

Fig.A.4.9 Occupied 6dB Bandwidth (802.11n-HT20, Ch 11)

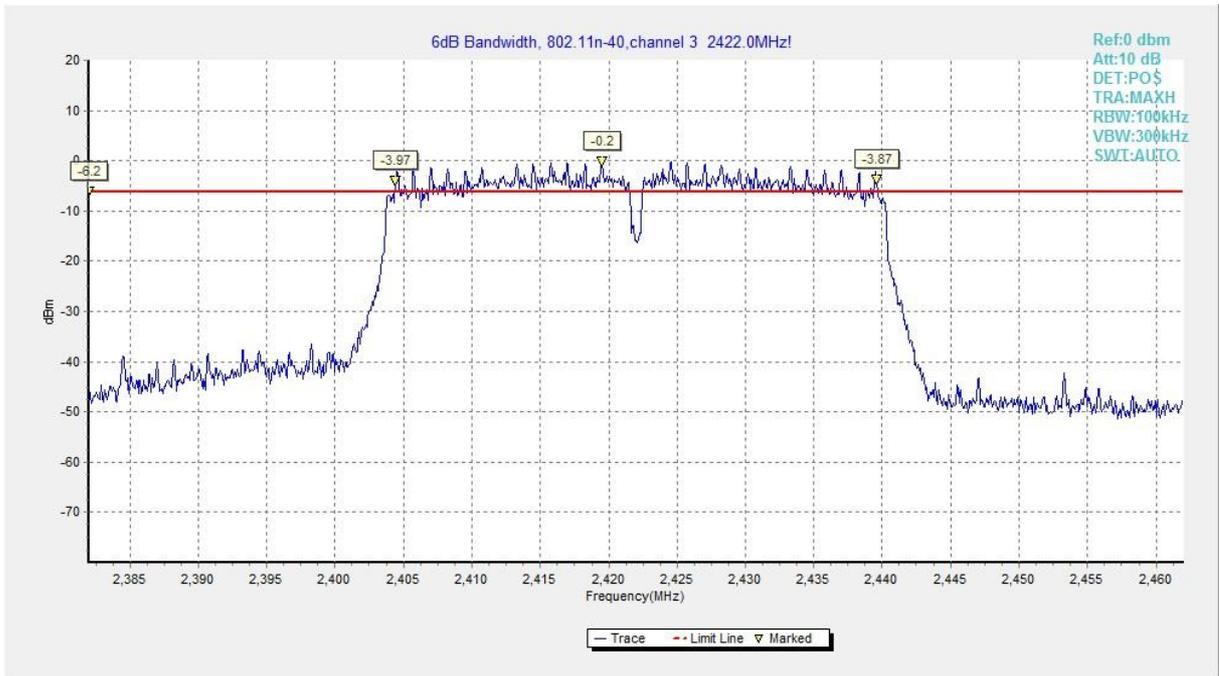


Fig.A.4.10 Occupied 6dB Bandwidth (802.11n-40MHz, Ch 3)

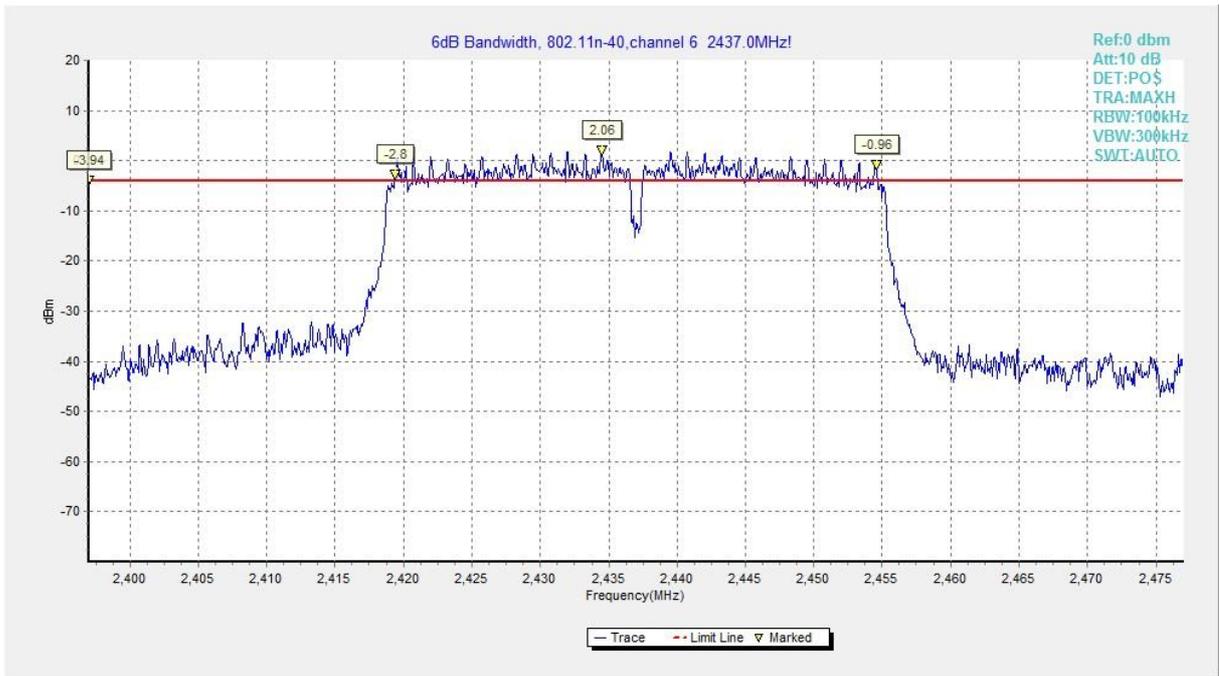


Fig.A.4.11 Occupied 6dB Bandwidth (802.11n-HT40, Ch 6)

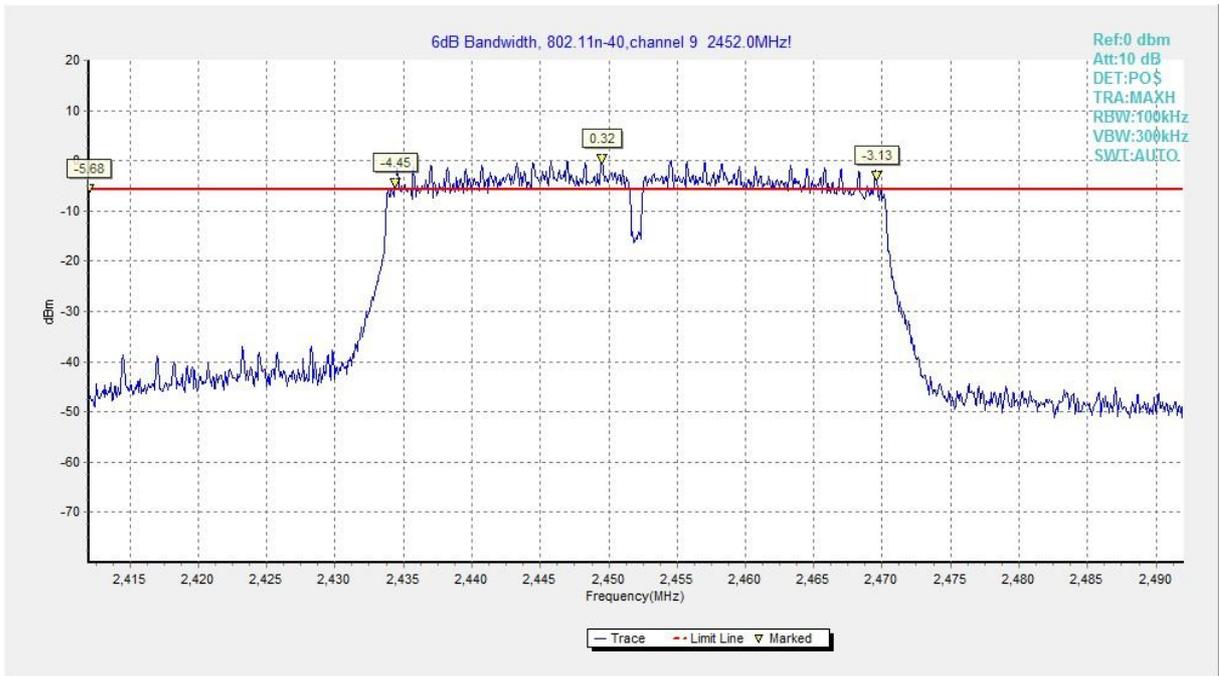


Fig.A.4.12 Occupied 6dB Bandwidth (802.11n-HT40, Ch 9)

A.5. Band Edges Compliance

Method of Measurement: See KDB558074 section 13.1(Marker-delta method).

Measurement Limit:

| Standard | Limit (dBc) |
|----------------------------|-------------|
| FCC 47 CFR Part 15.247 (d) | > 20 |

The measurement is made according to KDB558074.

EUT ID: EUT2

Modulation type and data rate tested:

| | | | |
|-------------|--------------|--------------|--------------|
| 802.11b | 802.11g | 802.11n-HT20 | 802.11n-HT40 |
| 11Mbps(CCK) | 54Mbps(OFDM) | MCS5(OFDM) | MCS5(OFDM) |

Measurement Result:

802.11b/g mode

| Mode | Channel | Test Results | Conclusion |
|---------|---------|--------------|------------|
| 802.11b | 1 | Fig.A.5.1 | P |
| | 11 | Fig.A.5.2 | P |
| 802.11g | 1 | Fig.A.5.3 | P |
| | 11 | Fig.A.5.4 | P |

802.11n-HT20 mode

| Mode | Channel | Test Results | Conclusion |
|-------------------|---------|--------------|------------|
| 802.11n (HT20) | 1 | Fig.A.5.5 | P |
| | 11 | Fig.A.5.6 | P |

802.11n-HT40 mode

| Mode | Channel | Test Results | Conclusion |
|-------------------|---------|--------------|------------|
| 802.11n (HT40) | 3 | Fig.A.5.7 | P |
| | 9 | Fig.A.5.8 | P |

Conclusion: Pass

Measurement Uncertainty:

| | |
|-------------------------|--------|
| Measurement Uncertainty | 0.75dB |
|-------------------------|--------|

Test graphs as below:

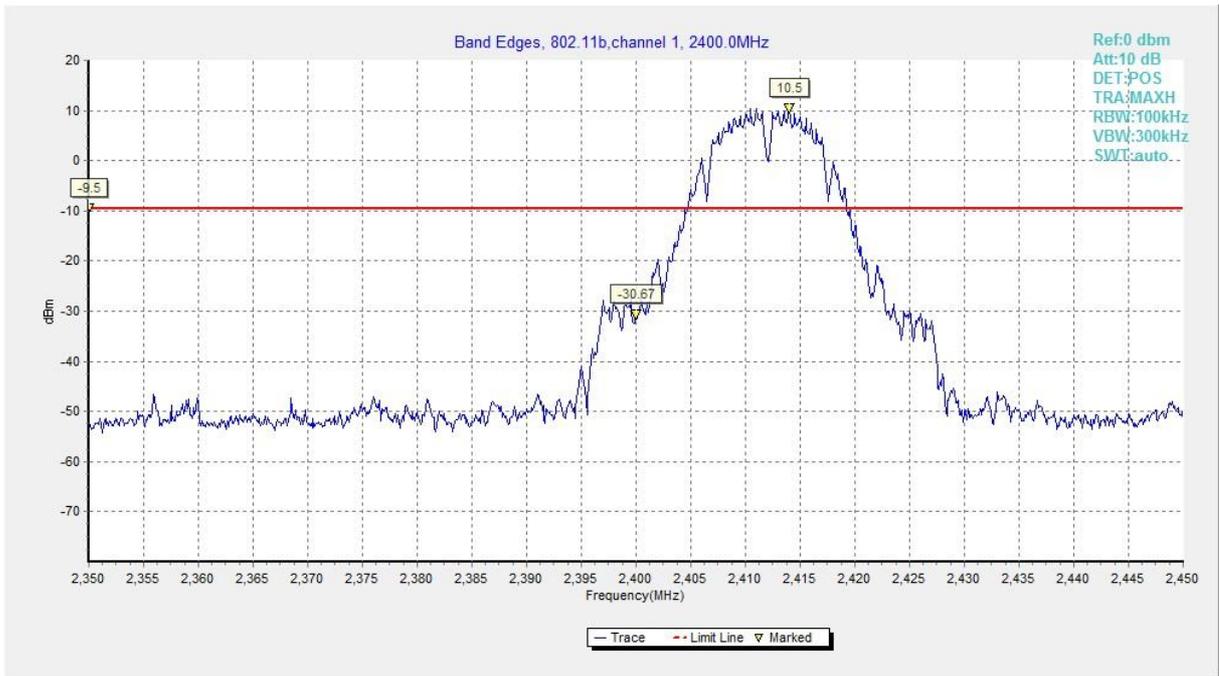


Fig.A.5.1 Band Edges (802.11b, Ch 1)



Fig.A.5.2 Band Edges (802.11b, Ch 11)

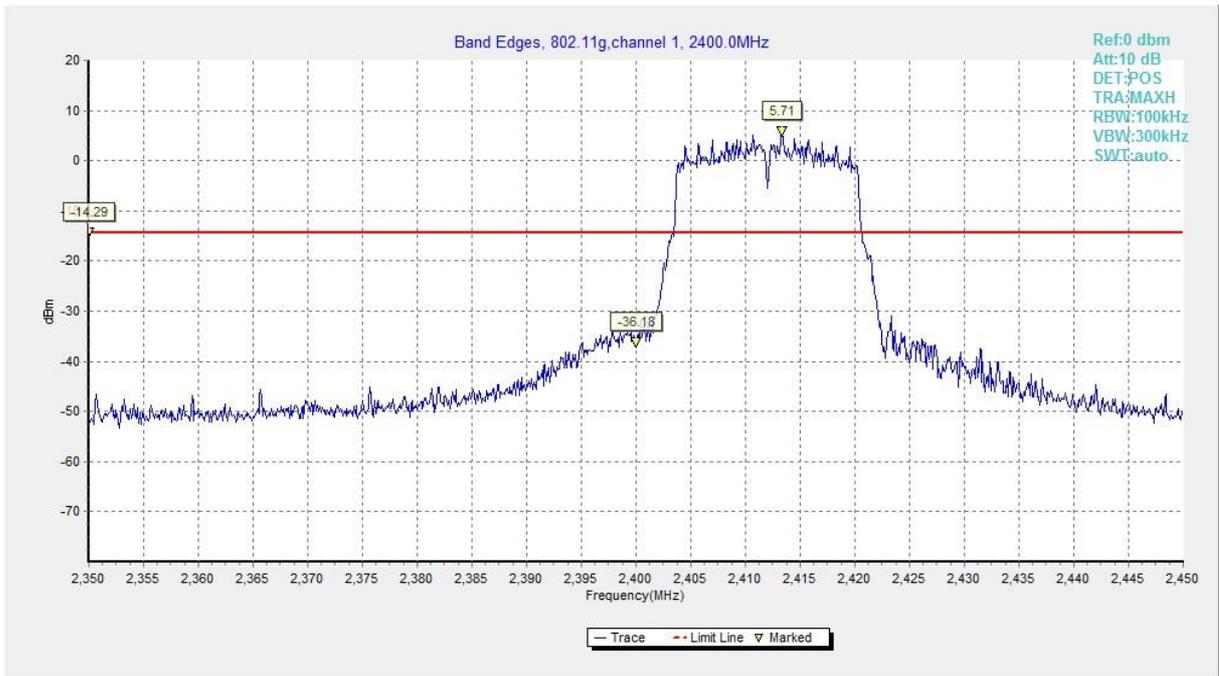


Fig.A.5.3 Band Edges (802.11g, Ch 1)

