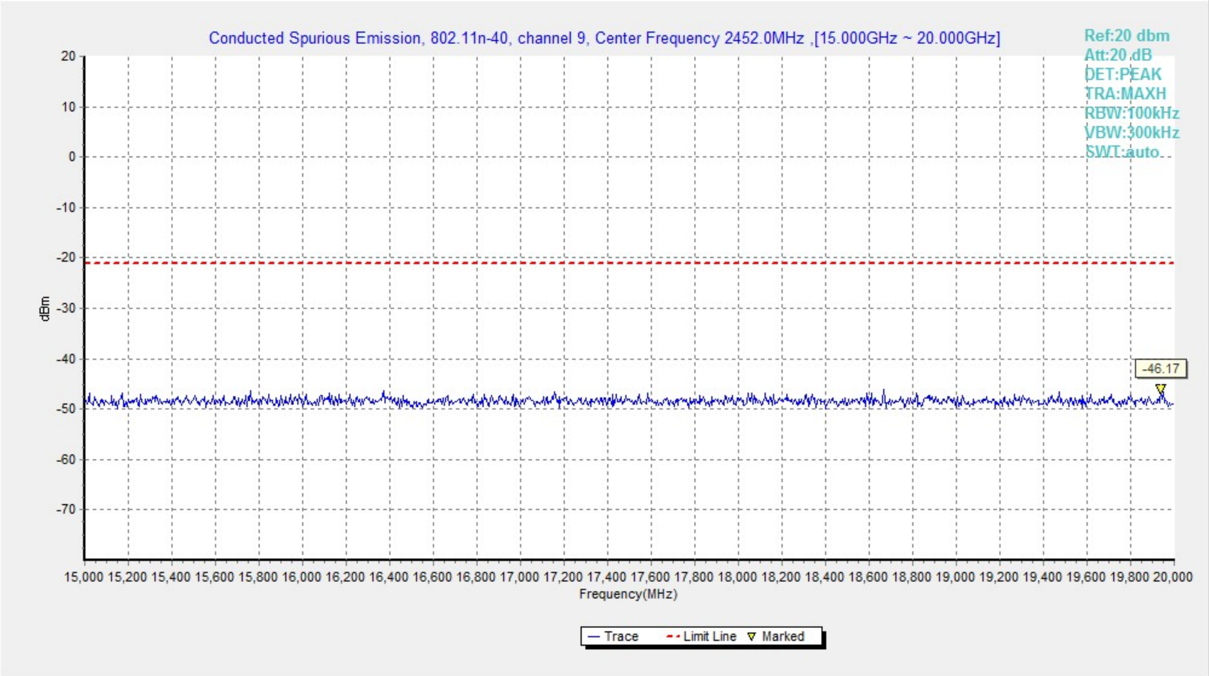


**Fig.A.6.1.95 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 15 GHz-20 GHz)**

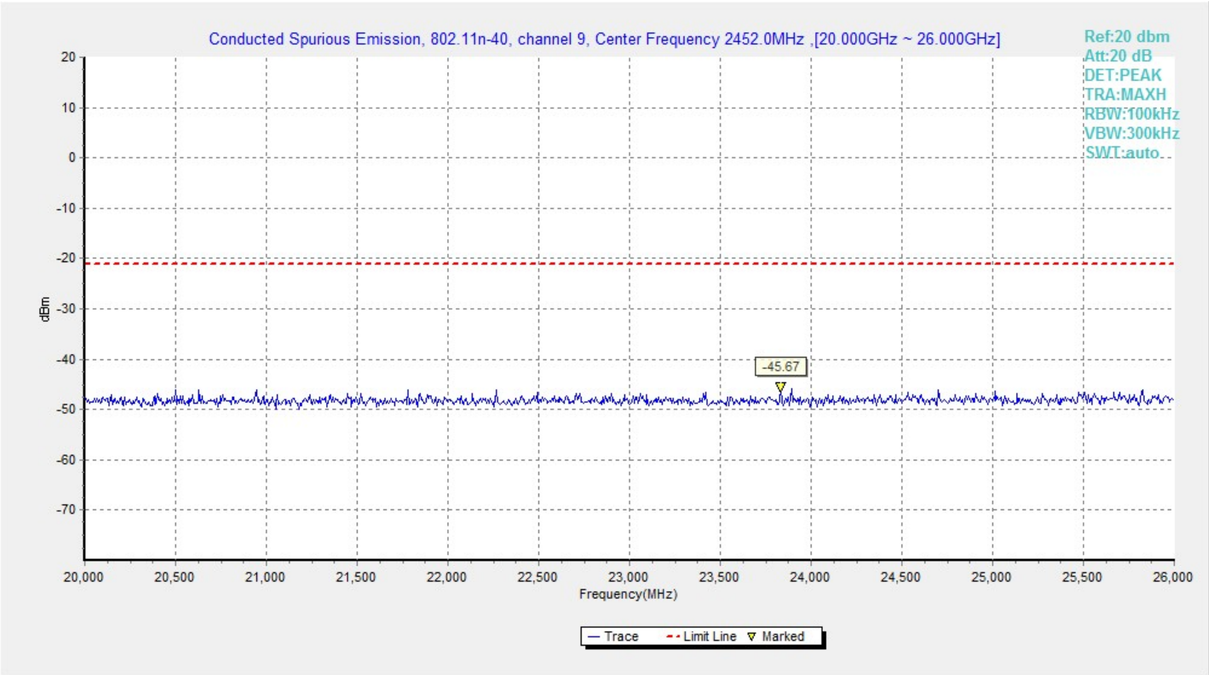


**Fig.A.6.1.96 Transmitter Spurious Emission - Conducted (802.11n-HT40, Ch9, 20 GHz-26 GHz)**

### A.6.2 Transmitter Spurious Emission - Radiated

**Method of Measurement: See ANSI C63.10-2013-clause 6.4 &6.5 & 6.6**
**Measurement Limit:**

| Standard | Limit |
|---|---|
| FCC 47 CFR Part 15.247, 15.205, 15.209 | 20dB below peak output power |

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

**Limit in restricted band:**

| Frequency of emission (MHz) | Field strength(uV/m) | Field strength(dBuV/m) |
|---|---|---|
| 30-88 | 100 | 40 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46 |
| Above 960 | 500 | 54 |

| Frequency (MHz) | Field strength(μV/m) | Measurement distance (m) |
|---|---|---|
| 0.009 - 0.490 | 2400/F(kHz) | 300 |
| 0.490 - 1.705 | 24000/F(kHz) | 30 |
| 1.705 – 30.0 | 30 | 30 |

