                    | 2437                 | 14.26                  | 30          | Pass    |
|                    | 2462                 | 14.74                  | 30          | Pass    |
| 802.11g            | 2412                 | 21.05                  | 30          | Pass    |
|                    | 2437                 | 21.16                  | 30          | Pass    |
|                    | 2462                 | 20.83                  | 30          | Pass    |
| 802.11n20          | 2412                 | 20.94                  | 30          | Pass    |
|                    | 2437                 | <b>21.25</b>           | 30          | Pass    |
|                    | 2462                 | 20.74                  | 30          | Pass    |
| 802.11n40          | 2422                 | 20.37                  | 30          | Pass    |
|                    | 2437                 | 20.32                  | 30          | Pass    |
|                    | 2452                 | 20.12                  | 30          | Pass    |
| 802.11ax20_RU_Full | 2412                 | 20.68                  | 30          | Pass    |
|                    | 2437                 | 20.77                  | 30          | Pass    |
|                    | 2462                 | 20.75                  | 30          | Pass    |
| 802.11ax40_RU_Full | 2422                 | 21.09                  | 30          | Pass    |
|                    | 2437                 | 20.99                  | 30          | Pass    |
|                    | 2452                 | 20.66                  | 30          | Pass    |

Power Spectral Density

Test Information:

|             |             |              |              |
|-------------|-------------|--------------|--------------|
| Sample No.: | 2WE3-2      | Test Date:   | 2025/03/03   |
| Test Site:  | RF          | Test Mode:   | Transmitting |
| Tester:     | Rainbow Zhu | Test Result: | Pass         |

Environmental Conditions:

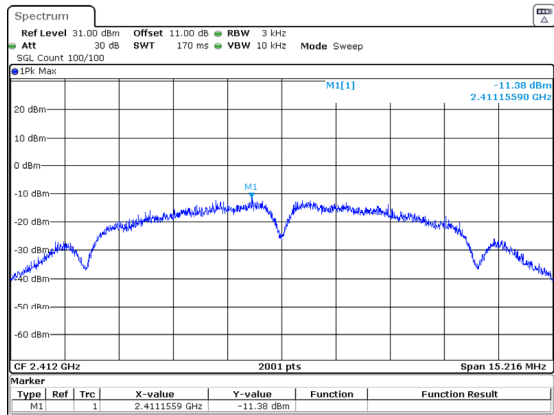
|                      |           |                              |       |                        |             |
|----------------------|-----------|------------------------------|-------|------------------------|-------------|
| Temperature:<br>(°C) | 24.6~25.7 | Relative<br>Humidity:<br>(%) | 44~47 | ATM Pressure:<br>(kPa) | 101.2~101.4 |
|----------------------|-----------|------------------------------|-------|------------------------|-------------|

**Test Data:**

| Mode               | Test Frequency (MHz) | Result (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|--------------------|----------------------|-------------------|------------------|---------|
| 802.11b            | 2412                 | -11.38            | 8                | Pass    |
|                    | 2437                 | -9.98             | 8                | Pass    |
|                    | 2462                 | <b>-9.94</b>      | 8                | Pass    |
| 802.11g            | 2412                 | -10.99            | 8                | Pass    |
|                    | 2437                 | -10.65            | 8                | Pass    |
|                    | 2462                 | -11.24            | 8                | Pass    |
| 802.11n20          | 2412                 | -11.47            | 8                | Pass    |
|                    | 2437                 | -11.15            | 8                | Pass    |
|                    | 2462                 | -11.87            | 8                | Pass    |
| 802.11n40          | 2422                 | -14.13            | 8                | Pass    |
|                    | 2437                 | -13.91            | 8                | Pass    |
|                    | 2452                 | -14.51            | 8                | Pass    |
| 802.11ax20_RU_Full | 2412                 | -12.18            | 8                | Pass    |
|                    | 2437                 | -12.22            | 8                | Pass    |
|                    | 2462                 | -13.10            | 8                | Pass    |
| 802.11ax40_RU_Full | 2422                 | -15.30            | 8                | Pass    |
|                    | 2437                 | -15.50            | 8                | Pass    |
|                    | 2452                 | -15.75            | 8                | Pass    |