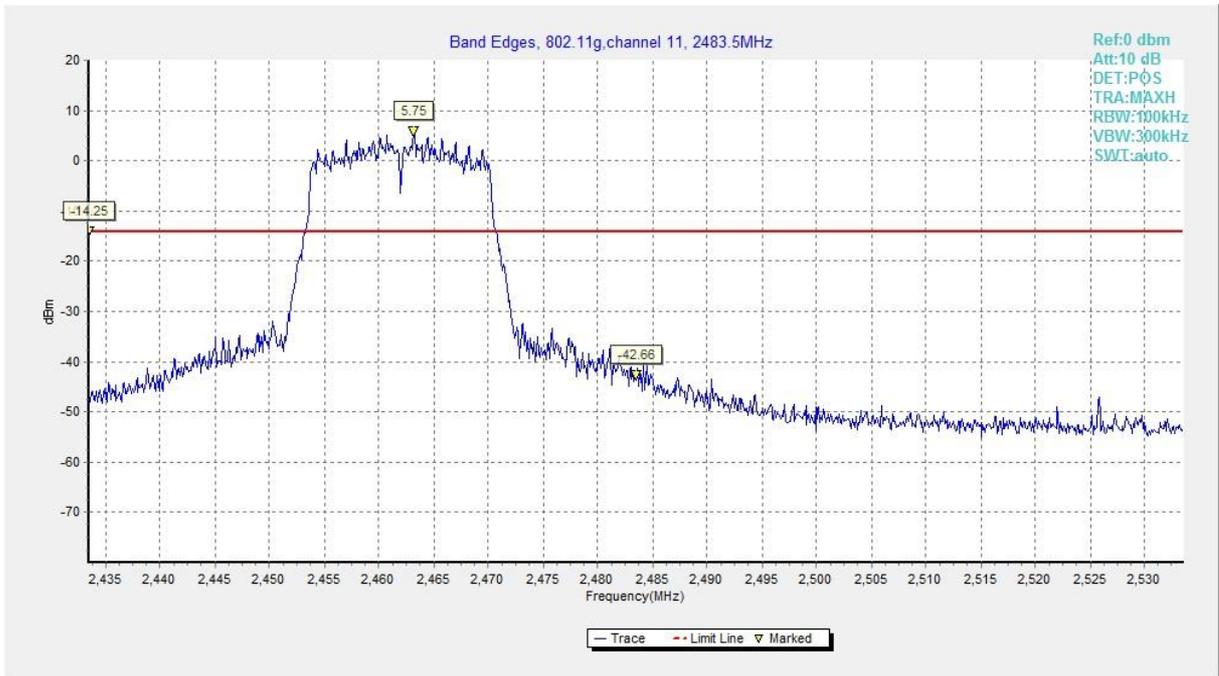


Fig.A.5.4 Band Edges (802.11g, Ch 11)

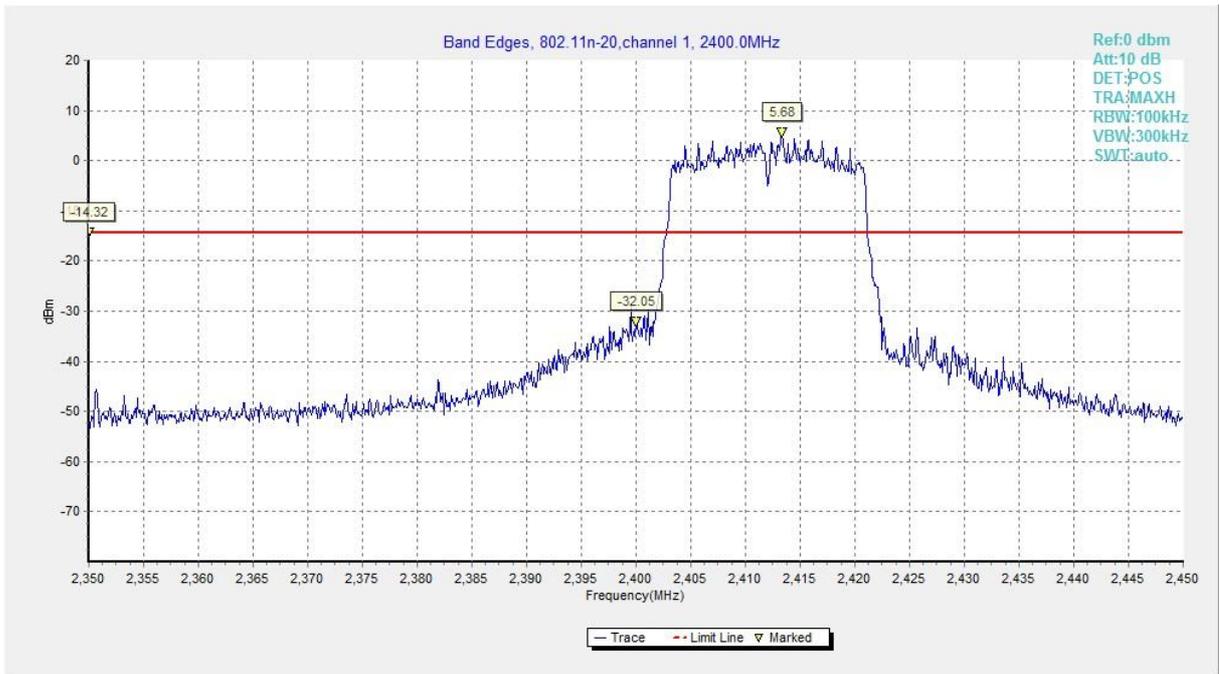


Fig.A.5.5 Band Edges (802.11n-HT20, Ch 1)

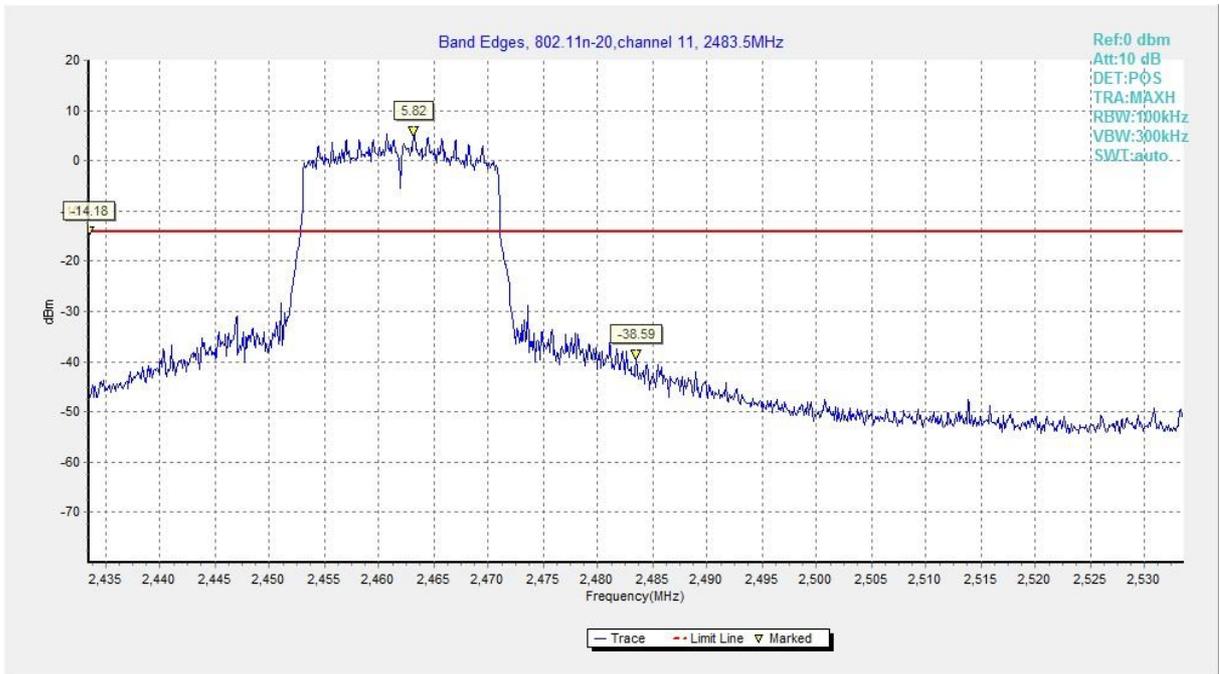


Fig.A.5.6 Band Edges (802.11n-HT20, Ch 11)



Fig.A.5.7 Band Edges (802.11n-HT40, Ch 3)

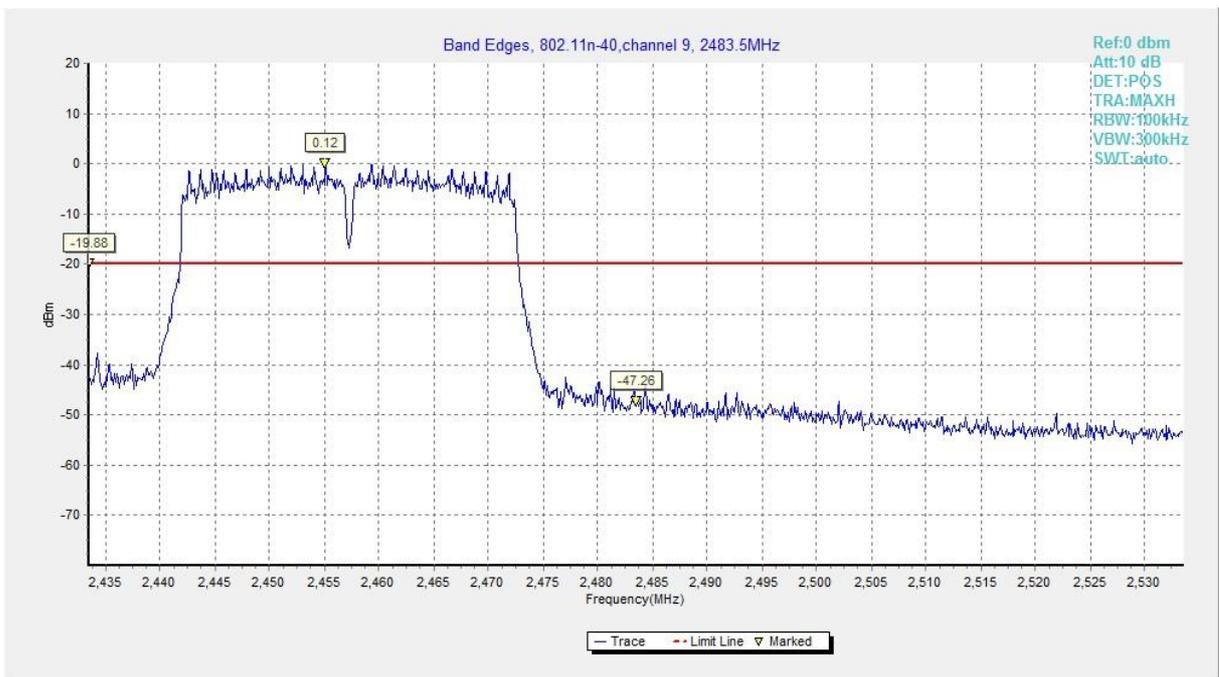


Fig.A.5.8 Band Edges (802.11n-HT40, Ch 9)

A.6. Transmitter Spurious Emission

A.6.1 Transmitter Spurious Emission - Conducted

Method of Measurement: See KDB558074 section 12.2.

Measurement Limit:

| Standard | Limit |
|----------------------------|---|
| FCC 47 CFR Part 15.247 (d) | 20dB below peak output power in 100 kHz bandwidth |

EUT ID: EUT2

Modulation type and data rate tested:

| | | | |
|-------------|--------------|--------------|--------------|
| 802.11b | 802.11g | 802.11n-HT20 | 802.11n-HT40 |
| 11Mbps(CCK) | 54Mbps(OFDM) | MCS5(OFDM) | MCS5(OFDM) |

Measurement Results:

802.11b mode

| MODE | Channel | Frequency Range | Test Results | Conclusion |
|---------|---------|-------------------|--------------|------------|
| 802.11b | 1 | 2.412 GHz | Fig.A.6.1.1 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.2 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.3 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.4 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.5 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.6 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.7 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.8 | P |
| | 6 | 2.437 GHz | Fig.A.6.1.9 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.10 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.11 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.12 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.13 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.14 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.15 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.16 | P |
| | 11 | 2.462 GHz | Fig.A.6.1.17 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.18 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.19 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.20 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.21 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.22 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.23 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.24 | P |

802.11g mode

| MODE | Channel | Frequency Range | Test Results | Conclusion |
|---------|---------|-------------------|--------------|------------|
| 802.11g | 1 | 2.412 GHz | Fig.A.6.1.25 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.26 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.27 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.28 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.29 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.30 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.31 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.32 | P |
| | 6 | 2.437 GHz | Fig.A.6.1.33 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.34 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.35 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.36 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.37 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.38 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.39 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.40 | P |
| | 11 | 2.462 GHz | Fig.A.6.1.41 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.42 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.43 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.44 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.45 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.46 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.47 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.48 | P |

802.11n-HT20 mode

| MODE | Channel | Frequency Range | Test Results | Conclusion |
|-------------------|---------|-------------------|--------------|------------|
| 802.11n (HT20) | 1 | 2.412 GHz | Fig.A.6.1.49 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.50 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.51 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.52 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.53 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.54 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.55 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.56 | P |
| | 6 | 2.437 GHz | Fig.A.6.1.57 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.58 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.59 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.60 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.61 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.62 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.63 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.64 | P |
| | 11 | 2.462 GHz | Fig.A.6.1.65 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.66 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.67 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.68 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.69 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.70 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.71 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.72 | P |

802.11n-HT40 mode

| MODE | Channel | Frequency Range | Test Results | Conclusion |
|-------------------|---------|-------------------|--------------|------------|
| 802.11n (HT40) | 3 | 2.422 GHz | Fig.A.6.1.73 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.74 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.75 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.76 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.77 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.78 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.79 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.80 | P |
| | 6 | 2.437 GHz | Fig.A.6.1.81 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.82 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.83 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.84 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.85 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.86 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.87 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.88 | P |
| | 9 | 2.452 GHz | Fig.A.6.1.89 | P |
| | | 30 MHz ~ 1 GHz | Fig.A.6.1.90 | P |
| | | 1 GHz ~ 2.5 GHz | Fig.A.6.1.91 | P |
| | | 2.5 GHz ~ 7.5 GHz | Fig.A.6.1.92 | P |
| | | 7.5 GHz ~ 10 GHz | Fig.A.6.1.93 | P |
| | | 10 GHz ~ 15 GHz | Fig.A.6.1.94 | P |
| | | 15 GHz ~ 20 GHz | Fig.A.6.1.95 | P |
| | | 20 GHz ~ 26 GHz | Fig.A.6.1.96 | P |

Conclusion: Pass

Measurement Uncertainty:

| Frequency Range | Uncertainty(dB) |
|------------------|-----------------|
| 30MHz ≤ f ≤ 2GHz | 0.63 |
| 2GHz ≤ f ≤3.6GHz | 0.82 |
| 3.6GHz ≤ f ≤8GHz | 1.55 |
| 8GHz ≤ f ≤20GHz | 1.86 |
| 20GHz ≤ f ≤22GHz | 1.90 |
| 22GHz ≤ f ≤26GHz | 2.20 |

Test graphs as below:

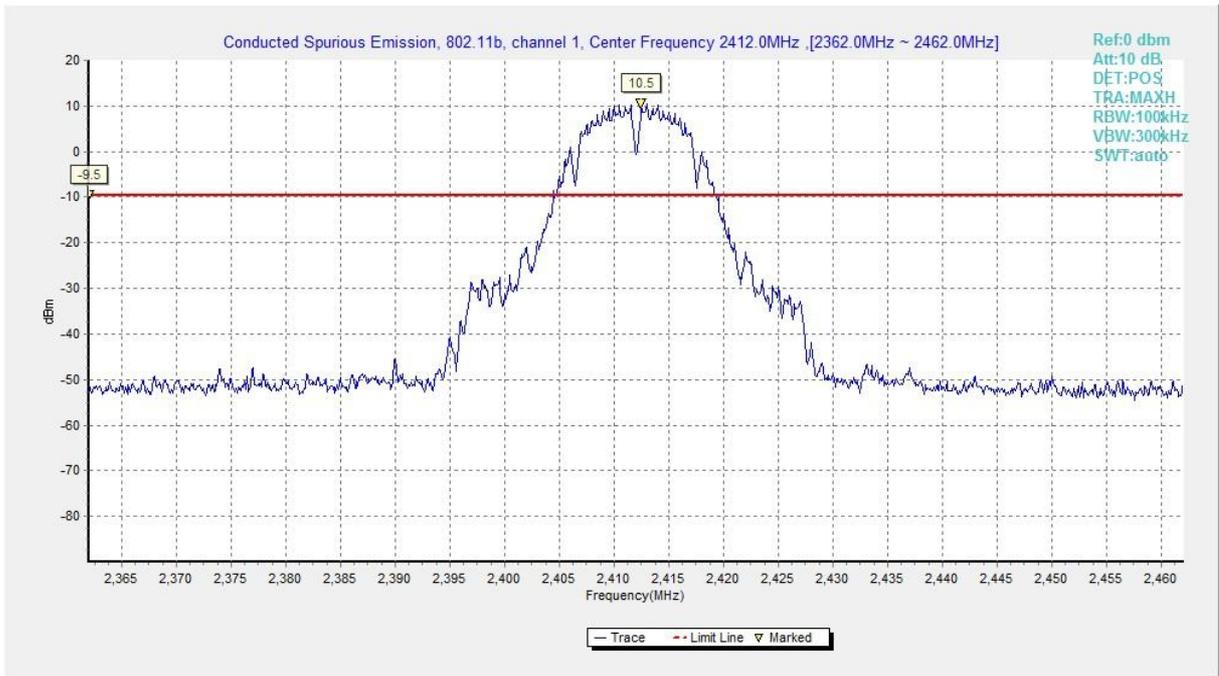


Fig.A.6.1.1 Transmitter Spurious Emission - Conducted (802.11b, Ch1, Center Frequency)

