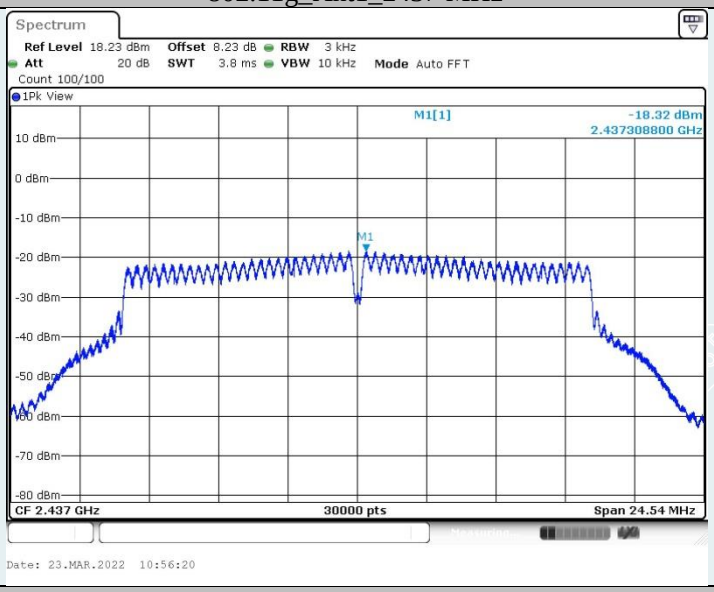
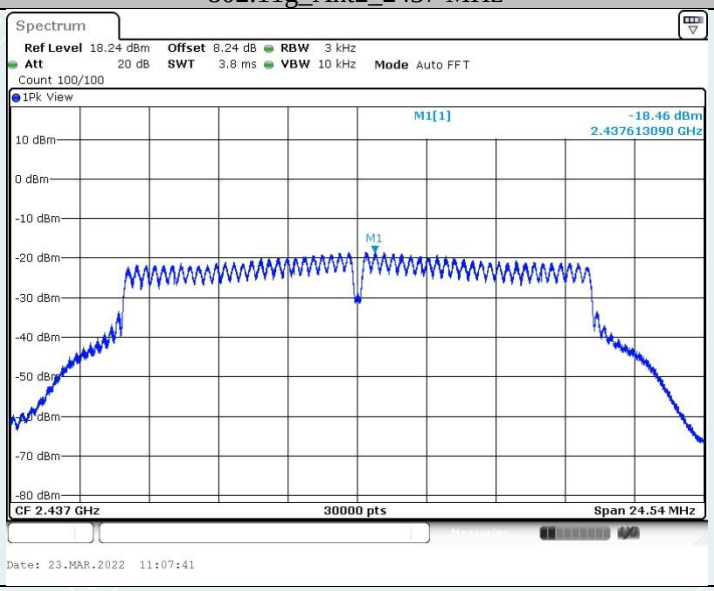
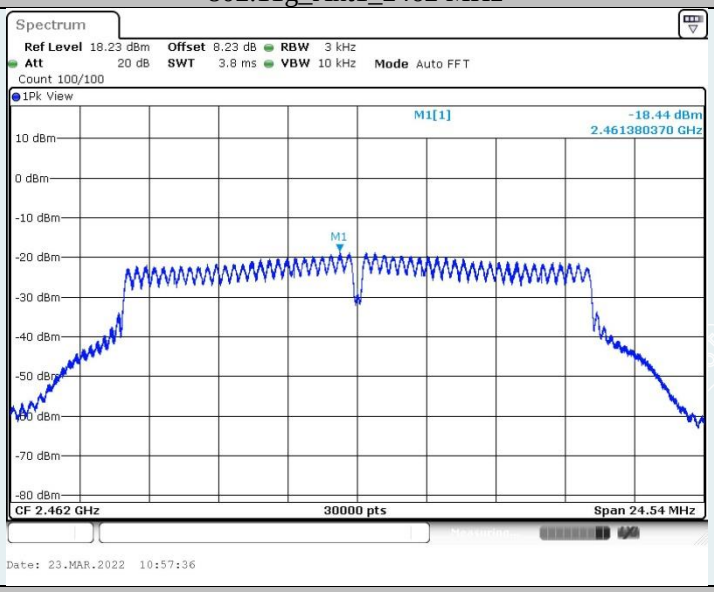
802.11g_Ant1_2437 MHz




802.11g_Ant2_2437 MHz



802.11g_Ant1_2462 MHz

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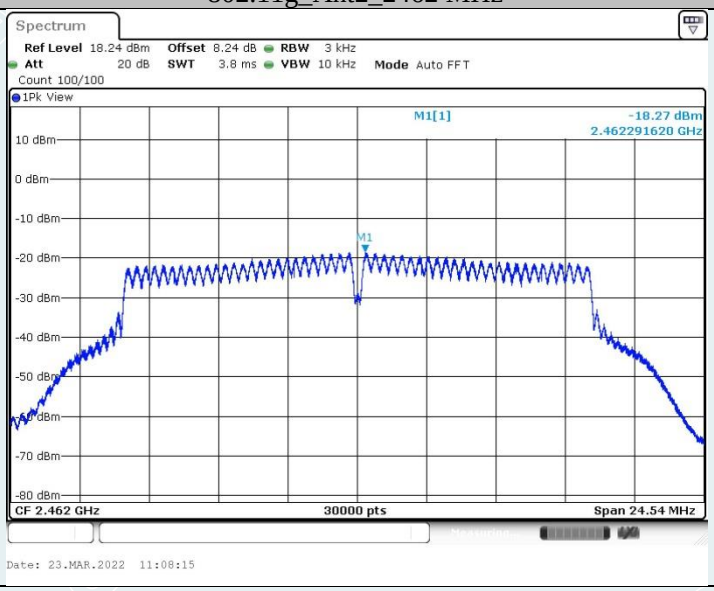
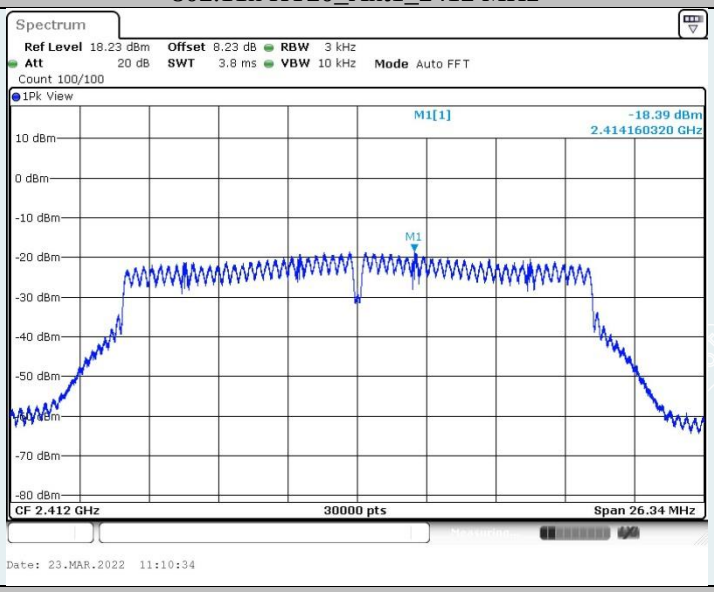
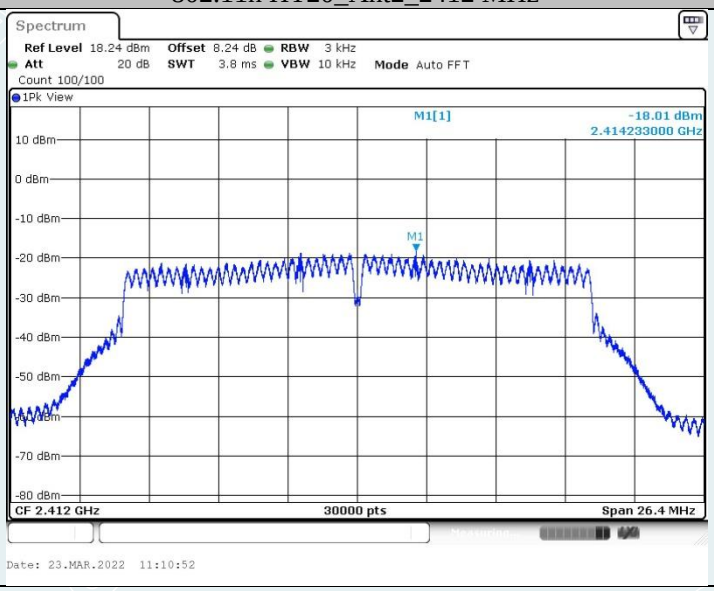
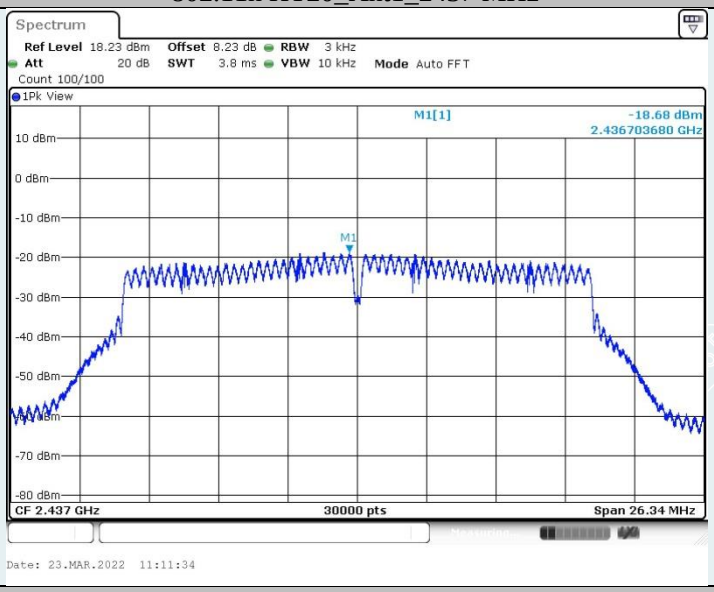
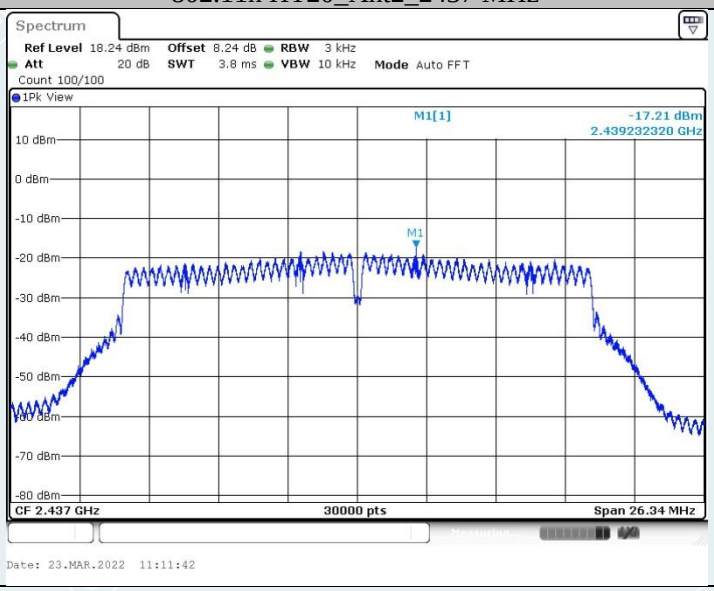