**Test Condition**

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

| Frequency of emission (MHz) | RBW/VBW | Sweep Time(s) |
|---|---|---|
| 30-1000 | 100KHz/300KHz | 5 |
| 1000-4000 | 1MHz/1MHz | 15 |
| 4000-18000 | 1MHz/1MHz | 40 |
| 18000-26500 | 1MHz/1MHz | 20 |

**EUT ID: EUT1**

**Measurement Results:**

**802.11b mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11b | Power | 2.38GHz ~2.45GHz | Fig.A.6.2.1 | **P** |
| | Power | 2.45GHz ~2.5GHz | Fig.A.6.2.2 | **P** |

**802.11g mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11g | Power | 2.38GHz ~2.43GHz | Fig.A.6.2.3 | **P** |
| | Power | 2.45GHz ~2.5GHz | Fig.A.6.2.4 | **P** |

**802.11n-HT20 mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11n (HT20) | Power | 2.38GHz ~2.45GHz | Fig.A.6.2.5 | **P** |
| | Power | 2.45GHz ~2.5GHz | Fig.A.6.2.6 | **P** |

**802.11n-HT40 mode**

| Mode | Channel | Frequency Range | Test Results | Conclusion |
|---|---|---|---|---|
| 802.11n (HT20) | Power | 2.38GHz ~2.45GHz | Fig.A.6.2.7 | **P** |
| | Power | 2.45GHz ~2.5GHz | Fig.A.6.2.8 | **P** |

**Conclusion: Pass**

**Note:**

A "reference path loss" is established and the $A_{Rpl}$ is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

$P_{Mea}$ is the field strength recorded from the instrument.

The measurement results are obtained as described below:

Result=$P_{Mea}$+$A_{Rpl=}$ $P_{Mea}$+Cable Loss+Antenna Factor

**Average**

**802.11b**

Ch1

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2389.335 | 40.0 | -14.3 | 27.2 | 27.142 | H |
| 17976.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17463.000 | 32.8 | -5.9 | 40.1 | -1.375 | V |
| 17977.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17485.500 | 32.7 | -5.9 | 40.1 | -1.475 | H |
| 17871.000 | 32.7 | -5.7 | 43.4 | -4.962 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17953.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17964.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17958.000 | 32.8 | -5.4 | 43.4 | -5.184 | V |
| 17962.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17974.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17980.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |

Ch11

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2484.945 | 39.8 | -14.4 | 27.2 | 26.963 | H |
| 17461.500 | 32.9 | -5.9 | 40.1 | -1.275 | H |
| 17467.500 | 32.9 | -5.9 | 40.1 | -1.275 | V |
| 17949.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17442.000 | 32.8 | -5.9 | 40.1 | -1.375 | H |
| 17862.000 | 32.8 | -5.7 | 43.4 | -4.862 | H |

**802.11g**

Ch1

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2388.615 | 40.6 | -14.3 | 27.2 | 27.742 | H |
| 17959.500 | 33.0 | -5.4 | 43.4 | -4.984 | H |
| 17965.500 | 32.9 | -5.4 | 43.4 | -5.084 | V |
| 17445.000 | 32.8 | -5.9 | 40.1 | -1.375 | H |
| 17866.500 | 32.8 | -5.7 | 43.4 | -4.862 | H |
| 17860.500 | 32.7 | -5.7 | 43.4 | -4.962 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17965.500 | 32.9 | -5.4 | 43.4 | -5.084 | H |
| 17950.500 | 32.9 | -5.4 | 43.4 | -5.084 | H |
| 17977.500 | 32.8 | -5.4 | 43.4 | -5.184 | V |
| 17958.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17982.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17460.000 | 32.8 | -5.9 | 40.1 | -1.375 | H |

Ch11

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2485.375 | 40.0 | -14.4 | 27.2 | 27.163 | H |
| 17866.500 | 32.8 | -5.7 | 43.4 | -4.862 | H |
| 17995.500 | 32.8 | -5.4 | 43.4 | -5.184 | V |
| 17947.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17452.500 | 32.8 | -5.9 | 40.1 | -1.375 | H |
| 17977.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |

**802.11n-HT20**

Ch1

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2388.935 | 40.5 | -14.3 | 27.2 | 27.642 | H |
| 17773.500 | 32.6 | -5.7 | 43.4 | -5.062 | H |
| 17971.500 | 32.6 | -5.4 | 43.4 | -5.384 | V |
| 17965.500 | 32.6 | -5.4 | 43.4 | -5.384 | H |
| 17850.000 | 32.6 | -5.7 | 43.4 | -5.062 | H |
| 17956.500 | 32.6 | -5.4 | 43.4 | -5.384 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17962.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17977.500 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17965.500 | 32.8 | -5.4 | 43.4 | -5.184 | V |
| 17773.500 | 32.7 | -5.7 | 43.4 | -4.962 | H |
| 17976.000 | 32.7 | -5.4 | 43.4 | -5.284 | H |
| 17958.000 | 32.6 | -5.4 | 43.4 | -5.384 | H |

Ch11

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2484.115 | 39.7 | -14.4 | 27.2 | 26.863 | H |
| 17967.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17977.500 | 32.7 | -5.4 | 43.4 | -5.284 | V |
| 17443.500 | 32.7 | -5.9 | 40.1 | -1.475 | H |
| 17964.000 | 32.7 | -5.4 | 43.4 | -5.284 | H |
| 17466.000 | 32.7 | -5.9 | 40.1 | -1.475 | H |

**802.11n-HT40**

Ch3

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2389.995 | 41.5 | -14.3 | 27.2 | 28.642 | H |
| 17449.500 | 32.9 | -5.9 | 40.1 | -1.275 | H |
| 17977.500 | 32.8 | -5.4 | 43.4 | -5.184 | V |
| 17970.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17973.000 | 32.7 | -5.4 | 43.4 | -5.284 | H |
| 17958.000 | 32.7 | -5.4 | 43.4 | -5.284 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17967.000 | 32.9 | -5.4 | 43.4 | -5.084 | H |
| 17965.500 | 32.9 | -5.4 | 43.4 | -5.084 | H |
| 17974.500 | 32.8 | -5.4 | 43.4 | -5.184 | V |
| 17451.000 | 32.7 | -5.9 | 40.1 | -1.475 | H |
| 17856.000 | 32.7 | -5.7 | 43.4 | -4.962 | H |
| 17460.000 | 32.7 | -5.9 | 40.1 | -1.475 | H |

