

## Appendix RF test data for WIFI 2.4G

## 1. Frequency Error

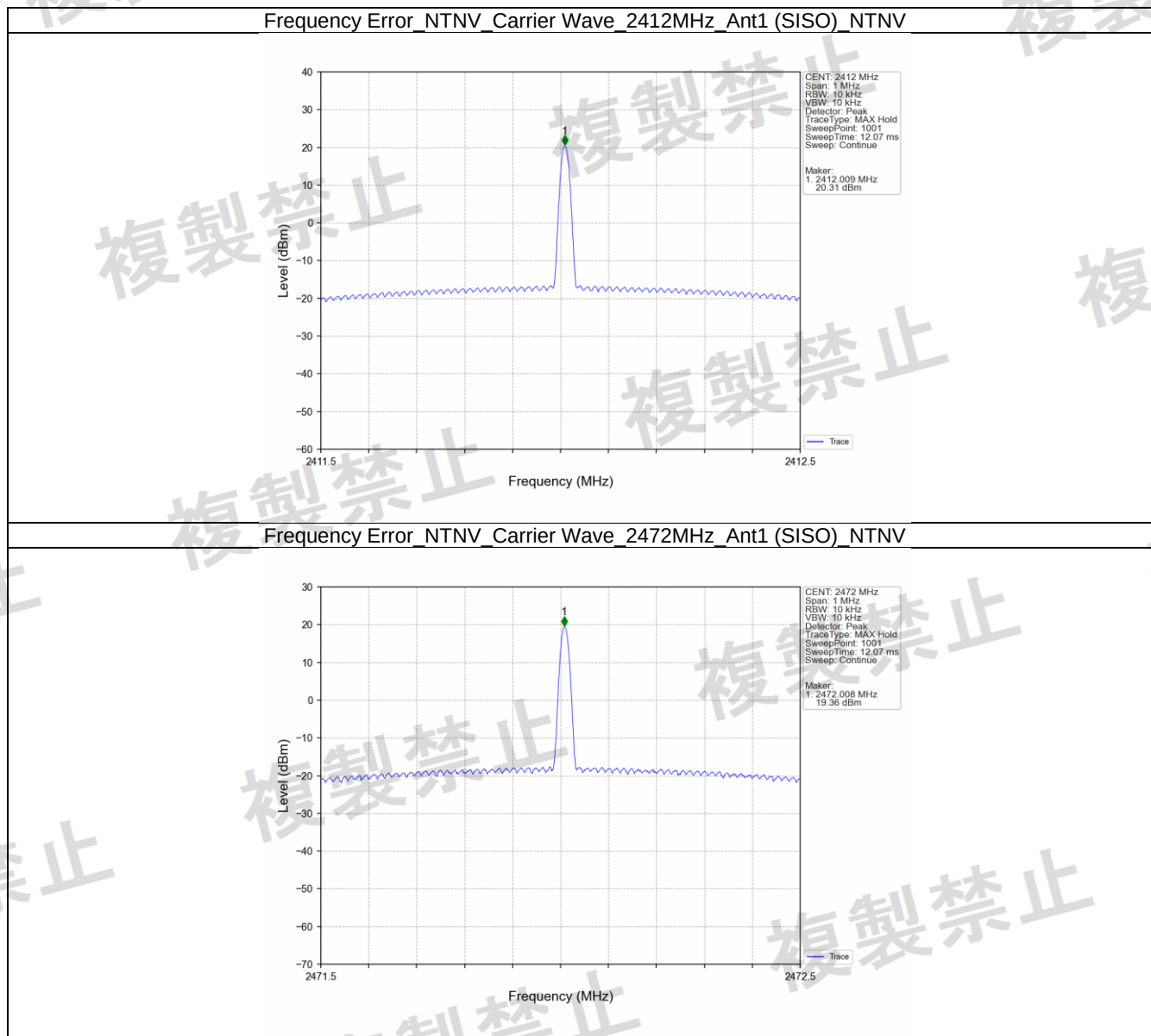
### 1.1 Test Result

#### 1.1.1 Ant1

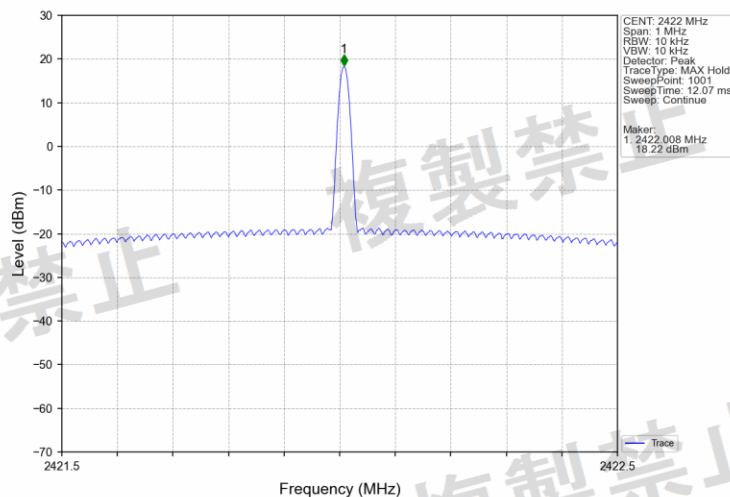
| Ant1 |              |         |                 |                          |                 |           |         |
|------|--------------|---------|-----------------|--------------------------|-----------------|-----------|---------|
| ENV  | Mode         | TX Type | Frequency (MHz) | Measured Frequency (MHz) | Tolerance (ppm) |           | Verdict |
|      |              |         |                 |                          | Result          | Limit     |         |
| NTNV | Carrier Wave | SISO    | 2412            | 2412.009                 | 3.73            | -50 to 50 | Pass    |
|      |              |         | 2472            | 2472.008                 | 3.24            | -50 to 50 | Pass    |
|      |              |         | 2422            | 2422.008                 | 3.30            | -50 to 50 | Pass    |
|      |              |         | 2462            | 2462.008                 | 3.25            | -50 to 50 | Pass    |

## 1.2 Test Graph

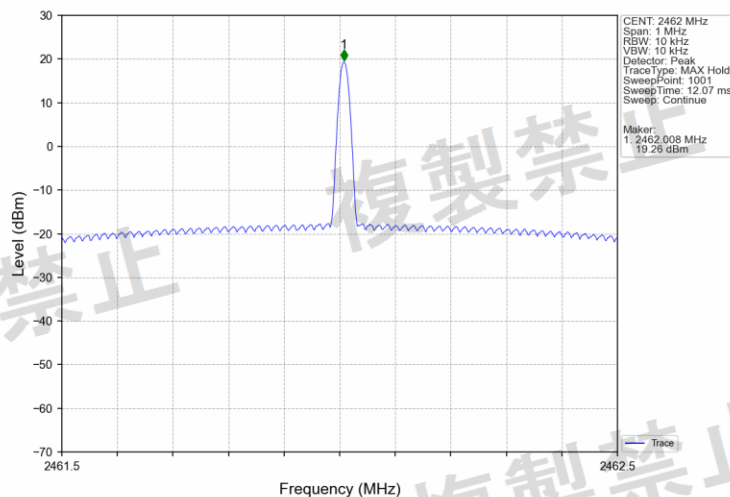
### 1.2.1 Ant1



Frequency Error NTNV Carrier Wave 2422MHz Ant1 (SISO) NTNV



Frequency Error\_NTNV\_Carrier Wave 2462MHz\_Ant1 (SISO)\_NTNV



## 2. Occupied Bandwidth

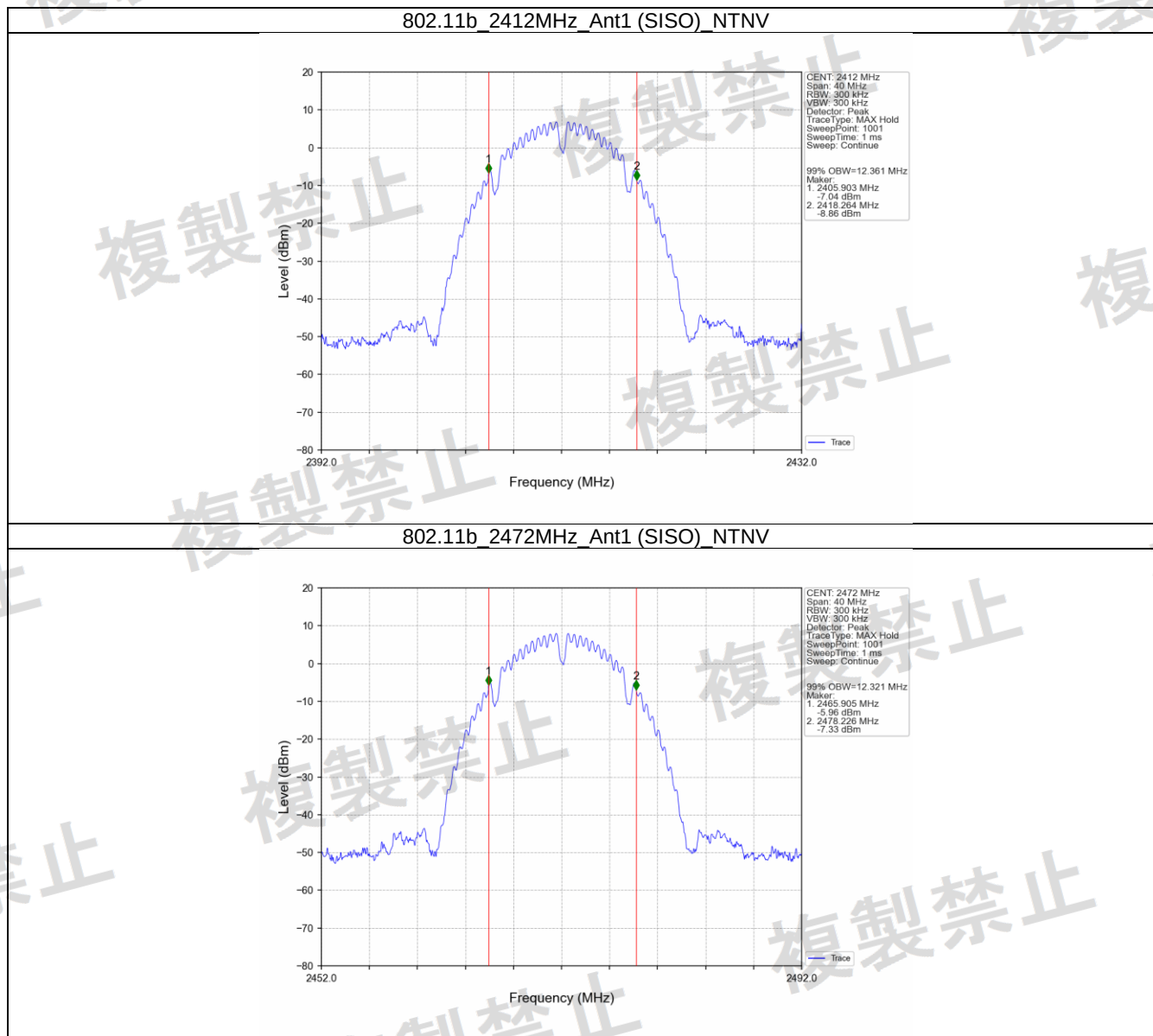
### 2.1 Test Result

#### 2.1.1 OBW

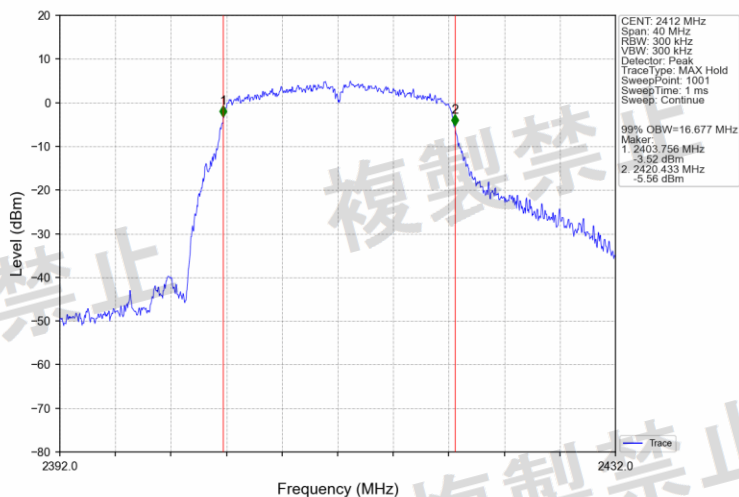
| ENV  | Mode             | TX Type | Frequency (MHz) | RU | RU Pos | 99% Occupied Bandwidth (MHz) |       | Verdict |
|------|------------------|---------|-----------------|----|--------|------------------------------|-------|---------|
|      |                  |         |                 |    |        | ANT1                         | Limit |         |
| NTNV | 802.11b          | SISO    | 2412            | /  | /      | 12.361                       | <=26  | Pass    |
|      |                  |         | 2472            | /  | /      | 12.321                       | <=26  | Pass    |
|      | 802.11g          | SISO    | 2412            | /  | /      | 16.677                       | <=26  | Pass    |
|      |                  |         | 2472            | /  | /      | 16.664                       | <=26  | Pass    |
|      | 802.11n (HT20)   | SISO    | 2412            | /  | /      | 17.767                       | <=26  | Pass    |
|      |                  |         | 2472            | /  | /      | 17.698                       | <=26  | Pass    |
|      | 802.11n (HT40)   | SISO    | 2422            | /  | /      | 35.968                       | <=40  | Pass    |
|      |                  |         | 2462            | /  | /      | 35.974                       | <=40  | Pass    |
|      | 802.11ax (HEW20) | SISO    | 2412            | SU | /      | 18.802                       | <=26  | Pass    |
|      |                  |         | 2472            | SU | /      | 18.783                       | <=26  | Pass    |
|      | 802.11ax (HEW40) | SISO    | 2422            | SU | /      | 37.509                       | <=40  | Pass    |
|      |                  |         | 2462            | SU | /      | 37.517                       | <=40  | Pass    |