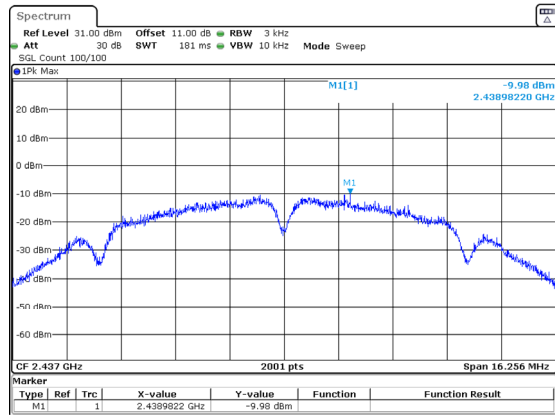
2.4G

802.11b\_2412MHz



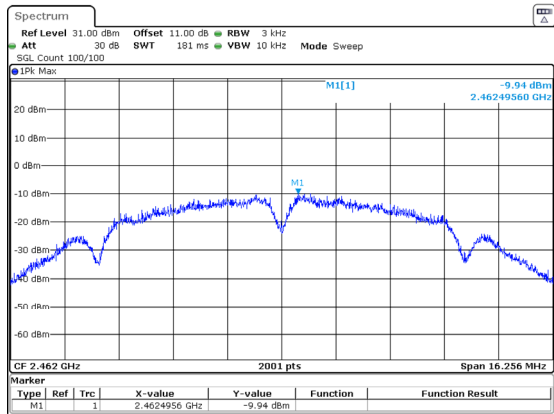
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:51:07

802.11b\_2437MHz



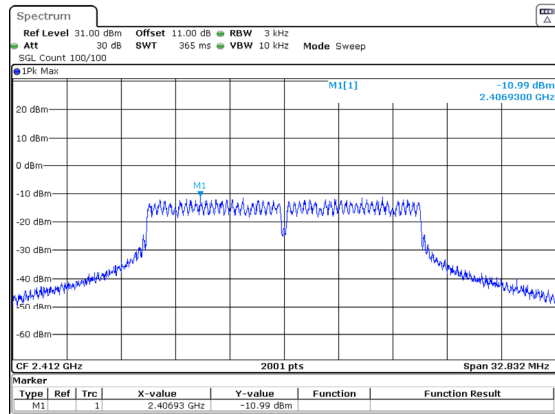
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:23:29

802.11b\_2462MHz



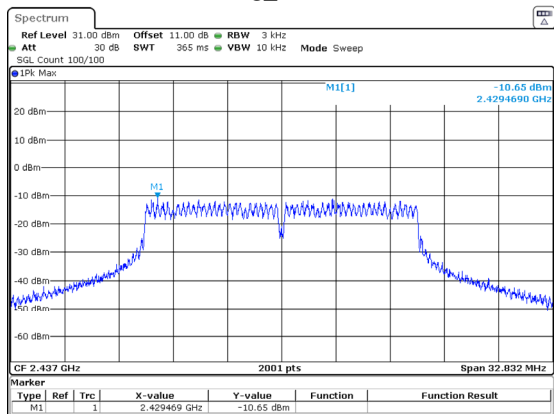
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:29:38

802.11g\_2412MHz



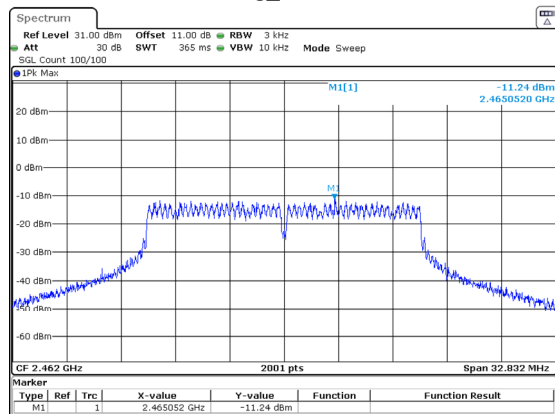
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:33:52

802.11g\_2437MHz



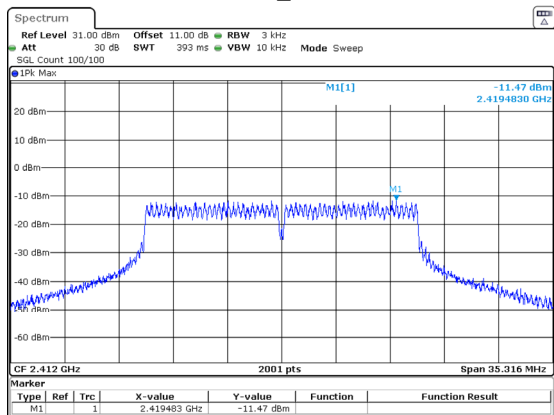
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:37:33

802.11g\_2462MHz



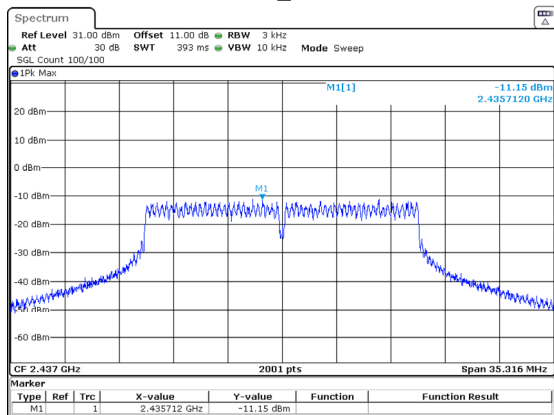
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:41:46