Ch9

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2483.540 | 39.0 | -14.4 | 27.2 | 26.163 | H |
| 17958.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17971.500 | 32.8 | -5.4 | 43.4 | -5.184 | V |
| 17449.500 | 32.8 | -5.9 | 40.1 | -1.375 | H |
| 17961.000 | 32.8 | -5.4 | 43.4 | -5.184 | H |
| 17431.500 | 32.8 | -5.9 | 40.1 | -1.375 | H |

**Peak**

**802.11b**

Ch1

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2389.800 | 51.5 | -14.3 | 27.2 | 38.642 | H |
| 17457.000 | 45.6 | -5.9 | 40.1 | 11.425 | H |
| 17335.500 | 45.1 | -6.5 | 40.1 | 11.496 | V |
| 17419.500 | 45.0 | -5.9 | 40.1 | 10.825 | H |
| 17746.500 | 44.9 | -5.7 | 43.4 | 7.238 | H |
| 17584.500 | 44.8 | -6.9 | 43.4 | 8.302 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17847.000 | 45.3 | -5.7 | 43.4 | 7.638 | H |
| 17568.000 | 44.9 | -6.9 | 43.4 | 8.402 | H |
| 17976.000 | 44.9 | -5.4 | 43.4 | 6.916 | V |
| 17608.500 | 44.7 | -6.9 | 43.4 | 8.202 | H |
| 17430.000 | 44.6 | -5.9 | 40.1 | 10.425 | H |
| 17805.000 | 44.6 | -5.7 | 43.4 | 6.938 | H |

Ch11

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2485.380 | 52.4 | -14.4 | 27.2 | 39.563 | H |
| 17884.500 | 45.0 | -5.7 | 43.4 | 7.338 | H |
| 17935.500 | 45.0 | -5.4 | 43.4 | 7.016 | V |
| 17658.000 | 45.0 | -6.9 | 43.4 | 8.502 | H |
| 17413.500 | 45.0 | -5.9 | 40.1 | 10.825 | H |
| 17341.500 | 44.9 | -6.5 | 40.1 | 11.296 | H |

**802.11g**

Ch1

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2388.500 | 55.9 | -14.3 | 27.2 | 43.042 | H |
| 17382.000 | 45.0 | -6.5 | 40.1 | 11.396 | H |
| 17959.500 | 44.9 | -5.4 | 43.4 | 6.916 | V |
| 17781.000 | 44.9 | -5.7 | 43.4 | 7.238 | H |
| 17817.000 | 44.8 | -5.7 | 43.4 | 7.138 | H |
| 17586.000 | 44.7 | -6.9 | 43.4 | 8.202 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17368.500 | 45.4 | -6.5 | 40.1 | 11.796 | H |
| 17928.000 | 44.9 | -5.4 | 43.4 | 6.916 | H |
| 17994.000 | 44.8 | -5.4 | 43.4 | 6.816 | V |
| 17959.500 | 44.5 | -5.4 | 43.4 | 6.516 | H |
| 17472.000 | 44.5 | -5.9 | 40.1 | 10.325 | H |
| 17965.500 | 44.5 | -5.4 | 43.4 | 6.516 | H |

Ch11

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2485.675 | 51.4 | -14.4 | 27.2 | 38.563 | H |
| 17952.000 | 45.3 | -5.4 | 43.4 | 7.316 | H |
| 17839.500 | 45.2 | -5.7 | 43.4 | 7.538 | V |
| 17850.000 | 45.0 | -5.7 | 43.4 | 7.338 | H |
| 17772.000 | 45.0 | -5.7 | 43.4 | 7.338 | H |
| 17535.000 | 44.8 | -5.9 | 43.4 | 7.325 | H |

**802.11n-HT20**

Ch1

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2388.050 | 55.2 | -14.3 | 27.2 | 42.342 | H |
| 17535.000 | 44.9 | -5.9 | 43.4 | 7.425 | H |
| 17803.500 | 44.7 | -5.7 | 43.4 | 7.038 | V |
| 17856.000 | 44.7 | -5.7 | 43.4 | 7.038 | H |
| 17566.500 | 44.7 | -6.9 | 43.4 | 8.202 | H |
| 17974.500 | 44.6 | -5.4 | 43.4 | 6.616 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17833.500 | 45.6 | -5.7 | 43.4 | 7.938 | H |
| 17472.000 | 45.3 | -5.9 | 40.1 | 11.125 | H |
| 17476.500 | 44.9 | -5.9 | 40.1 | 10.725 | V |
| 17496.000 | 44.7 | -5.9 | 40.1 | 10.525 | H |
| 17878.500 | 44.7 | -5.7 | 43.4 | 7.038 | H |
| 17577.000 | 44.6 | -6.9 | 43.4 | 8.102 | H |

Ch11

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2483.800 | 55.1 | -14.4 | 27.2 | 42.263 | H |
| 17845.500 | 45.0 | -5.7 | 43.4 | 7.338 | H |
| 17484.000 | 45.0 | -5.9 | 40.1 | 10.825 | V |
| 17671.500 | 44.6 | -6.9 | 43.4 | 8.102 | H |
| 17697.000 | 44.5 | -6.9 | 43.4 | 8.002 | H |
| 17973.000 | 44.5 | -5.4 | 43.4 | 6.516 | H |

**802.11n-HT40**

Ch3

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2387.730 | 54.6 | -14.3 | 27.2 | 41.742 | H |
| 17856.000 | 45.1 | -5.7 | 43.4 | 7.438 | H |
| 17655.000 | 45.1 | -6.9 | 43.4 | 8.602 | V |
| 17449.500 | 44.9 | -5.9 | 40.1 | 10.725 | H |
| 17181.000 | 44.8 | -6.3 | 40.1 | 11.005 | H |
| 17206.500 | 44.8 | -6.3 | 40.1 | 11.005 | H |

Ch6

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 17554.500 | 45.2 | -5.9 | 43.4 | 7.725 | H |
| 17788.500 | 44.8 | -5.7 | 43.4 | 7.138 | H |
| 17652.000 | 44.8 | -6.9 | 43.4 | 8.302 | V |
| 17907.000 | 44.7 | -5.7 | 43.4 | 7.038 | H |
| 17863.500 | 44.5 | -5.7 | 43.4 | 6.838 | H |
| 17547.000 | 44.5 | -5.9 | 43.4 | 7.025 | H |