| 802.11n HT20_Ant1_2412 MHz |
| --- |
|  |
| 802.11n HT20_Ant2_2412 MHz |
|  |

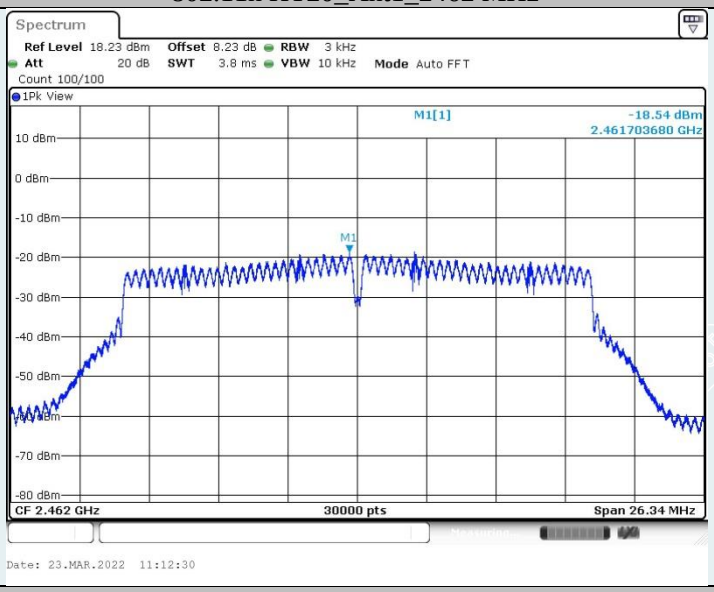
802.11n HT20_Ant1_2437 MHz



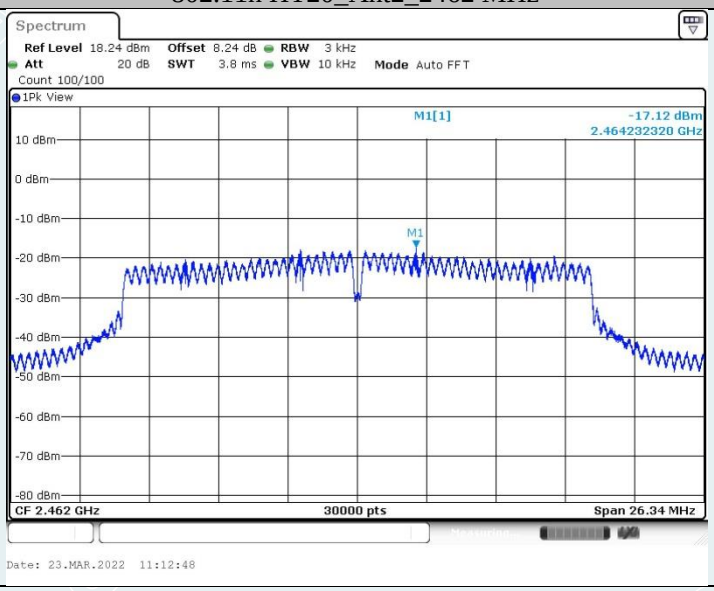

802.11n HT20_Ant2_2437 MHz



802.11n HT20_Ant1_2462 MHz




802.11n HT20_Ant2_2462 MHz



## 10. CONDUCTED BAND EDGES AND SPURIOUS EMISSIONS

### 10.1 LIMITS

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

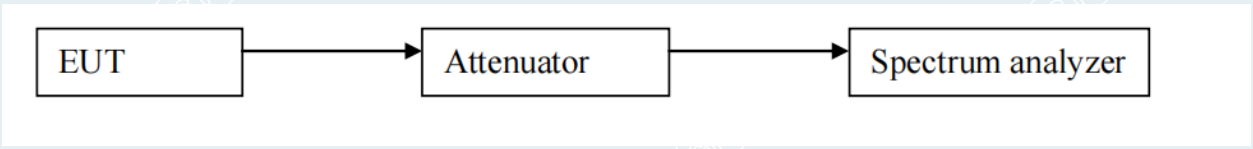
### 10.2 TEST PROCEDURES

Test procedures follow KDB 558074 D01 15.247 Measurement Guidance.

Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.

1) Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.
2) Set the spectrum analyzer: RBW =100kHz; VBW =300kHz, Frequency range = 30MHz to 26.5GHz; Sweep = auto; Detector Function = Peak; Trace = Max hold.
3) Measure and record the results in the test report.
4) The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

### 10.3 TEST SETUP




---------- **The following blanks** ----------

## 10.4 TEST RESULTS

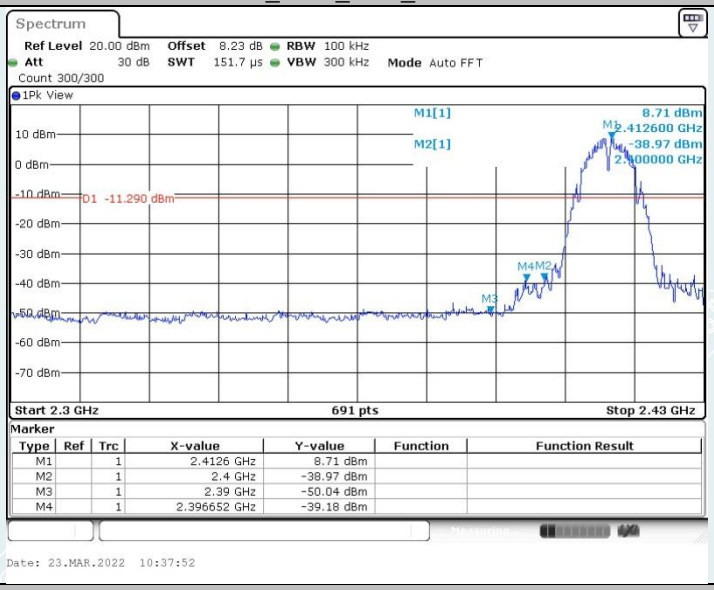
Environment: 23.5℃/48%RH Voltage:DC 3.8V
Tested By:Lu Wei Date: 2022-03-23

Band edge

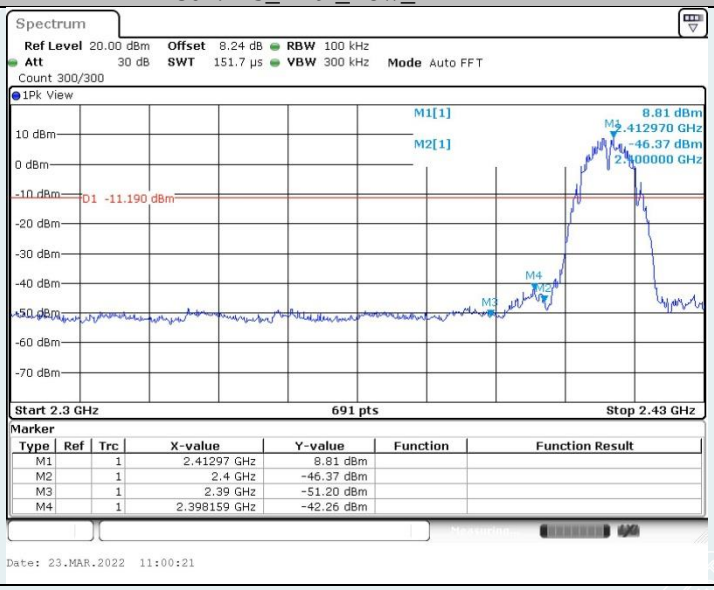
| Test Mode | Antenna | ChName | Frequency [MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 802.11b | Ant1 | Low | 2412 | 8.71 | -39.18 | ≤-11.29 | PASS |
| | Ant2 | Low | 2412 | 8.81 | -42.26 | ≤-11.19 | PASS |
| | Ant1 | High | 2462 | 8.81 | -46.64 | ≤-11.19 | PASS |
| | Ant2 | High | 2462 | 8.48 | -46.82 | ≤-11.52 | PASS |
| 802.11g | Ant1 | Low | 2412 | 2.27 | -33.25 | ≤-17.73 | PASS |
| | Ant2 | Low | 2412 | 1.69 | -35.64 | ≤-18.31 | PASS |
| | Ant1 | High | 2462 | 1.59 | -44.13 | ≤-18.41 | PASS |
| | Ant2 | High | 2462 | 1.77 | -47.26 | ≤-18.23 | PASS |
| 802.11n HT20 | Ant1 | Low | 2412 | 2.21 | -33.07 | ≤-17.79 | PASS |
| | Ant2 | Low | 2412 | 2.70 | -31.12 | ≤-17.3 | PASS |
| | Ant1 | High | 2462 | 1.74 | -44.24 | ≤-18.26 | PASS |
| | Ant2 | High | 2462 | 3.34 | -28.2 | ≤-16.66 | PASS |