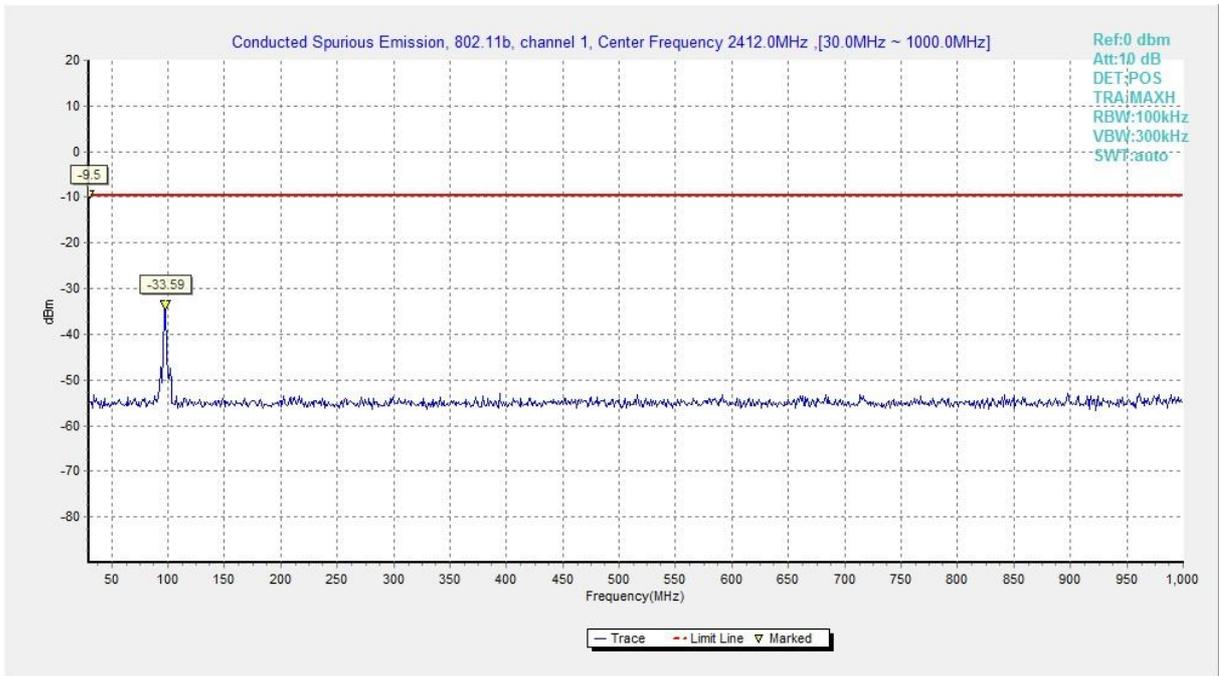


Fig.A.6.1.2 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 30 MHz-1 GHz)

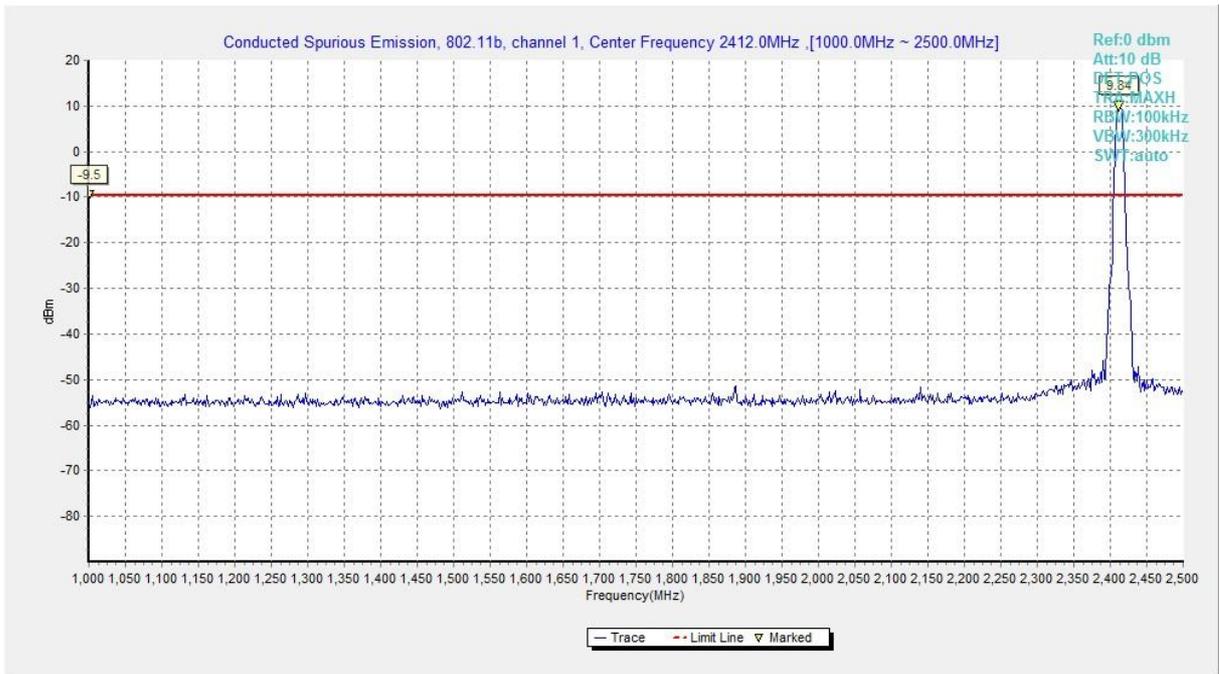


Fig.A.6.1.3 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 1 GHz-2.5 GHz)

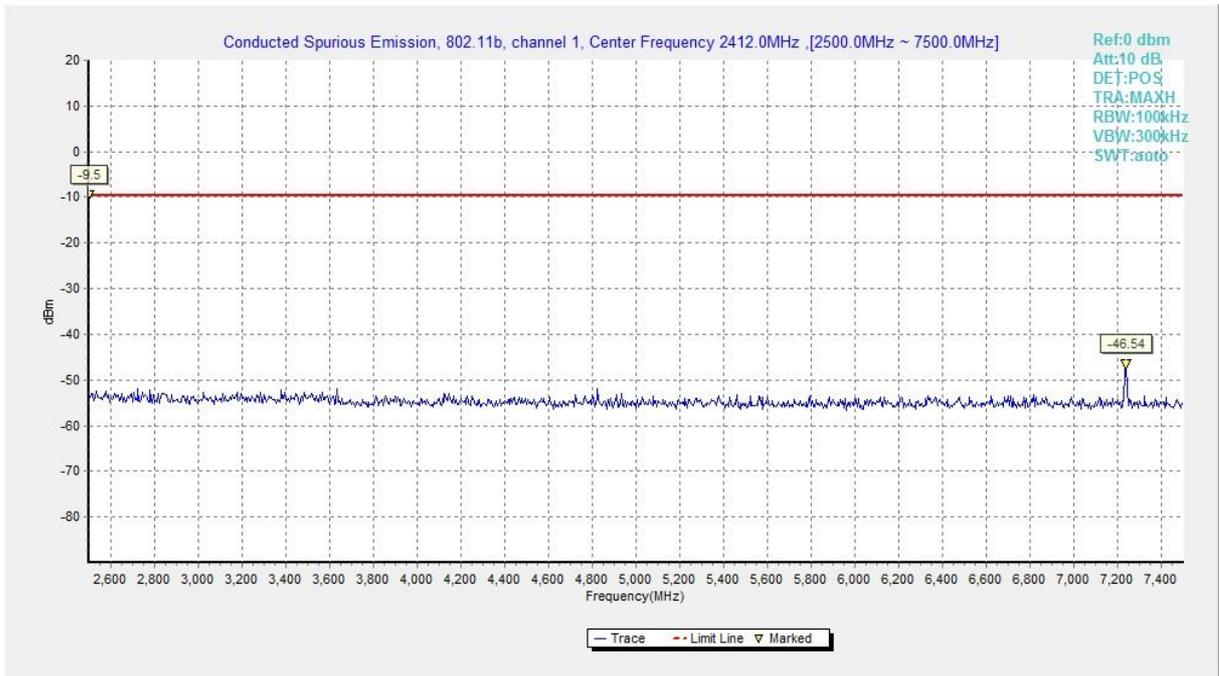


Fig.A.6.1.4 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 2.5 GHz-7.5 GHz)

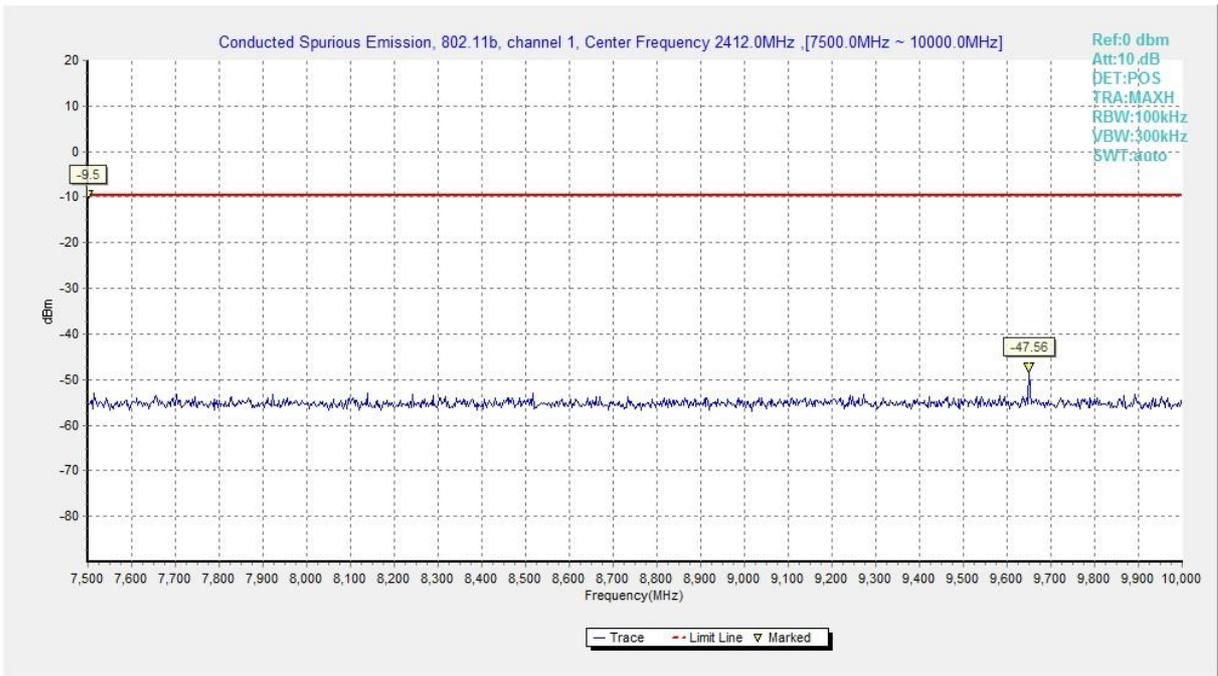


Fig.A.6.1.5 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 7.5 GHz-10 GHz)

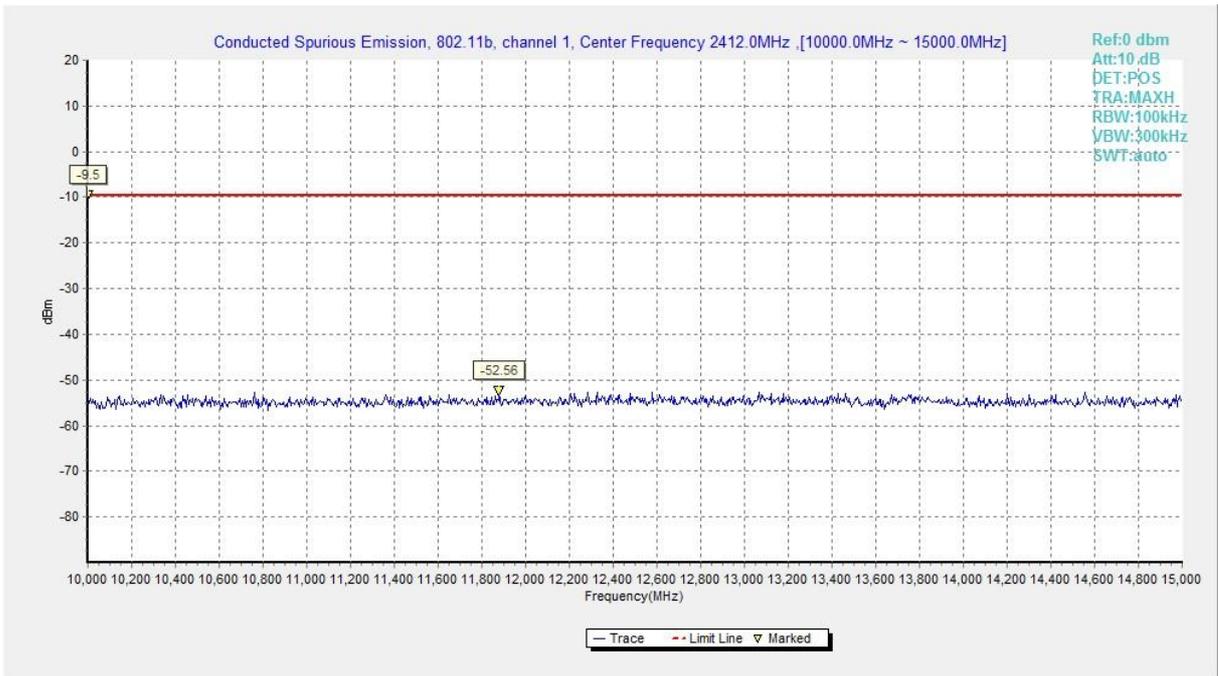


Fig.A.6.1.6 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 10 GHz-15 GHz)

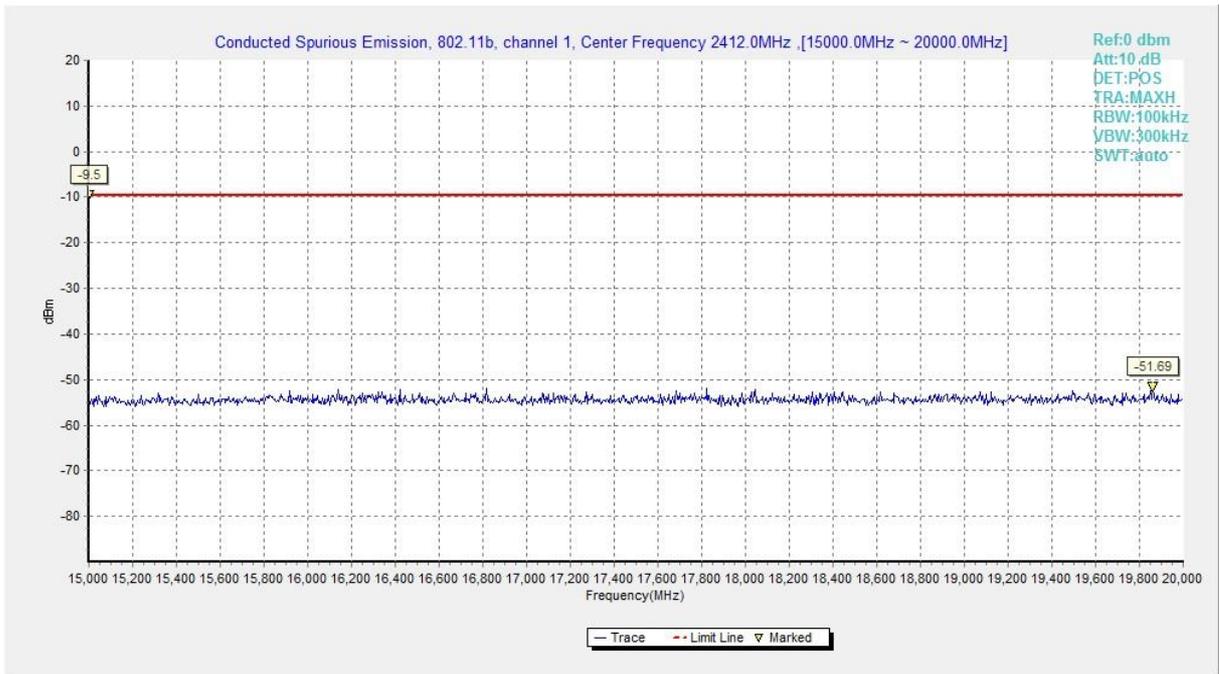


Fig.A.6.1.7 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 15 GHz-20 GHz)