Ch9

| Frequency(MHz) | Result (dBuV/m) | Cable Loss(dB) | Antenna Factor | $P_{Mea}$ (dBuV/m) | Polarization |
|---|---|---|---|---|---|
| 2483.890 | 51.5 | -14.4 | 27.2 | 38.663 | H |
| 17638.500 | 45.4 | -6.9 | 43.4 | 8.902 | H |
| 17472.000 | 44.8 | -5.9 | 40.1 | 10.625 | V |
| 17505.000 | 44.7 | -5.9 | 43.4 | 7.225 | H |
| 17374.500 | 44.6 | -6.5 | 40.1 | 10.996 | H |
| 17940.000 | 44.6 | -5.4 | 43.4 | 6.616 | H |

**Test graphs as below:**

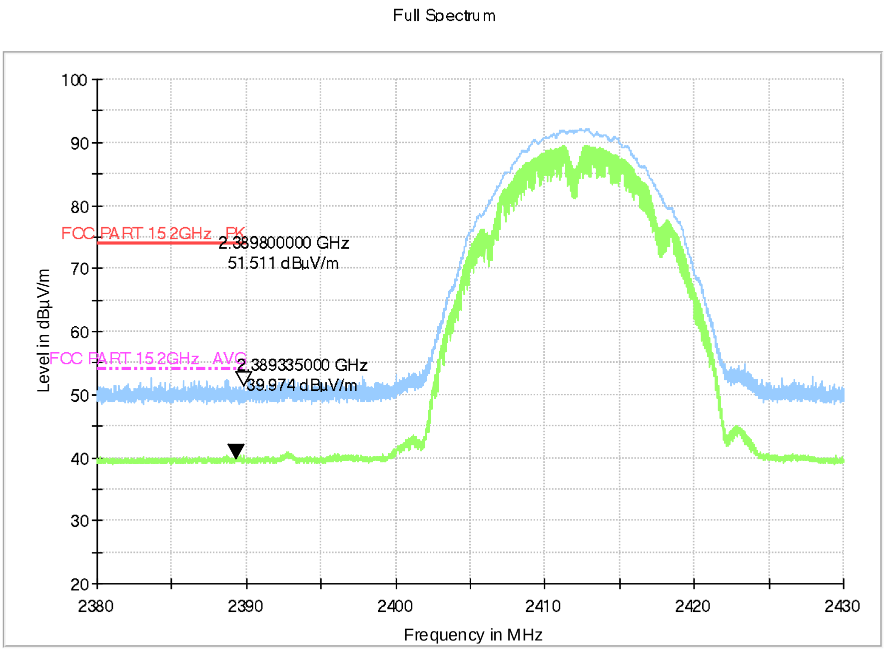


**Fig.A.6.2.1 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch1, 2.38 GHz – 2.45GHz**

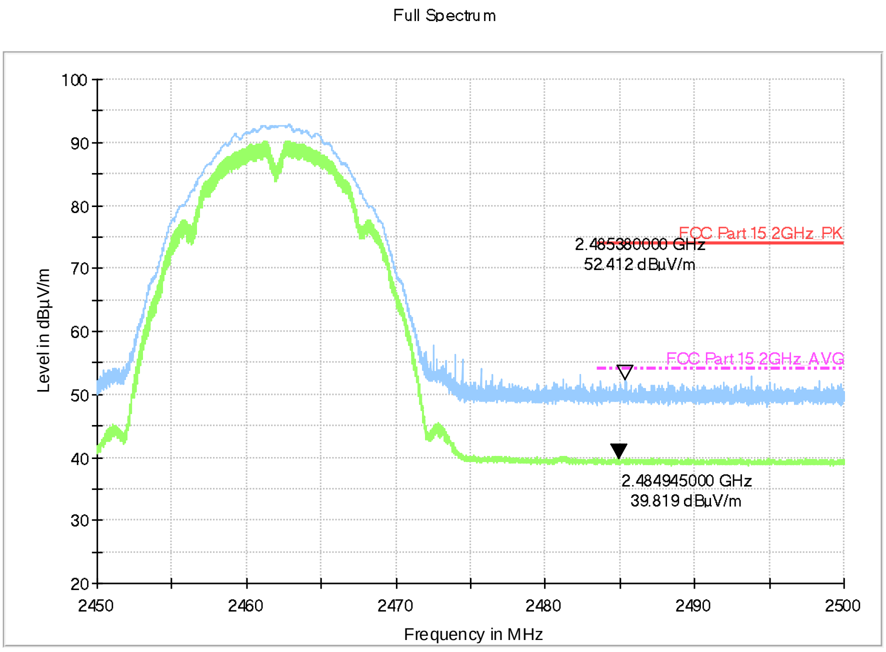


**Fig.A.6.2.2 Transmitter Spurious Emission - Radiated (Power): 802.11b, ch11, 2.45 GHz - 2.50GHz**

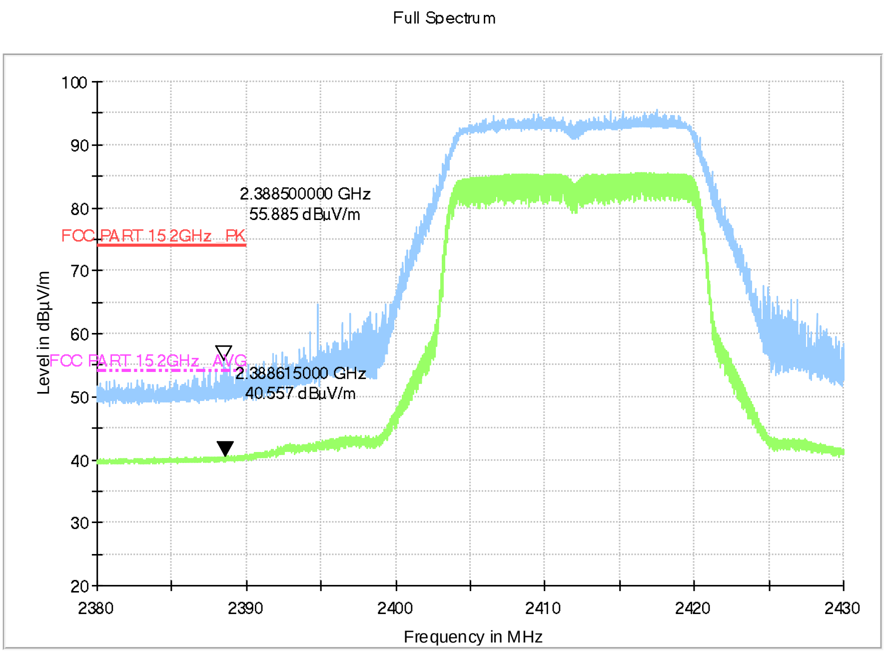


**Fig.A.6.2.3 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch1, 2.38 GHz - 2.45GHz**

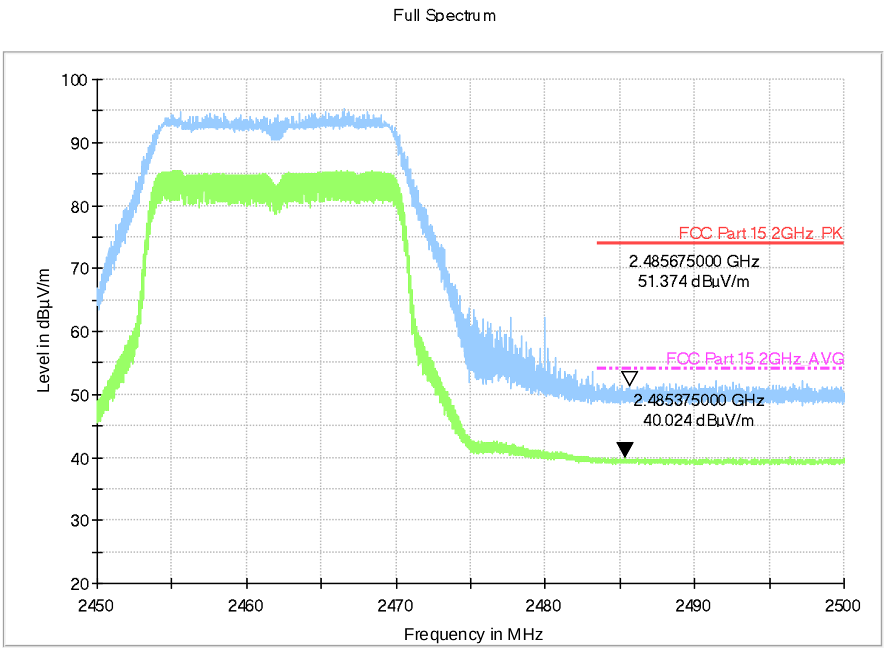


**Fig.A.6.2.4 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz**

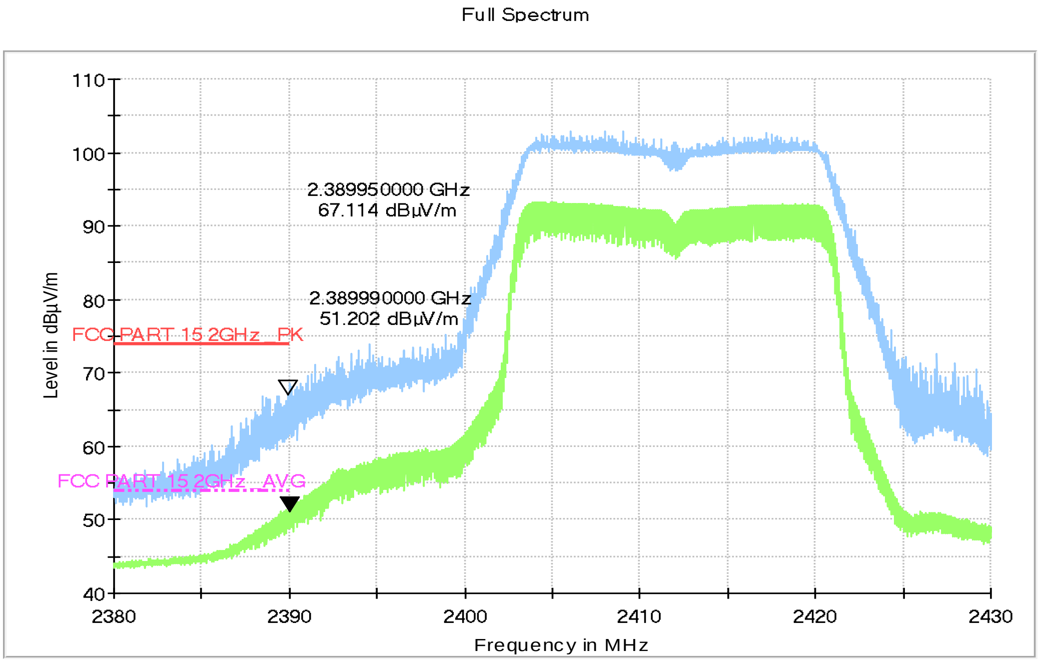


**Fig.A.6.2.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.38 GHz - 2.45GHz**

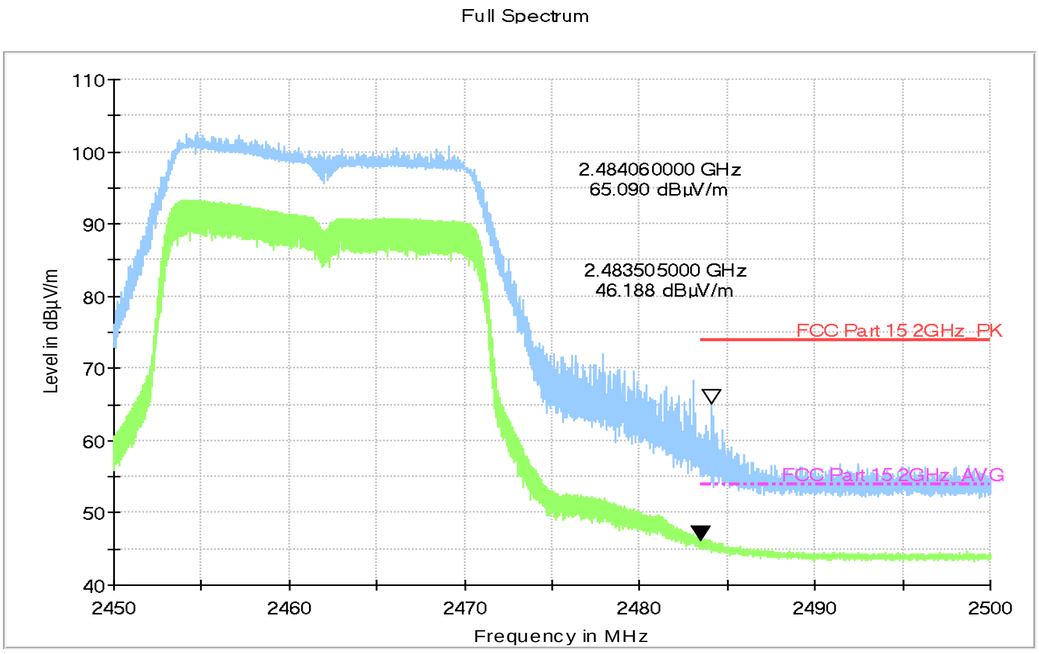