**---------- The following blanks ----------**

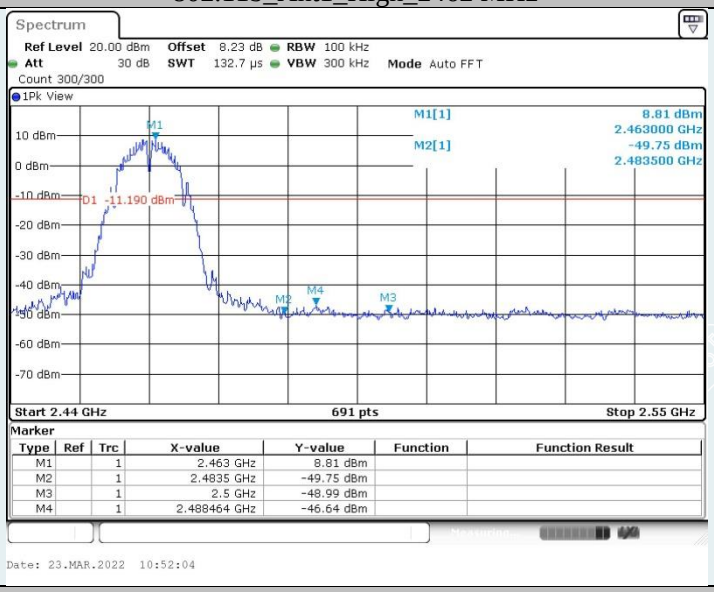
802.11b_Ant1_Low_2412 MHz



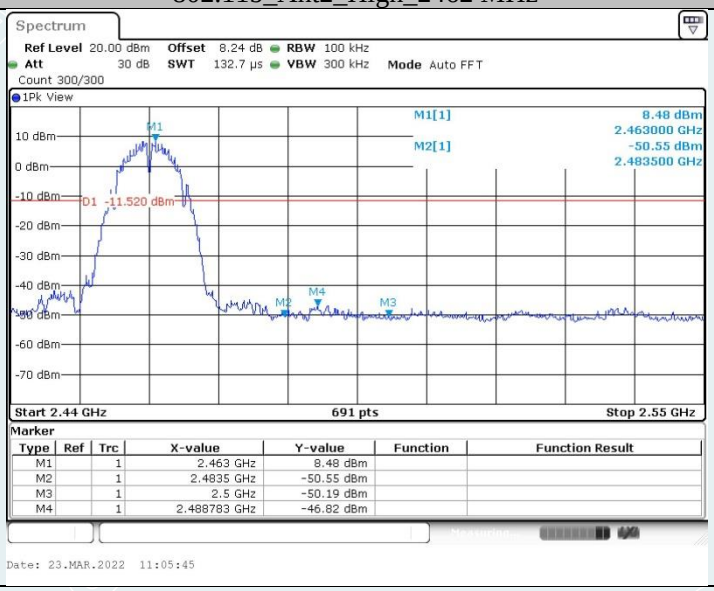

802.11b_Ant2_Low_2412 MHz



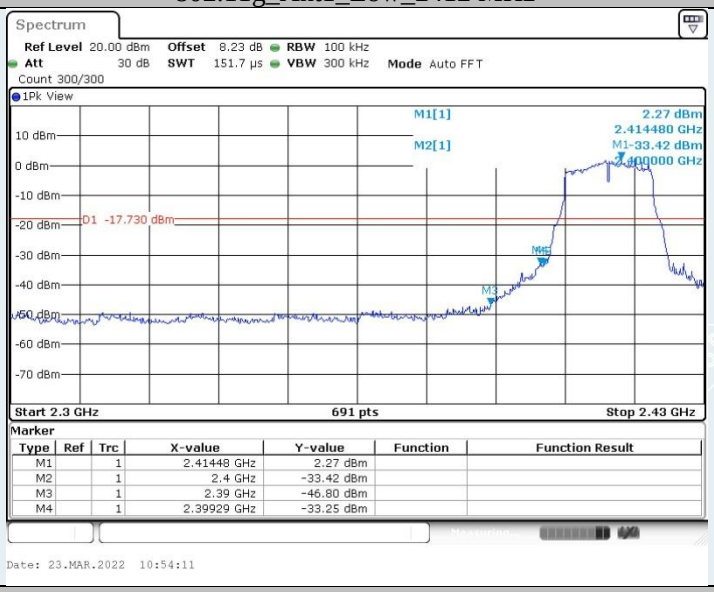
802.11b_Ant1_High_2462 MHz



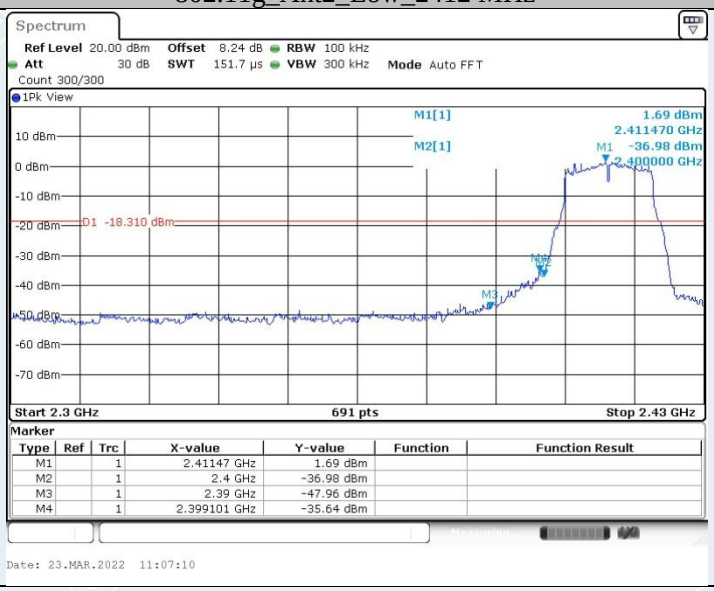

802.11b_Ant2_High_2462 MHz



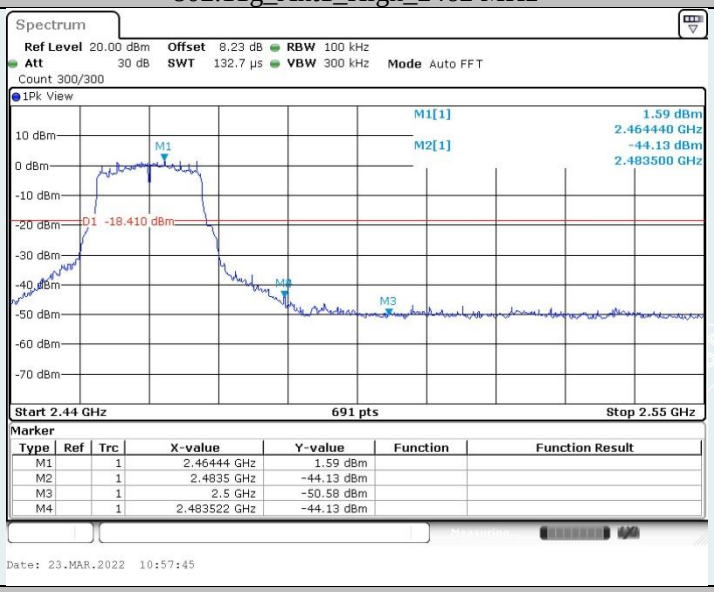
802.11g_Ant1_Low_2412 MHz



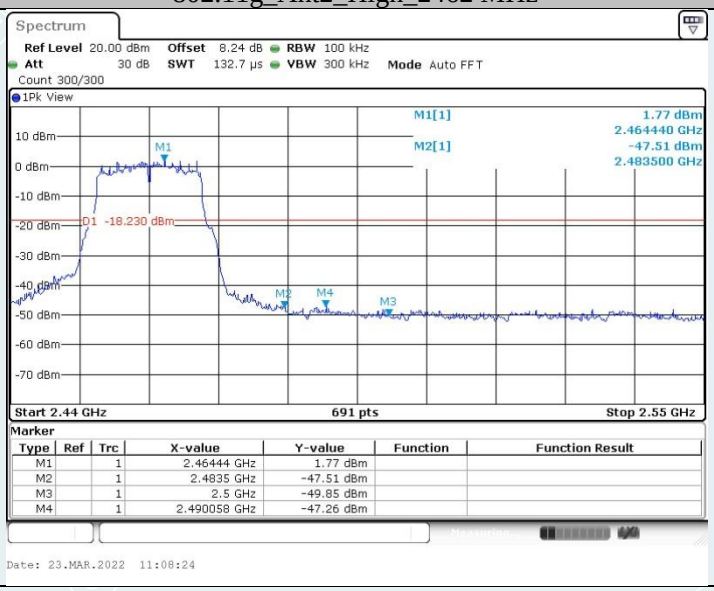

802.11g_Ant2_Low_2412 MHz



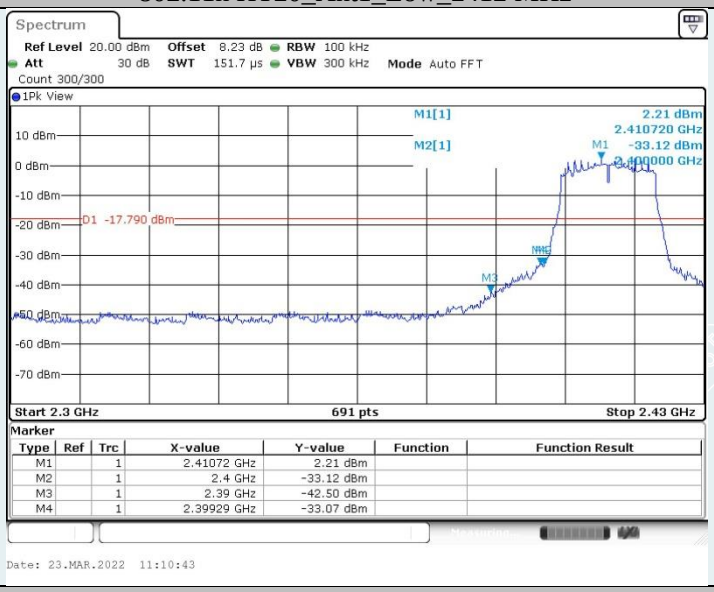
802.11g_Ant1_High_2462 MHz



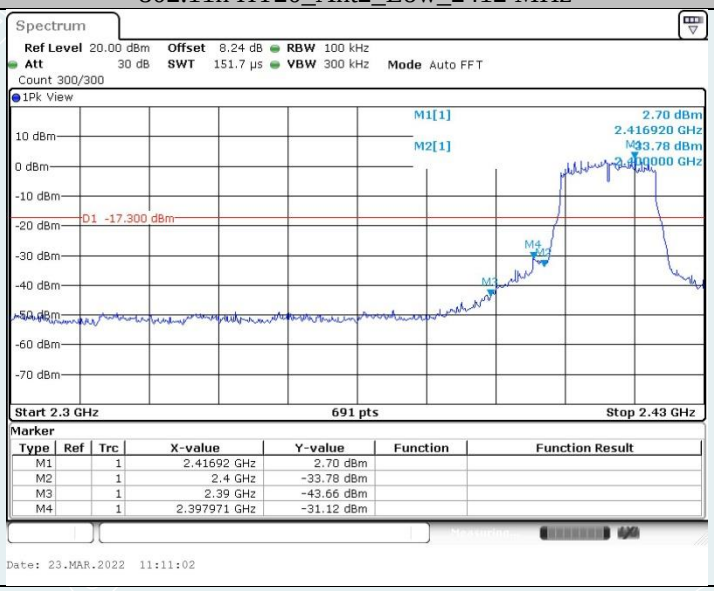

802.11g_Ant2_High_2462 MHz



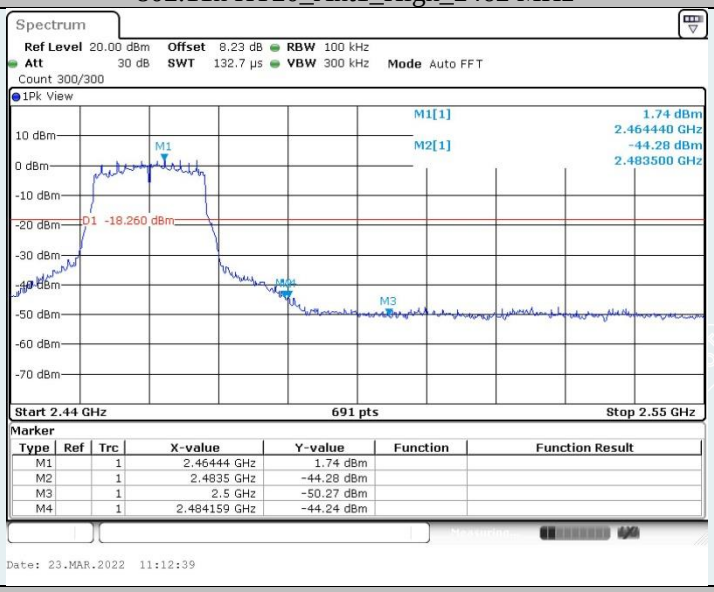
802.11n HT20_Ant1_Low_2412 MHz



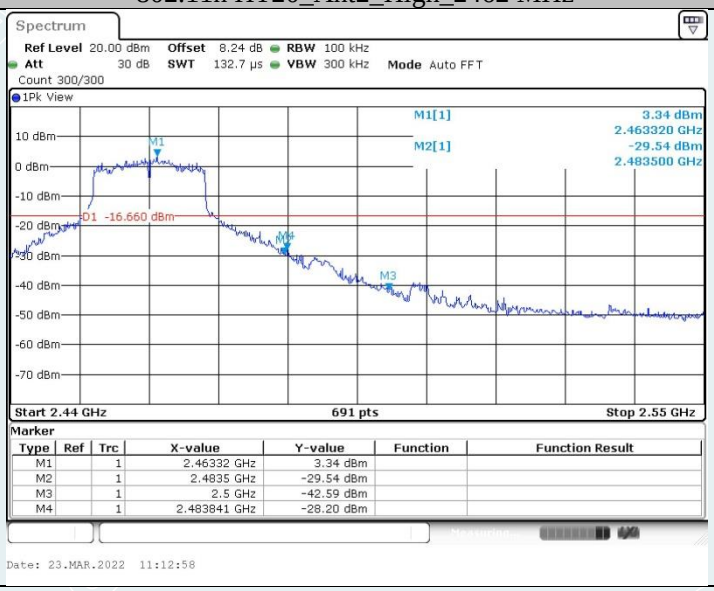

802.11n HT20_Ant2_Low_2412 MHz



802.11n HT20_Ant1_High_2462 MHz




802.11n HT20_Ant2_High_2462 MHz

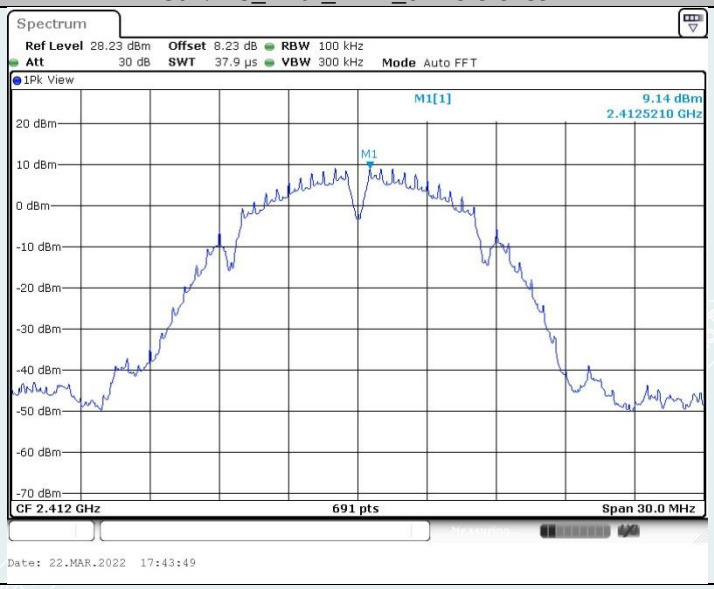


Conducted Spurious Emission:
Test Result
Environment: 23.5℃/48%RH Voltage:DC 3.8V
Tested By:Lu Wei Date: 2022-03-22