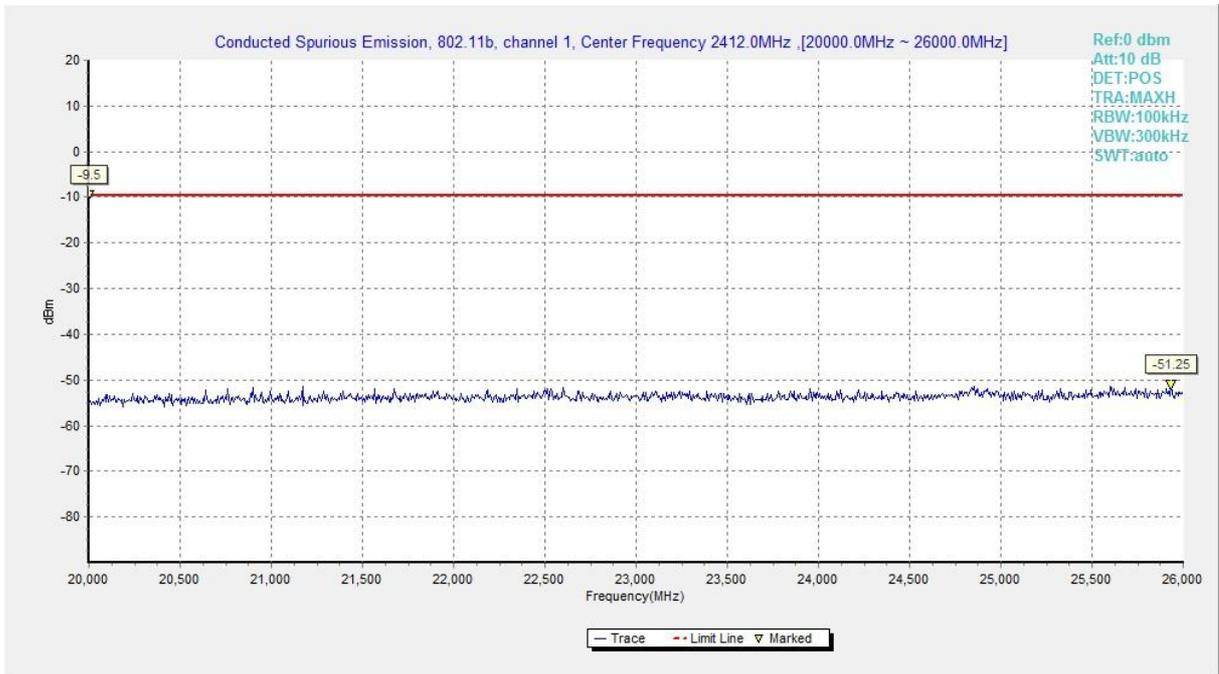


Fig.A.6.1.8 Transmitter Spurious Emission - Conducted (802.11b, Ch1, 20 GHz-26 GHz)

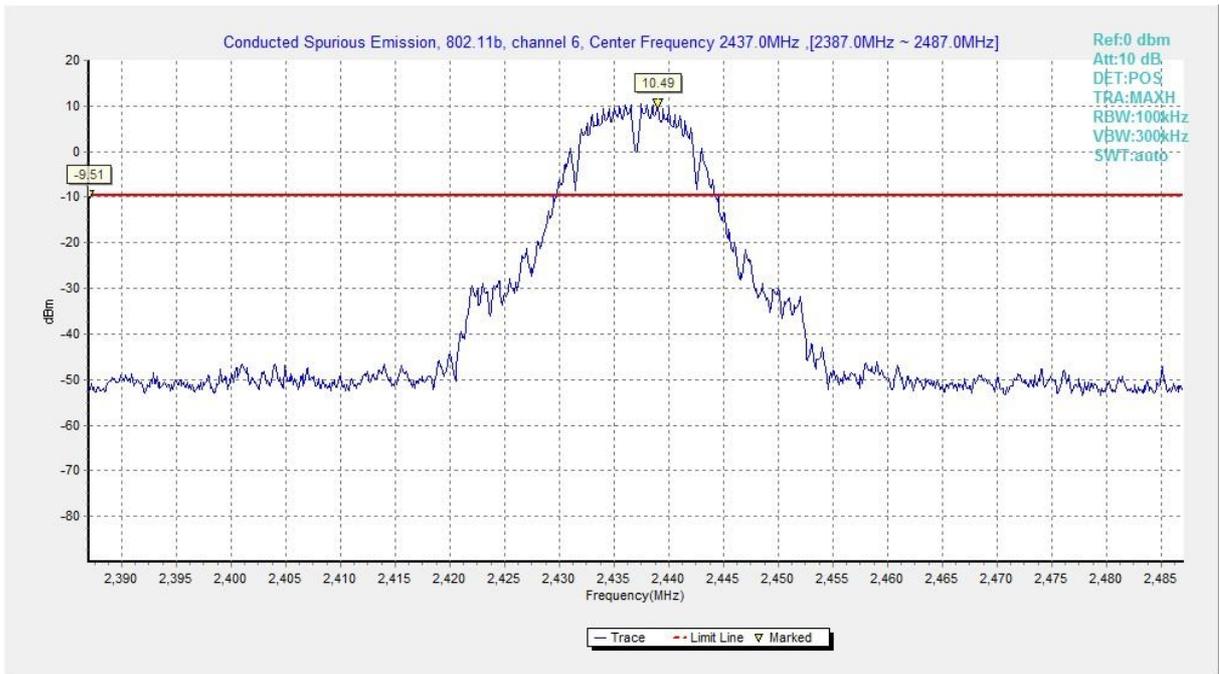


Fig.A.6.1.9 Transmitter Spurious Emission - Conducted (802.11b, Ch6, Center Frequency)

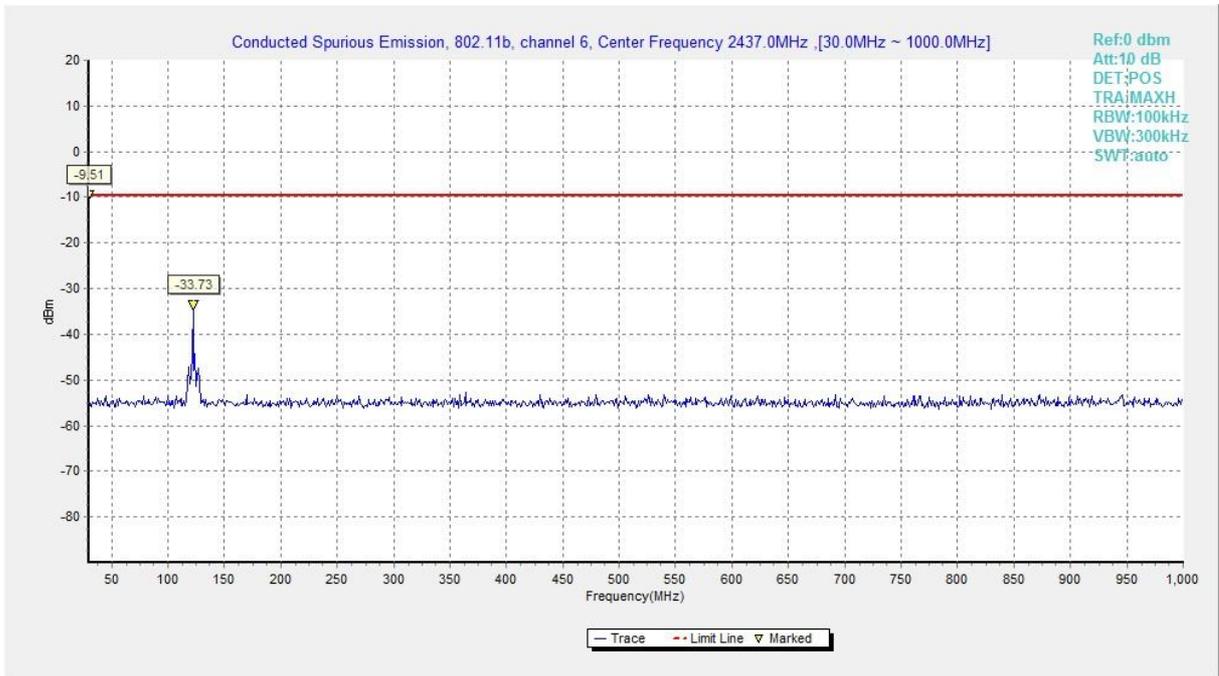


Fig.A.6.1.10 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 30 MHz-1 GHz)

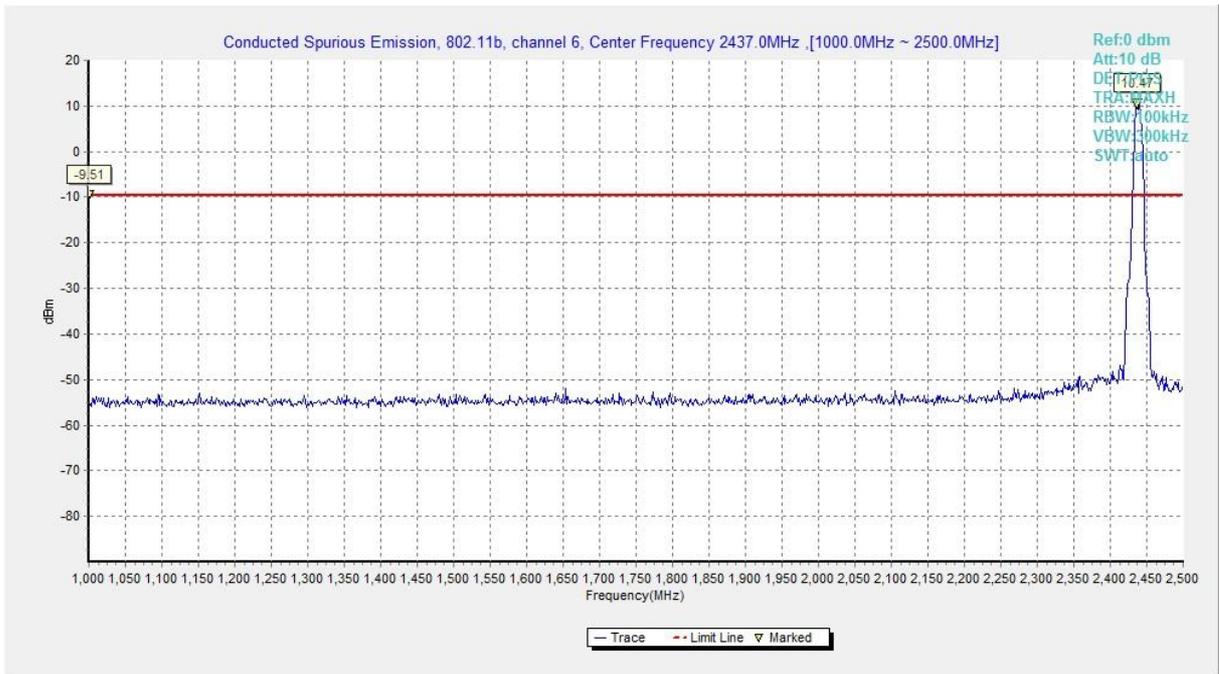


Fig.A.6.1.11 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 1 GHz-2.5 GHz)

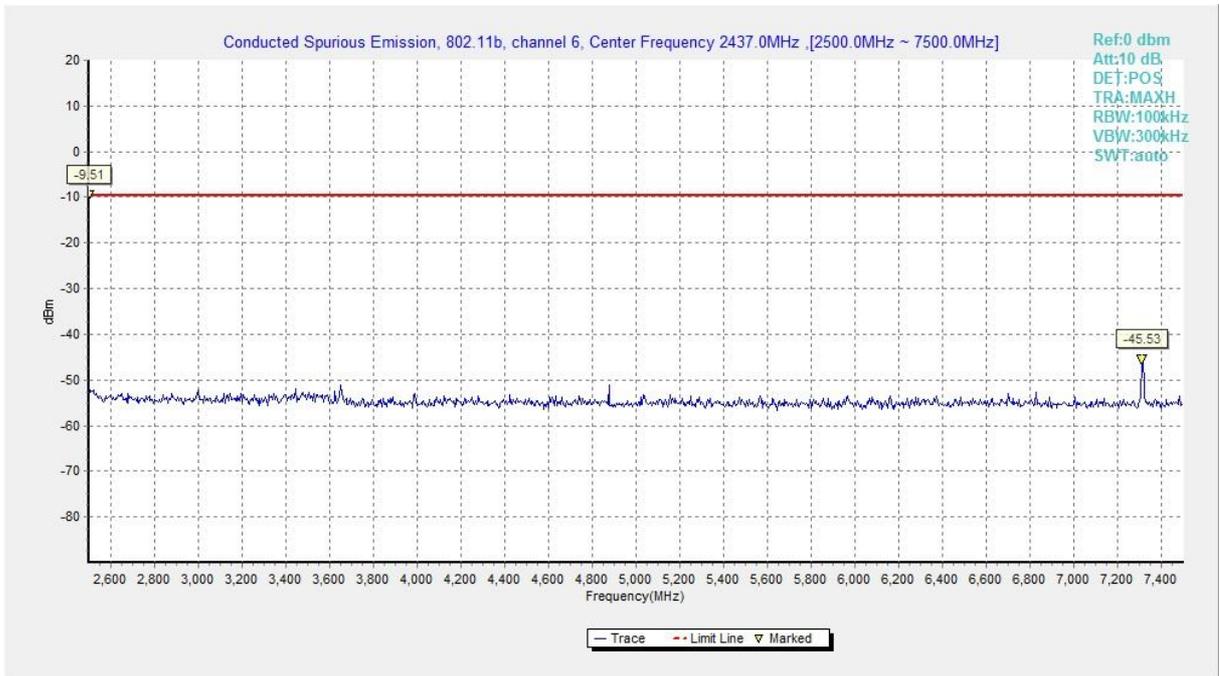


Fig.A.6.1.12 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 2.5 GHz-7.5 GHz)

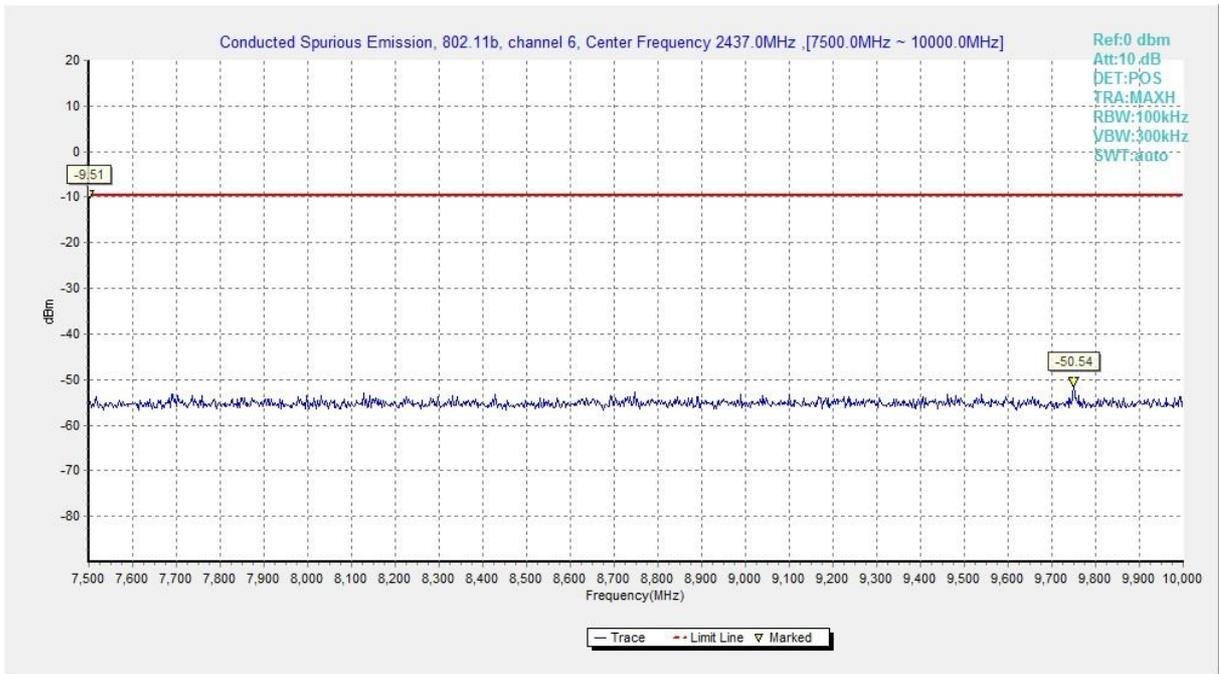


Fig.A.6.1.13 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 7.5 GHz-10 GHz)