**Fig.A.6.2.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz**

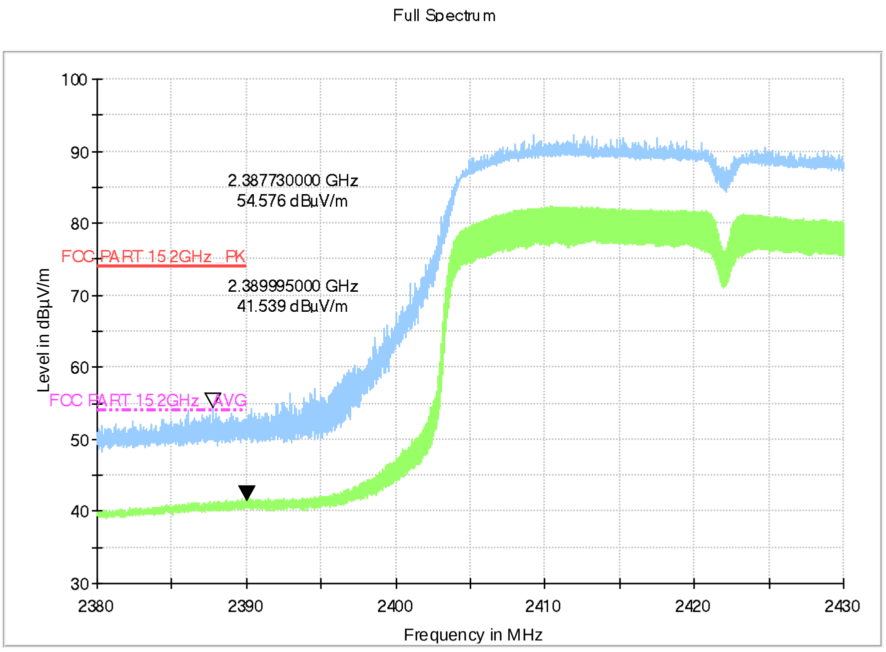


**Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.38 GHz - 2.45GHz**

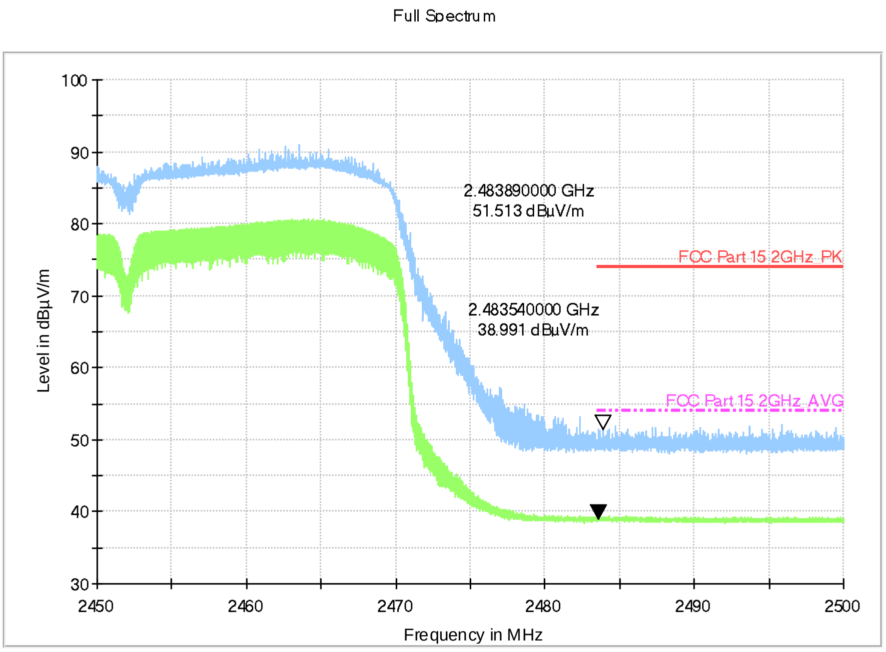


**Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9, 2.45 GHz - 2.50GHz**

## A.7. AC Power-line Conducted Emission

**Method of Measurement: See ANSI C63.10-2013-clause 6.2**

1 The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.

2 If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.

3 The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.

4 If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

5 If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.36 Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

**Test Condition:**

| **Voltage（V）** | **Frequency（Hz）** |
|---|---|
| 120 | 60 |

**Measurement Result and limit:**

WLAN (Quasi-peak Limit)

| Frequency range (MHz) | Quasi-peak Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | With charger AE2 | | |
| | | 802.11b | Idle | |
| 0.15 to 0.5 | 66 to 56 | Fig.A.7.1 | Fig.A.7.2 | P |