802.11n20\_2412MHz



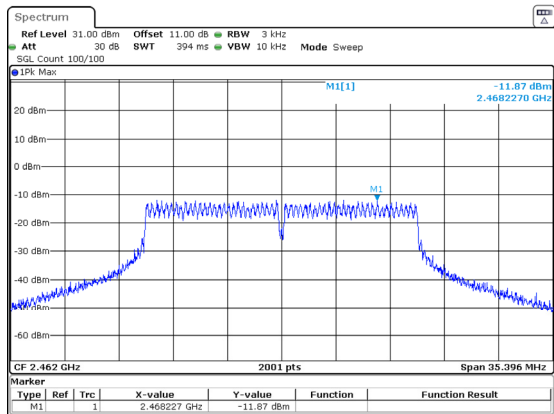
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:46:11

802.11n20\_2437MHz



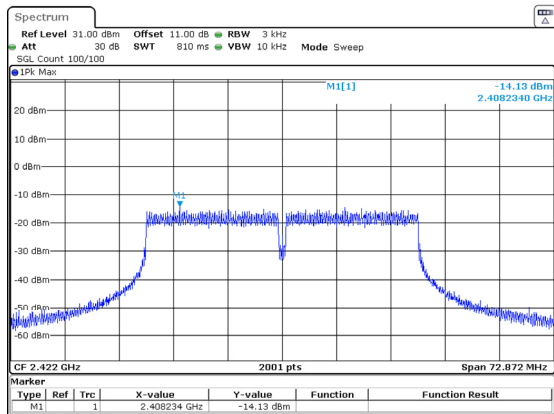
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:50:28

802.11n20\_2462MHz



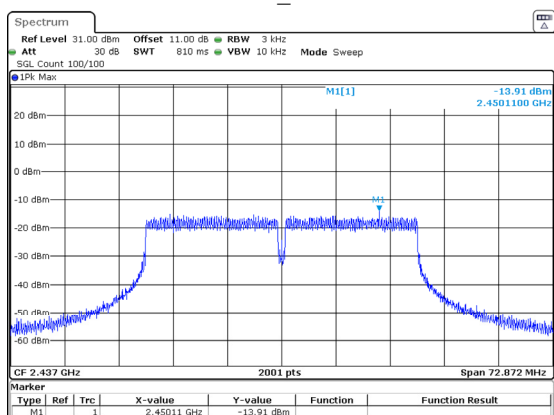
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Date: 3.MAR.2025 10:55:10

802.11n40\_2422MHz



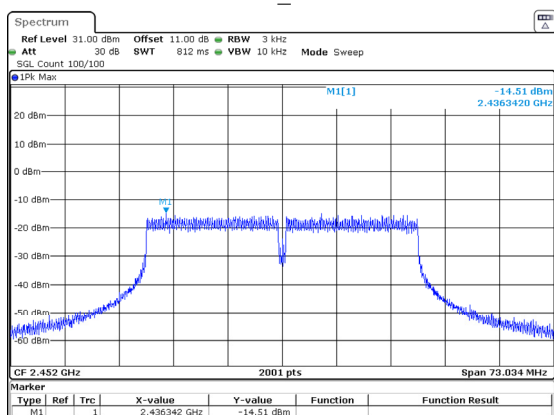
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:00:06

802.11n40\_2437MHz



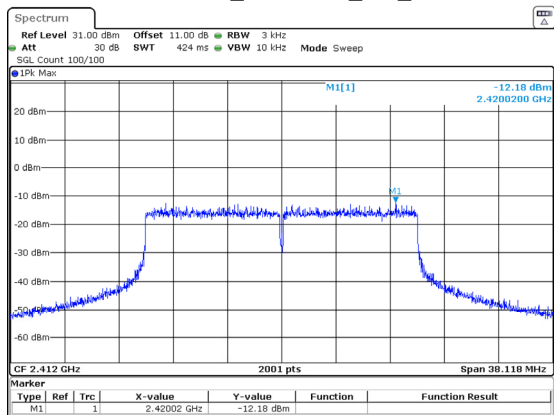
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:04:07