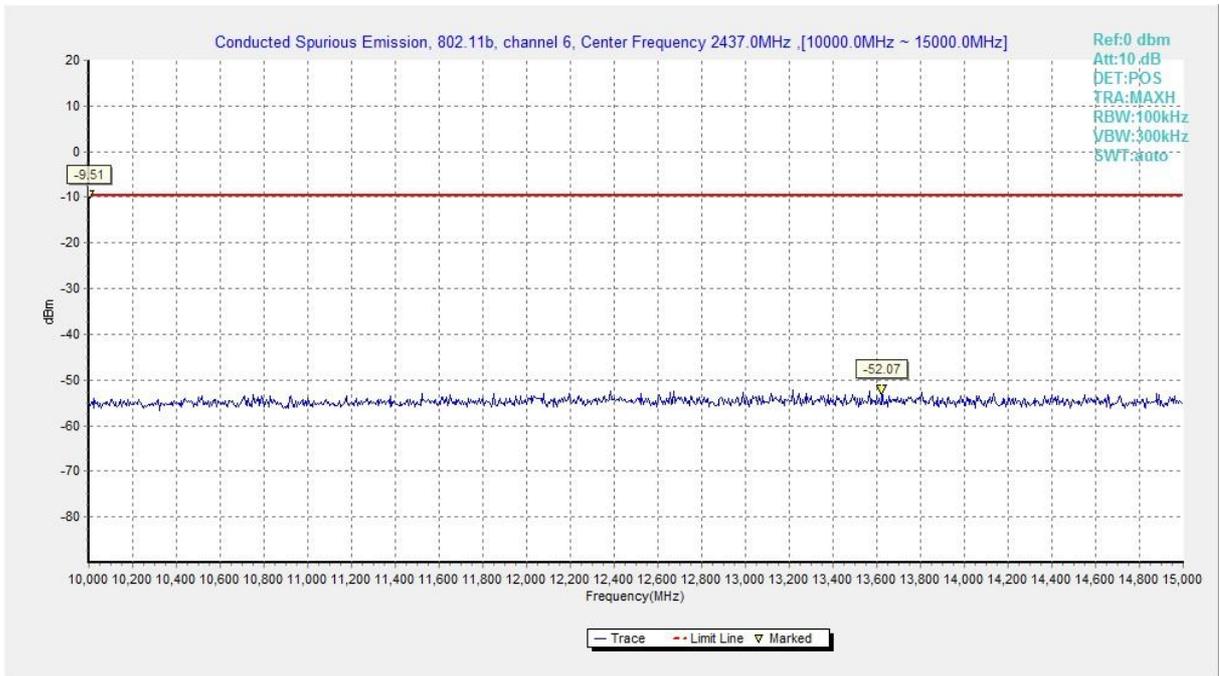


Fig.A.6.1.14 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 10 GHz-15 GHz)

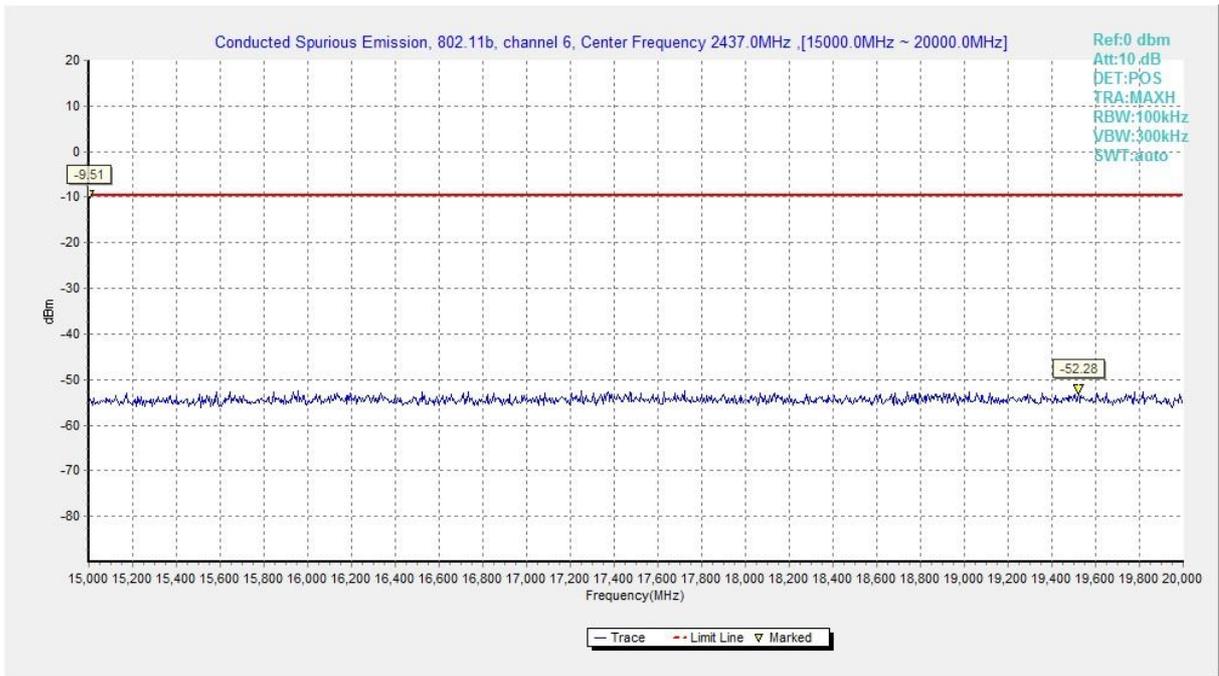


Fig.A.6.1.15 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 15 GHz-20 GHz)

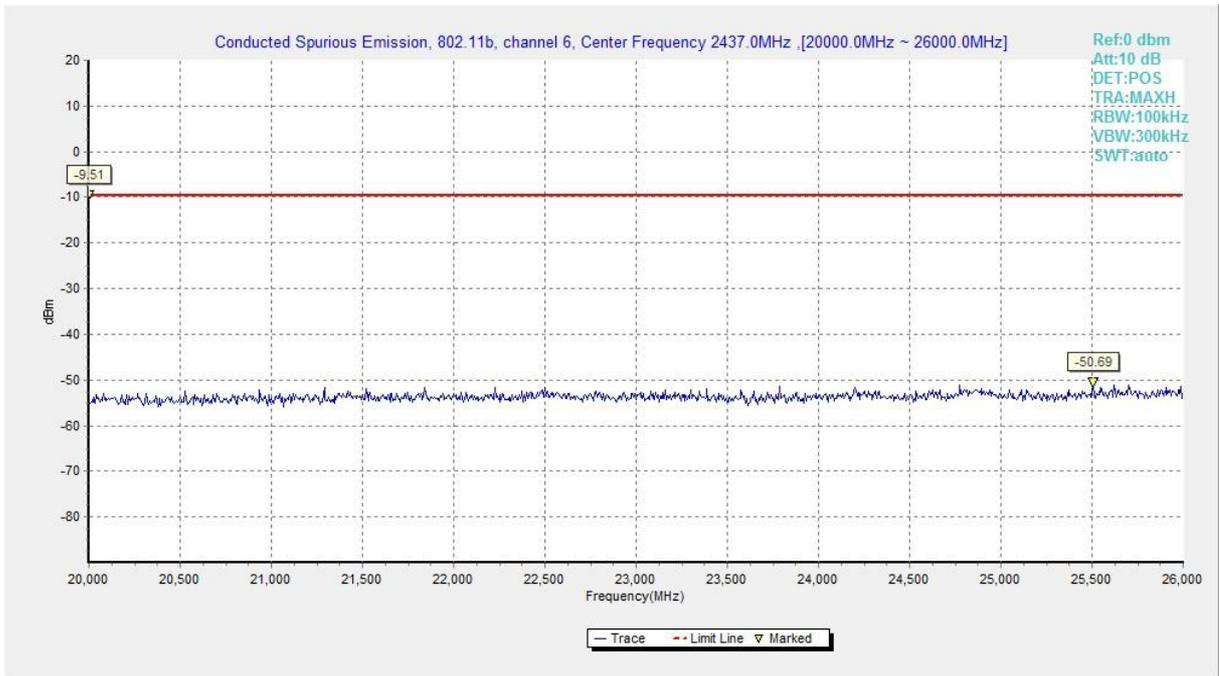


Fig.A.6.1.16 Transmitter Spurious Emission - Conducted (802.11b, Ch6, 20 GHz-26 GHz)

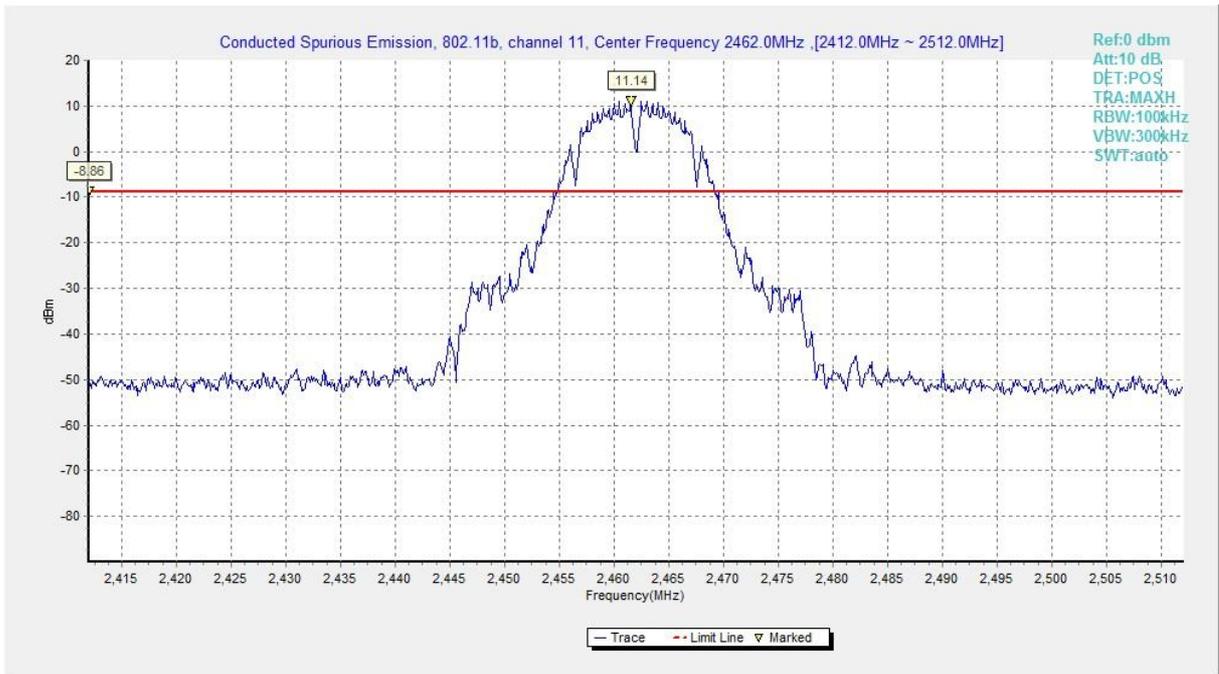


Fig.A.6.1.17 Transmitter Spurious Emission - Conducted (802.11b, Ch11, Center Frequency)

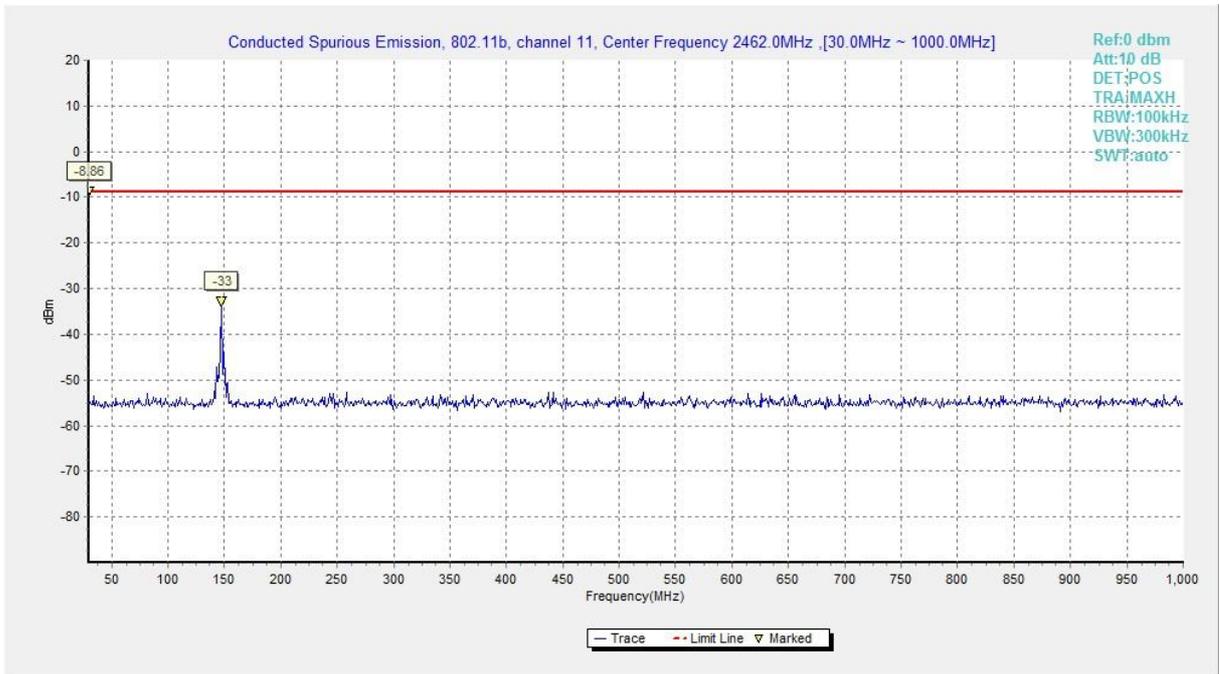


Fig.A.6.1.18 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 30 MHz-1 GHz)

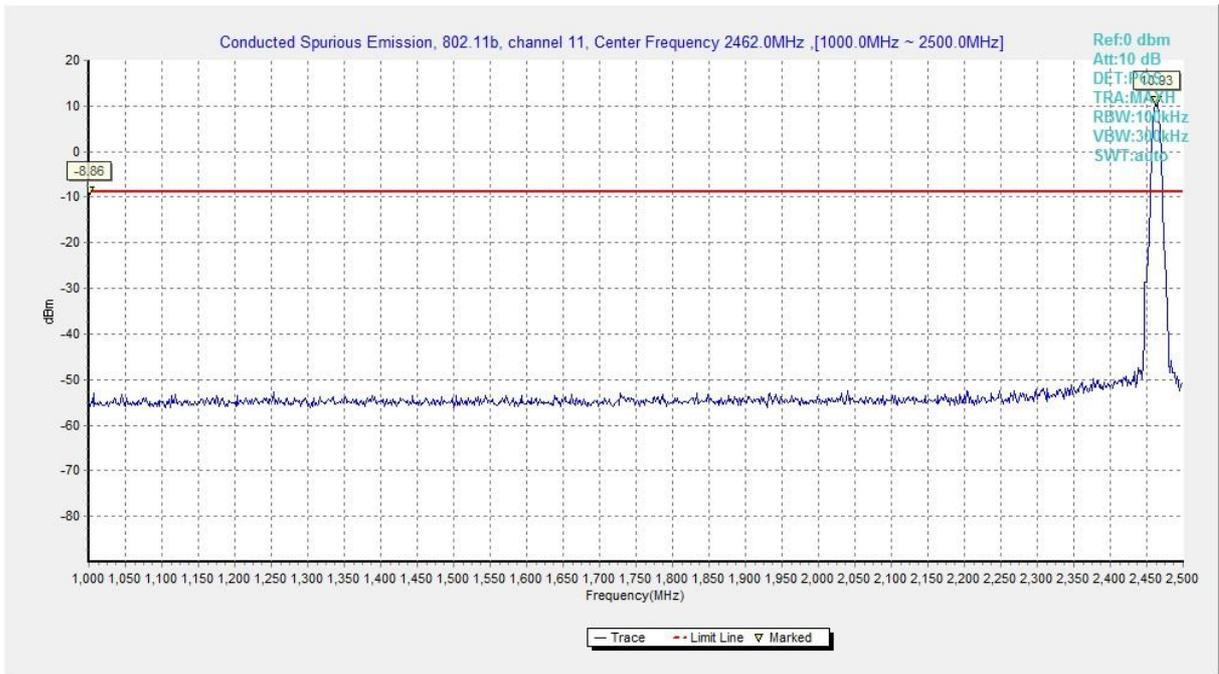


Fig.A.6.1.19 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 1 GHz-2.5 GHz)

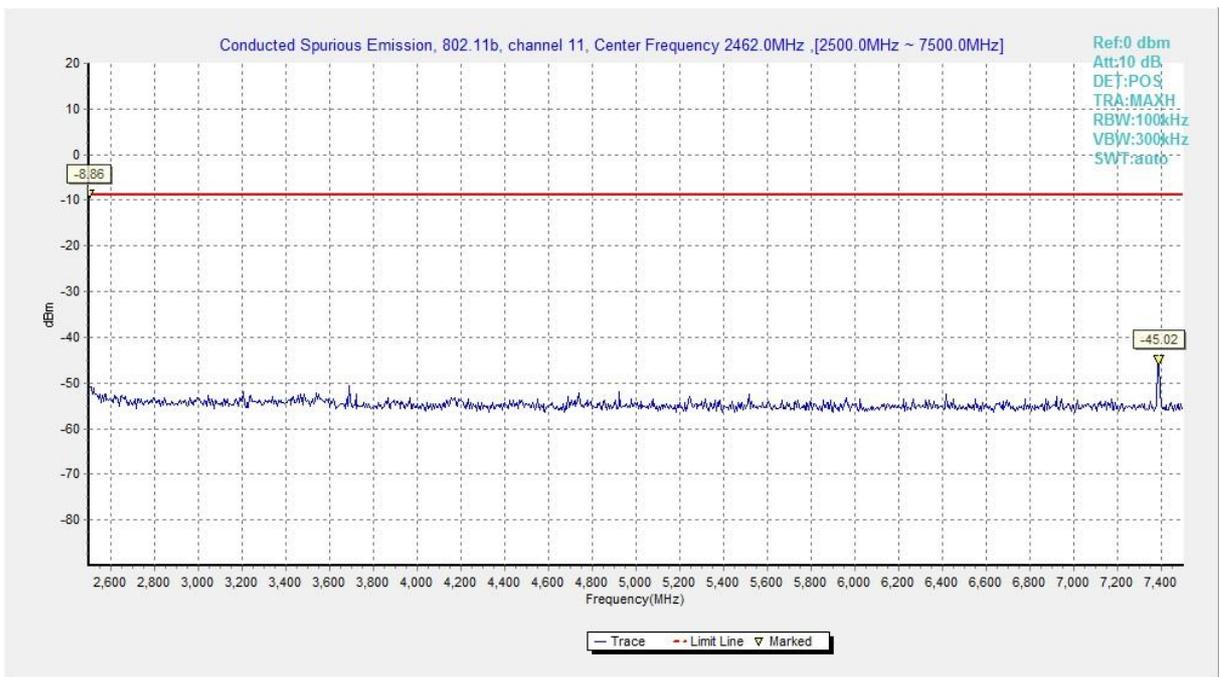


Fig.A.6.1.20 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 2.5 GHz-7.5 GHz)