| 0.5 to 5 | 56 | | | |
| 5 to 30 | 60 | | | |
| NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz. | | | | |

WLAN (Average Limit)

| Frequency range (MHz) | Average Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | With charger AE2 | | |
| | | 802.11b | Idle | |
| 0.15 to 0.5 | 56 to 46 | Fig.A.7.1 | Fig.A.7.2 | P |
| 0.5 to 5 | 46 | | | |
| 5 to 30 | 50 | | | |
| NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz. | | | | |

WLAN (Quasi-peak Limit)

| Frequency range (MHz) | Quasi-peak Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | With charger AE3 | | |
| | | 802.11b | Idle | |
| 0.15 to 0.5 | 67 to 56 | Fig.A.7.3 | Fig.A.7.4 | P |
| 0.5 to 5 | 56 | | | |
| 5 to 30 | 60 | | | |
| NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz. | | | | |

WLAN (Average Limit)

| Frequency range (MHz) | Average Limit (dBμV) | Result (dBμV) | | Conclusion |
|---|---|---|---|---|
| | | With charger AE3 | | |
| | | 802.11b | Idle | |
| 0.15 to 0.5 | 56 to 46 | Fig.A.7.3 | Fig.A.7.4 | P |
| 0.5 to 5 | 46 | | | |
| 5 to 30 | 50 | | | |
| NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz. | | | | |