802.11n40\_2452MHz

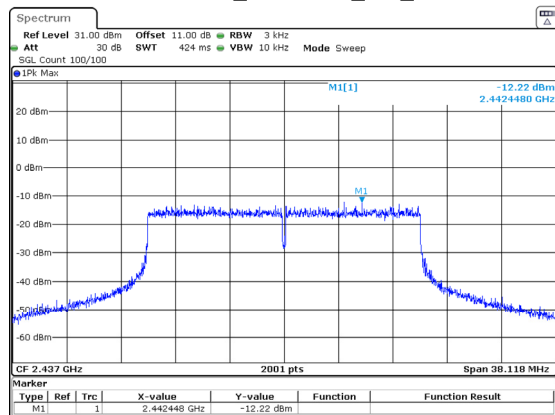


ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:09:01

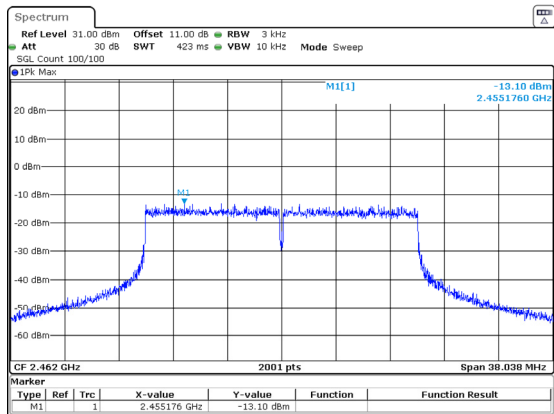
802.11ax20\_2412MHz\_RU\_Full



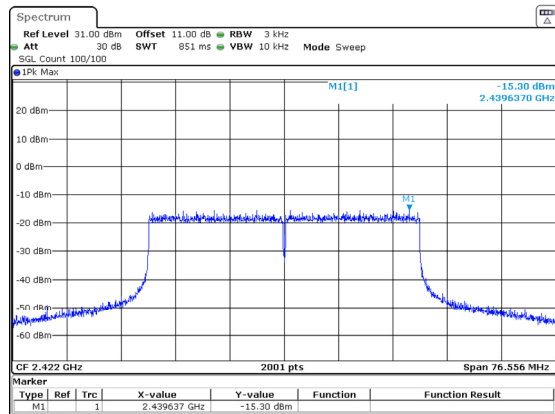
802.11ax20\_2437MHz\_RU\_Full



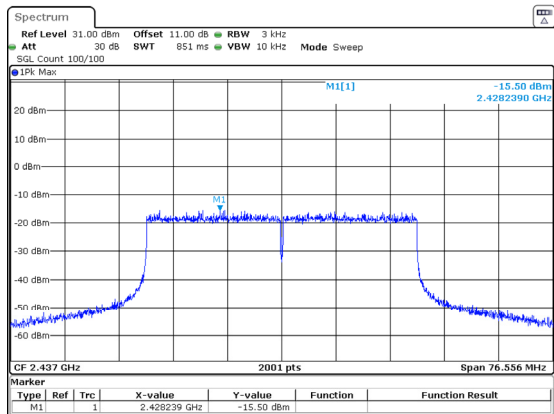
802.11ax20\_2462MHz\_RU\_Full



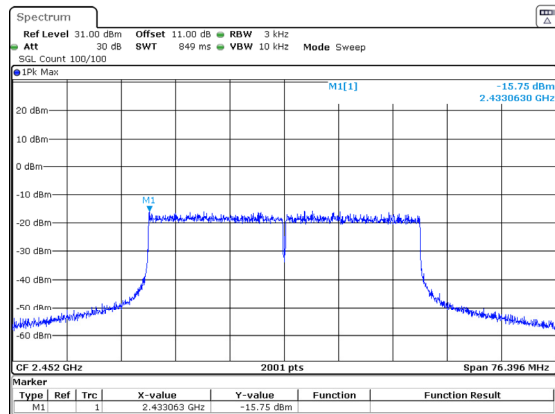
802.11ax40\_2422MHz\_RU\_Full



802.11ax40\_2437MHz\_RU\_Full



802.11ax40\_2452MHz\_RU\_Full



**100 kHz Bandwidth of Frequency Band Edge****Test Information:**

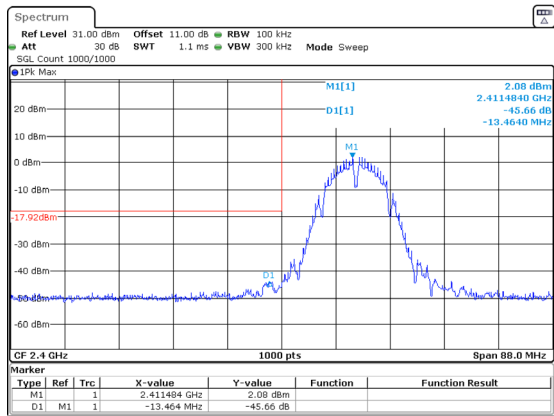
|                    |             |                     |              |
|--------------------|-------------|---------------------|--------------|
| <b>Sample No.:</b> | 2WE3-2      | <b>Test Date:</b>   | 2025/03/03   |
| <b>Test Site:</b>  | RF          | <b>Test Mode:</b>   | Transmitting |
| <b>Tester:</b>     | Rainbow Zhu | <b>Test Result:</b> | Pass         |