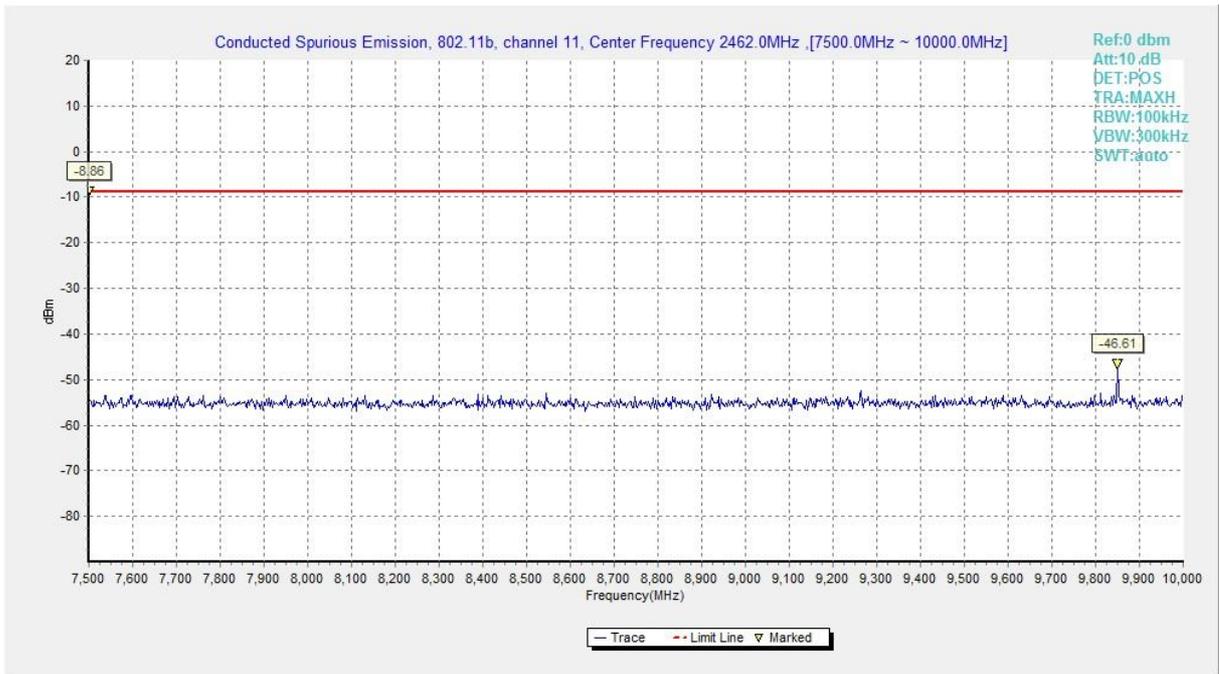


Fig.A.6.1.21 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 7.5 GHz-10 GHz)

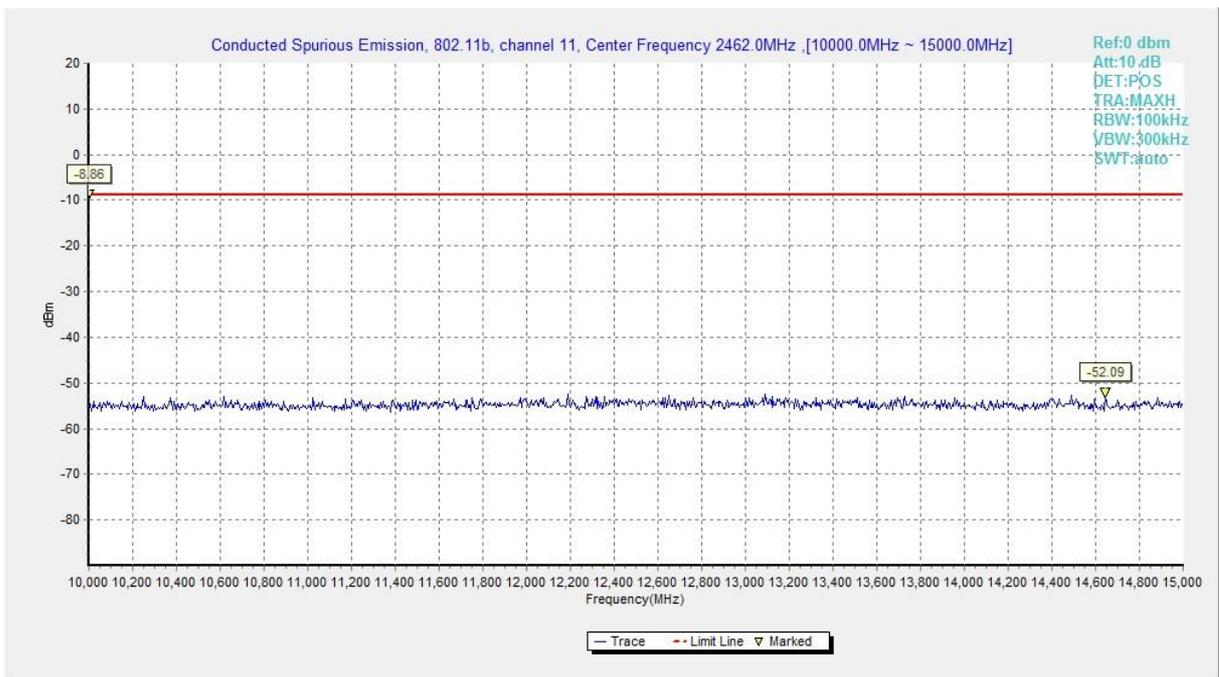


Fig.A.6.1.22 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 10 GHz-15 GHz)

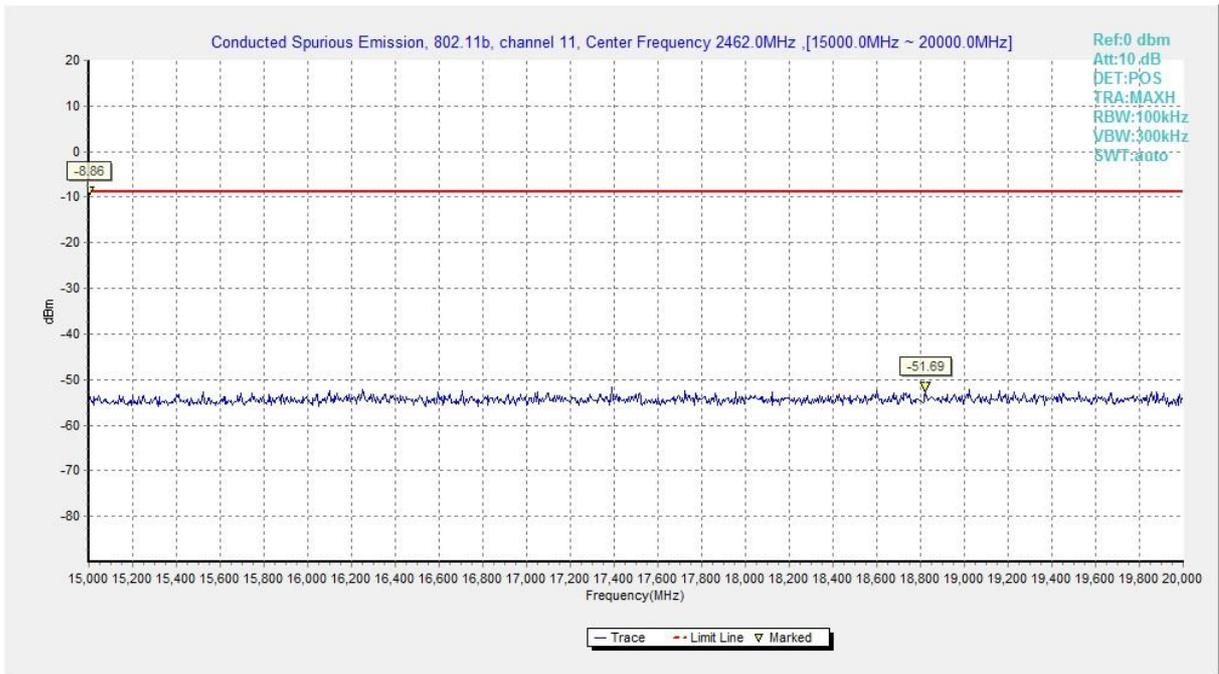


Fig.A.6.1.23 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 15 GHz-20 GHz)

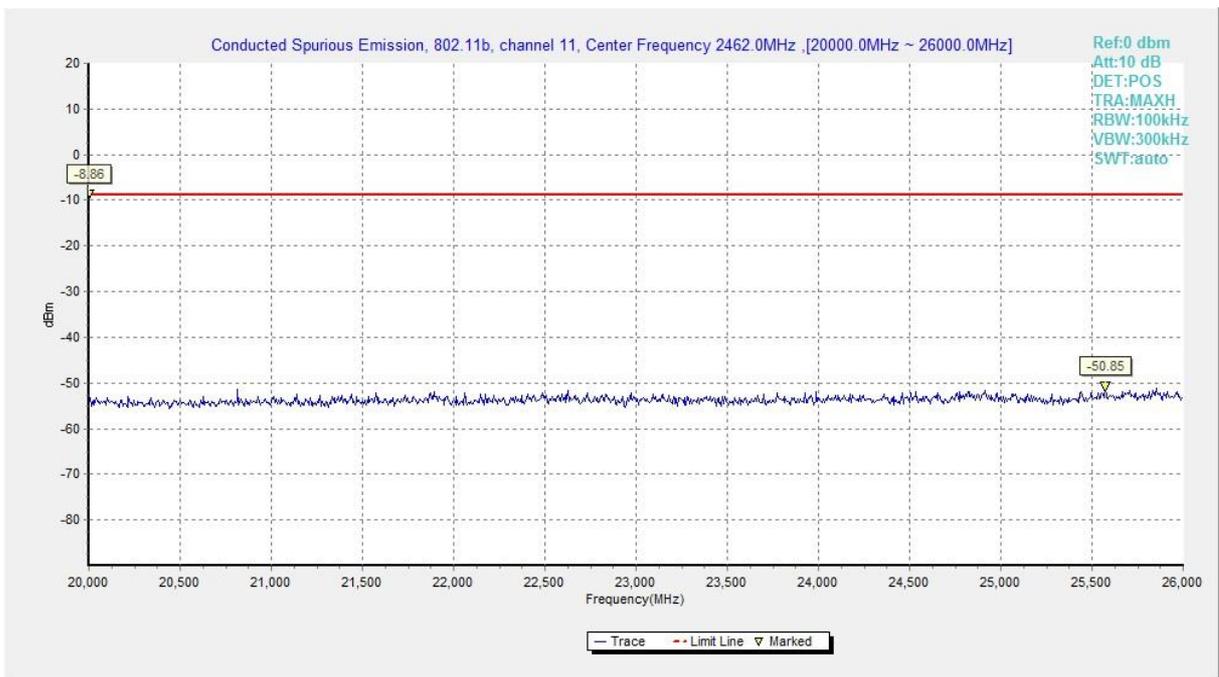


Fig.A.6.1.24 Transmitter Spurious Emission - Conducted (802.11b, Ch11, 20 GHz-26 GHz)

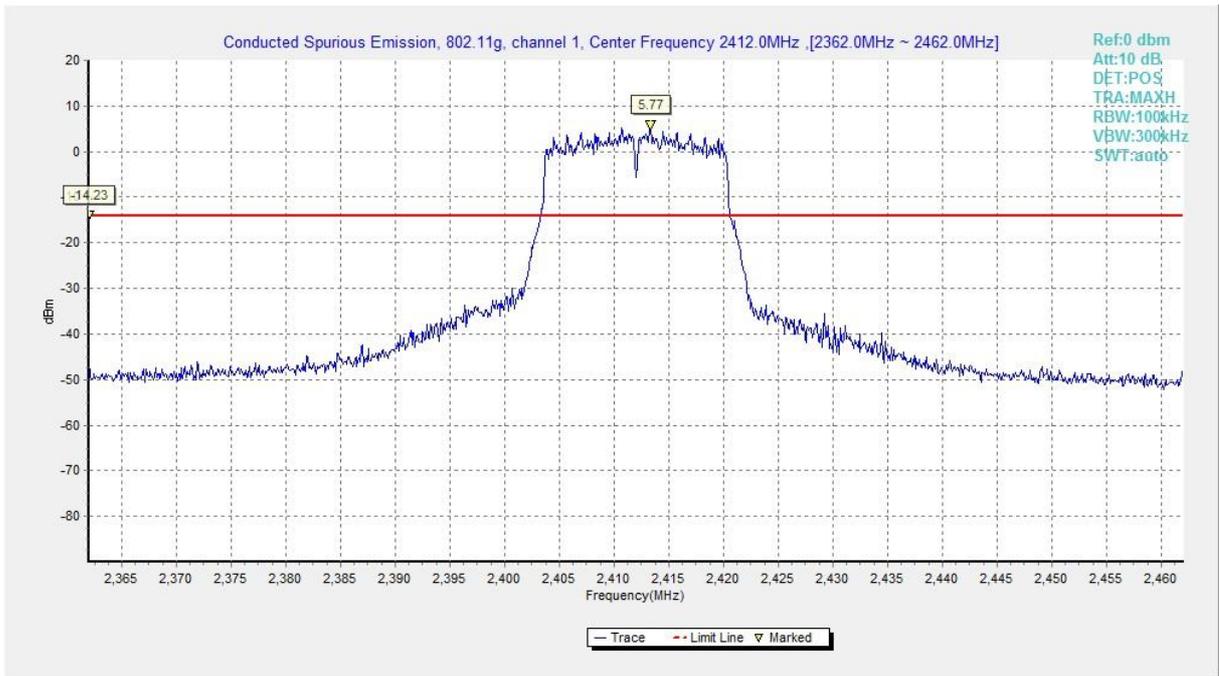


Fig.A.6.1.25 Transmitter Spurious Emission - Conducted (802.11g, Ch1, Center Frequency)

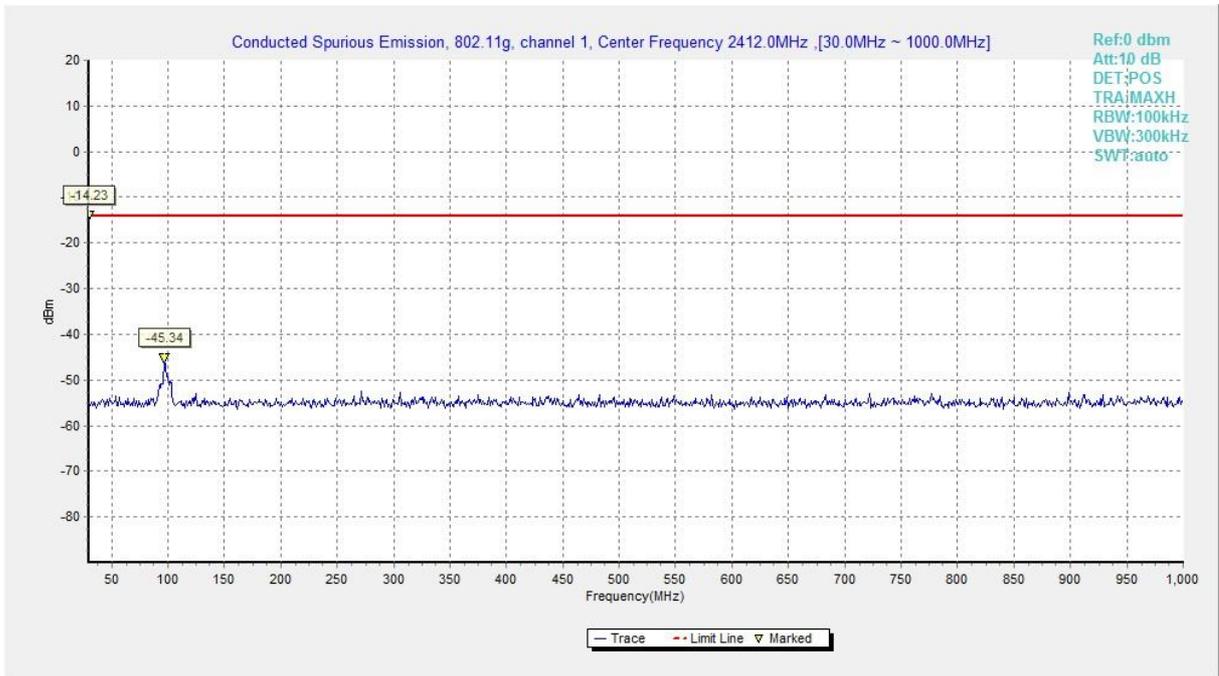


Fig.A.6.1.26 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 30 MHz-1 GHz)