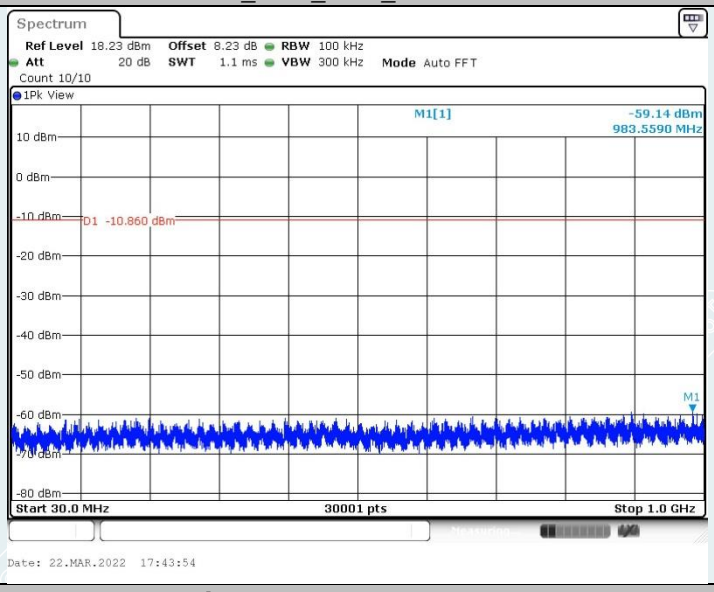
| TestMode | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 802.11b | Ant1 | 2412 | Reference | 9.14 | 9.14 | --- | PASS |
| | | | 30~1000 | 9.14 | -59.14 | ≤-10.86 | PASS |
| | | | 1000~26500 | 9.14 | -52.32 | ≤-10.86 | PASS |
| | Ant2 | 2412 | Reference | 8.85 | 8.85 | --- | PASS |
| | | | 30~1000 | 8.85 | -60 | ≤-11.15 | PASS |
| | | | 1000~26500 | 8.85 | -49.89 | ≤-11.15 | PASS |
| | Ant1 | 2437 | Reference | 8.92 | 8.92 | --- | PASS |
| | | | 30~1000 | 8.92 | -59.3 | ≤-11.08 | PASS |
| | | | 1000~26500 | 8.92 | -53.42 | ≤-11.08 | PASS |
| | Ant2 | 2437 | Reference | 8.50 | 8.50 | --- | PASS |
| | | | 30~1000 | 8.50 | -59.21 | ≤-11.5 | PASS |
| | | | 1000~26500 | 8.50 | -51.66 | ≤-11.5 | PASS |
| | Ant1 | 2462 | Reference | 8.85 | 8.85 | --- | PASS |
| | | | 30~1000 | 8.85 | -59.63 | ≤-11.15 | PASS |
| | | | 1000~26500 | 8.85 | -54.86 | ≤-11.15 | PASS |
| | Ant2 | 2462 | Reference | 8.70 | 8.70 | --- | PASS |
| | | | 30~1000 | 8.70 | -58.84 | ≤-11.3 | PASS |
| | | | 1000~26500 | 8.70 | -53.26 | ≤-11.3 | PASS |
| 802.11g | Ant1 | 2412 | Reference | 2.22 | 2.22 | --- | PASS |
| | | | 30~1000 | 2.22 | -58.99 | ≤-17.78 | PASS |
| | | | 1000~26500 | 2.22 | -54.72 | ≤-17.78 | PASS |
| | Ant2 | 2412 | Reference | 1.98 | 1.98 | --- | PASS |
| | | | 30~1000 | 1.98 | -59.11 | ≤-18.02 | PASS |
| | | | 1000~26500 | 1.98 | -54.73 | ≤-18.02 | PASS |
| | Ant1 | 2437 | Reference | 1.95 | 1.95 | --- | PASS |
| | | | 30~1000 | 1.95 | -59.84 | ≤-18.05 | PASS |
| | | | 1000~26500 | 1.95 | -55.57 | ≤-18.05 | PASS |
| | Ant2 | 2437 | Reference | 1.49 | 1.49 | --- | PASS |
| | | | 30~1000 | 1.49 | -59.17 | ≤-18.51 | PASS |
| | | | 1000~26500 | 1.49 | -54.98 | ≤-18.51 | PASS |
| | Ant1 | 2462 | Reference | 1.83 | 1.83 | --- | PASS |
| | | | 30~1000 | 1.83 | -59.73 | ≤-18.17 | PASS |
| | | | 1000~26500 | 1.83 | -55.18 | ≤-18.17 | PASS |
| | Ant2 | 2462 | Reference | 1.65 | 1.65 | --- | PASS |
| | | | 30~1000 | 1.65 | -59.08 | ≤-18.35 | PASS |
| | | | 1000~26500 | 1.65 | -55.29 | ≤-18.35 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 802.11n HT20 | Ant1 | 2412 | Reference | 2.26 | 2.26 | --- | PASS |
| | | | 30~1000 | 2.26 | -59.11 | ≤-17.74 | PASS |
| | | | 1000~26500 | 2.26 | -55.36 | ≤-17.74 | PASS |
| | Ant2 | 2412 | Reference | 2.44 | 2.44 | --- | PASS |
| | | | 30~1000 | 2.44 | -58.93 | ≤-17.56 | PASS |
| | | | 1000~26500 | 2.44 | -54.81 | ≤-17.56 | PASS |
| | Ant1 | 2437 | Reference | 2.16 | 2.16 | --- | PASS |
| | | | 30~1000 | 2.16 | -59.24 | ≤-17.84 | PASS |
| | | | 1000~26500 | 2.16 | -55.16 | ≤-17.84 | PASS |
| | Ant2 | 2437 | Reference | 2.48 | 2.48 | --- | PASS |
| | | | 30~1000 | 2.48 | -58.66 | ≤-17.52 | PASS |
| | | | 1000~26500 | 2.48 | -55.25 | ≤-17.52 | PASS |
| | Ant1 | 2462 | Reference | 1.81 | 1.81 | --- | PASS |
| | | | 30~1000 | 1.81 | -59.23 | ≤-18.19 | PASS |
| | | | 1000~26500 | 1.81 | -54.31 | ≤-18.19 | PASS |
| | Ant2 | 2462 | Reference | 2.44 | 2.44 | --- | PASS |
| | | | 30~1000 | 2.44 | -59.28 | ≤-17.56 | PASS |
| | | | 1000~26500 | 2.44 | -55.02 | ≤-17.56 | PASS |