**Environmental Conditions:**

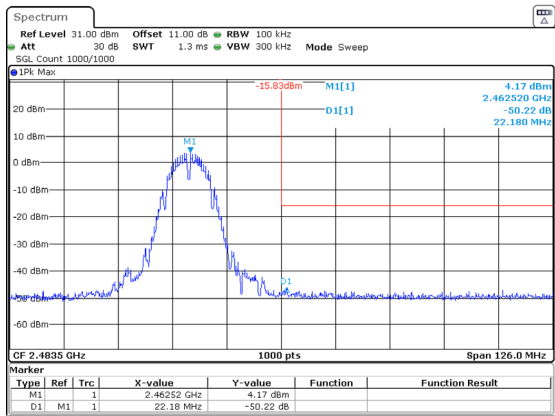
|                             |           |                                  |       |                               |             |
|-----------------------------|-----------|----------------------------------|-------|-------------------------------|-------------|
| <b>Temperature:</b><br>(°C) | 24.6~25.7 | <b>Relative Humidity:</b><br>(%) | 44~47 | <b>ATM Pressure:</b><br>(kPa) | 101.2~101.4 |
|-----------------------------|-----------|----------------------------------|-------|-------------------------------|-------------|

2.4G

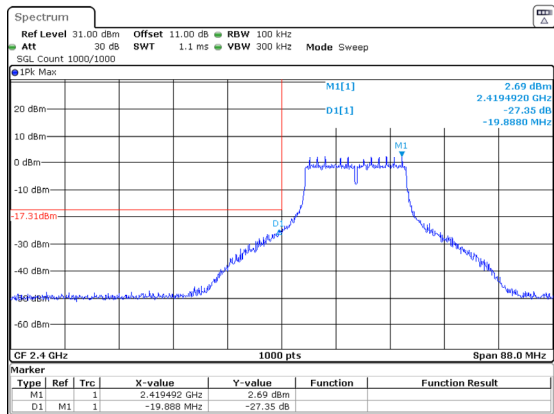
802.11b\_2412MHz



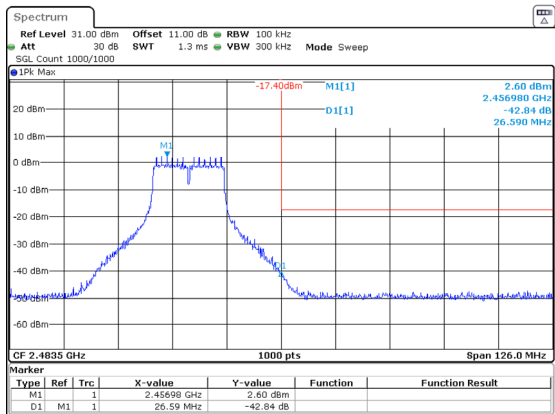
802.11b\_2462MHz