## 2.2 Test Graph

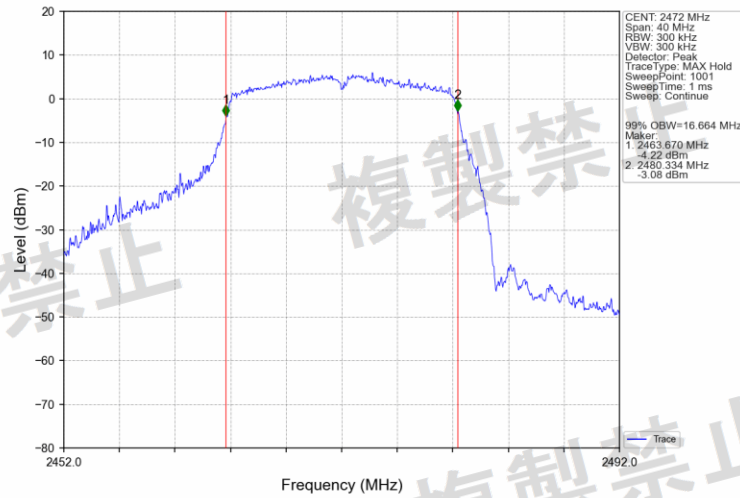
### 2.2.1 OBW



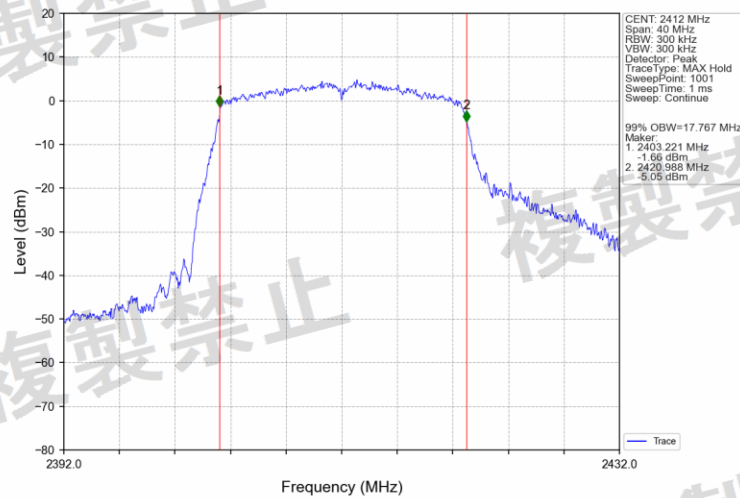
802.11g 2412MHz Ant1 (SISO) NTN



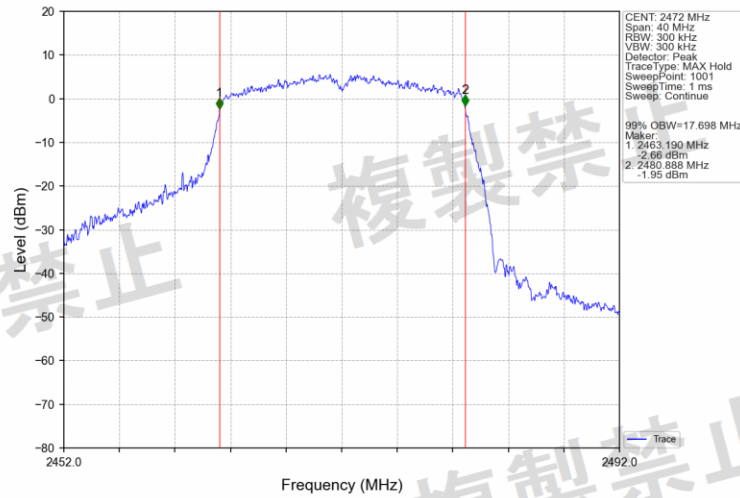
802.11g 2472MHz Ant1 (SISO) NTVN



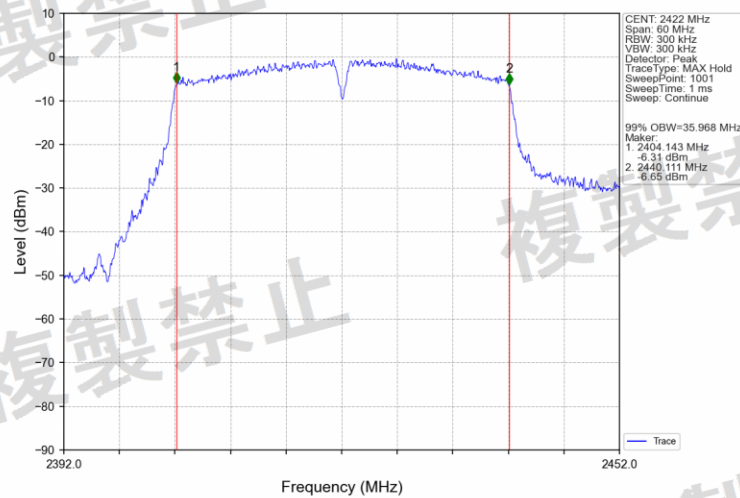
802.11n(HT20) 2412MHz Ant1 (SISO) NTVN



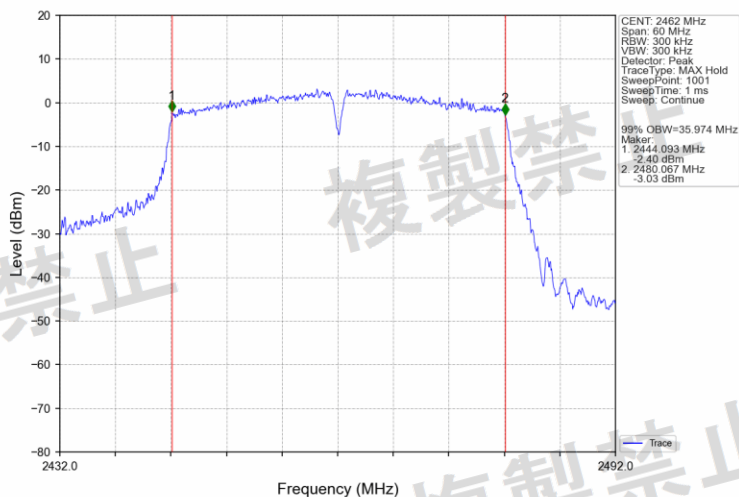
802.11n(HT20) 2472MHz Ant1 (SISO) NTNV



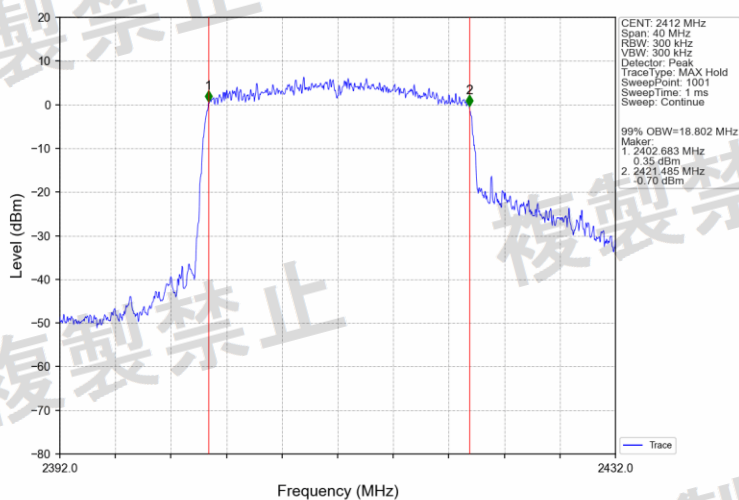
802.11n(HT40) 2422MHz Ant1 (SISO) NTNV



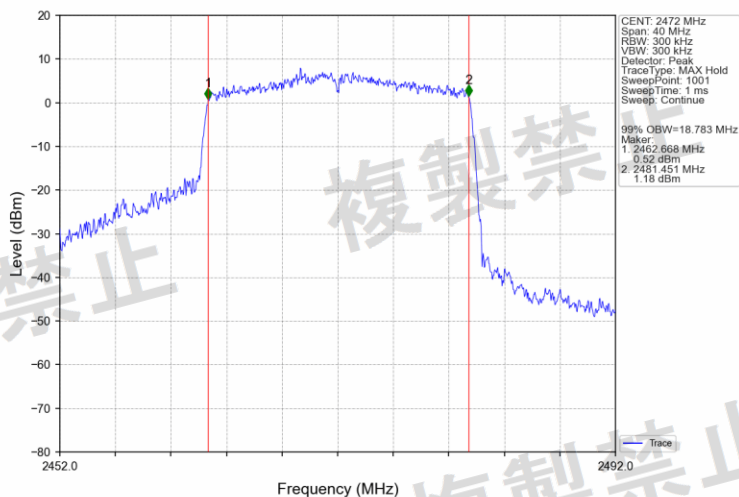
802.11n(HT40) 2462MHz Ant1 (SISO) NTNV



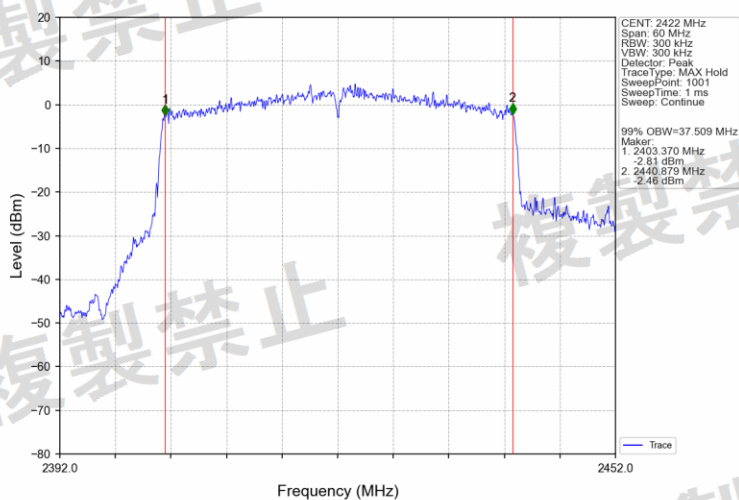
802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTNV



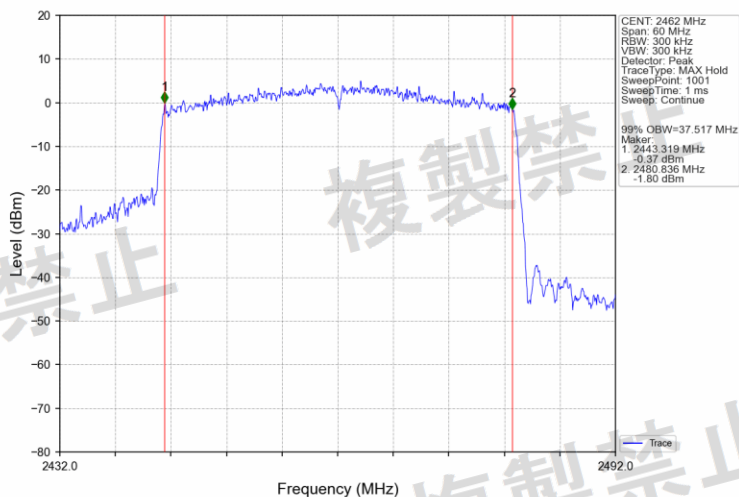
802.11ax(HEW20) 2472MHz SU / Ant1 (SISO) NTN



802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTN



802.11ax(HEW40) 2462MHz SU / Ant1 (SISO) NTVN



### 3. Antenna Power

#### 3.1 Test Result

##### 3.1.1 Power

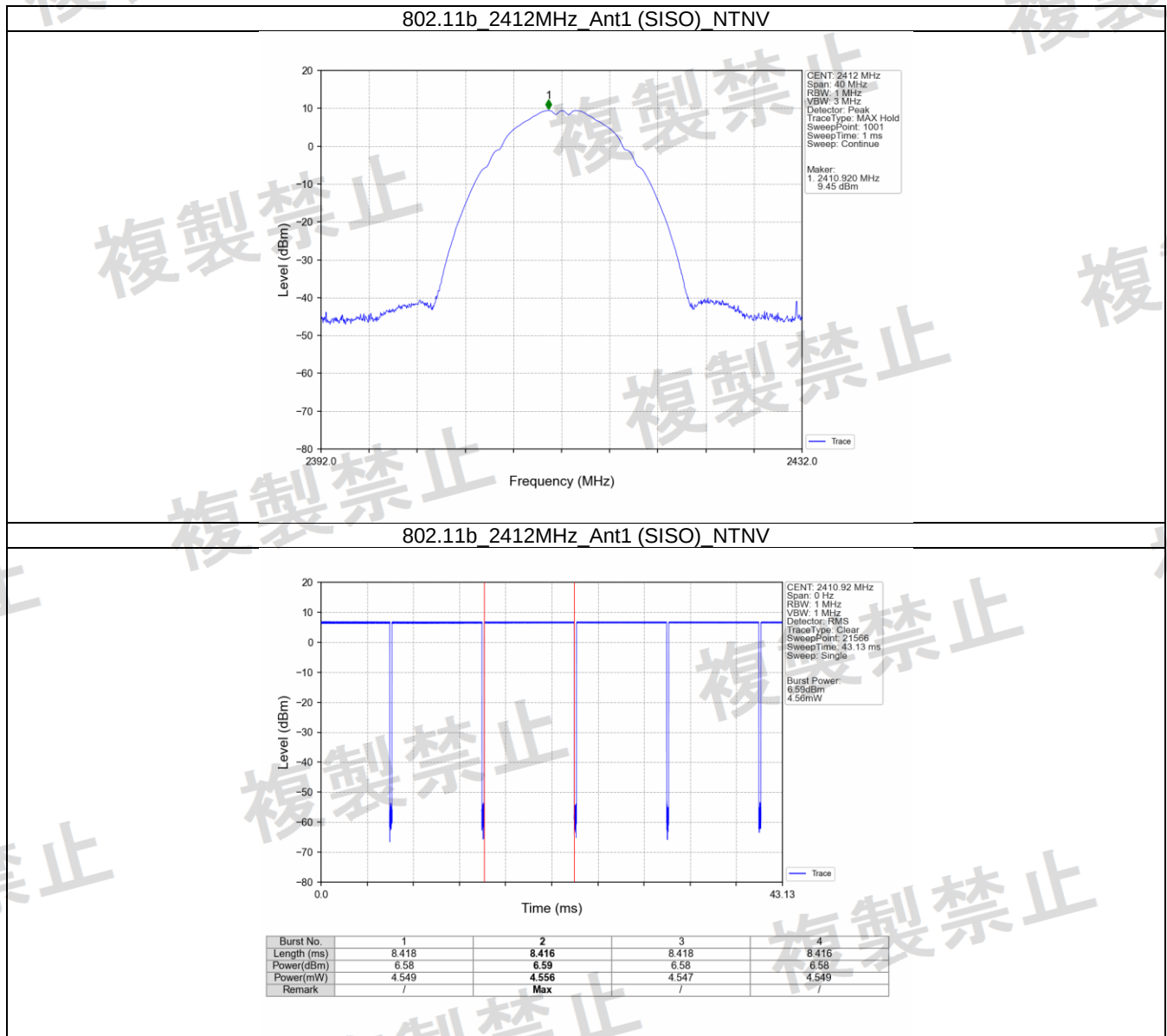
| ENV  | Mode             | TX Type | Frequency (MHz) | RU | RU Pos | ANT | Antenna Power (mW/MHz) |         | Nominal Power (mW/MHz) | Tolerance (%) |       | Verdict |
|------|------------------|---------|-----------------|----|--------|-----|------------------------|---------|------------------------|---------------|-------|---------|
|      |                  |         |                 |    |        |     | Measured               | Limit   |                        | Measured      | Limit |         |
| NTNV | 802.11b          | SISO    | 2412            | /  | /      | 1   | 4.556                  | <=10.00 | 5.800                  | -21.45        | <=20  | Pass    |
|      |                  |         | 2472            | /  | /      | 1   | 5.826                  | <=10.00 | 5.800                  | 0.45          | <=20  | Pass    |
|      | 802.11g          | SISO    | 2412            | /  | /      | 1   | 1.550                  | <=10.00 | 2.000                  | -22.50        | <=20  | Pass    |
|      |                  |         | 2472            | /  | /      | 1   | 2.237                  | <=10.00 | 2.000                  | 11.85         | <=20  | Pass    |
|      | 802.11n (HT20)   | SISO    | 2412            | /  | /      | 1   | 1.656                  | <=10.00 | 2.000                  | -17.20        | <=20  | Pass    |
|      |                  |         | 2472            | /  | /      | 1   | 2.092                  | <=10.00 | 2.000                  | 4.60          | <=20  | Pass    |
|      | 802.11n (HT40)   | SISO    | 2422            | /  | /      | 1   | 0.511                  | <=5.00  | 1.000                  | -48.90        | <=20  | Pass    |
|      |                  |         | 2462            | /  | /      | 1   | 1.112                  | <=5.00  | 1.000                  | 11.20         | <=20  | Pass    |
|      | 802.11ax (HEW20) | SISO    | 2412            | SU | /      | 1   | 1.691                  | <=10.00 | 1.700                  | -0.53         | <=20  | Pass    |
|      |                  |         | 2472            | SU | /      | 1   | 1.808                  | <=10.00 | 1.700                  | 6.35          | <=20  | Pass    |
|      | 802.11ax (HEW40) | SISO    | 2422            | SU | /      | 1   | 0.860                  | <=5.00  | 1.000                  | -14.00        | <=20  | Pass    |
|      |                  |         | 2462            | SU | /      | 1   | 1.124                  | <=5.00  | 1.000                  | 12.40         | <=20  | Pass    |

##### 3.1.2 EIRP

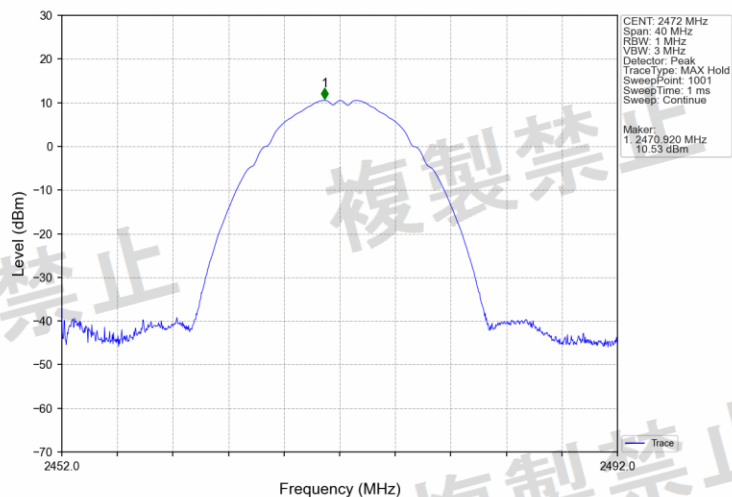
| ENV  | Mode             | TX Type | Frequency (MHz) | RU | RU Pos | ANT | Gain (dBi) | EIRP (dBm/MHz) |         | Verdict |
|------|------------------|---------|-----------------|----|--------|-----|------------|----------------|---------|---------|
|      |                  |         |                 |    |        |     |            | Result         | Limit   |         |
| NTNV | 802.11b          | SISO    | 2412            | /  | /      | 1   | 2.02       | 8.61           | <=12.14 | Pass    |
|      |                  |         | 2472            | /  | /      | 1   | 2.02       | 9.67           | <=12.14 | Pass    |
|      | 802.11g          | SISO    | 2412            | /  | /      | 1   | 2.02       | 3.92           | <=12.14 | Pass    |
|      |                  |         | 2472            | /  | /      | 1   | 2.02       | 5.52           | <=12.14 | Pass    |
|      | 802.11n (HT20)   | SISO    | 2412            | /  | /      | 1   | 2.02       | 4.21           | <=12.14 | Pass    |
|      |                  |         | 2472            | /  | /      | 1   | 2.02       | 5.23           | <=12.14 | Pass    |
|      | 802.11n (HT40)   | SISO    | 2422            | /  | /      | 1   | 2.02       | -0.90          | <=9.13  | Pass    |
|      |                  |         | 2462            | /  | /      | 1   | 2.02       | 2.48           | <=9.13  | Pass    |
|      | 802.11ax (HEW20) | SISO    | 2412            | SU | /      | 1   | 2.02       | 4.30           | <=12.14 | Pass    |
|      |                  |         | 2472            | SU | /      | 1   | 2.02       | 4.59           | <=12.14 | Pass    |
|      | 802.11ax (HEW40) | SISO    | 2422            | SU | /      | 1   | 2.02       | 1.36           | <=9.13  | Pass    |
|      |                  |         | 2462            | SU | /      | 1   | 2.02       | 2.53           | <=9.13  | Pass    |