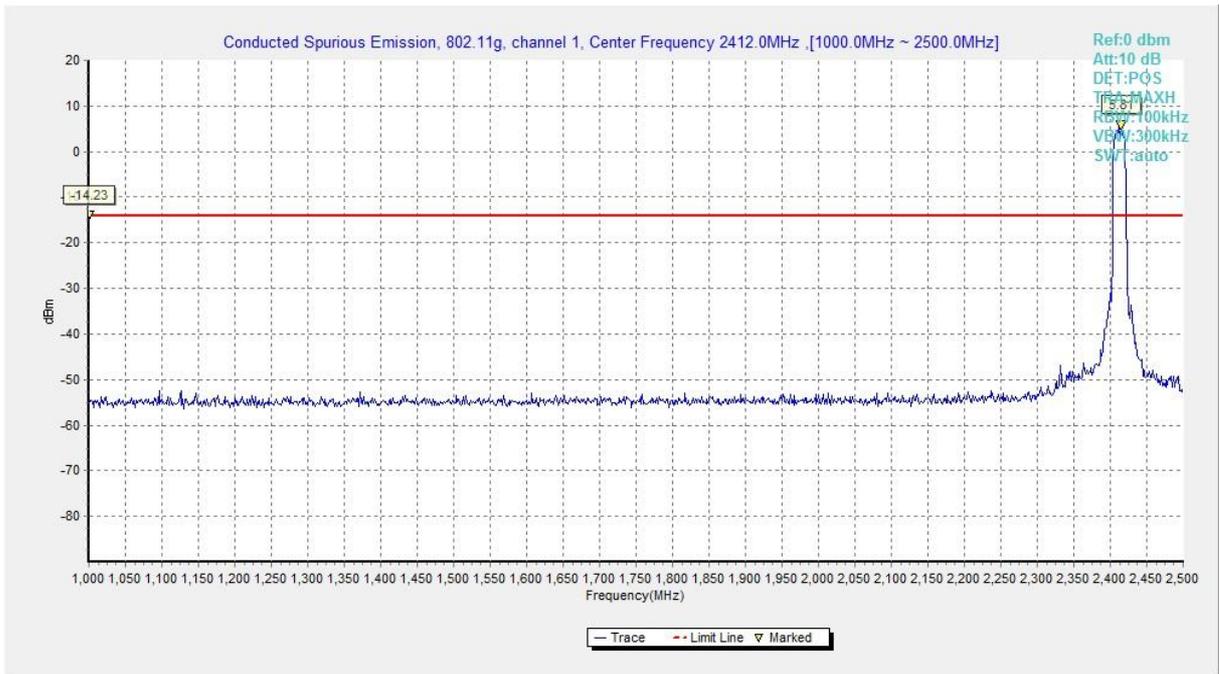


Fig.A.6.1.27 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 1 GHz-2.5 GHz)

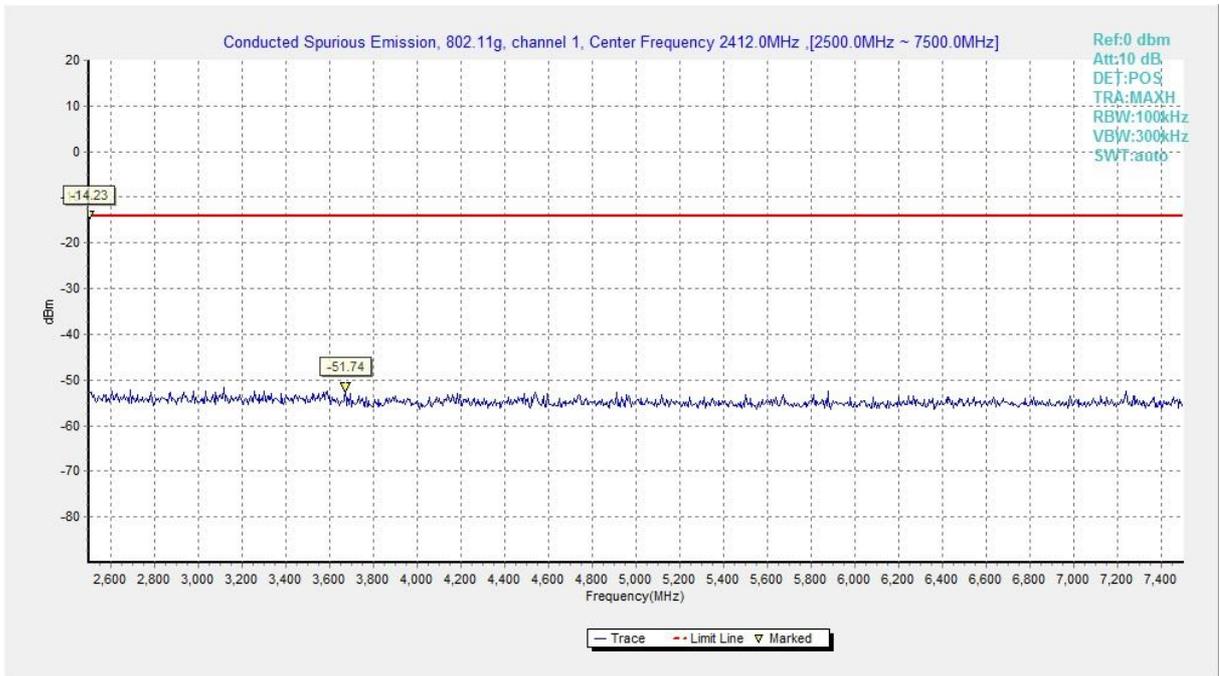


Fig.A.6.1.28 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 2.5 GHz-7.5 GHz)

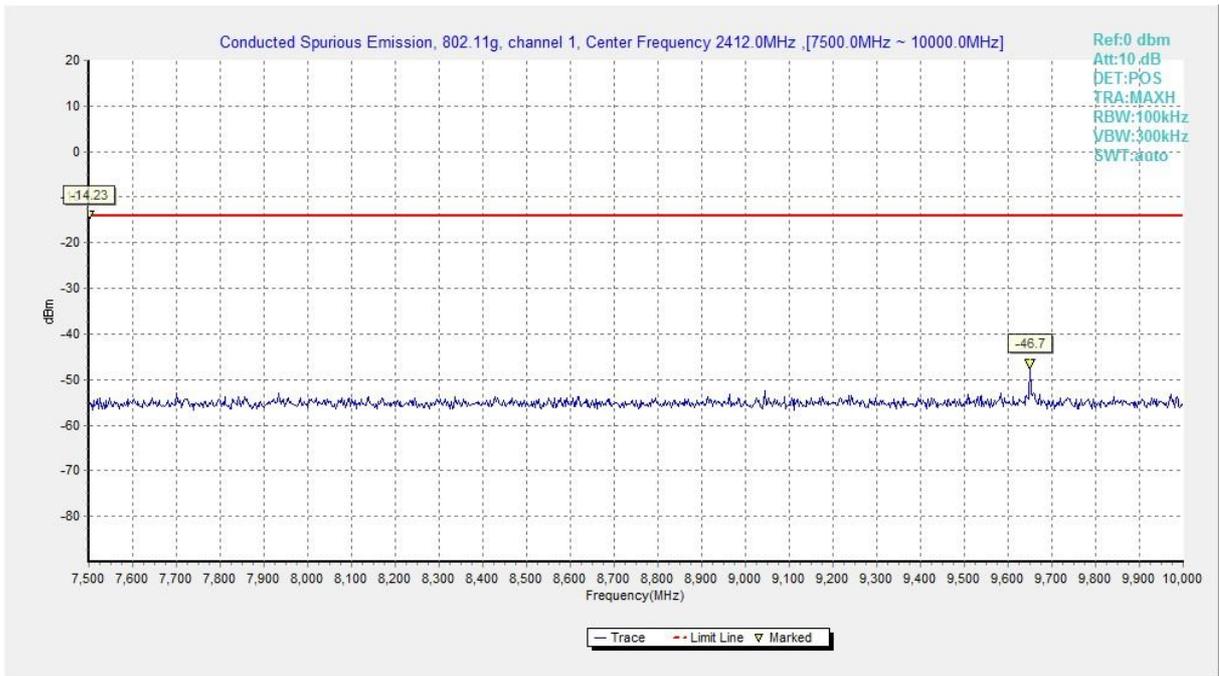


Fig.A.6.1.29 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 7.5 GHz-10 GHz)

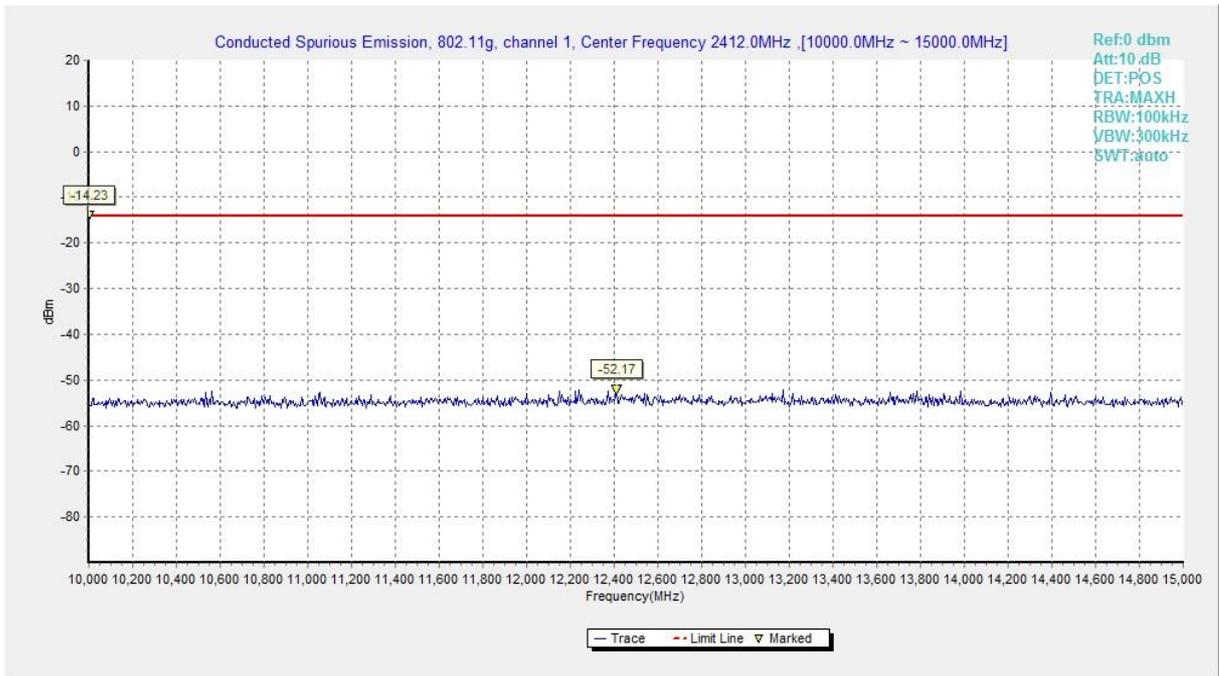


Fig.A.6.1.30 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 10 GHz-15 GHz)

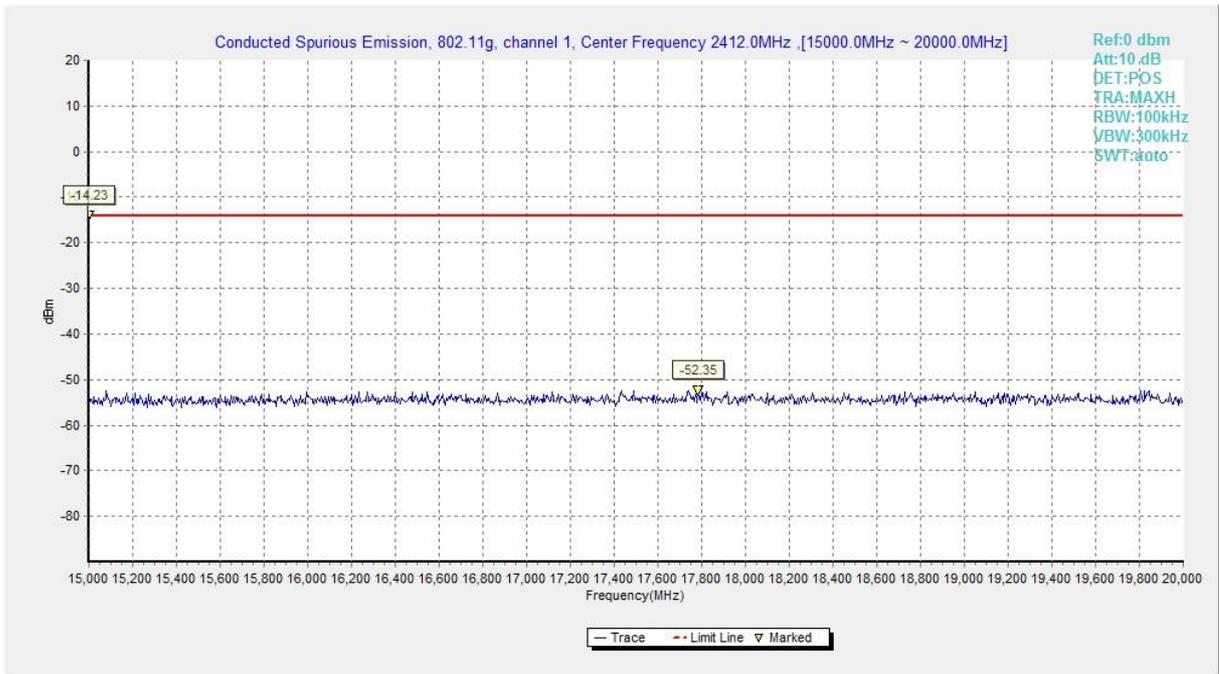


Fig.A.6.1.31 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 15 GHz-20 GHz)

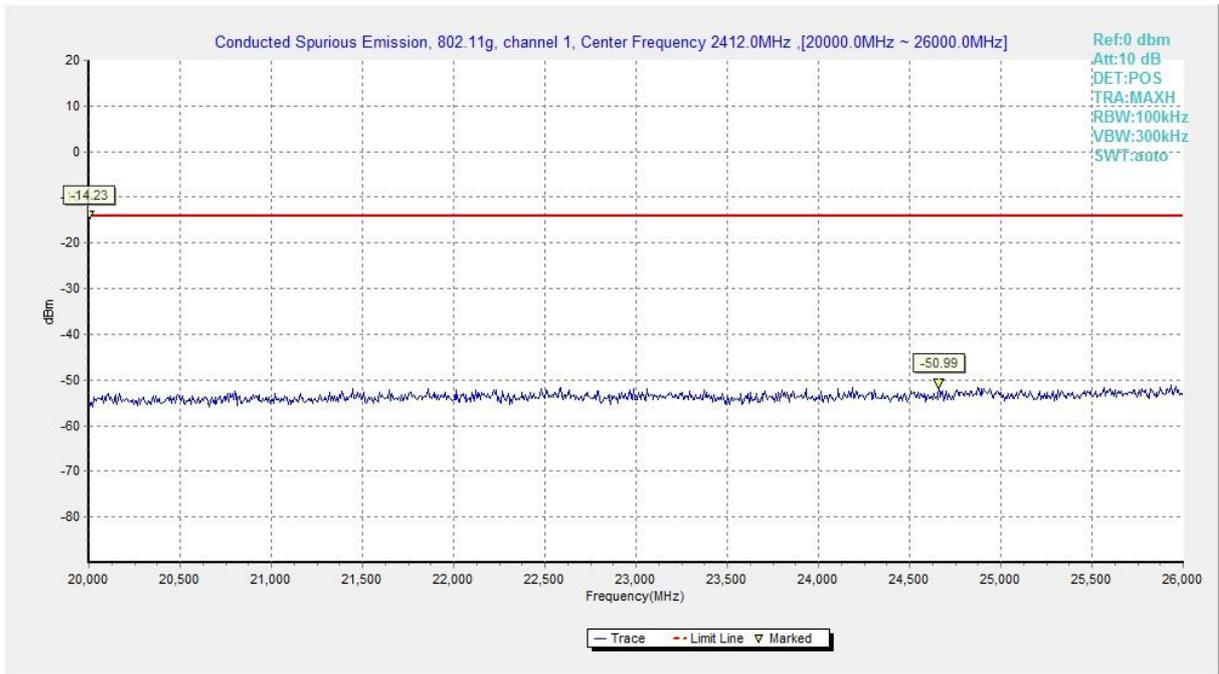


Fig.A.6.1.32 Transmitter Spurious Emission - Conducted (802.11g, Ch1, 20 GHz-26 GHz)