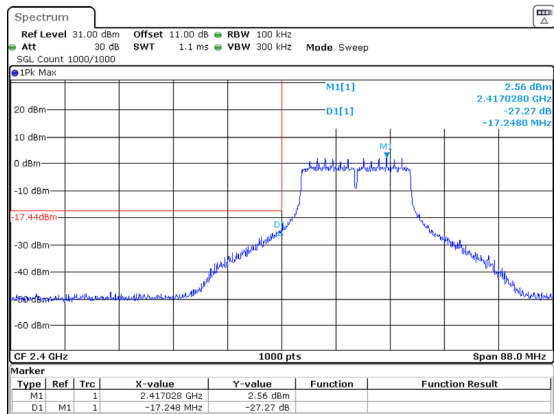
802.11g\_2412MHz



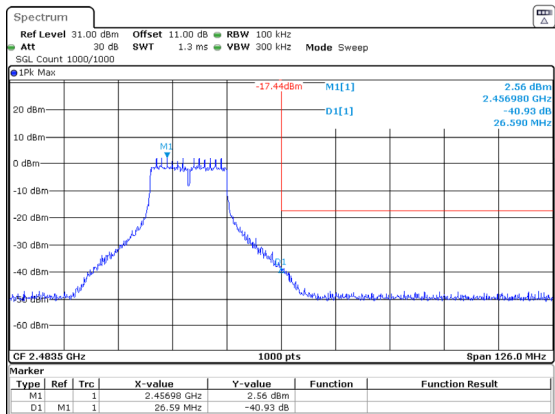
802.11g\_2462MHz



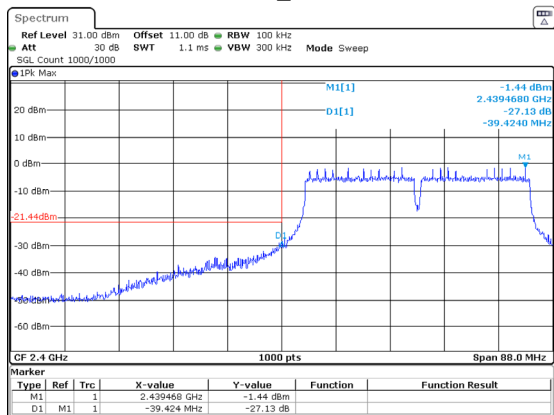
802.11n20\_2412MHz



802.11n20\_2462MHz

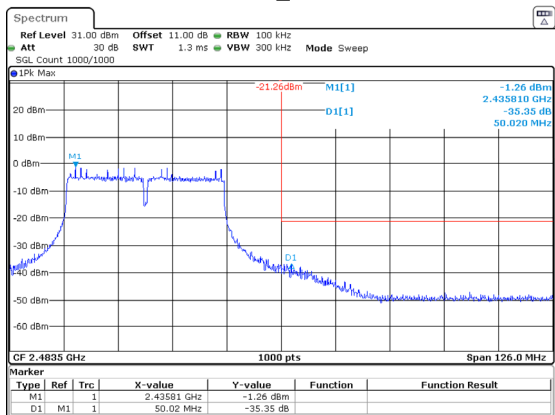


802.11n40\_2422MHz



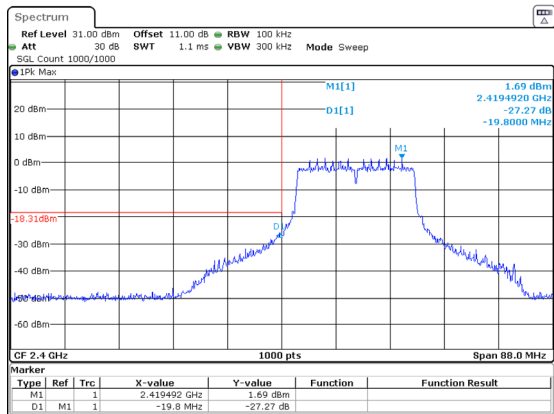
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:58:03

802.11n40\_2452MHz



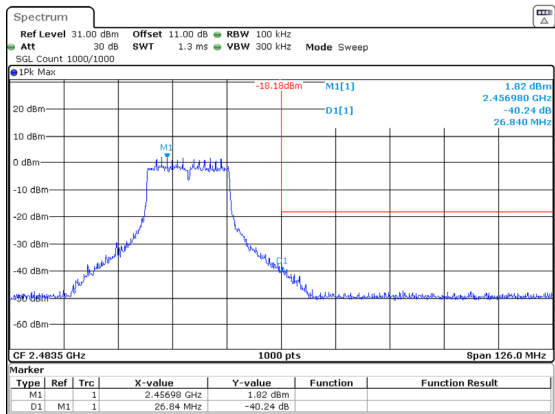
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:06:59

802.11ax20\_2412MHz\_RU\_Full



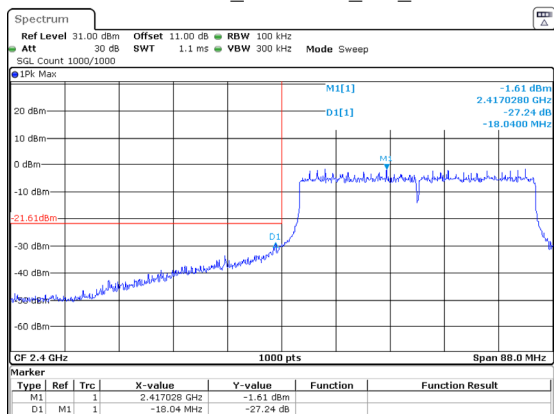
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:13:12

802.11ax20\_2462MHz\_RU\_Full



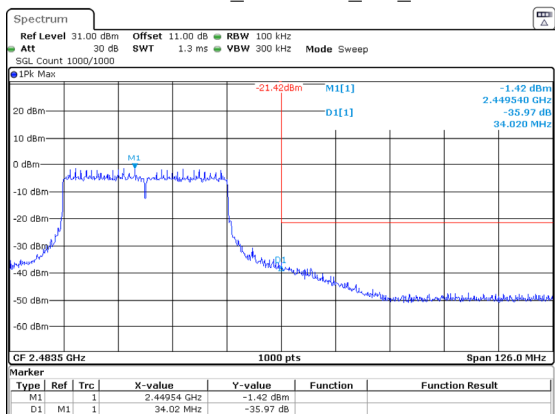
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:25:09