**Conclusion: Pass**

**Test graphs as below:**

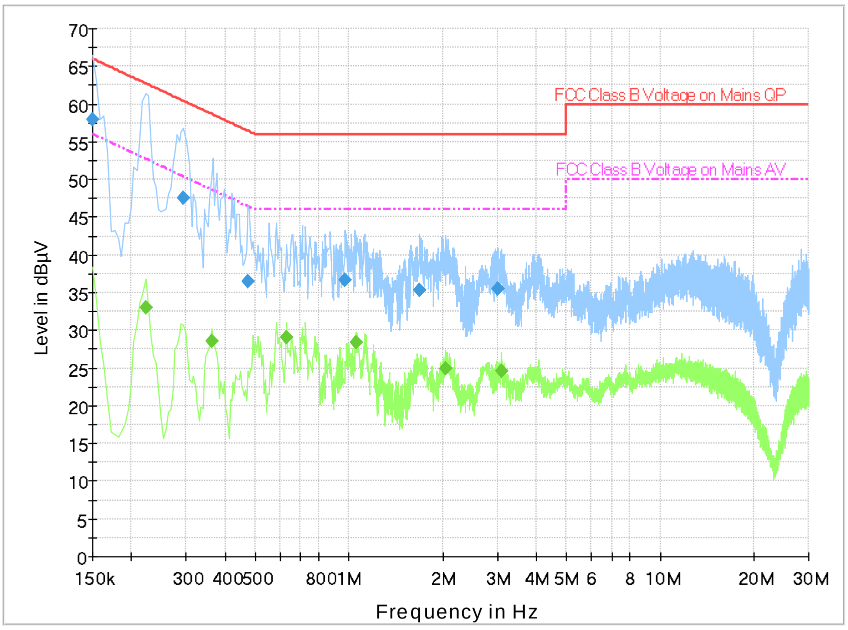


**Fig.A.7.1 AC Powerline Conducted Emission-802.11b**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

| Frequency (MHz) | QuasiPeak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.150000 | 58.0 | GND | L1 | 20.2 | 8.0 | 66.0 |
| 0.294000 | 47.6 | GND | L1 | 19.8 | 12.8 | 60.4 |
| 0.474000 | 36.6 | GND | L1 | 19.9 | 19.9 | 56.4 |
| 0.973500 | 36.6 | GND | L1 | 19.6 | 19.4 | 56.0 |
| 1.684500 | 35.3 | GND | L1 | 19.7 | 20.7 | 56.0 |
| 3.012000 | 35.5 | GND | L1 | 19.7 | 20.5 | 56.0 |

Final Result 2

| Frequency (MHz) | Average (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.222000 | 33.1 | GND | L1 | 19.8 | 19.7 | 52.7 |
| 0.361500 | 28.6 | GND | L1 | 19.8 | 20.1 | 48.7 |
| 0.631500 | 29.1 | GND | L1 | 19.8 | 16.9 | 46.0 |
| 1.054500 | 28.4 | GND | L1 | 19.6 | 17.6 | 46.0 |
| 2.035500 | 24.9 | GND | L1 | 19.7 | 21.1 | 46.0 |
| 3.079500 | 24.6 | GND | L1 | 19.7 | 21.4 | 46.0 |

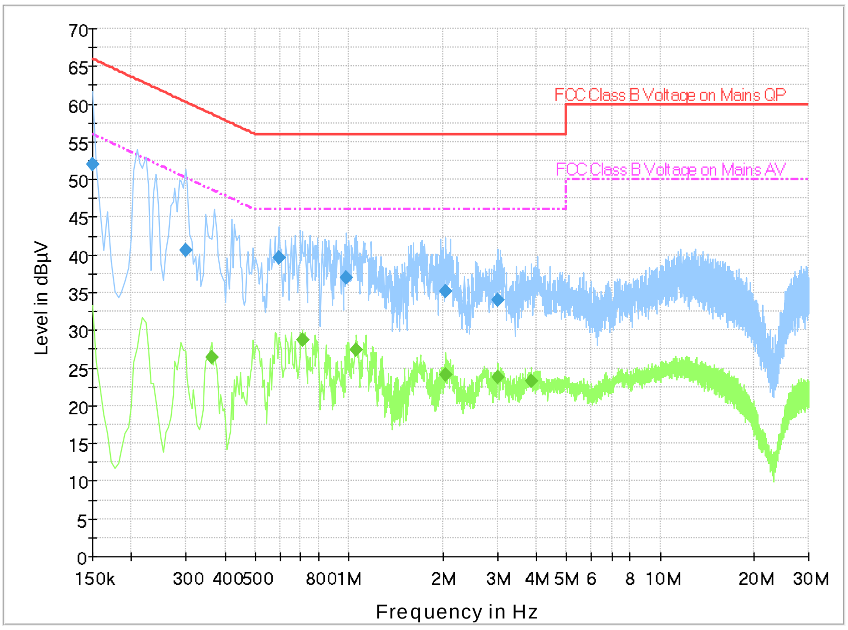


**Fig.A.7.2 AC Powerline Conducted Emission-Idle**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

| Frequency (MHz) | QuasiPeak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.150000 | 51.9 | GND | L1 | 20.2 | 14.1 | 66.0 |
| 0.298500 | 40.6 | GND | L1 | 19.8 | 19.7 | 60.3 |
| 0.595500 | 39.6 | GND | L1 | 19.8 | 16.4 | 56.0 |
| 0.982500 | 37.0 | GND | L1 | 19.6 | 19.0 | 56.0 |
| 2.044500 | 35.2 | GND | L1 | 19.7 | 20.8 | 56.0 |
| 3.003000 | 34.1 | GND | L1 | 19.7 | 21.9 | 56.0 |

Final Result 2

| Frequency (MHz) | Average (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.361500 | 26.5 | GND | L1 | 19.8 | 22.2 | 48.7 |
| 0.708000 | 28.7 | GND | L1 | 19.8 | 17.3 | 46.0 |
| 1.059000 | 27.4 | GND | L1 | 19.6 | 18.6 | 46.0 |
| 2.053500 | 24.2 | GND | L1 | 19.7 | 21.8 | 46.0 |
| 3.003000 | 23.8 | GND | L1 | 19.7 | 22.2 | 46.0 |
| 3.844500 | 23.3 | GND | L1 | 19.6 | 22.7 | 46.0 |