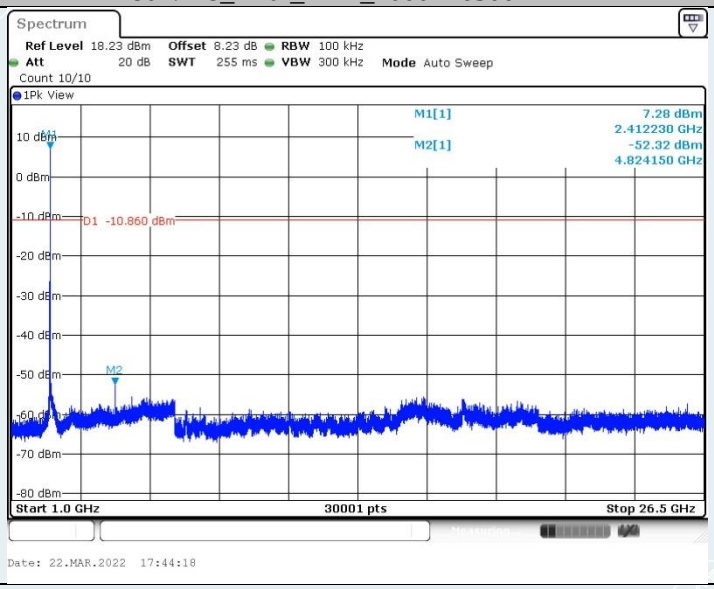
802.11b_Ant1_2412_0~Reference



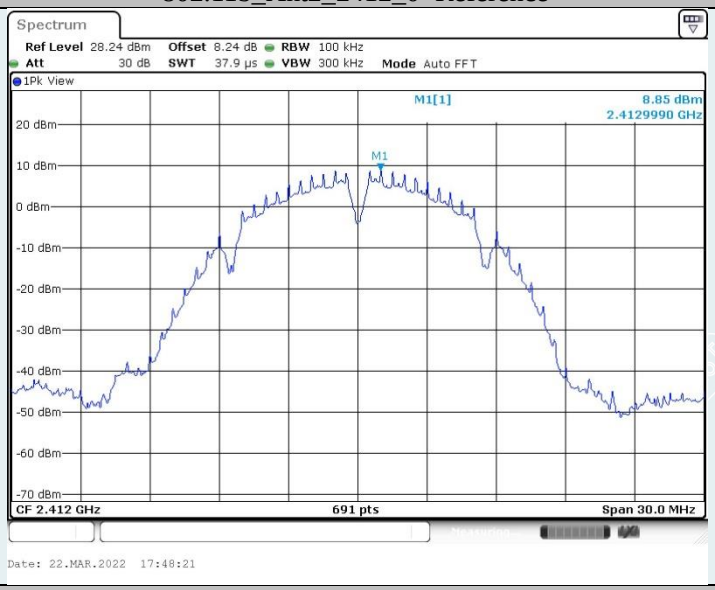
802.11b_Ant1_2412_30~1000 MHz



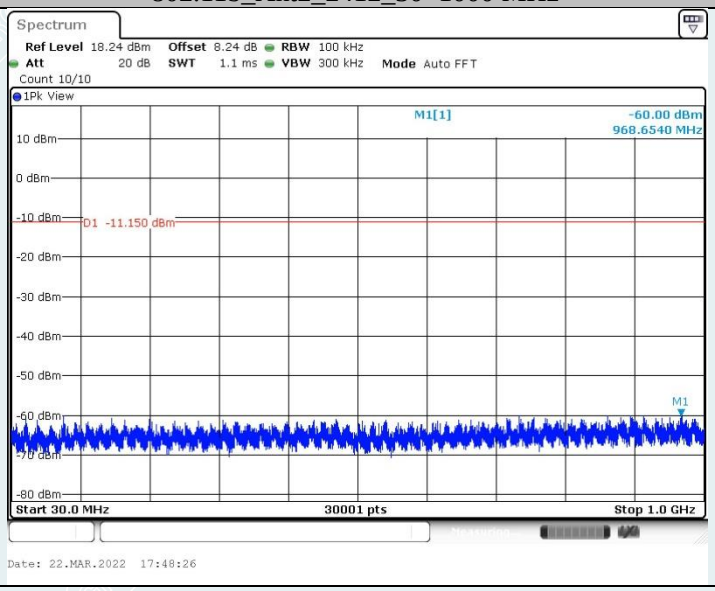

802.11b_Ant1_2412_1000~26500 MHz



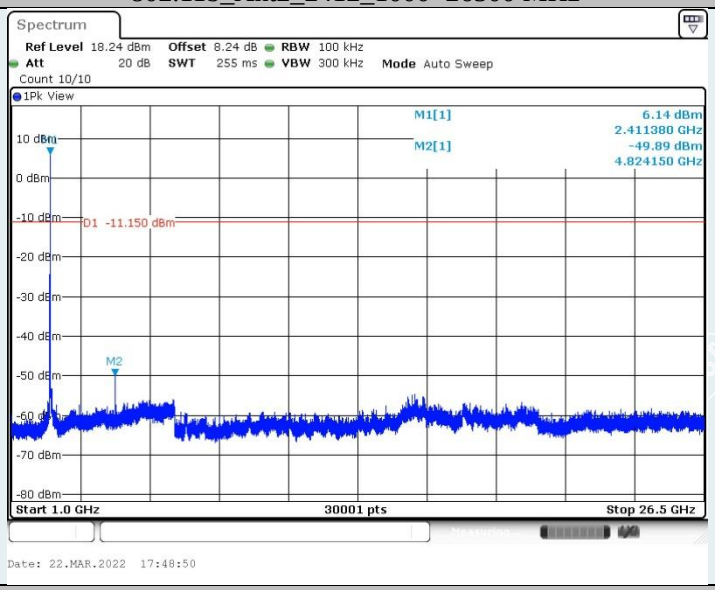
802.11b_Ant2_2412_0~Reference



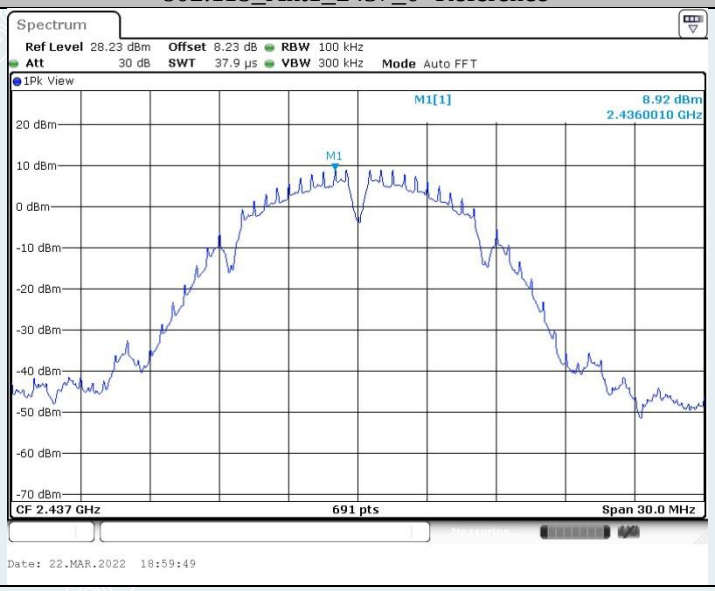

802.11b_Ant2_2412_30~1000 MHz



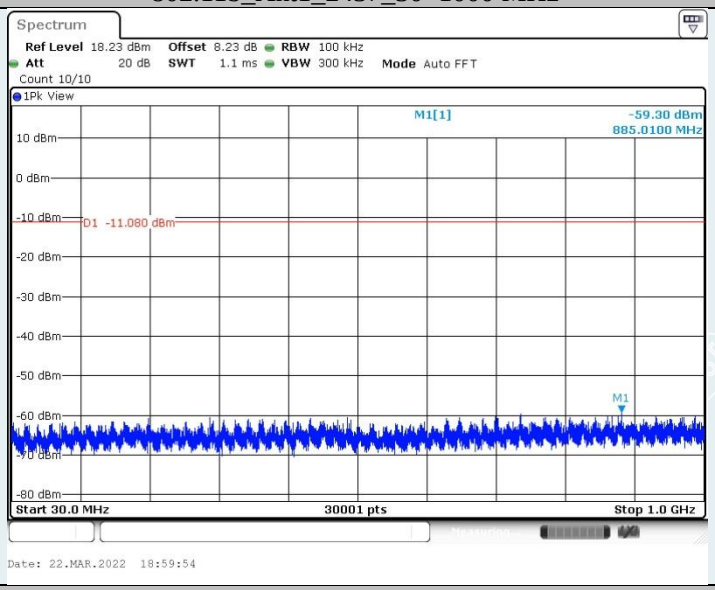
802.11b_Ant2_2412_1000~26500 MHz



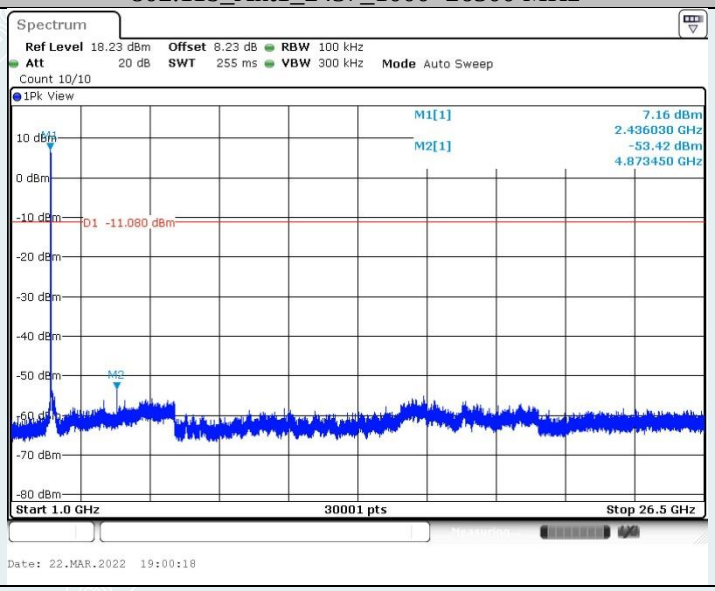

802.11b_Ant1_2437_0~Reference



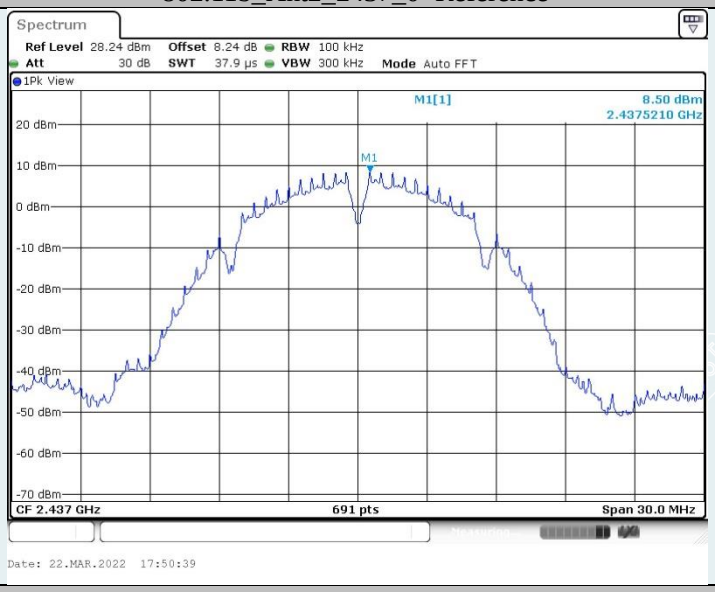
802.11b_Ant1_2437_30~1000 MHz



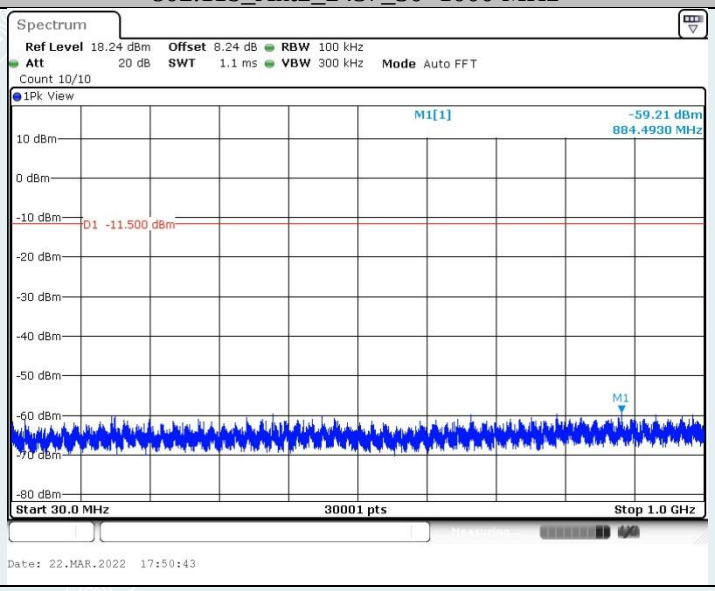

802.11b_Ant1_2437_1000~26500 MHz



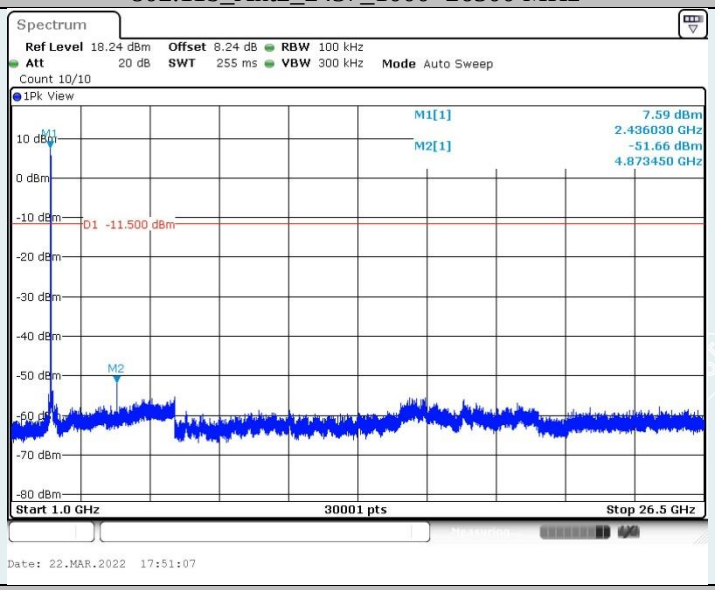