802.11ax40\_2422MHz\_RU\_Full



ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:29:09

802.11ax40\_2452MHz\_RU\_Full



ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 11:38:35

**Duty Cycle****Test Information:**

|                    |             |                     |              |
|--------------------|-------------|---------------------|--------------|
| <b>Sample No.:</b> | 2WE3-2      | <b>Test Date:</b>   | 2025/03/03   |
| <b>Test Site:</b>  | RF          | <b>Test Mode:</b>   | Transmitting |
| <b>Tester:</b>     | Rainbow Zhu | <b>Test Result:</b> | Pass         |

**Environmental Conditions:**

|                             |           |                                  |       |                               |             |
|-----------------------------|-----------|----------------------------------|-------|-------------------------------|-------------|
| <b>Temperature:</b><br>(°C) | 24.6~25.7 | <b>Relative Humidity:</b><br>(%) | 44~47 | <b>ATM Pressure:</b><br>(kPa) | 101.2~101.4 |
|-----------------------------|-----------|----------------------------------|-------|-------------------------------|-------------|

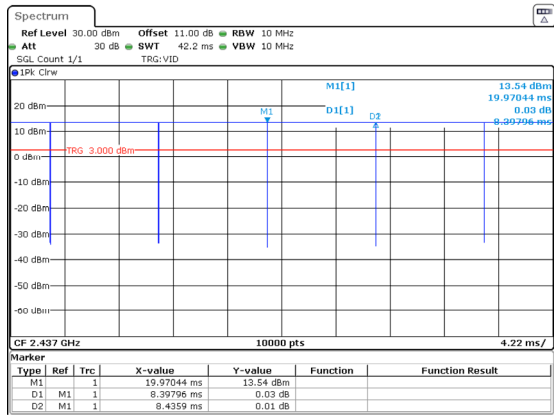
**Test Data:**

| Mode               | Test Frequency (MHz) | Ton (ms)     | Ton+Toff (ms) | Duty Cycle (%) | Duty Cycle Factor(dB) | 1/Ton (Hz) | VBW Setting (kHz) |
|--------------------|----------------------|--------------|---------------|----------------|-----------------------|------------|-------------------|
| 802.11b            | 2437                 | <b>8.398</b> | 8.436         | 99.55          | /                     | /          | 0.010             |
| 802.11g            | 2437                 | 1.387        | 1.425         | 97.33          | 0.12                  | 721        | 1                 |
| 802.11n20          | 2437                 | 1.299        | 1.336         | 97.23          | 0.12                  | 770        | 1                 |
| 802.11n40          | 2437                 | 4.884        | 4.924         | 99.19          | /                     | /          | 0.010             |
| 802.11ax20_RU_Full | 2437                 | 1.012        | 1.049         | 96.47          | 0.16                  | 988        | 1                 |
| 802.11ax40_RU_Full | 2437                 | 3.860        | 3.899         | 99.00          | /                     | /          | 0.010             |

**Duty Cycle = Ton/(Ton+Toff)\*100%**

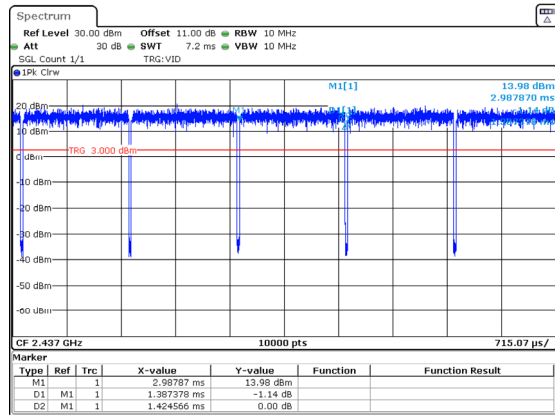
2.4G

802.11b\_2437MHz



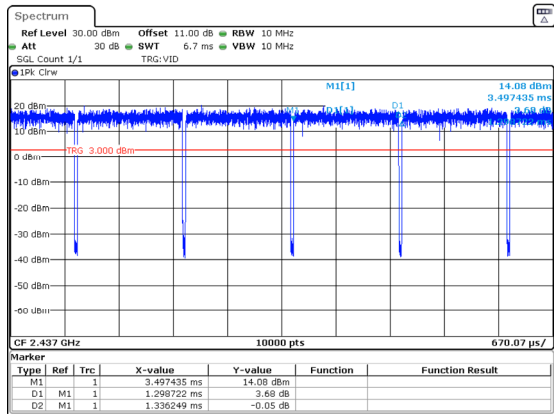
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:03:42