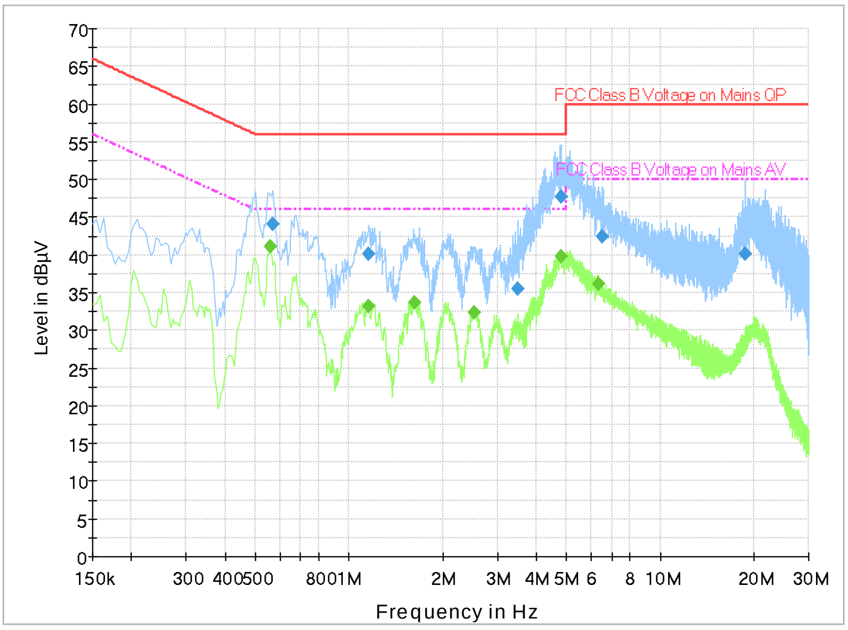


**Fig.A.7.3 AC Powerline Conducted Emission-802.11b**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

| Frequency (MHz) | QuasiPeak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.568500 | 44.1 | GND | L1 | 19.9 | 11.9 | 56.0 |
| 1.158000 | 40.2 | GND | L1 | 19.6 | 15.8 | 56.0 |
| 3.498000 | 35.5 | GND | N | 19.7 | 20.5 | 56.0 |
| 4.789500 | 47.7 | GND | L1 | 19.6 | 8.3 | 56.0 |
| 6.513000 | 42.5 | GND | L1 | 19.8 | 17.5 | 60.0 |
| 18.775500 | 40.1 | GND | N | 19.9 | 19.9 | 60.0 |

Final Result 2

| Frequency (MHz) | Average (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.559500 | 41.1 | GND | L1 | 19.9 | 4.9 | 46.0 |
| 1.158000 | 33.3 | GND | L1 | 19.6 | 12.7 | 46.0 |
| 1.630500 | 33.7 | GND | L1 | 19.7 | 12.3 | 46.0 |
| 2.517000 | 32.4 | GND | L1 | 19.7 | 13.6 | 46.0 |
| 4.798500 | 39.8 | GND | L1 | 19.6 | 6.2 | 46.0 |
| 6.360000 | 36.1 | GND | L1 | 19.8 | 13.9 | 50.0 |

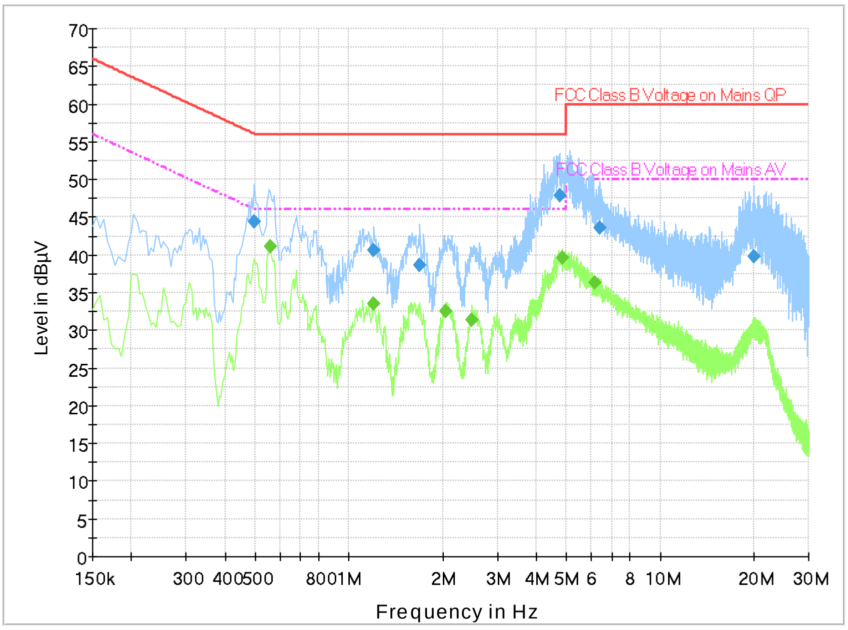


**Fig.A.7.4 AC Powerline Conducted Emission-Idle**

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

| Frequency (MHz) | QuasiPeak (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.496500 | 44.5 | GND | L1 | 19.9 | 11.6 | 56.1 |
| 1.203000 | 40.6 | GND | L1 | 19.6 | 15.4 | 56.0 |
| 1.689000 | 38.6 | GND | L1 | 19.7 | 17.4 | 56.0 |
| 4.744500 | 47.9 | GND | L1 | 19.6 | 8.1 | 56.0 |
| 6.414000 | 43.5 | GND | L1 | 19.8 | 16.5 | 60.0 |
| 20.076000 | 39.8 | GND | N | 20.0 | 20.2 | 60.0 |

Final Result 2

| Frequency (MHz) | Average (dBµV) | PE | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|---|---|---|---|---|---|---|
| 0.559500 | 41.1 | GND | L1 | 19.9 | 4.9 | 46.0 |
| 1.203000 | 33.5 | GND | L1 | 19.6 | 12.5 | 46.0 |
| 2.040000 | 32.6 | GND | L1 | 19.7 | 13.4 | 46.0 |
| 2.490000 | 31.3 | GND | L1 | 19.7 | 14.7 | 46.0 |
| 4.834500 | 39.6 | GND | L1 | 19.6 | 6.4 | 46.0 |
| 6.153000 | 36.2 | GND | L1 | 19.7 | 13.8 | 50.0 |

## ANNEX B: Accreditation Certificate

**United States Department of Commerce**
**National Institute of Standards and Technology**

NVLAP®

# Certificate of Accreditation to ISO/IEC 17025:2005

**NVLAP LAB CODE: 600118-0**

**Telecommunication Technology Labs, CAICT**
Beijing
China

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:*

**Electromagnetic Compatibility & Telecommunications**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2018-09-28 through 2019-09-30
*Effective Dates*

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

*For the National Voluntary Laboratory Accreditation Program*

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