802.11b_Ant2_2437_0~Reference



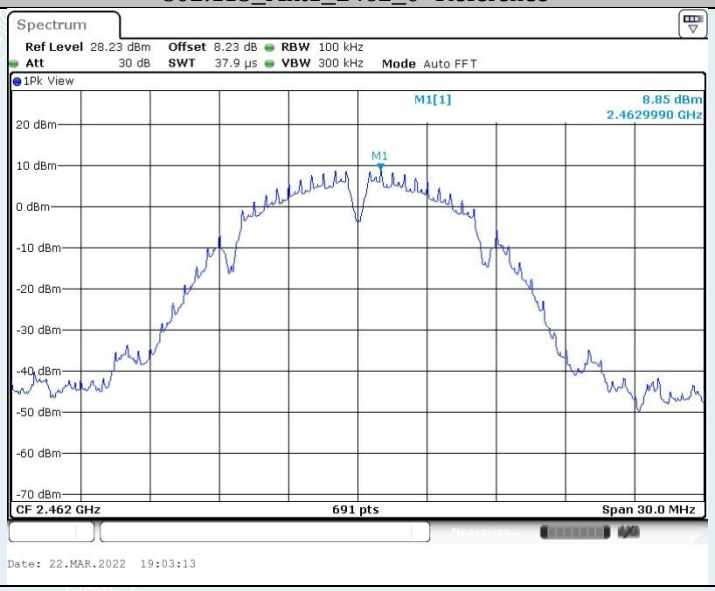

802.11b_Ant2_2437_30~1000 MHz



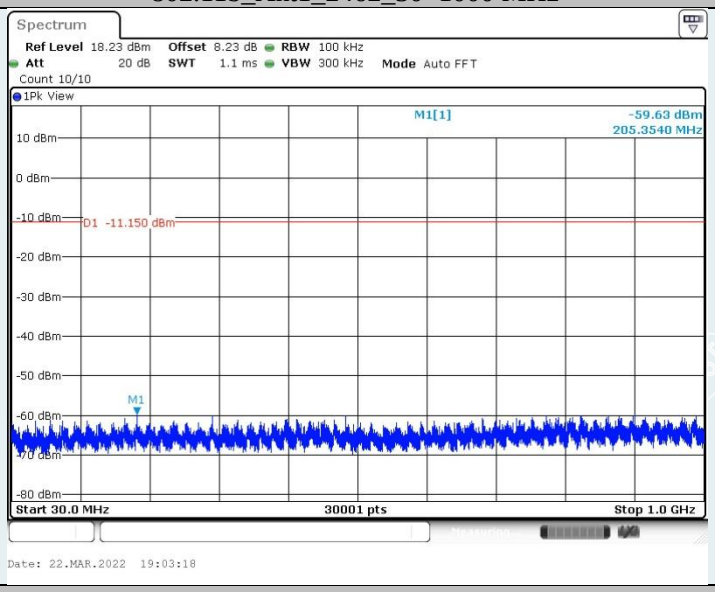
802.11b_Ant2_2437_1000~26500 MHz



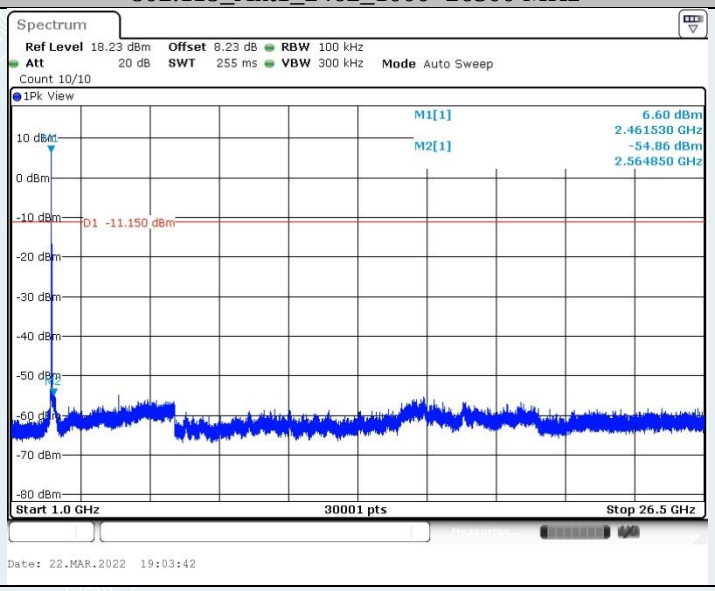

802.11b_Ant1_2462_0~Reference



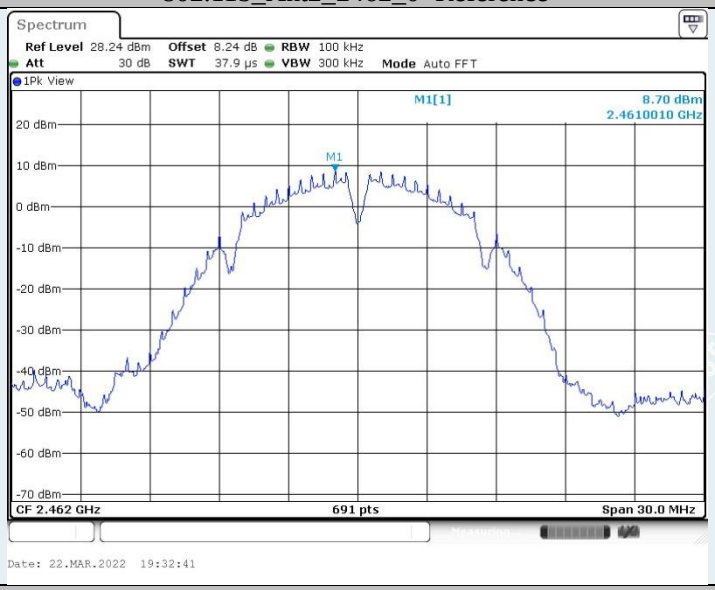
802.11b_Ant1_2462_30~1000 MHz



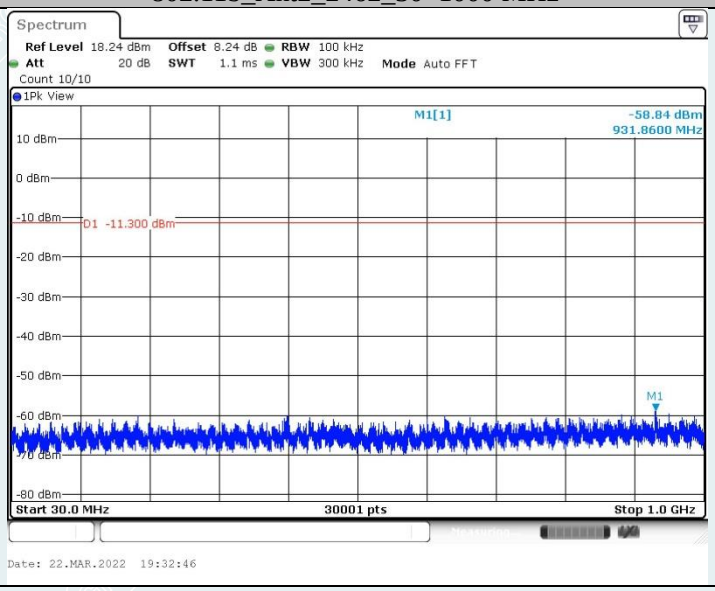

802.11b_Ant1_2462_1000~26500 MHz



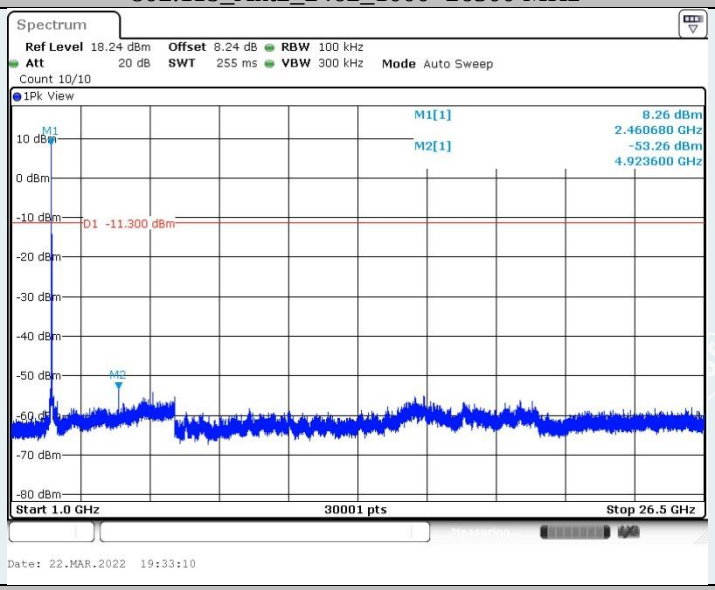
802.11b_Ant2_2462_0~Reference



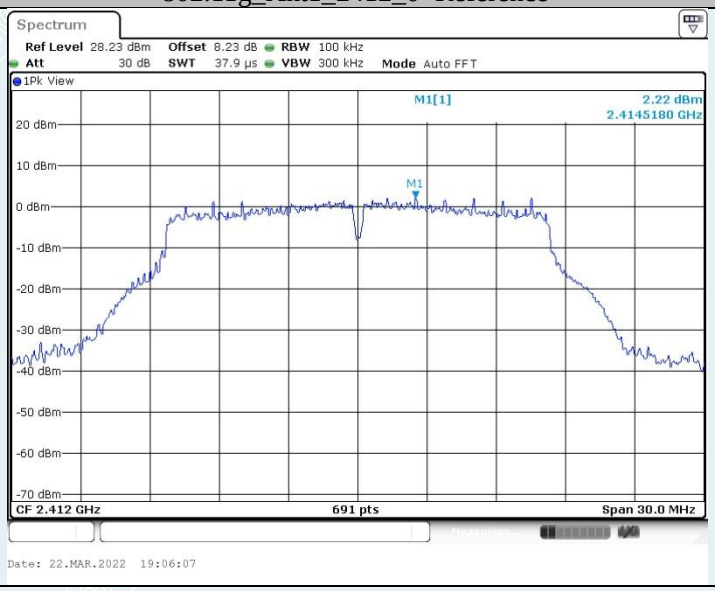

802.11b_Ant2_2462_30~1000 MHz



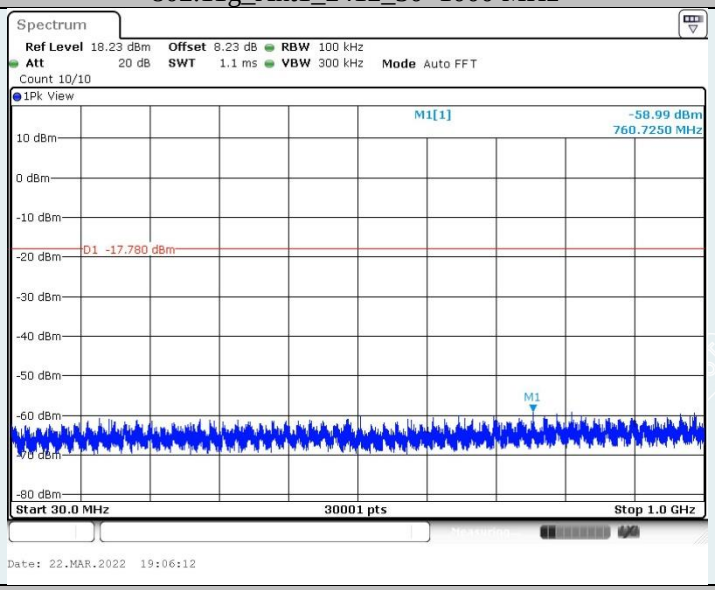
802.11b_Ant2_2462_1000~26500 MHz



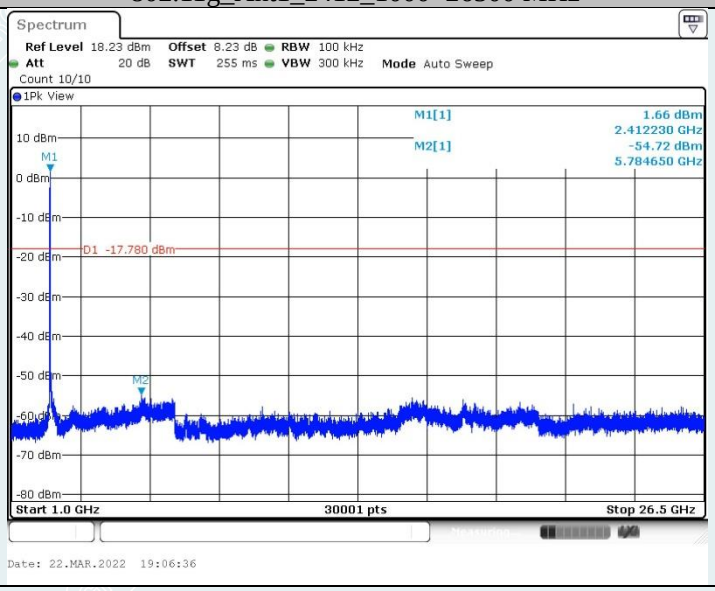