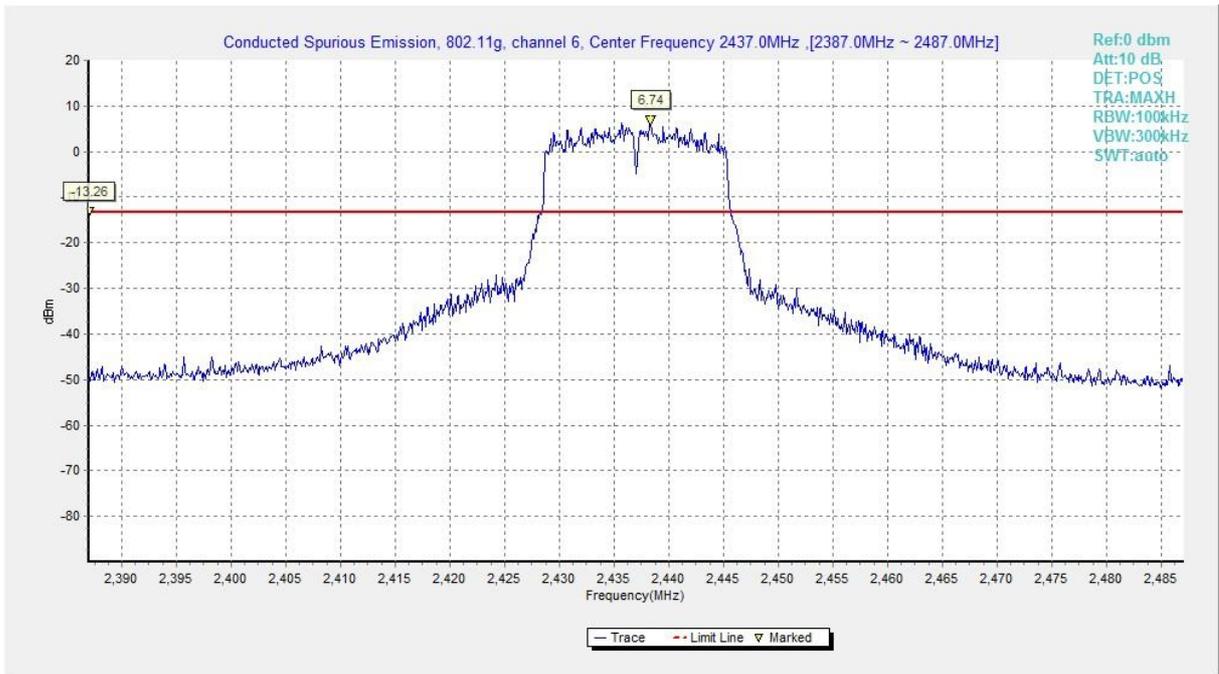


Fig.A.6.1.33 Transmitter Spurious Emission - Conducted (802.11g, Ch6, Center Frequency)

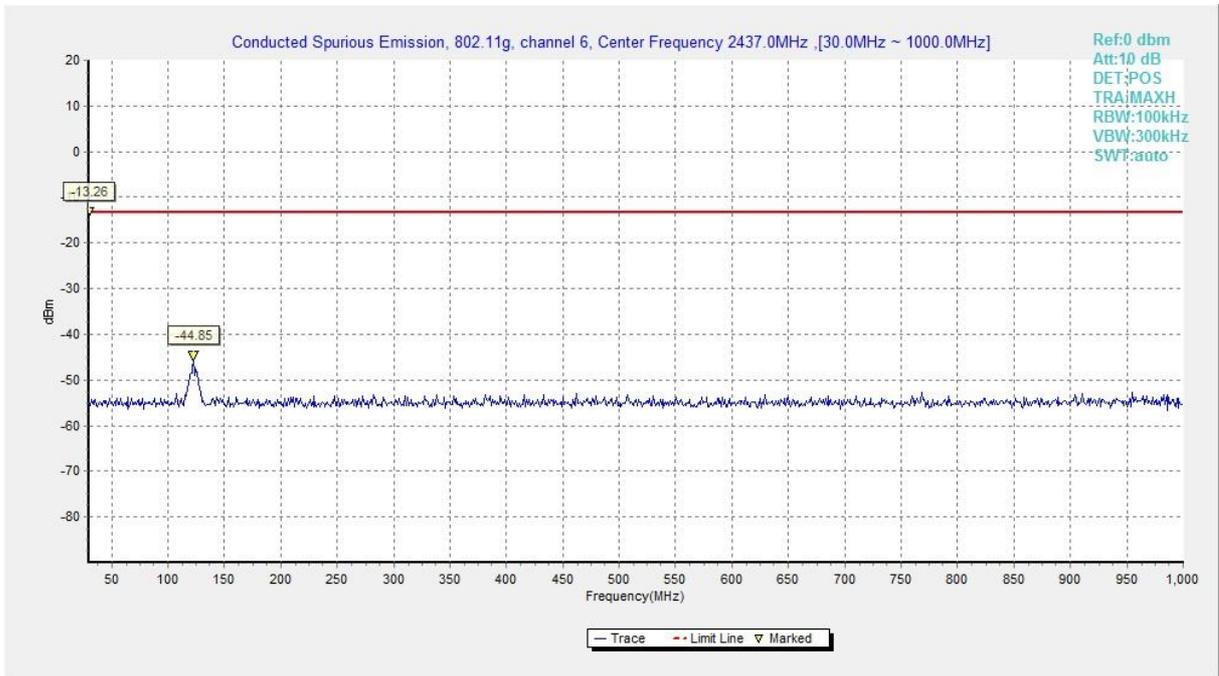


Fig.A.6.1.34 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 30 MHz-1 GHz)

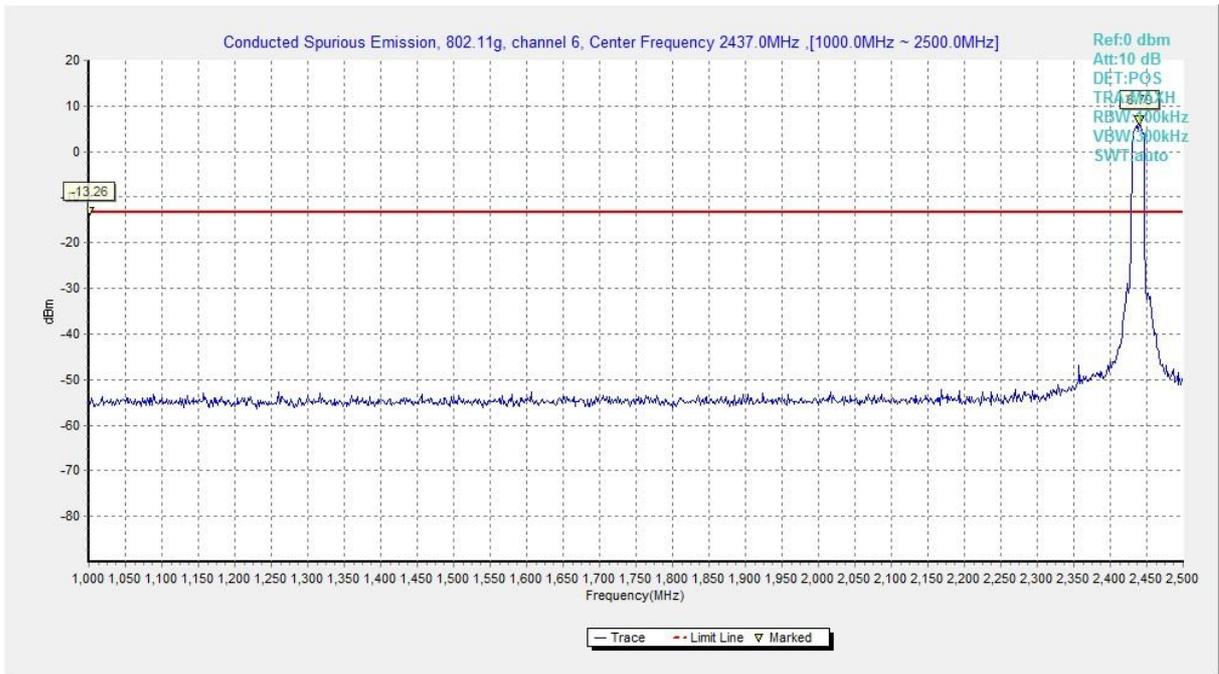


Fig.A.6.1.35 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 1 GHz-2.5 GHz)

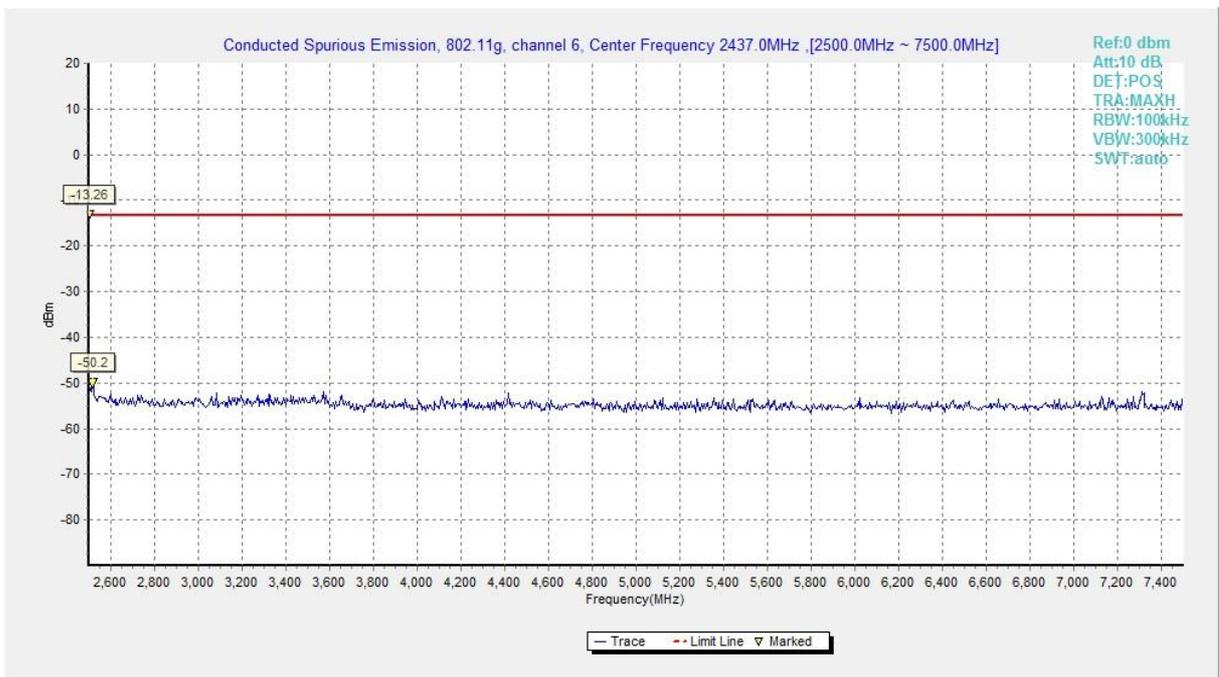


Fig.A.6.1.36 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 2.5 GHz-7.5 GHz)

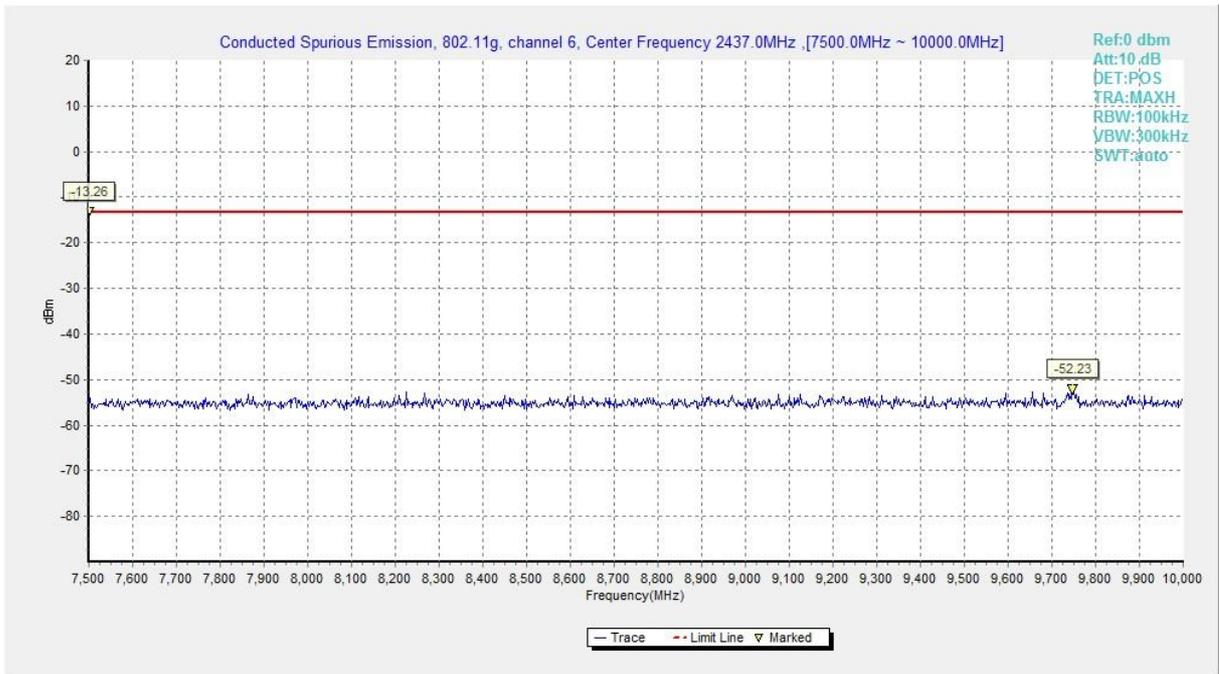


Fig.A.6.1.37 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 7.5 GHz-10 GHz)

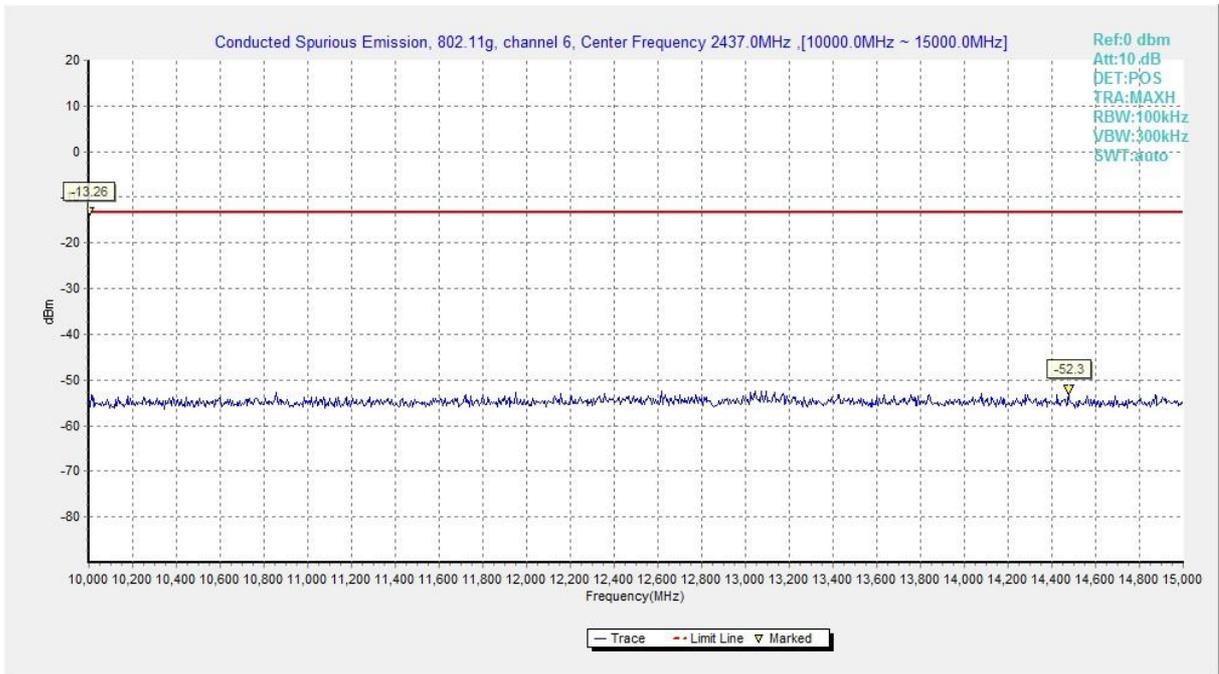


Fig.A.6.1.38 Transmitter Spurious Emission - Conducted (802.11g, Ch6, 10 GHz-15 GHz)