## 3.2 Test Graph

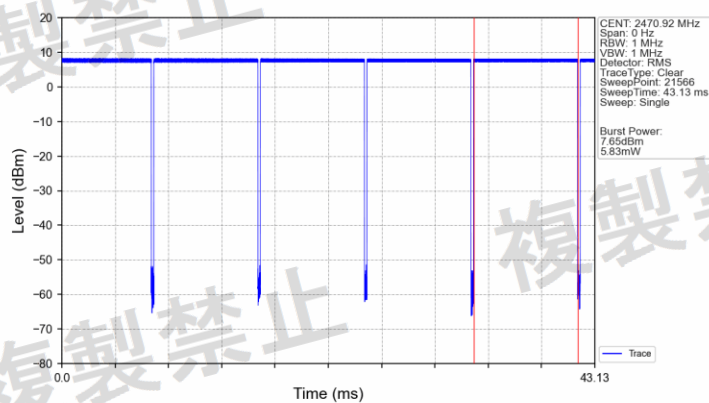
### 3.2.1 Power



802.11b 2472MHz Ant1 (SISO) NTNV

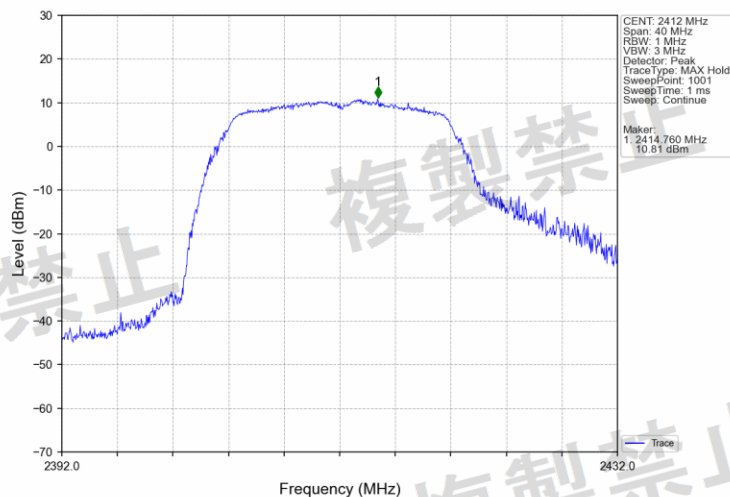


802.11b 2472MHz Ant1 (SISO) NTNV

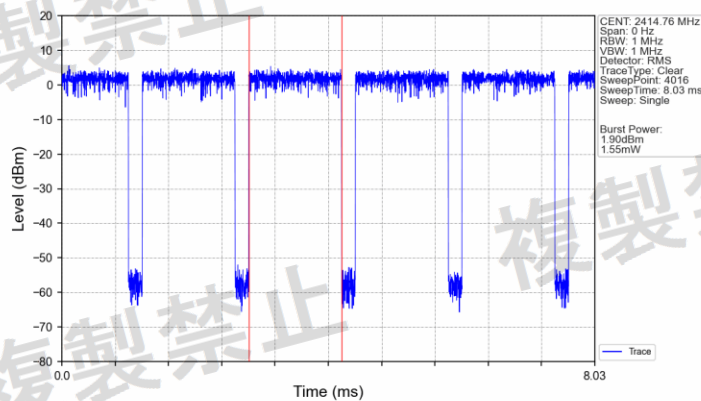


| Burst No    | 1     | 2     | 3     | 4     |
|-------------|-------|-------|-------|-------|
| Length (ms) | 8.416 | 8.418 | 8.416 | 8.418 |
| Power(dBm)  | 7.65  | 7.65  | 7.65  | 7.65  |
| Power(mW)   | 5.822 | 5.821 | 5.823 | 5.826 |
| Remark      | /     | /     | /     | Max   |

802.11g 2412MHz Ant1 (SISO) NTNV

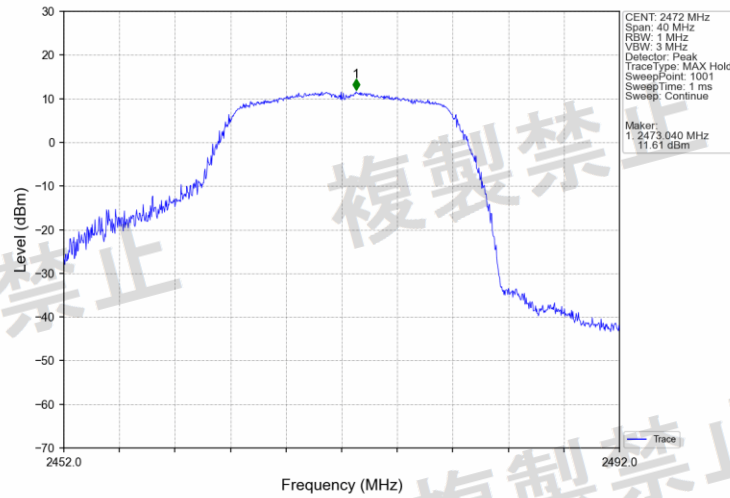


802.11g 2412MHz Ant1 (SISO) NTNV

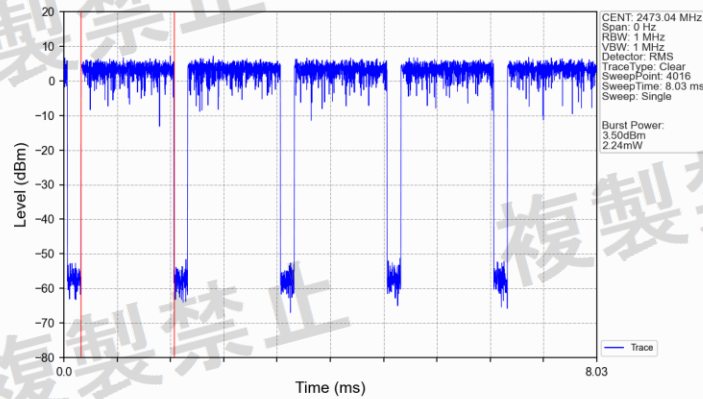


| Burst No.   | 1     | 2     | 3     | 4     |
|-------------|-------|-------|-------|-------|
| Length (ms) | 1.398 | 1.398 | 1.398 | 1.398 |
| Power(dBm)  | 1.88  | 1.90  | 1.79  | 1.87  |
| Power(mW)   | 1.543 | 1.550 | 1.509 | 1.537 |
| Remark      | /     | Max   | /     | /     |

802.11g 2472MHz Ant1 (SISO) NTNV

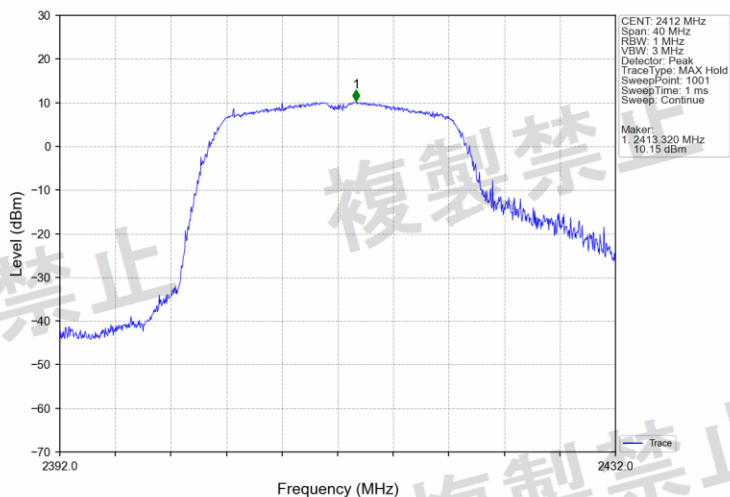


802.11g 2472MHz Ant1 (SISO) NTNV

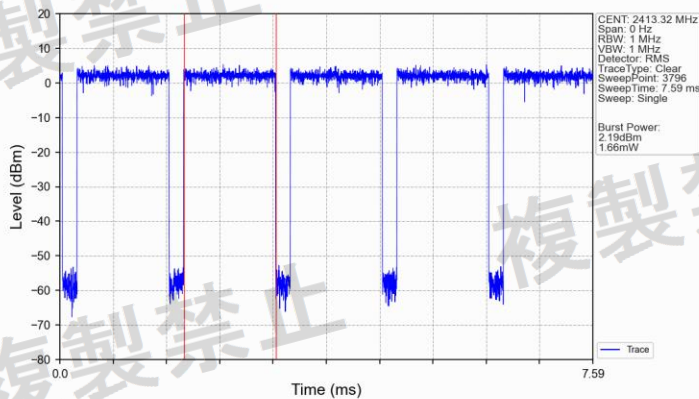


| Burst No.   | 1     | 2     | 3     | 4     |
|-------------|-------|-------|-------|-------|
| Length (ms) | 1.398 | 1.398 | 1.398 | 1.398 |
| Power(dBm)  | 3.50  | 3.48  | 3.46  | 3.44  |
| Power(mW)   | 2.237 | 2.230 | 2.220 | 2.208 |
| Remark      | Max   | /     | /     | /     |

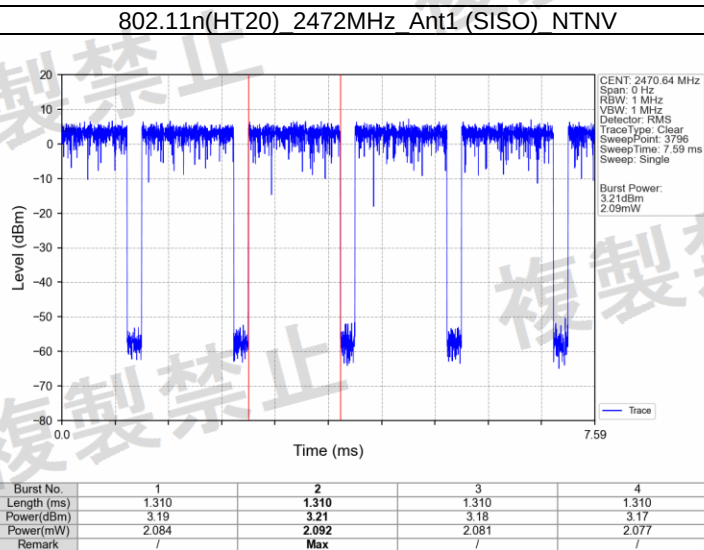
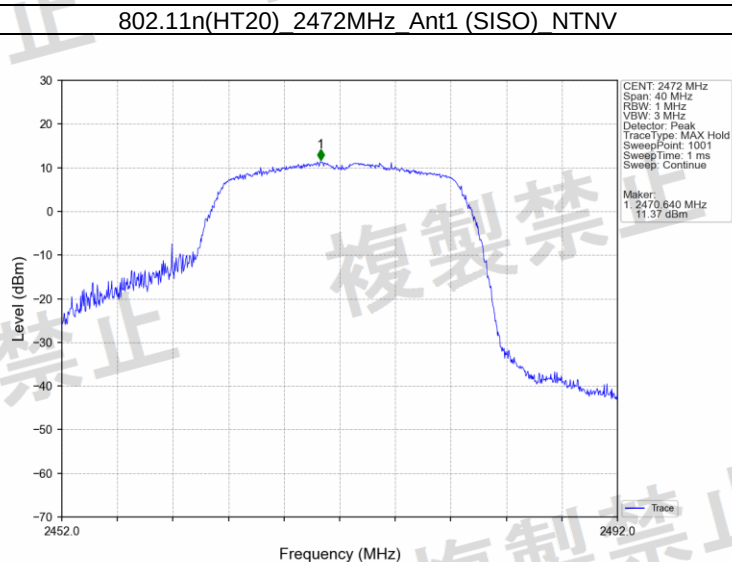
802.11n(HT20) 2412MHz Ant1 (SISO) NTVN



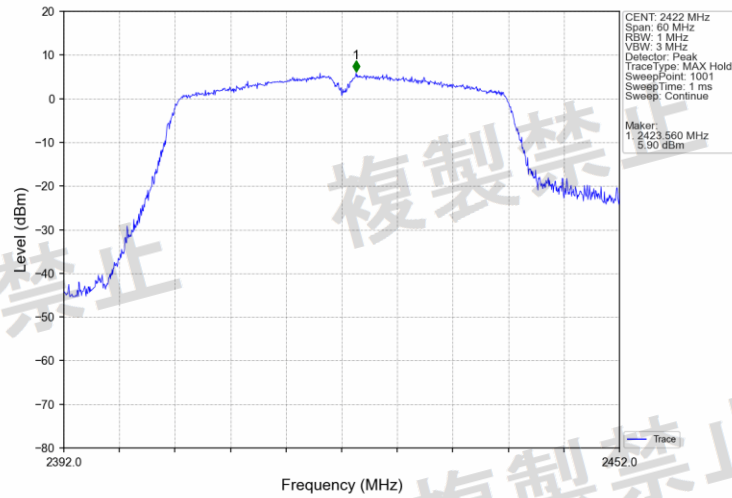
802.11n(HT20) 2412MHz Ant1 (SISO) NTVN



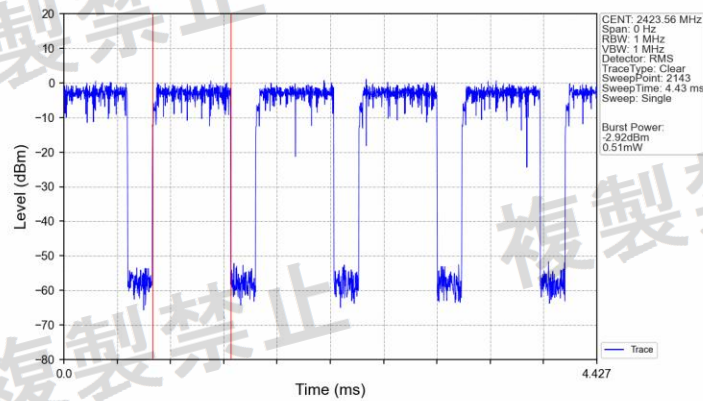
| Burst No.   | 1     | 2     | 3     | 4     |
|-------------|-------|-------|-------|-------|
| Length (ms) | 1.310 | 1.310 | 1.310 | 1.308 |
| Power(dBm)  | 2.17  | 2.19  | 2.12  | 2.14  |
| Power(mW)   | 1.647 | 1.656 | 1.629 | 1.637 |
| Remark      | /     | Max   | /     | /     |



802.11n(HT40) 2422MHz Ant1 (SISO) NTVN

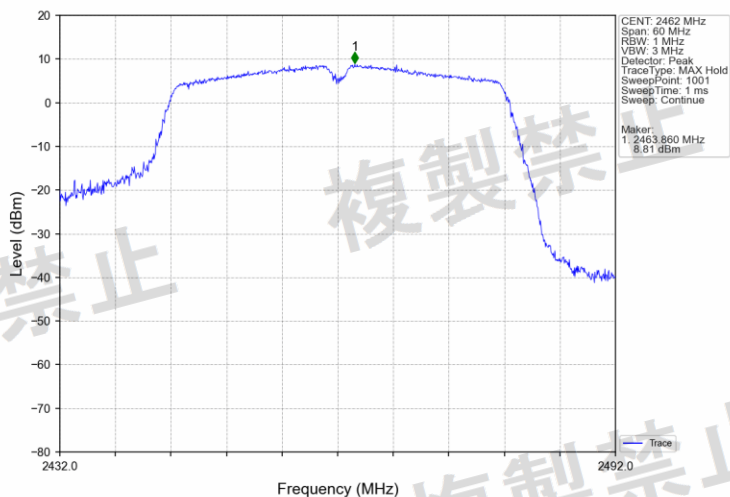


802.11n(HT40) 2422MHz Ant1 (SISO) NTVN

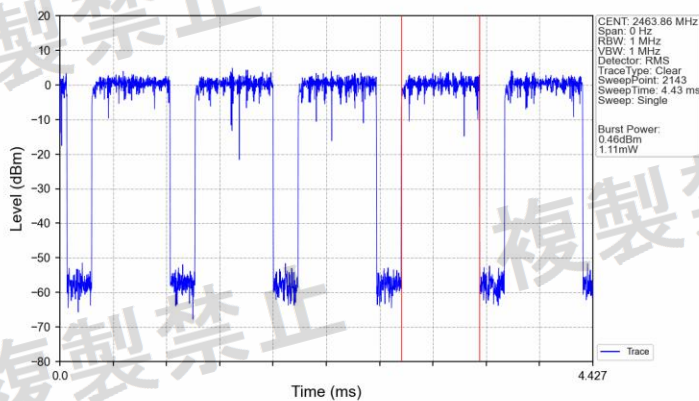


| Burst No    | 1     | 2     | 3     | 4     |
|-------------|-------|-------|-------|-------|
| Length (ms) | 0.649 | 0.649 | 0.649 | 0.649 |
| Power(dBm)  | -2.92 | -2.97 | -2.95 | -2.96 |
| Power(mW)   | 0.511 | 0.505 | 0.507 | 0.506 |
| Remark      | Max   | /     | /     | /     |