802.11g\_2437MHz



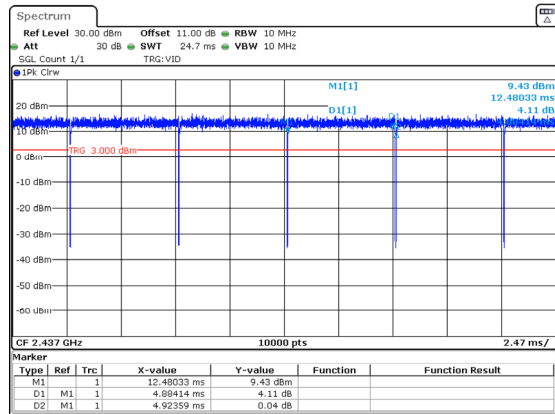
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Date: 3.MAR.2025 10:05:57

802.11n20\_2437MHz



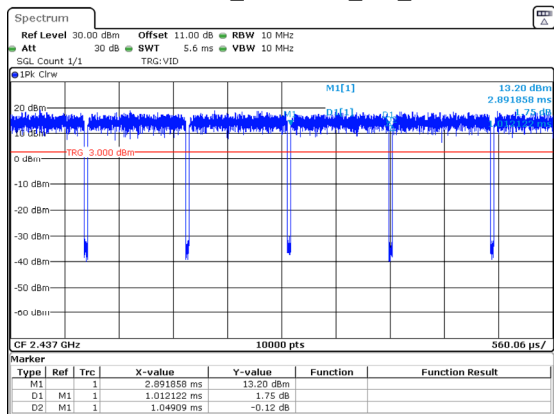
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Date: 3.MAR.2025 10:07:58

802.11n40\_2437MHz



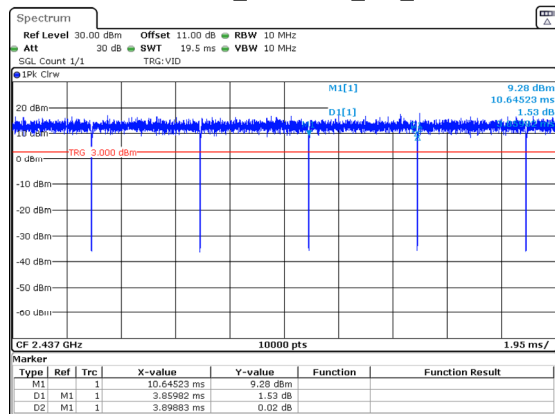
ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:09:55

802.11ax20\_2437MHz\_RU\_Full



ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:12:06

802.11ax40\_2437MHz\_RU\_Full



ProjectNo.:2401A54698E-RF Tester:Rainbow Zhu  
Date: 3.MAR.2025 10:14:03

## RF EXPOSURE EVALUATION

### MPE-BASED EXEMPTION

#### Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 v01 Interim General RF Exposure Guidance

MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power (ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(3)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

| RF Source frequency (MHz) | Threshold ERP (watts) |
|---------------------------|-----------------------|
| 0.3-1.34                  | $1,920 R^2$ .         |
| 1.34-30                   | $3,450 R^2/f^2$ .     |
| 30-300                    | $3.83 R^2$ .          |
| 300-1,500                 | $0.0128 R^2 f$ .      |
| 1,500-100,000             | $19.2 R^2$ .          |

R is the minimum separation distance in meters

f = frequency in MHz

### Result

| Mode       | Frequency (MHz) | Tune up conducted power <sup>#</sup> (dBm) | Antenna Gain <sup>#</sup> |       | ERP   |        | Evaluation Distance (m) | ERP Limit (mW) |
|------------|-----------------|--------------------------------------------|---------------------------|-------|-------|--------|-------------------------|----------------|
|            |                 |                                            | (dBi)                     | (dBd) | (dBm) | (mW)   |                         |                |
| 2.4G Wi-Fi | 2412-2462       | 21.5                                       | 4.86                      | 2.71  | 24.21 | 263.63 | 0.2                     | 768            |

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.

2. The 2.4G and 5G Wi-Fi cannot transmit at same time.

3. 0dBd=2.15dBi

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

### Result: Compliant

## **EUT PHOTOGRAPHS**

Please refer to the attachment 2401A54698E-RF External photo and 2401A54698E-RF Internal photo.

## **TEST SETUP PHOTOGRAPHS**

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Please refer to the attachment 2401A54698E-RFA Test Setup photo.

**\*\*\*\*\* END OF REPORT \*\*\*\*\***