802.11g_Ant1_2412_0~Reference



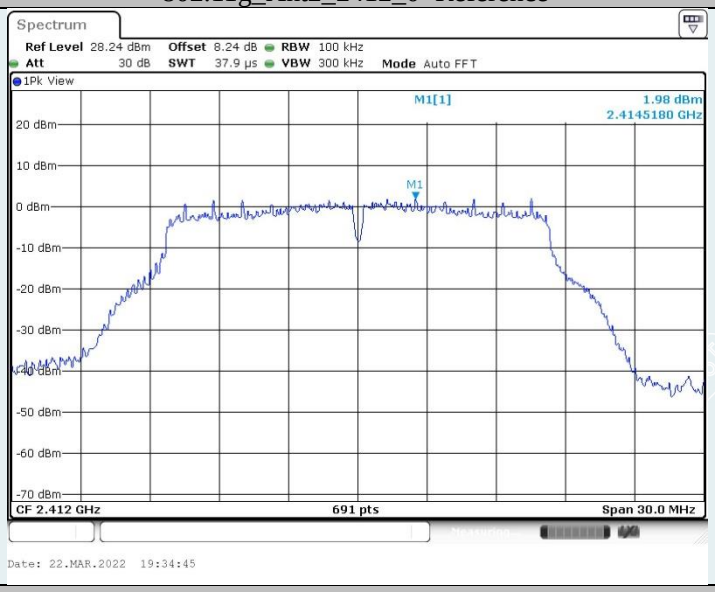
802.11g_Ant1_2412_30~1000 MHz



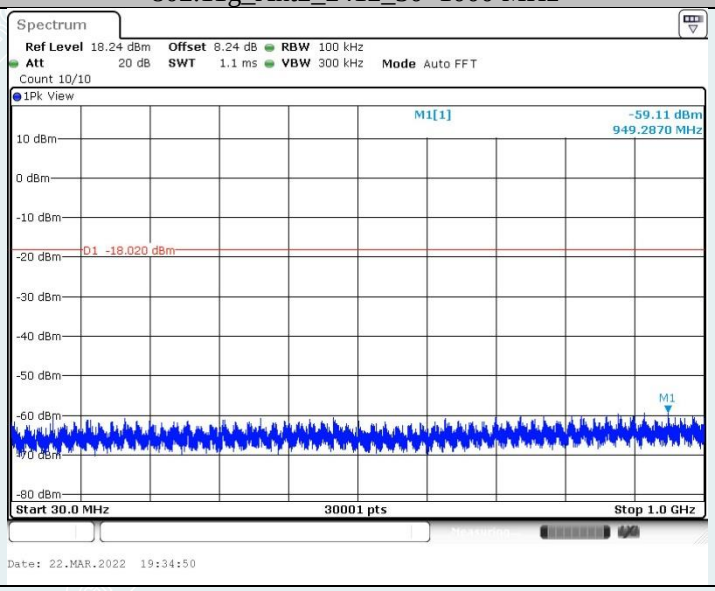

802.11g_Ant1_2412_1000~26500 MHz



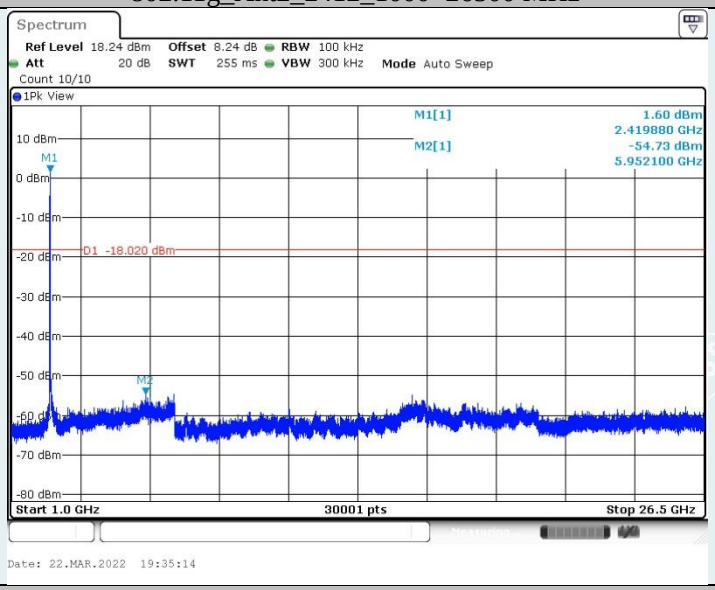
802.11g_Ant2_2412_0~Reference



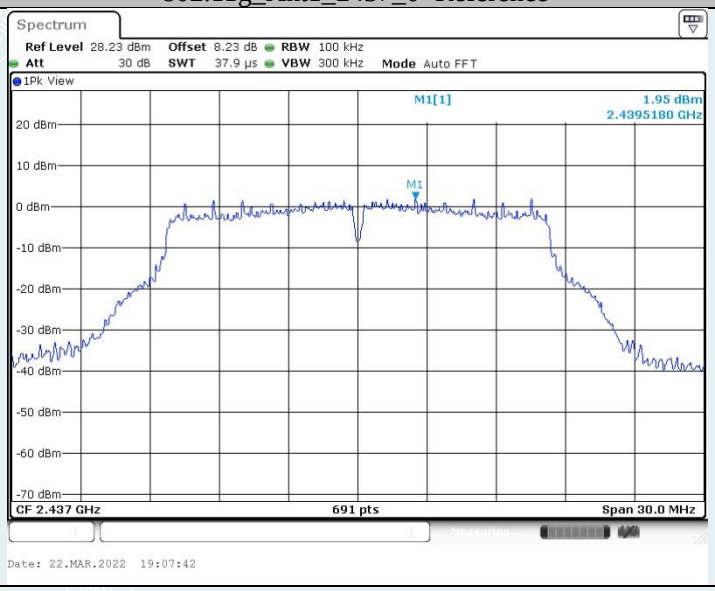

802.11g_Ant2_2412_30~1000 MHz



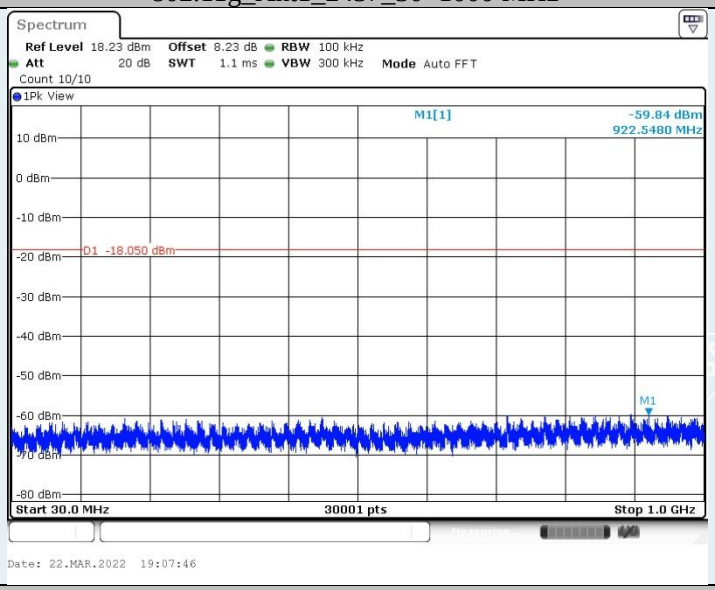
802.11g_Ant2_2412_1000~26500 MHz



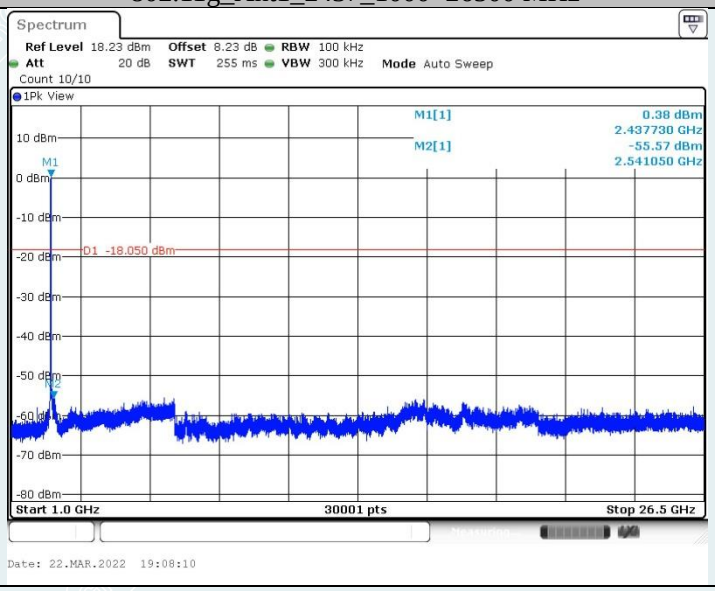

802.11g_Ant1_2437_0~Reference



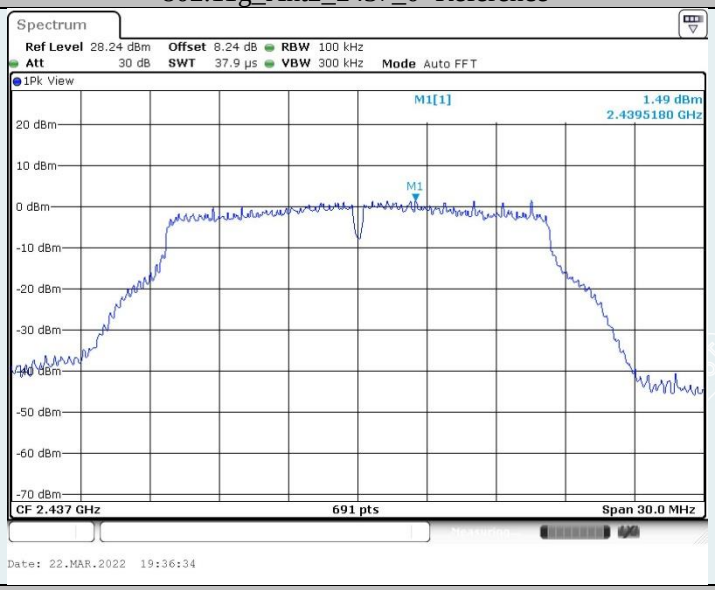
802.11g_Ant1_2437_30~1000 MHz



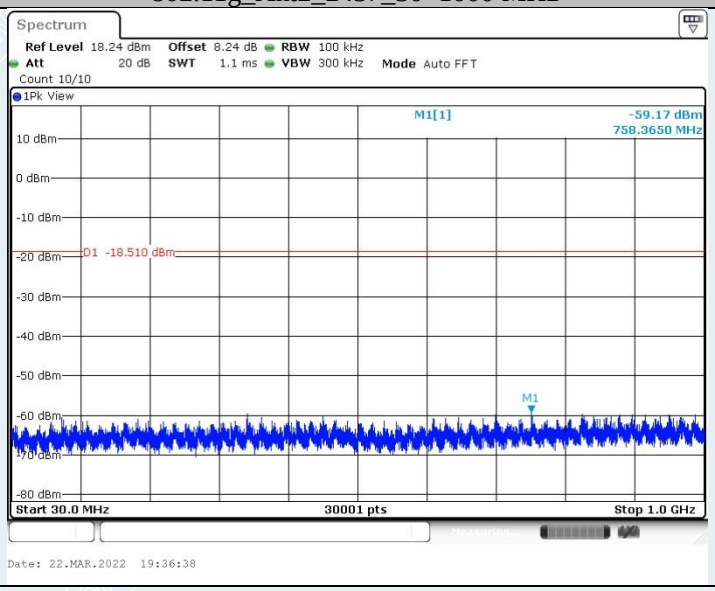

802.11g_Ant1_2437_1000~26500 MHz



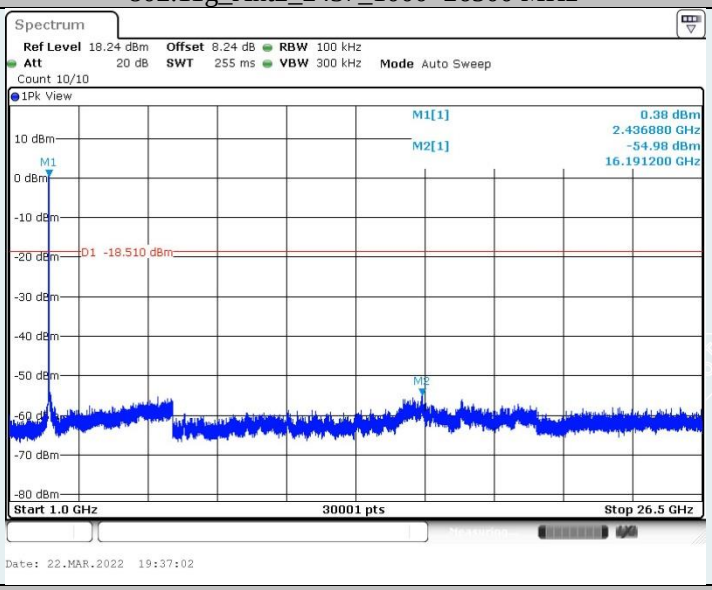
802.11g_Ant2_2437_0~Reference