802.11n(HT40) 2462MHz Ant1 (SISO) NTNV

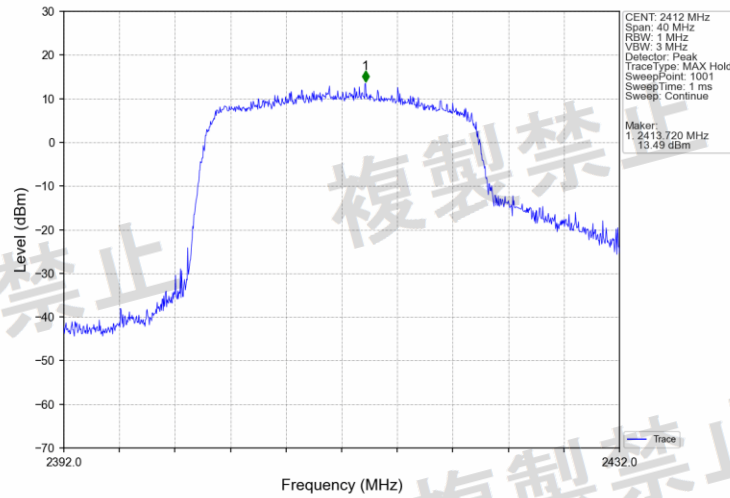


802.11n(HT40) 2462MHz Ant1 (SISO) NTNV

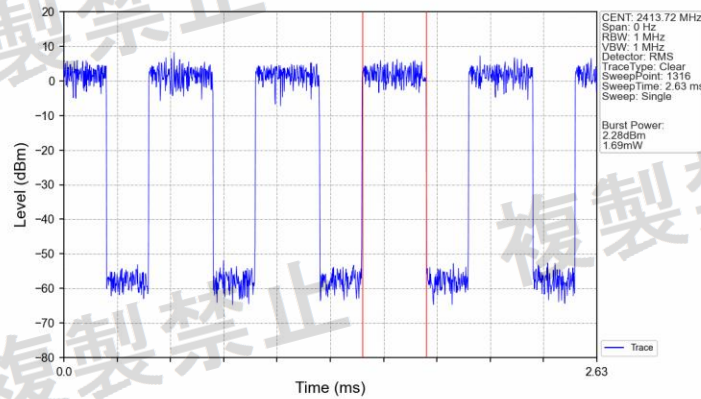


| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.649 | 0.649 | 0.649 | 0.649 | 0.649 |
| Power (dBm) | 0.46  | 0.44  | 0.39  | 0.46  | 0.41  |
| Power (mW)  | 1.111 | 1.107 | 1.094 | 1.112 | 1.100 |
| Remark      | /     | /     | /     | Max   | /     |

## 802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTN

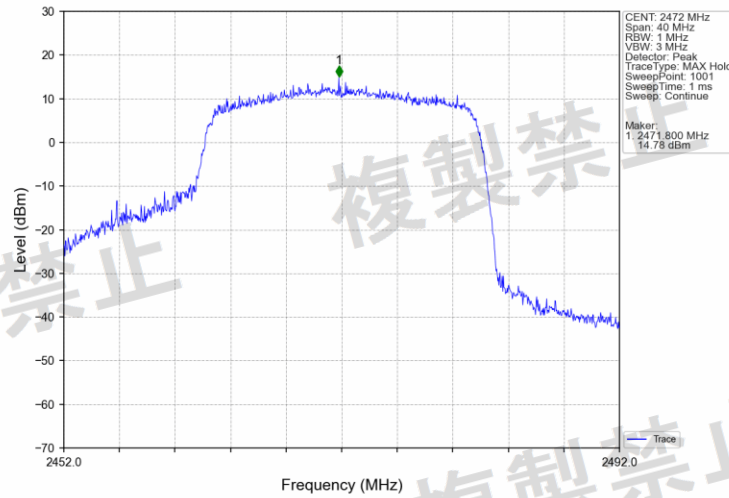


## 802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTN

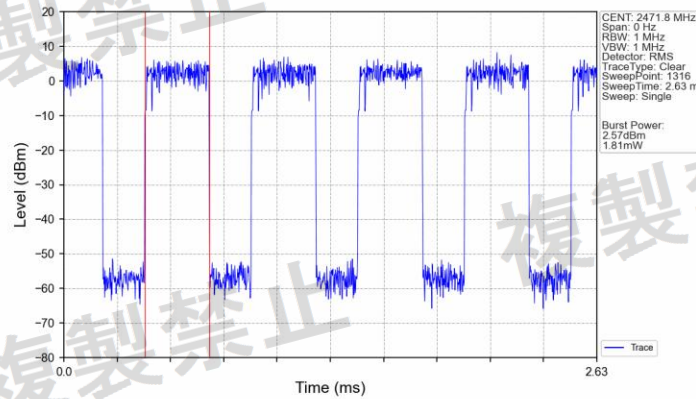


| Burst No    | 1     | 2     | 3     | 4     |
|-------------|-------|-------|-------|-------|
| Length (ms) | 0.316 | 0.316 | 0.316 | 0.316 |
| Power (dBm) | 2.17  | 2.16  | 2.28  | 2.28  |
| Power (mW)  | 1.648 | 1.644 | 1.691 | 1.691 |
| Remark      | /     | /     | Max   | /     |

802.11ax(HEW20) 2472MHz SU / Ant1 (SISO) NTNv

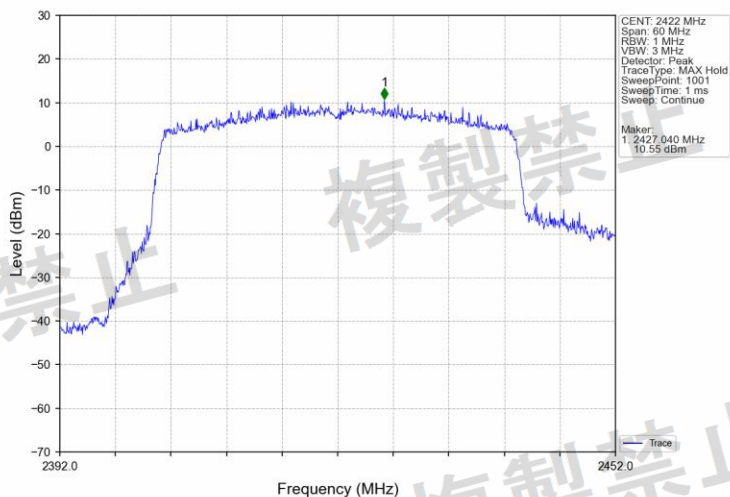


802.11ax(HEW20) 2472MHz SU / Ant1 (SISO) NTNv

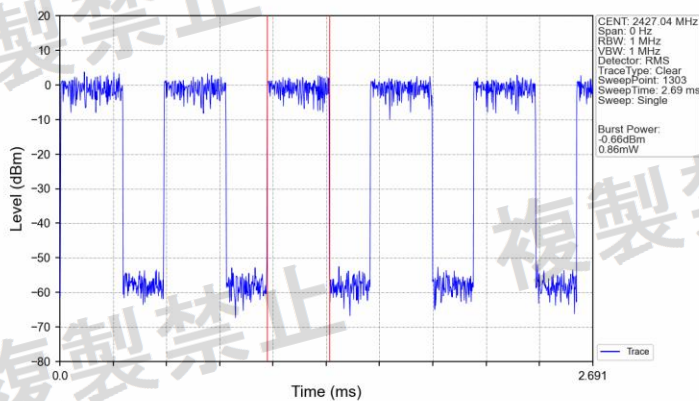


| Burst No    | 1     | 2     | 3     | 4     |
|-------------|-------|-------|-------|-------|
| Length (ms) | 0.318 | 0.318 | 0.318 | 0.318 |
| Power(dBm)  | 2.57  | 2.51  | 2.53  | 2.54  |
| Power(mW)   | 1.808 | 1.782 | 1.792 | 1.795 |
| Remark      | Max   | /     | /     | /     |

802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTN

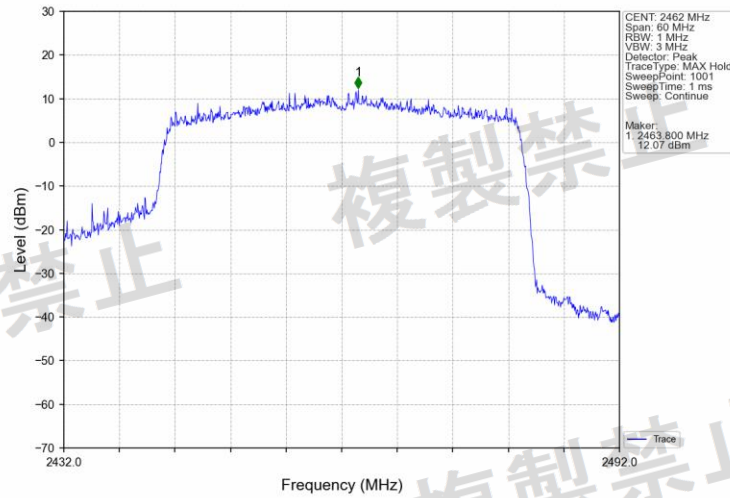


802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTN

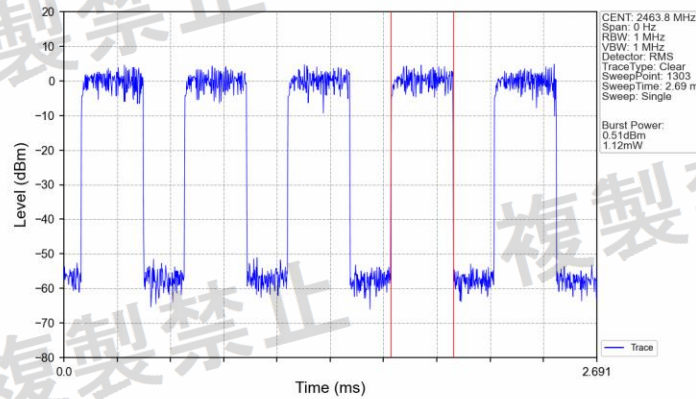


| Burst No    | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.314 | 0.314 | 0.312 | 0.312 | 0.312 |
| Power (dBm) | -0.67 | -0.69 | -0.66 | -0.69 | -0.68 |
| Power (mW)  | 0.857 | 0.854 | 0.860 | 0.852 | 0.856 |
| Remark      | /     | /     | Max   | /     | /     |

802.11ax(HEW40) 2462MHz SU / Ant1 (SISO) NTNV



802.11ax(HEW40) 2462MHz SU / Ant1 (SISO) NTNV



| Burst No.   | 1     | 2     | 3     | 4     | 5     |
|-------------|-------|-------|-------|-------|-------|
| Length (ms) | 0.314 | 0.314 | 0.314 | 0.314 | 0.312 |
| Power (dBm) | 0.34  | 0.29  | 0.43  | 0.51  | 0.25  |
| Power (mW)  | 1.082 | 1.068 | 1.105 | 1.124 | 1.060 |
| Remark      | /     | /     | /     | Max   | /     |

## 4. Spurious Emission Intensity

### 4.1 Test Result

#### 4.1.1 TxSe\_NTNV

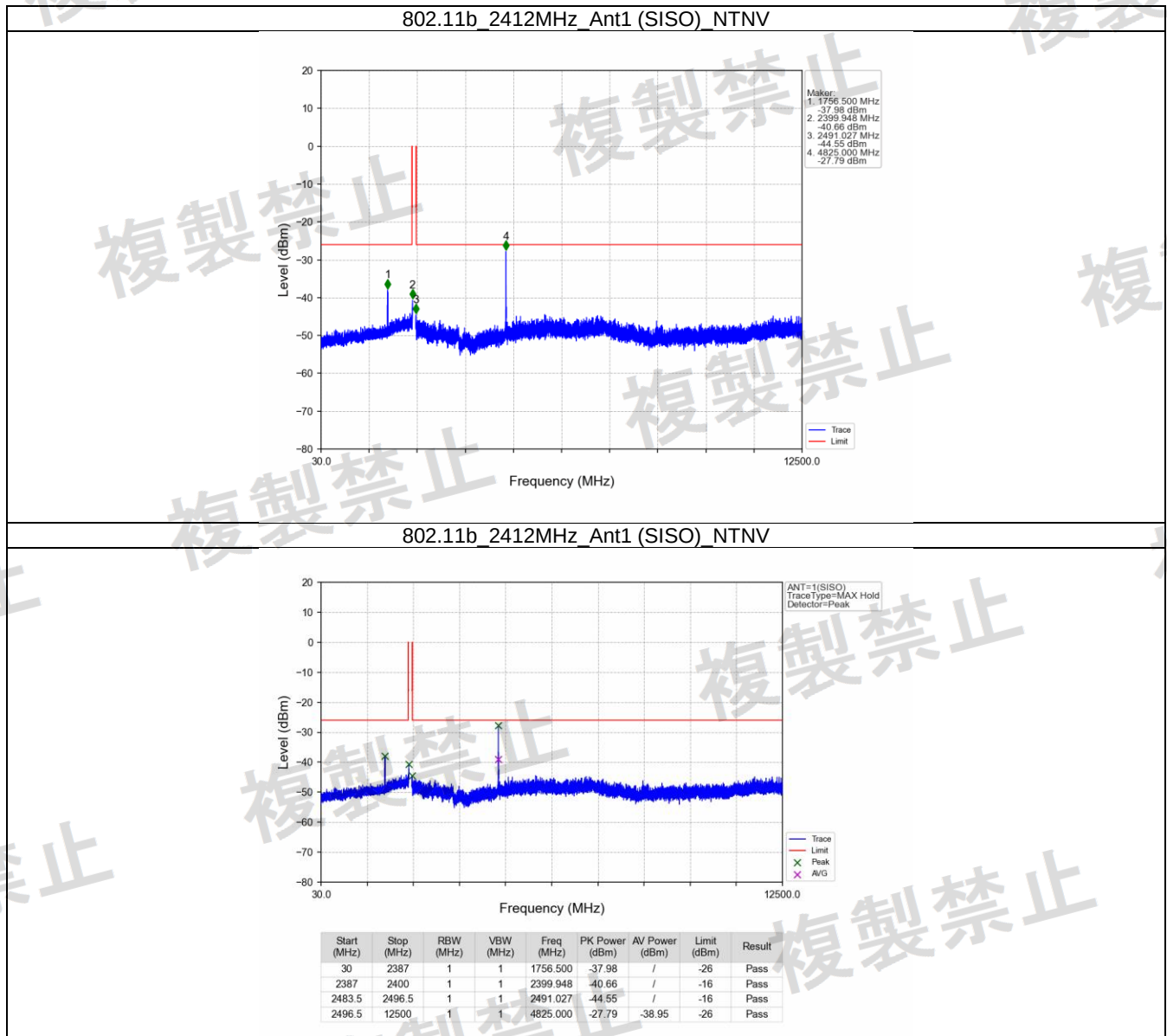
| NTNV             |         |             |    |        |     |             |            |             |                     |                    |                     |                 |         |                    |
|------------------|---------|-------------|----|--------|-----|-------------|------------|-------------|---------------------|--------------------|---------------------|-----------------|---------|--------------------|
| Mode             | TX Type | Freq. (MHz) | RU | RU Pos | ANT | Freq. Range |            | Marker      |                     |                    |                     | Limit (uW /MHz) | Verdict |                    |
|                  |         |             |    |        |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm /MHz) | PK Power (uW /MHz) | AV Power (dBm /MHz) |                 |         | AV Power (uW /MHz) |
| 802.11b          | SISO    | 2412        | /  | /      | 1   | 30          | 2387       | 1756.5      | -37.98              | 0.159              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.948    | -40.66              | 0.086              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2491.027    | -44.55              | 0.035              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4825        | -27.79              | 1.663              | -38.95              | 0.127           | 2.5     | Pass               |
|                  |         | 2472        | /  | /      | 1   | 30          | 2387       | 1753        | -34.23              | 0.378              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2393.682    | -44.54              | 0.035              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2484.449    | -39.33              | 0.117              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4944.5      | -30.31              | 0.931              | /                   | /               | 2.5     | Pass               |
| 802.11g          | SISO    | 2412        | /  | /      | 1   | 30          | 2387       | 2241        | -41.73              | 0.067              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.675    | -31.93              | 0.641              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2489.493    | -42.48              | 0.056              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4830.5      | -32.60              | 0.550              | /                   | /               | 2.5     | Pass               |
|                  |         | 2472        | /  | /      | 1   | 30          | 2387       | 2351.5      | -42.50              | 0.056              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.714    | -38.80              | 0.132              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2483.942    | -31.14              | 0.769              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4945        | -35.49              | 0.282              | /                   | /               | 2.5     | Pass               |
| 802.11n (HT20)   | SISO    | 2412        | /  | /      | 1   | 30          | 2387       | 2241.5      | -39.87              | 0.103              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.857    | -32.58              | 0.552              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2491.742    | -43.29              | 0.047              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4823.5      | -33.55              | 0.442              | /                   | /               | 2.5     | Pass               |
|                  |         | 2472        | /  | /      | 1   | 30          | 2387       | 1754        | -37.09              | 0.195              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.649    | -37.45              | 0.180              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2483.578    | -29.80              | 1.047              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4942        | -35.43              | 0.286              | /                   | /               | 2.5     | Pass               |
| 802.11n (HT40)   | SISO    | 2422        | /  | /      | 1   | 30          | 2387       | 2211        | -44.49              | 0.036              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.974    | -28.53              | 1.403              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2491.352    | -44.87              | 0.033              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 2634.5      | -37.58              | 0.175              | /                   | /               | 2.5     | Pass               |
|                  |         | 2462        | /  | /      | 1   | 30          | 2387       | 2234.5      | -43.17              | 0.048              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.506    | -38.27              | 0.149              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2483.539    | -24.09              | 3.899              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4925.5      | -36.04              | 0.249              | /                   | /               | 2.5     | Pass               |
| 802.11ax (HEW20) | SISO    | 2412        | SU | /      | 1   | 30          | 2387       | 1938        | -25.35              | 2.917              | -39.38              | 0.115           | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.558    | -33.68              | 0.429              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2493.939    | -43.16              | 0.048              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4821.5      | -32.31              | 0.587              | /                   | /               | 2.5     | Pass               |
|                  |         | 2472        | SU | /      | 1   | 30          | 2387       | 2231        | -43.72              | 0.042              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.818    | -38.61              | 0.138              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2483.591    | -30.11              | 0.975              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4945.5      | -34.56              | 0.350              | /                   | /               | 2.5     | Pass               |
| 802.11ax (HEW40) | SISO    | 2422        | SU | /      | 1   | 30          | 2387       | 1933        | -28.16              | 1.528              | -57.31              | 0.002           | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.662    | -23.01              | 5.000              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2483.5      | 2496.5     | 2495.733    | -42.37              | 0.058              | /                   | /               | 25      | Pass               |
|                  |         |             |    |        |     | 2496.5      | 12500      | 4850.5      | -34.47              | 0.357              | /                   | /               | 2.5     | Pass               |
|                  |         | 2462        | SU | /      | 1   | 30          | 2387       | 1757.5      | -36.20              | 0.240              | /                   | /               | 2.5     | Pass               |
|                  |         |             |    |        |     | 2387        | 2400       | 2399.506    | -37.73              | 0.169              | /                   | /               | 25      | Pass               |



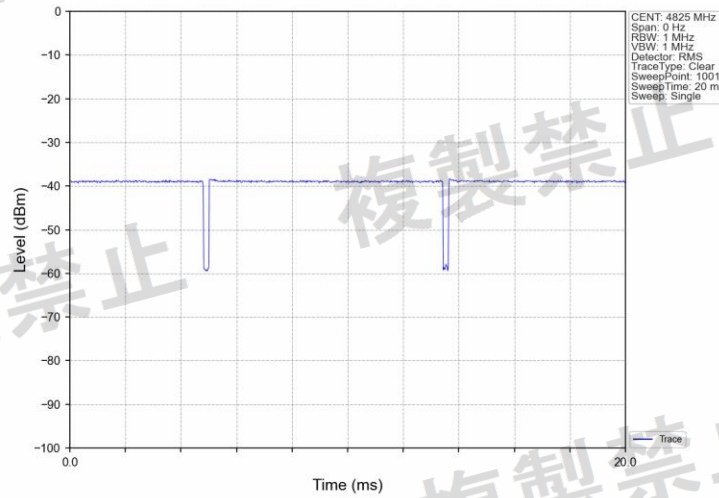
|  |  |  |  |  |        |        |          |        |       |   |   |     |      |
|--|--|--|--|--|--------|--------|----------|--------|-------|---|---|-----|------|
|  |  |  |  |  | 2483.5 | 2496.5 | 2483.513 | -32.65 | 0.543 | / | / | 25  | Pass |
|  |  |  |  |  | 2496.5 | 12500  | 4925     | -35.56 | 0.278 | / | / | 2.5 | Pass |

## 4.2 Test Graph

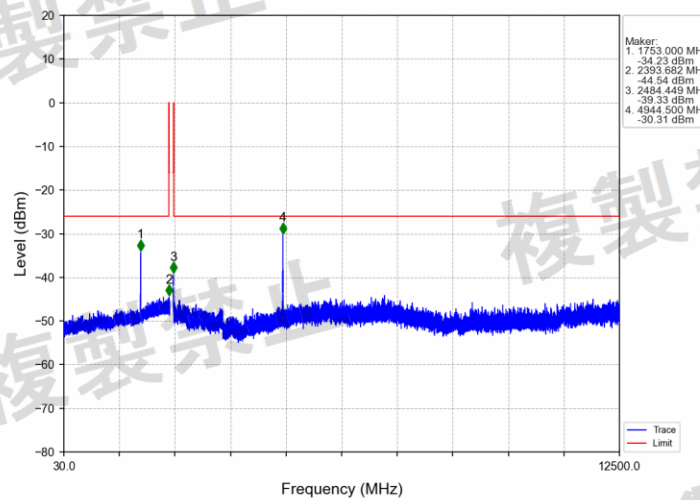
### 4.2.1 TxSe\_NTNV



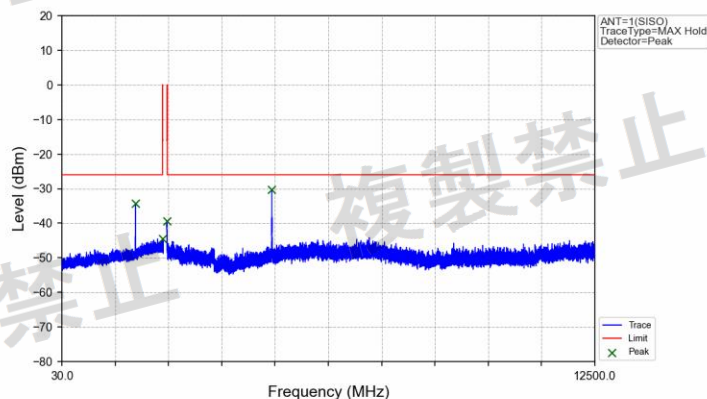
802.11b 2412MHz Ant1 (SISO) NTNV



802.11b 2472MHz Ant1 (SISO) NTNV

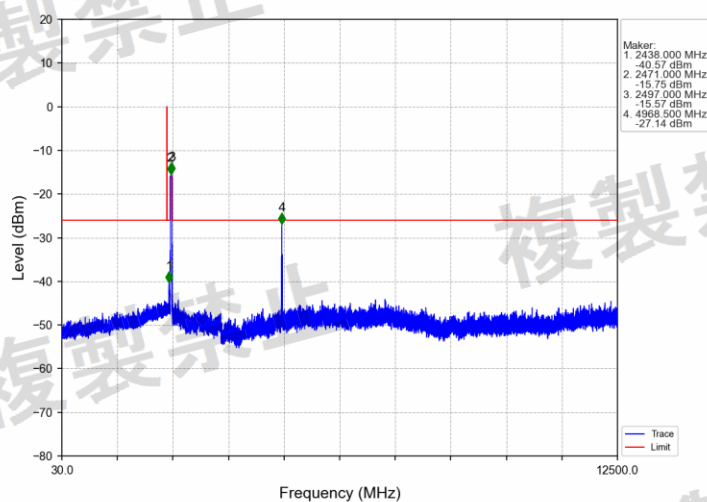


## 802.11b 2472MHz Ant1 (SISO) NTNV

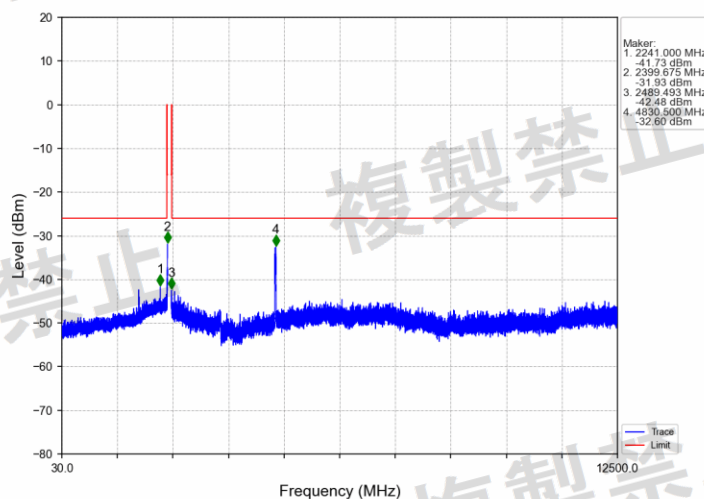


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1753.000   | -34.23         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2393.682   | -44.54         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2484.449   | -39.33         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4944.500   | -30.31         | /              | -26         | Pass   |

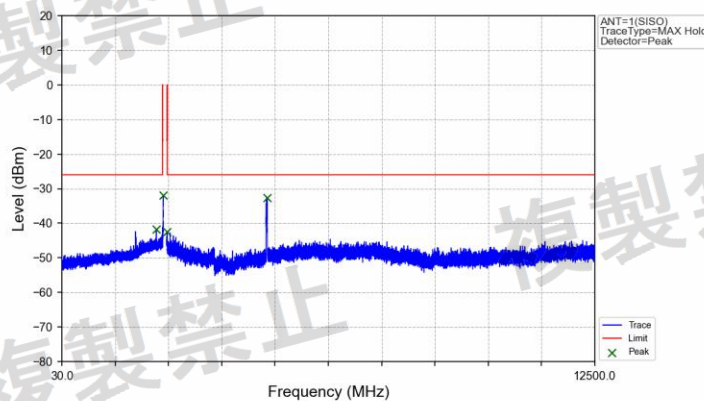
## 802.11b 2484MHz Ant1 (SISO) NTNV



802.11g 2412MHz Ant1 (SISO) NTNV

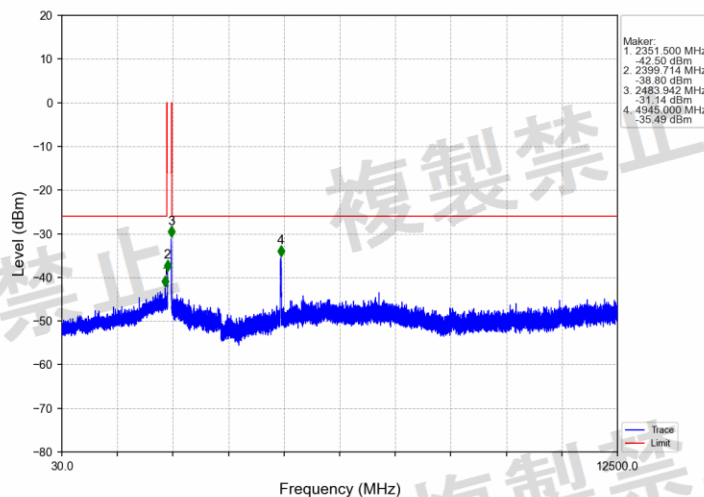


802.11g 2412MHz Ant1 (SISO) NTNV

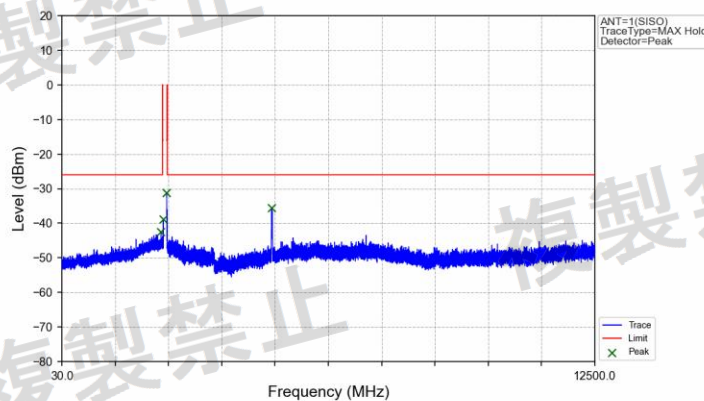


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2241.000   | -41.73         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.675   | -31.93         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2489.493   | -42.48         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4830.500   | -32.60         | /              | -26         | Pass   |

802.11g 2472MHz Ant1 (SISO) NTNV

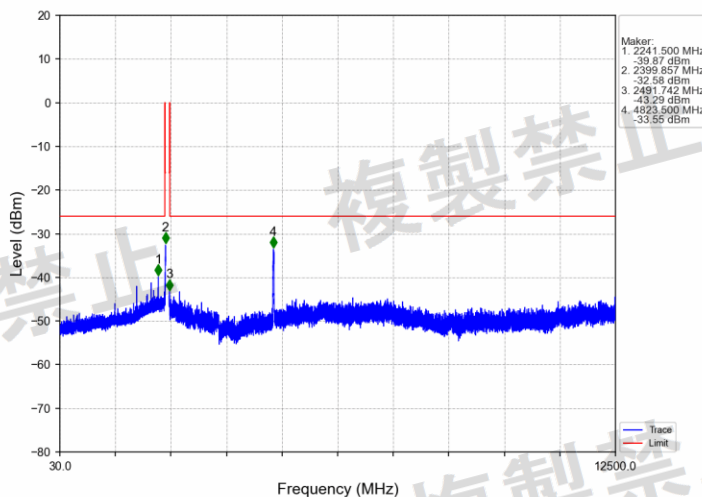


802.11g 2472MHz Ant1 (SISO) NTNV

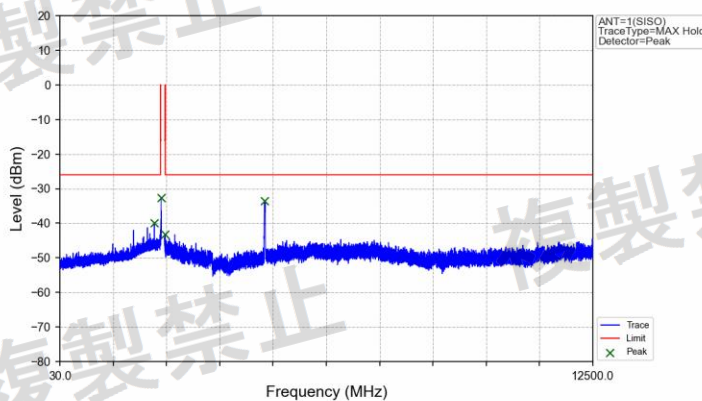


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2351.500   | -42.50         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.714   | -38.80         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.942   | -31.14         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4945.000   | -35.49         | /              | -26         | Pass   |

802.11n(HT20) 2412MHz Ant1 (SISO) NTVN

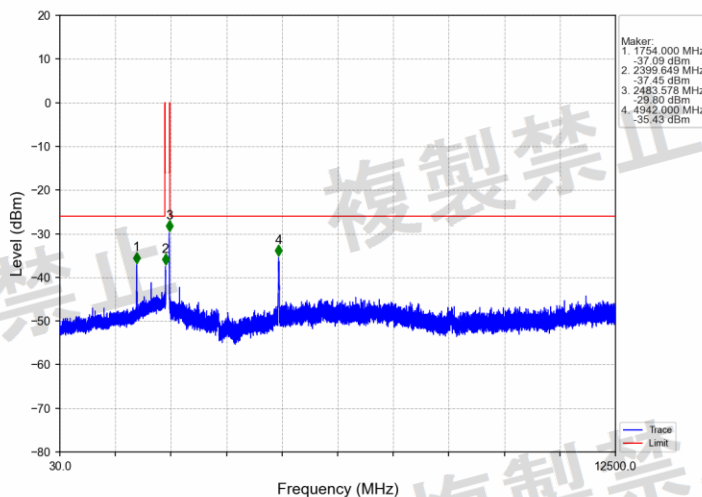


802.11n(HT20) 2412MHz Ant1 (SISO) NTVN

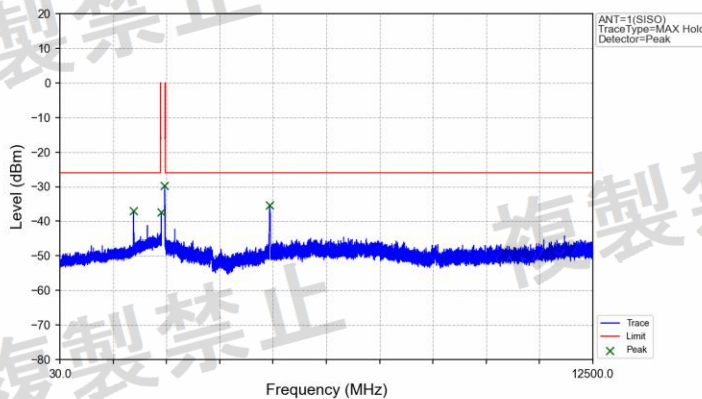


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2241.500   | -39.87         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.857   | -32.58         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2491.742   | -43.29         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4823.500   | -33.55         | /              | -26         | Pass   |