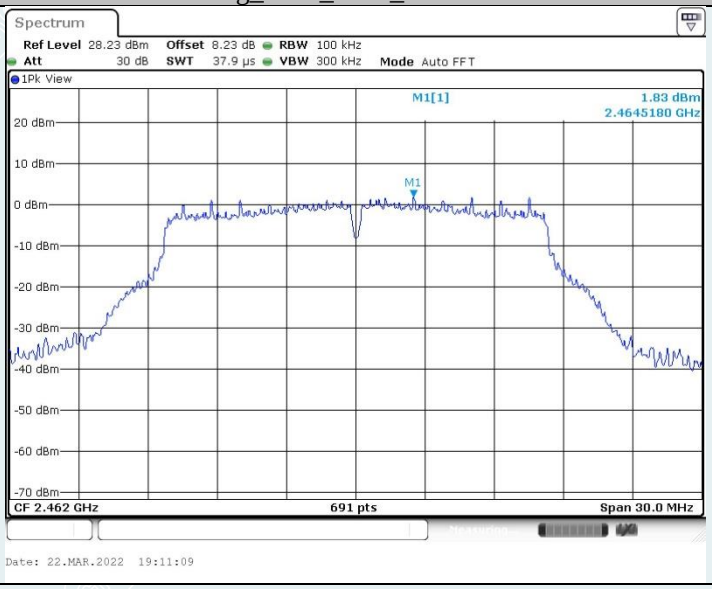

802.11g_Ant2_2437_30~1000 MHz



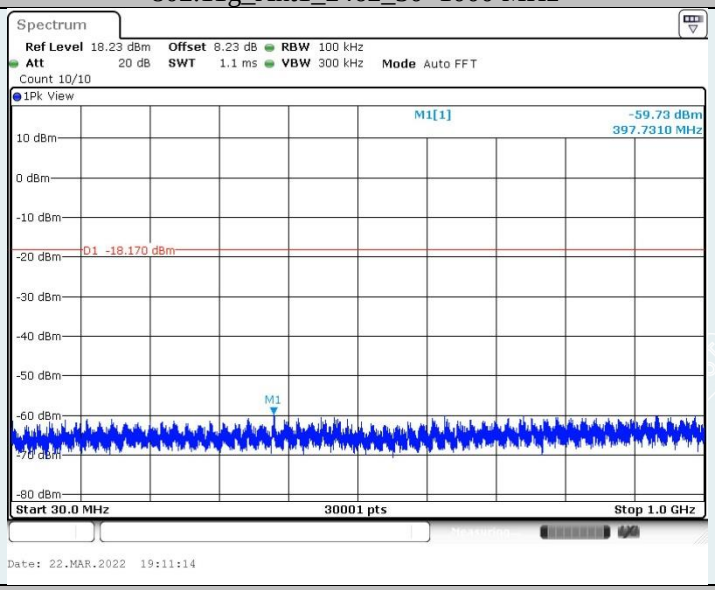
802.11g_Ant2_2437_1000~26500 MHz



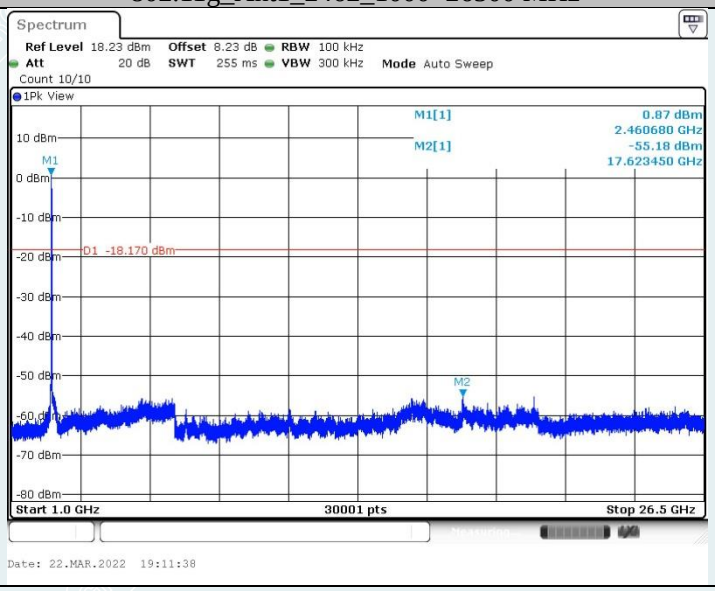

802.11g_Ant1_2462_0~Reference



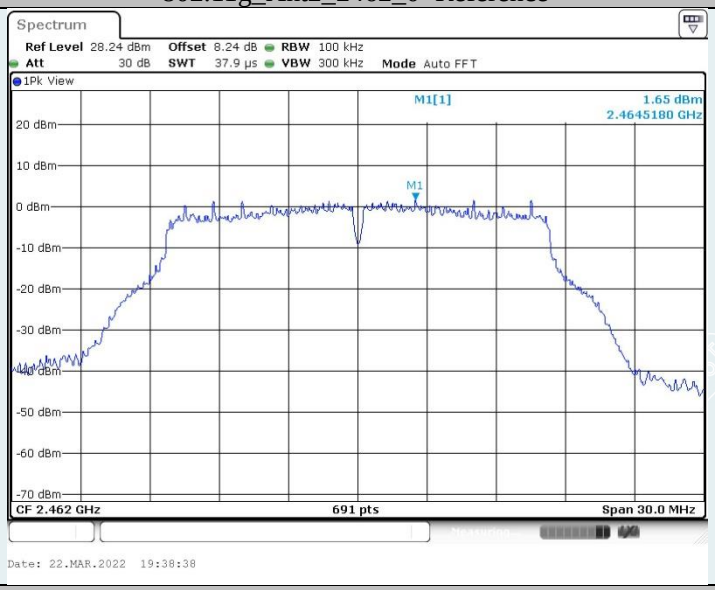
802.11g_Ant1_2462_30~1000 MHz



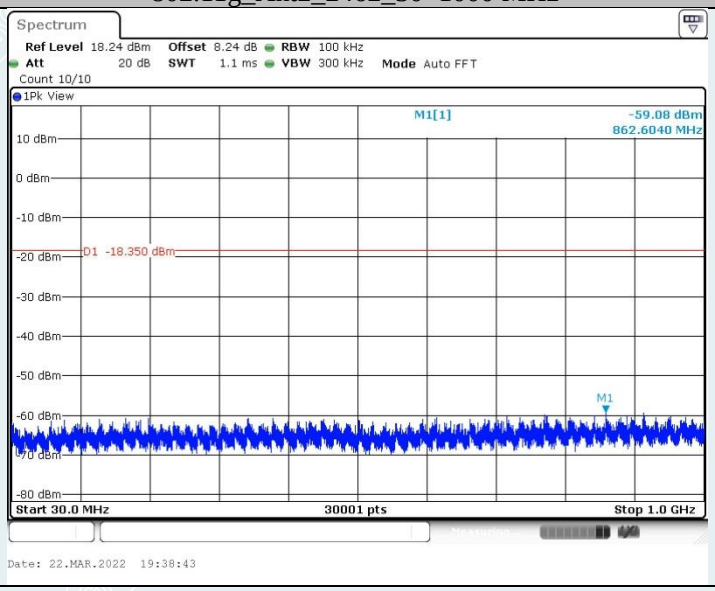

802.11g_Ant1_2462_1000~26500 MHz



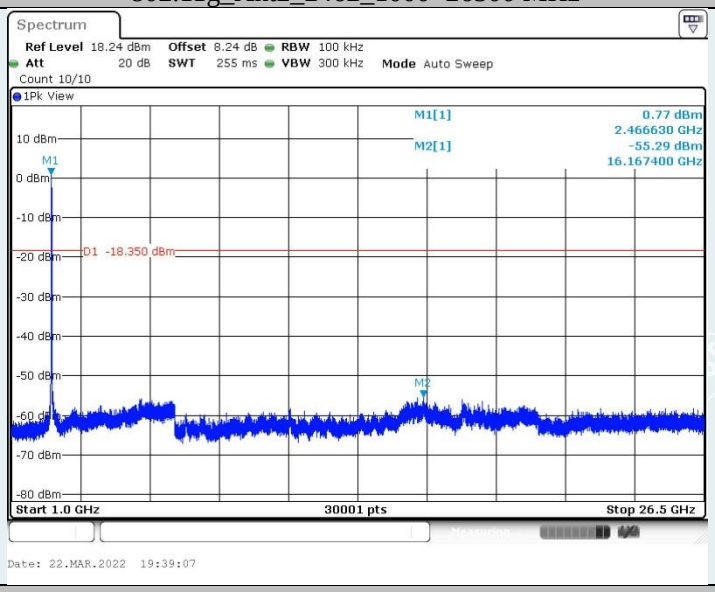
802.11g_Ant2_2462_0~Reference



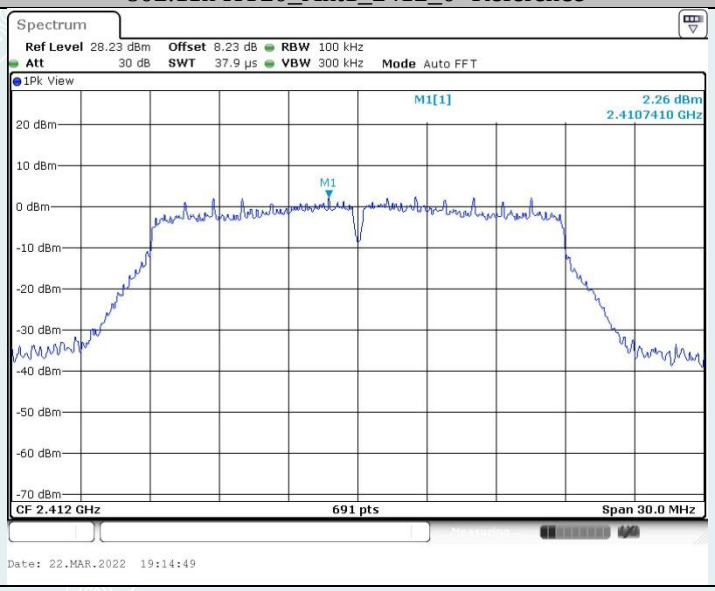

802.11g_Ant2_2462_30~1000 MHz



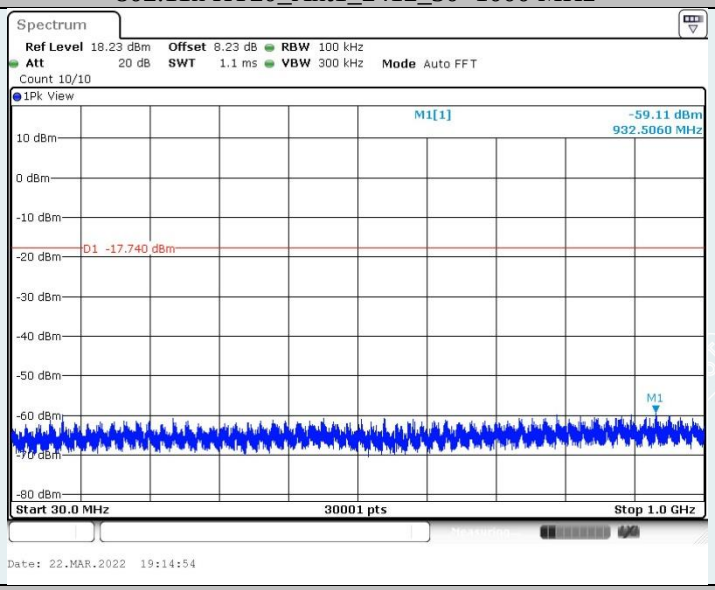
802.11g_Ant2_2462_1000~26500 MHz




802.11n HT20_Ant1_2412_0~Reference



802.11n HT20_Ant1_2412_30~1000 MHz




802.11n HT20_Ant1_2412_1000~26500 MHz