802.11n(HT20) 2472MHz Ant1 (SISO) NTVN

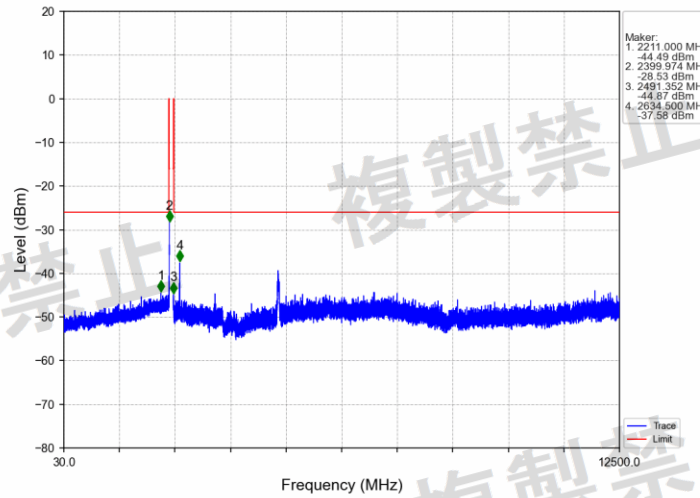


802.11n(HT20) 2472MHz Ant1 (SISO) NTVN

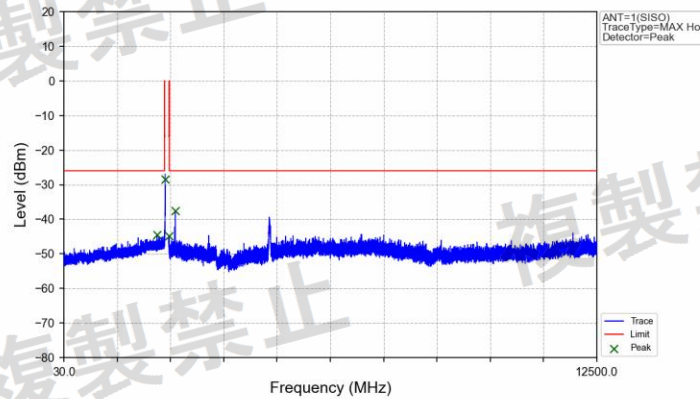


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1754.000   | -37.09         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.649   | -37.45         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.578   | -29.80         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4942.000   | -35.43         | /              | -26         | Pass   |

802.11n(HT40) 2422MHz Ant1 (SISO) NTVN

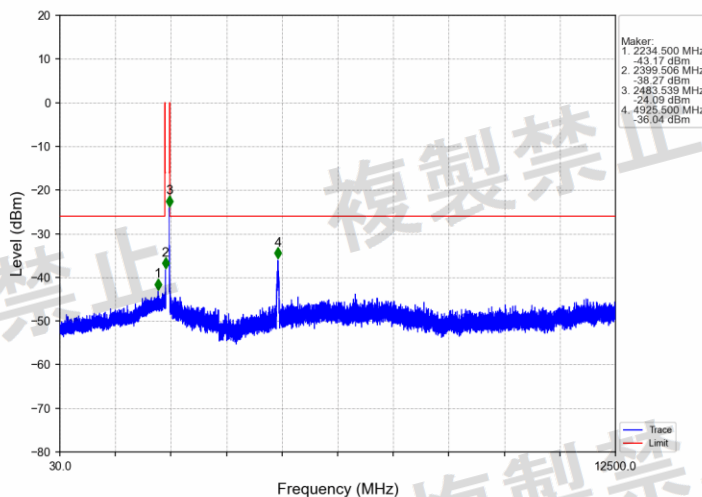


802.11n(HT40) 2422MHz Ant1 (SISO) NTVN

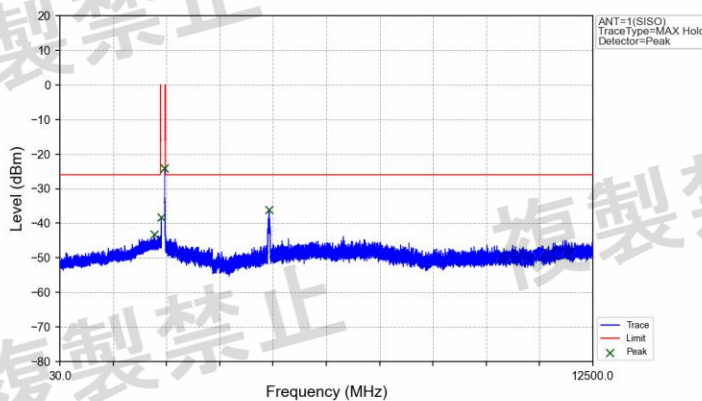


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2211.000   | -44.49         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.974   | -28.53         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2491.352   | -44.87         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 2634.500   | -37.58         | /              | -26         | Pass   |

802.11n(HT40) 2462MHz Ant1 (SISO) NTVN

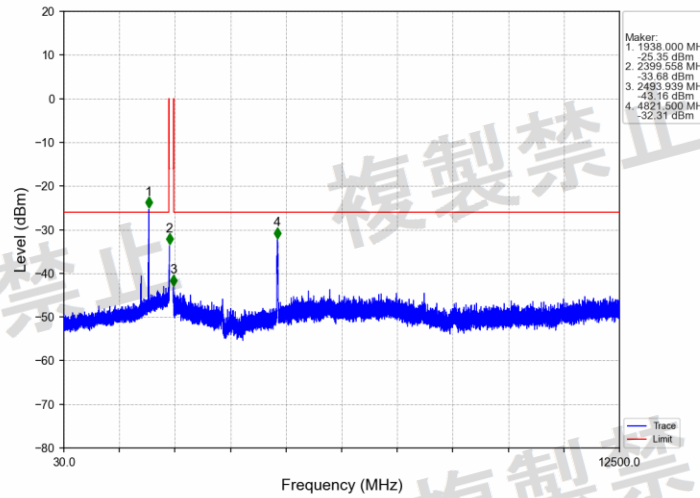


802.11n(HT40) 2462MHz Ant1 (SISO) NTVN

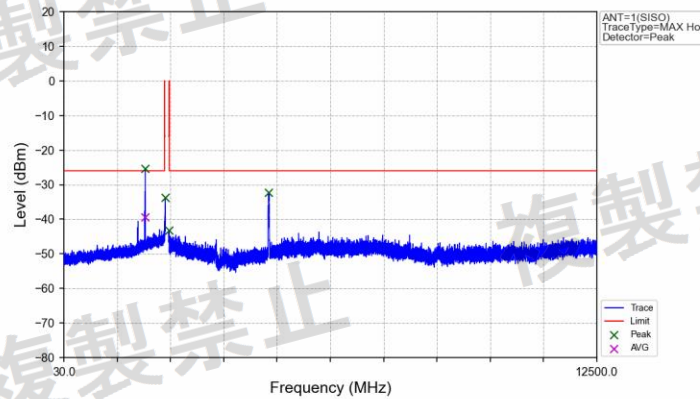


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2234.500   | -43.17         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.506   | -38.27         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.539   | -24.09         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4925.500   | -36.04         | /              | -26         | Pass   |

802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTVN

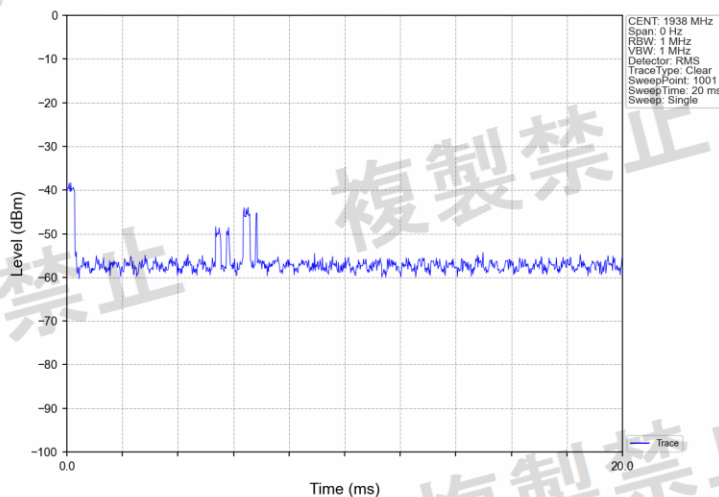


802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTVN

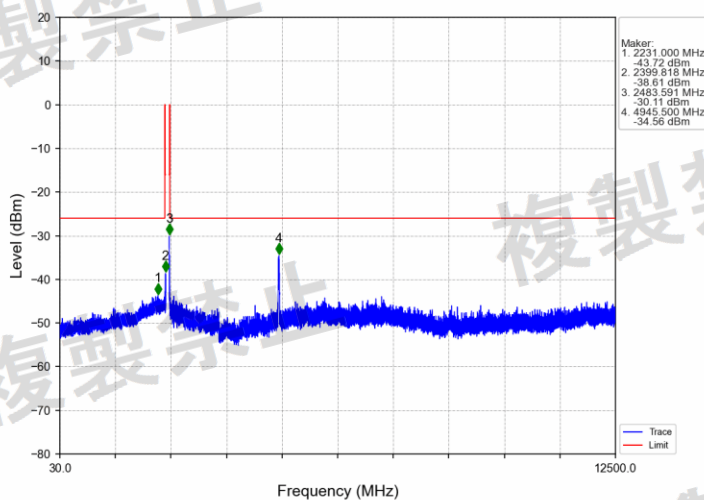


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1938.000   | -25.35         | -39.38         | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.558   | -33.68         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2493.939   | -43.16         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4821.500   | -32.31         | /              | -26         | Pass   |

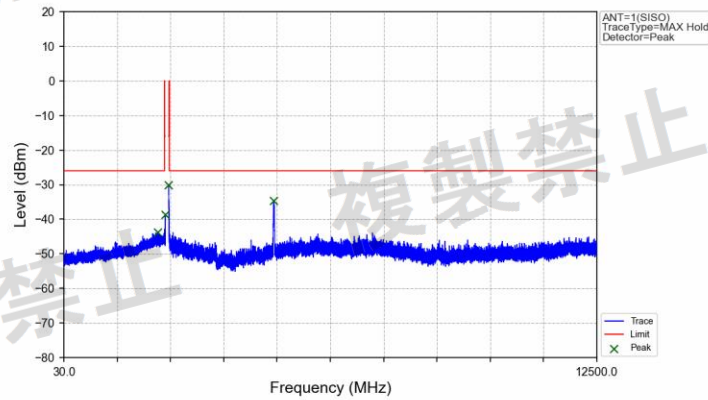
802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTVN



802.11ax(HEW20) 2472MHz SU / Ant1 (SISO) NTVN

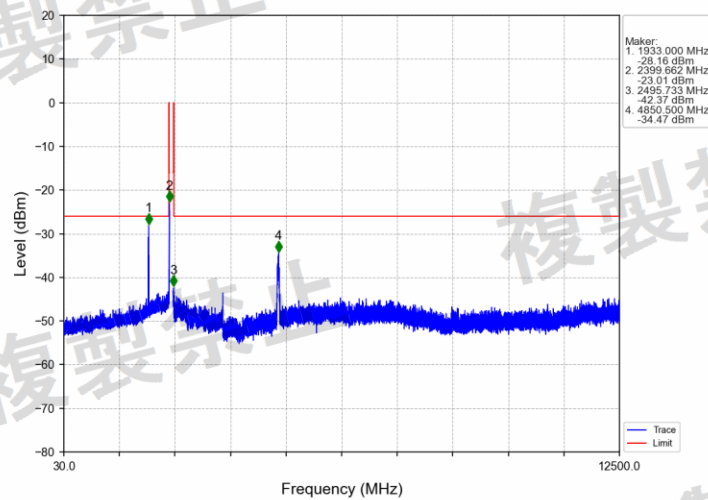


## 802.11ax(HEW20) 2472MHz SU / Ant1 (SISO) NTN

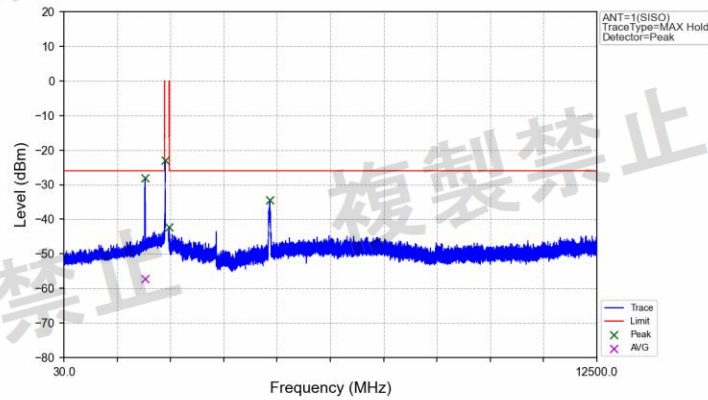


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 2231.000   | -43.72         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.818   | -38.61         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.591   | -30.11         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4945.500   | -34.56         | /              | -26         | Pass   |

## 802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTN

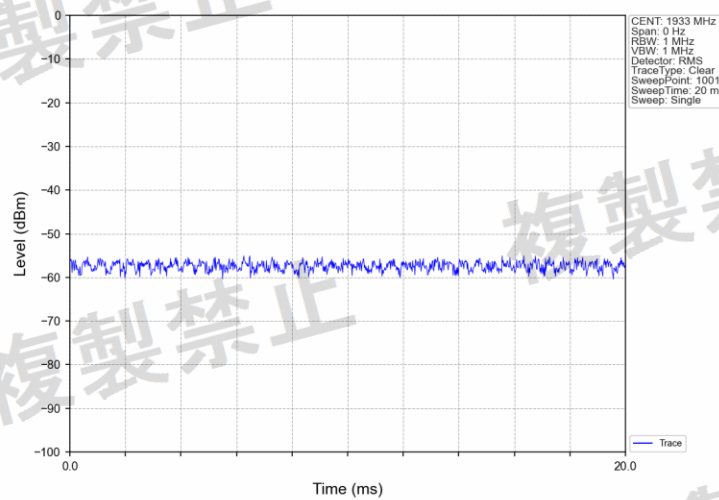


## 802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTVN

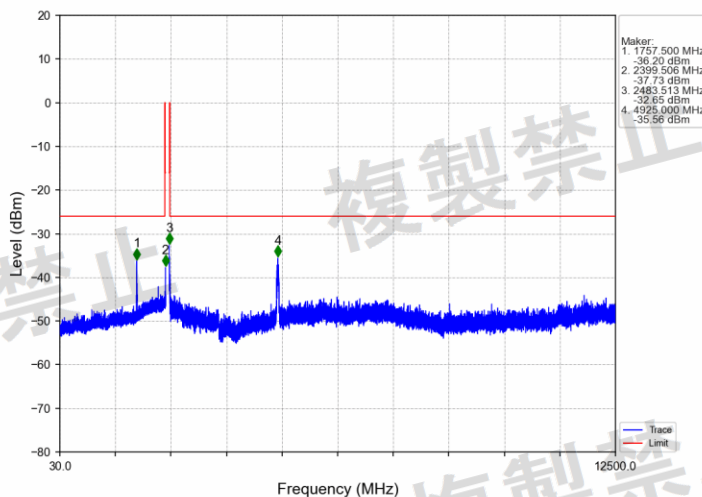


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1933.000   | -28.16         | -57.31         | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.662   | -23.01         | -              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2495.733   | -42.37         | -              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4850.500   | -34.47         | -              | -26         | Pass   |

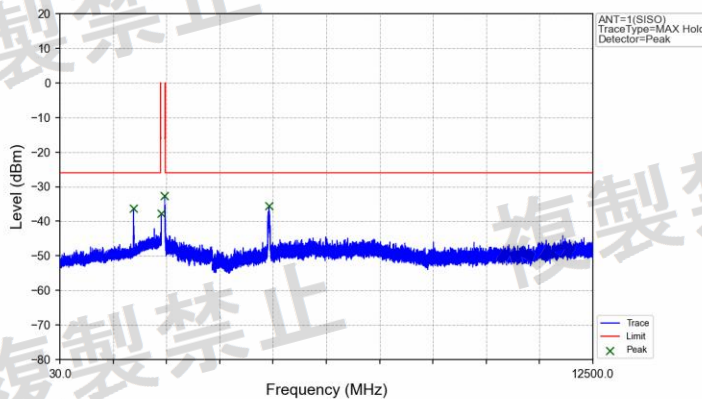
## 802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTVN



802.11ax(HEW40) 2462MHz SU / Ant1 (SISO) NTVN



802.11ax(HEW40) 2462MHz SU / Ant1 (SISO) NTVN



| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 2387       | 1         | 1         | 1757.500   | -36.20         | /              | -26         | Pass   |
| 2387        | 2400       | 1         | 1         | 2399.506   | -37.73         | /              | -16         | Pass   |
| 2483.5      | 2496.5     | 1         | 1         | 2483.513   | -32.65         | /              | -16         | Pass   |
| 2496.5      | 12500      | 1         | 1         | 4925.000   | -35.56         | /              | -26         | Pass   |

## 5. Secondary Radiated Emission

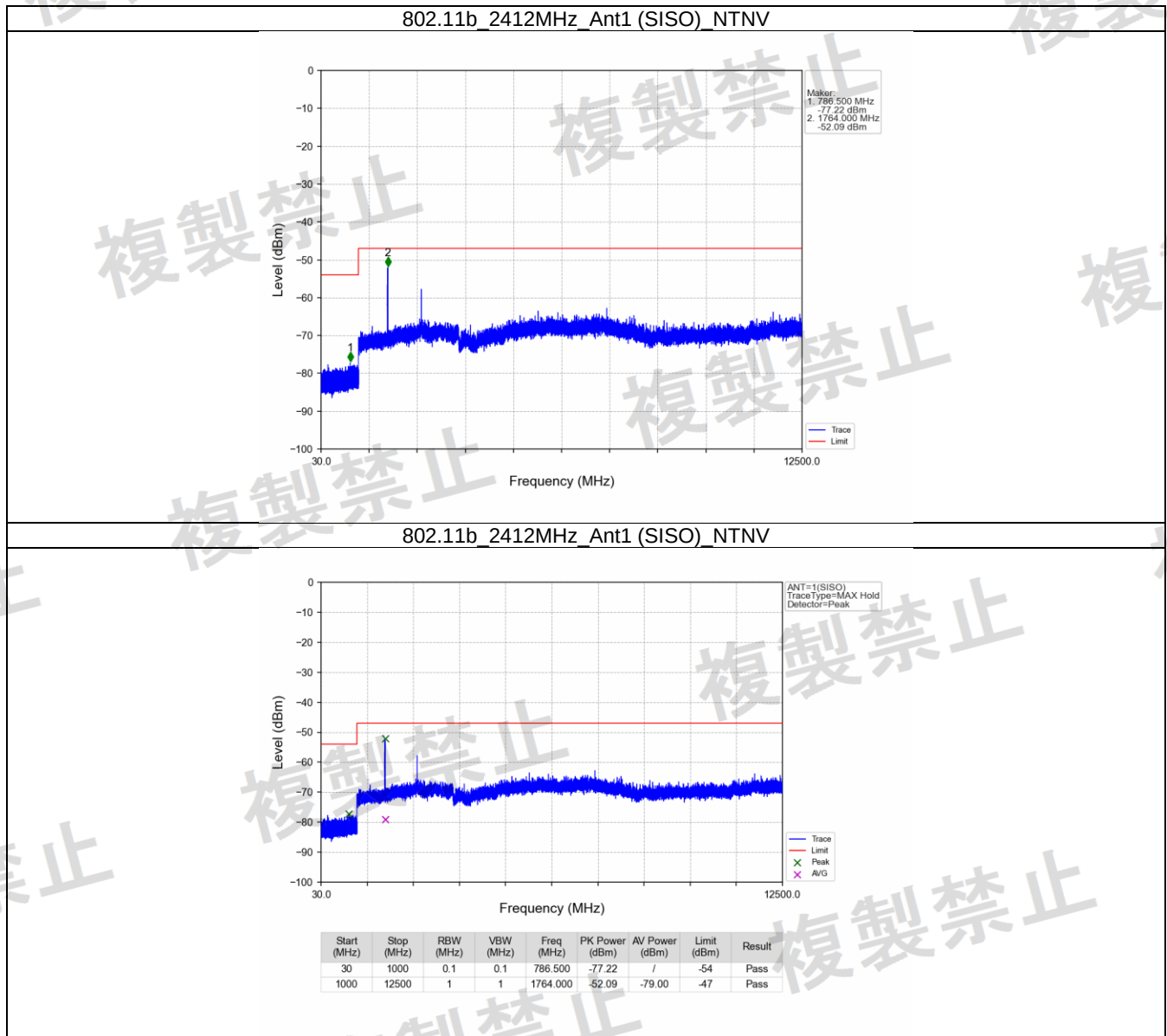
### 5.1 Test Result

#### 5.1.1 RxSe\_NTNV

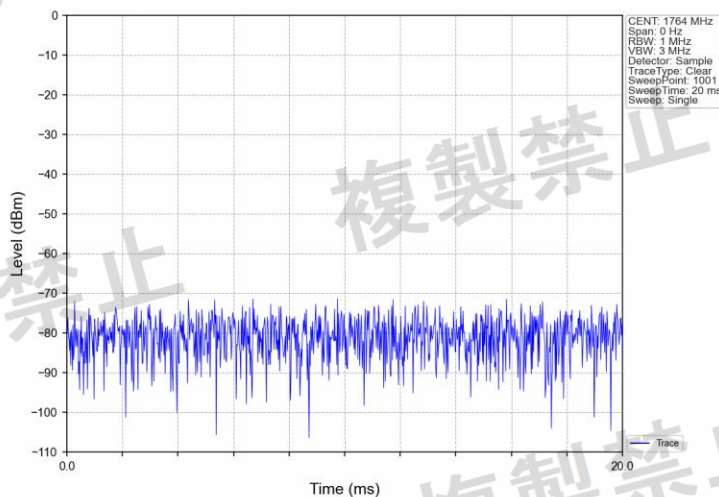
| NTNV             |         |             |    |        |     |             |            |             |                |               |                |            |         |               |
|------------------|---------|-------------|----|--------|-----|-------------|------------|-------------|----------------|---------------|----------------|------------|---------|---------------|
| Mode             | TX Type | Freq. (MHz) | RU | RU Pos | ANT | Freq. Range |            | Marker      |                |               |                | Limit (nW) | Verdict |               |
|                  |         |             |    |        |     | Start (MHz) | Stop (MHz) | Freq. (MHz) | PK Power (dBm) | PK Power (nW) | AV Power (dBm) |            |         | AV Power (nW) |
| 802.11b          | SISO    | 2412        | /  | /      | 1   | 30          | 1000       | 786.5       | -77.22         | 0.019         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 1764        | -52.09         | 6.180         | -79.00         | 0.013      | 20      | Pass          |
|                  |         | 2472        | /  | /      | 1   | 30          | 1000       | 610.1       | -77.58         | 0.017         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 1764.5      | -56.89         | 2.046         | /              | /          | 20      | Pass          |
| 802.11g          | SISO    | 2412        | /  | /      | 1   | 30          | 1000       | 827.5       | -76.89         | 0.020         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 1746.5      | -60.78         | 0.836         | /              | /          | 20      | Pass          |
|                  |         | 2472        | /  | /      | 1   | 30          | 1000       | 800.95      | -77.75         | 0.017         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 5813        | -56.91         | 2.037         | /              | /          | 20      | Pass          |
| 802.11n (HT20)   | SISO    | 2412        | /  | /      | 1   | 30          | 1000       | 989.05      | -77.05         | 0.020         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 12331       | -62.69         | 0.538         | /              | /          | 20      | Pass          |
|                  |         | 2472        | /  | /      | 1   | 30          | 1000       | 818.8       | -77.36         | 0.018         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 2402.5      | -59.67         | 1.079         | /              | /          | 20      | Pass          |
| 802.11n (HT40)   | SISO    | 2422        | /  | /      | 1   | 30          | 1000       | 820.85      | -77.34         | 0.018         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 6021.5      | -63.82         | 0.415         | /              | /          | 20      | Pass          |
|                  |         | 2462        | /  | /      | 1   | 30          | 1000       | 910.75      | -76.47         | 0.023         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 1747        | -58.15         | 1.531         | /              | /          | 20      | Pass          |
| 802.11ax (HEW20) | SISO    | 2412        | SU | /      | 1   | 30          | 1000       | 869.5       | -77.07         | 0.020         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 5798        | -60.09         | 0.979         | /              | /          | 20      | Pass          |
|                  |         | 2472        | SU | /      | 1   | 30          | 1000       | 818.5       | -77.13         | 0.019         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 6896.5      | -63.82         | 0.415         | /              | /          | 20      | Pass          |
| 802.11ax (HEW40) | SISO    | 2422        | SU | /      | 1   | 30          | 1000       | 914.1       | -77.20         | 0.019         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 6336.5      | -63.51         | 0.446         | /              | /          | 20      | Pass          |
|                  |         | 2462        | SU | /      | 1   | 30          | 1000       | 717.35      | -76.96         | 0.020         | /              | /          | 4       | Pass          |
|                  |         |             |    |        |     | 1000        | 12500      | 1747        | -63.40         | 0.457         | /              | /          | 20      | Pass          |

## 5.2 Test Graph

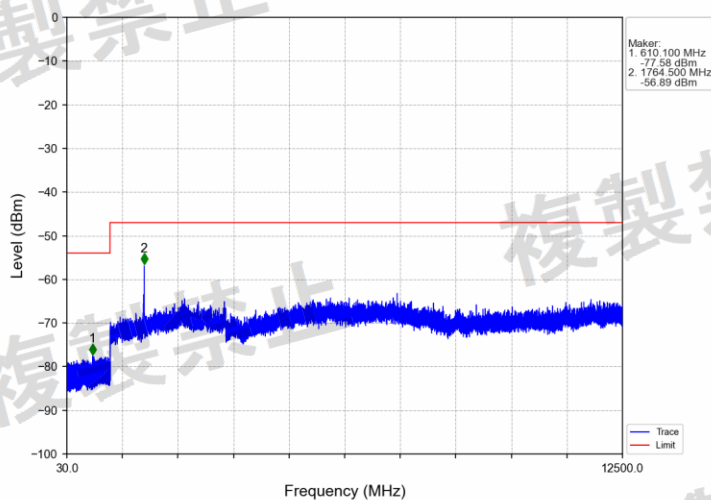
### 5.2.1 RxSe\_NTNV



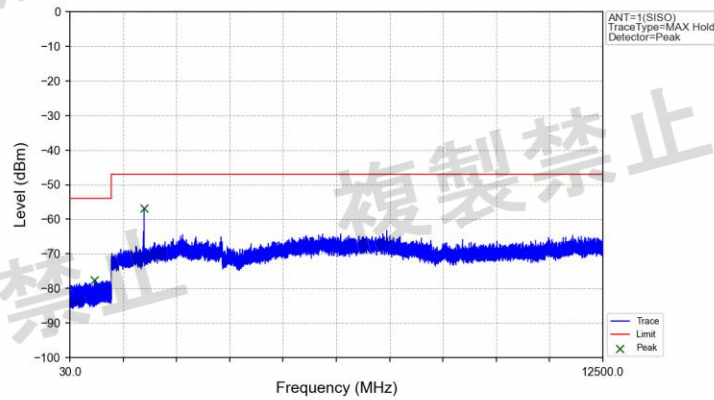
802.11b 2412MHz Ant1 (SISO) NTN



802.11b 2472MHz Ant1 (SISO) NTN

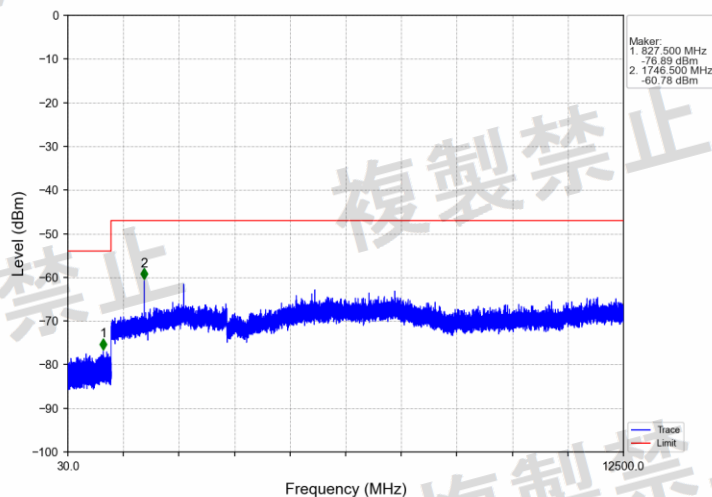


## 802.11b 2472MHz Ant1 (SISO) NTN

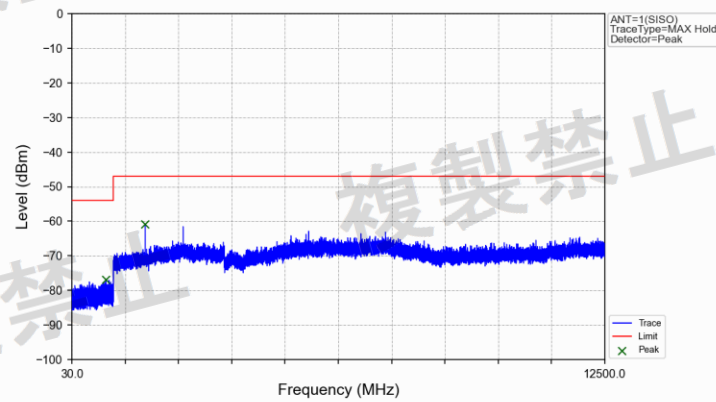


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | A/V Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|-----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 610.100    | -77.58         | /               | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 1764.500   | -56.89         | /               | -47         | Pass   |

802.11g 2412MHz Ant1 (SISO) NTVN

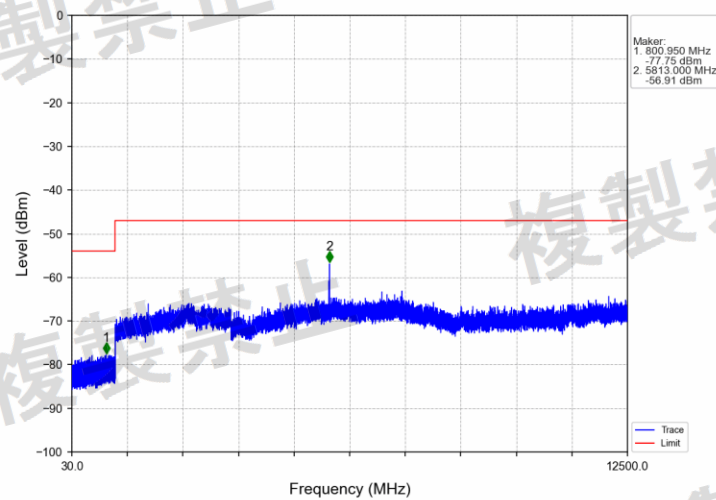


## 802.11g 2412MHz Ant1 (SISO) NTN

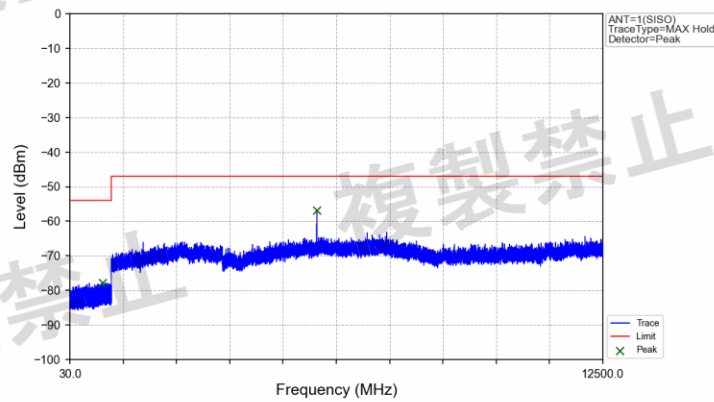


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 827.500    | -76.89         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 1746.500   | -60.78         | /              | -47         | Pass   |

## 802.11g 2472MHz Ant1 (SISO) NTN

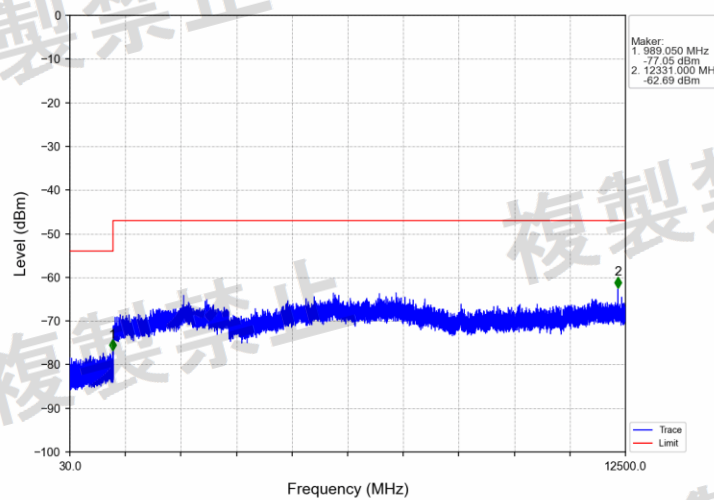


## 802.11g 2472MHz Ant1 (SISO) NTVN



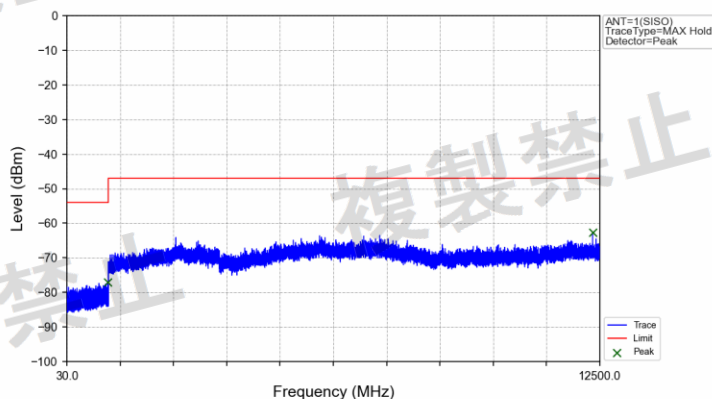
| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | A/V Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|-----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 800.950    | -77.75         | /               | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 5813.000   | -56.91         | /               | -47         | Pass   |

## 802.11n(HT20) 2412MHz Ant1 (SISO) NTVN



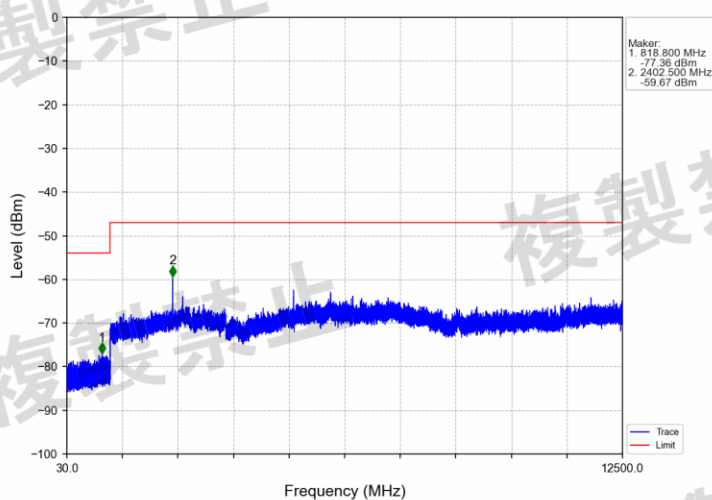
| Marker | Freq (MHz) | Level (dBm) |
|--------|------------|-------------|
| 1      | 989.050    | -77.05      |
| 2      | 12331.000  | -62.69      |

## 802.11n(HT20) 2412MHz Ant1 (SISO) NTVN

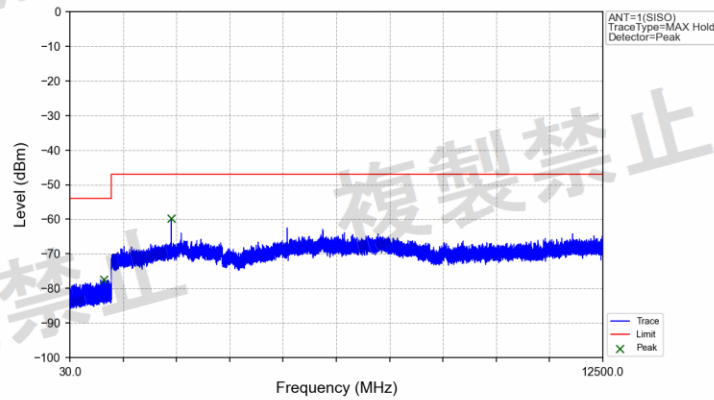


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | A/V Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|-----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 989.050    | -77.05         | /               | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 12331.000  | -62.69         | /               | -47         | Pass   |

## 802.11n(HT20) 2472MHz Ant1 (SISO) NTVN

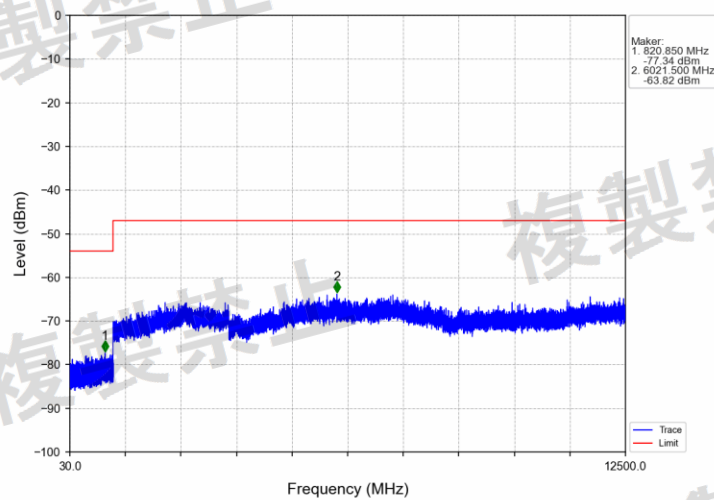


## 802.11n(HT20) 2472MHz Ant1 (SISO) NTVN

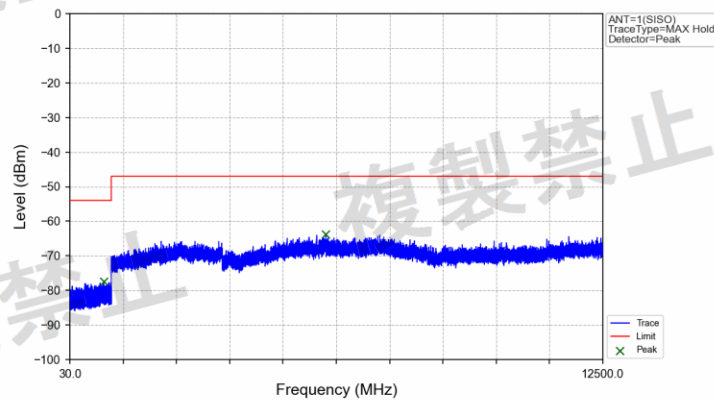


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | A/V Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|-----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 818.800    | -77.36         | /               | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 2402.500   | -59.67         | /               | -47         | Pass   |

## 802.11n(HT40) 2422MHz Ant1 (SISO) NTVN

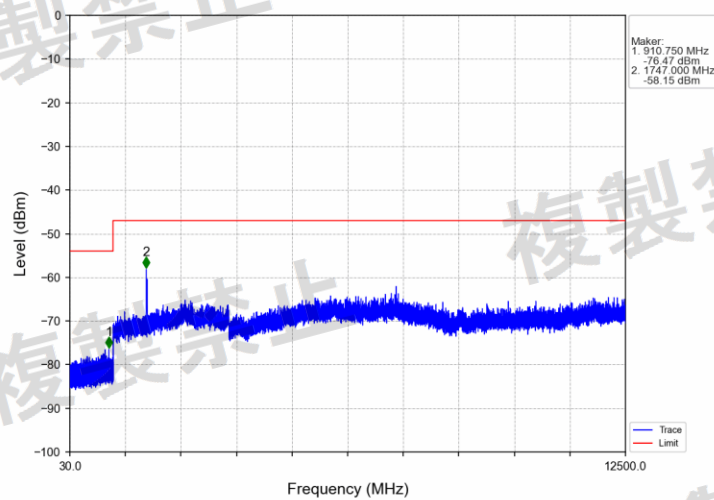


## 802.11n(HT40) 2422MHz Ant1 (SISO) NTVN

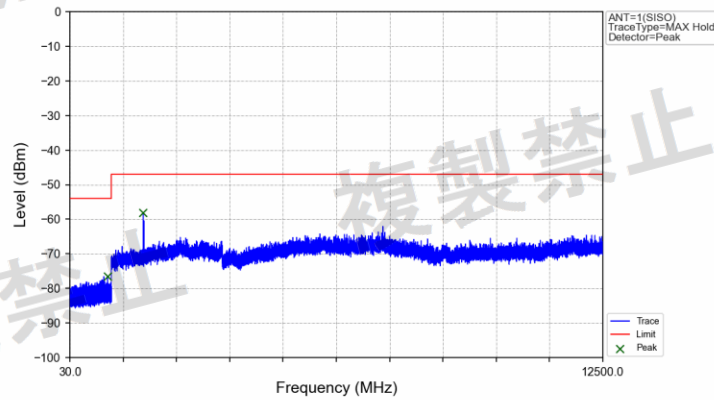


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 820.850    | -77.34         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 6021.500   | -63.82         | /              | -47         | Pass   |

## 802.11n(HT40) 2462MHz Ant1 (SISO) NTVN

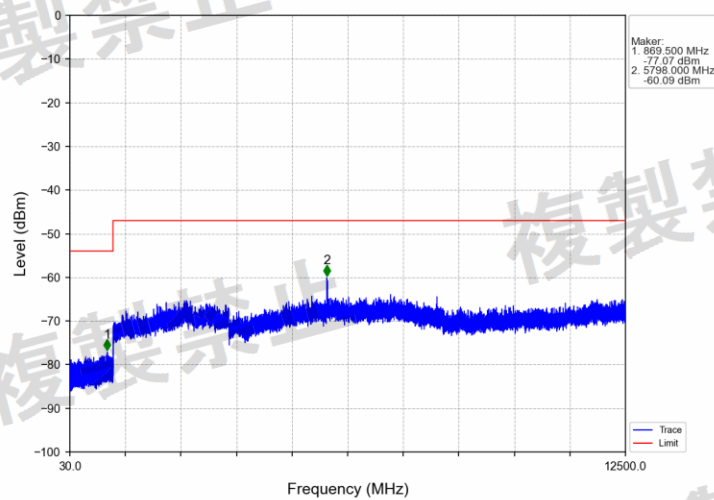


## 802.11n(HT40) 2462MHz Ant1 (SISO) NTNV

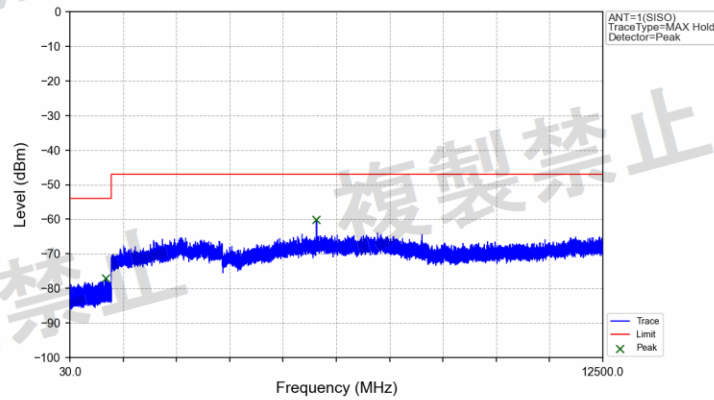


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 910.750    | -76.47         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 1747.000   | -58.15         | /              | -47         | Pass   |

## 802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTNV

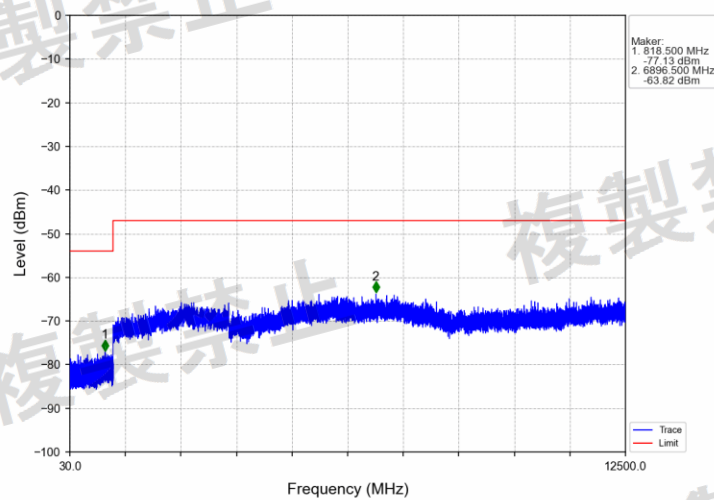


## 802.11ax(HEW20) 2412MHz SU / Ant1 (SISO) NTN

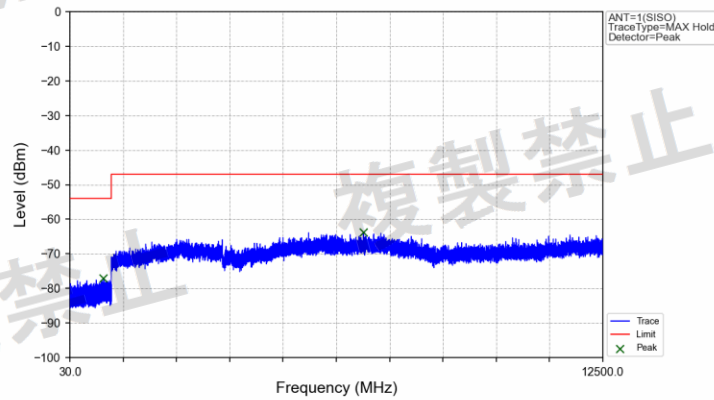


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | A/V Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|-----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 869.500    | -77.07         | /               | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 5798.000   | -60.09         | /               | -47         | Pass   |

## 802.11ax(HEW20) 2472MHz SU / Ant1 (SISO) NTN

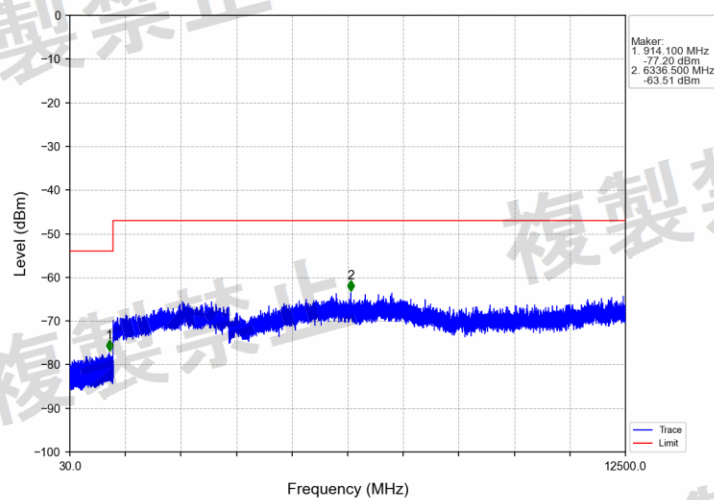


## 802.11ax(HEW20) 2472MHz SU / Ant1 (SISO) NTNV

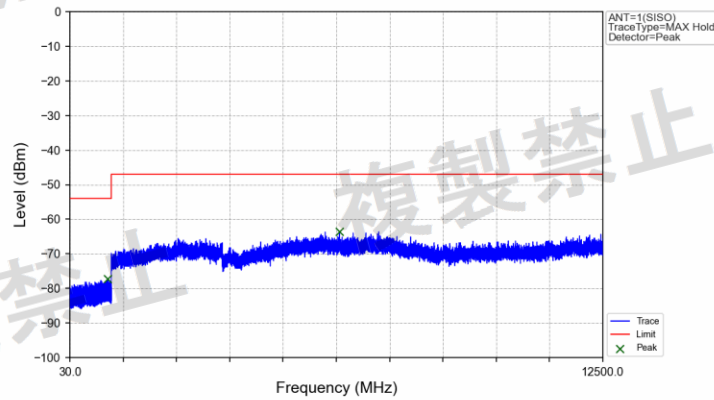


| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 818.500    | -77.13         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 6896.500   | -63.82         | /              | -47         | Pass   |

## 802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTNV

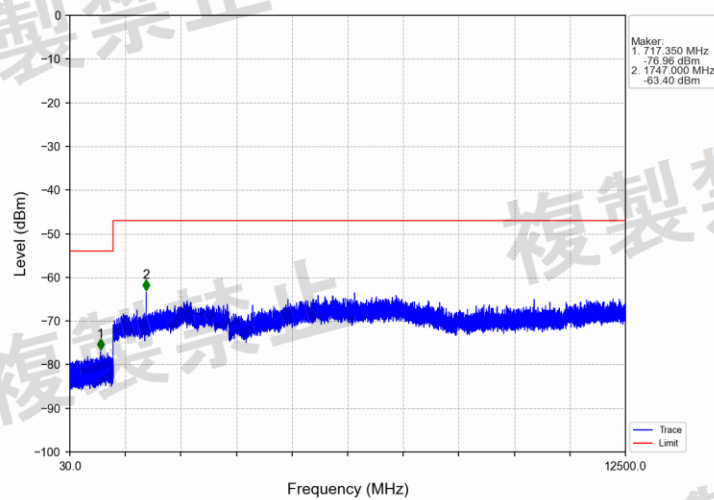


## 802.11ax(HEW40) 2422MHz SU / Ant1 (SISO) NTNV



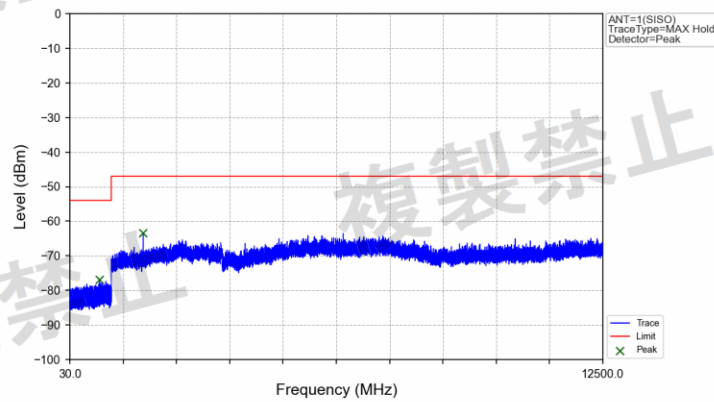
| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | AV Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 914.100    | -77.20         | /              | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 6336.500   | -63.51         | /              | -47         | Pass   |

## 802.11ax(HEW40) 2462MHz SU / Ant1 (SISO) NTNV





802.11ax(HEW40) 2462MHz SU / Ant1 (SISO) NTNv



| Start (MHz) | Stop (MHz) | RBW (MHz) | VBW (MHz) | Freq (MHz) | PK Power (dBm) | A/V Power (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|-----------|------------|----------------|-----------------|-------------|--------|
| 30          | 1000       | 0.1       | 0.1       | 717.350    | -76.96         | /               | -54         | Pass   |
| 1000        | 12500      | 1         | 1         | 1747.000   | -63.40         | /               | -47         | Pass   |

\*\*\*\*\* End of Report \*\*\*\*\*