





Fig.A.6.2.7 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch11, 2.45 GHz - 2.50GHz



Fig.A.6.2.8 Transmitter Spurious Emission - Radiated (Power): 802.11g, ch10, 2.45 GHz - 2.50GHz







Fig.A.6.2.9 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.45GHz



Fig.A.6.2.10 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch2, 2.31 GHz - 2.45GHz







Fig.A.6.2.11 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz



Fig.A.6.2.12 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch10, 2.45 GHz - 2.50GHz





A.7. AC Power-line Conducted Emission

Method of Measurement:

See Clause 6.2 of ANSI C63.10-2013 specifically.

See Clause 4 and Clause 5 of ANSI C63.10-2013 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver: Quasi-Peak / Average Detector.

The measurement bandwidth is:

| Frequency of Emission (MHz) | RBW/IF bandwidth | | |
|-----------------------------|------------------|--|--|
| 0.15-30 | 9kHz | | |

Test Condition:

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

Measurement Setup







Measurement Result and limit:

WLAN (Quasi-peak Limit)

| Frequency range | Quasi-peak | Result (dBμV) With charger | | Result (dBμV) With charger Conclust | | Conclusion |
|-----------------|--------------|-------------------------------|-----------|---------------------------------------|--|------------|
| | Linin (dBµV) | 802.11b | ldle | | | |
| 0.15 to 0.5 | 66 to 56 | | | | | |
| 0.5 to 5 | 56 | Fig.A.7.1 | Fig.A.7.2 | Р | | |
| 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)

| | | Result | | | | | |
|--|------------|-----------|------------|---|--|--|--|
| requency range | (MU=) (dB) | | Conclusion | | | | |
| | (ασμν) | 802.11b | ldle | | | | |
| 0.15 to 0.5 | 56 to 46 | | | | | | |
| 0.5 to 5 | 46 | Fig.A.7.1 | Fig.A.7.2 | Р | | | |
| 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:





Result for Traffic:



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

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line. **Final Result 1**

| Frequency | QuasiPeak | Meas. | Bandwidth | Line | Corr. | Margin | Limit |
|-----------|-----------|--------|-----------|------|-------|--------|--------|
| (MHz) | (dBµV) | Time | (kHz) | | (dB) | (dB) | (dBµV) |
| | | (ms) | | | | | |
| 0.474000 | 44.1 | 5000.0 | 9.000 | L1 | 19.9 | 12.3 | 56.4 |
| 0.663000 | 38.5 | 5000.0 | 9.000 | L1 | 19.8 | 17.5 | 56.0 |
| 1.063500 | 40.0 | 5000.0 | 9.000 | L1 | 19.7 | 16.0 | 56.0 |
| 1.545000 | 39.4 | 5000.0 | 9.000 | L1 | 19.7 | 16.6 | 56.0 |
| 1.950000 | 40.4 | 5000.0 | 9.000 | L1 | 19.7 | 15.6 | 56.0 |
| 2.283000 | 35.0 | 5000.0 | 9.000 | Ν | 19.6 | 21.0 | 56.0 |

Final Result 2

| Frequency | Average | Meas. | Bandwidth | Line | Corr. | Margin | Limit |
|-----------|---------|--------|-----------|------|-------|--------|--------|
| (MHz) | (dBµV) | Time | (kHz) | | (dB) | (dB) | (dBµV) |
| | | (ms) | | | | | |
| 0.474000 | 37.3 | 5000.0 | 9.000 | L1 | 19.9 | 9.2 | 46.4 |
| 0.532500 | 34.2 | 5000.0 | 9.000 | L1 | 19.8 | 11.8 | 46.0 |
| 0.658500 | 33.8 | 5000.0 | 9.000 | L1 | 19.8 | 12.2 | 46.0 |
| 1.072500 | 32.8 | 5000.0 | 9.000 | L1 | 19.7 | 13.2 | 46.0 |
| 1.531500 | 30.8 | 5000.0 | 9.000 | L1 | 19.7 | 15.2 | 46.0 |
| 1.950000 | 31.1 | 5000.0 | 9.000 | L1 | 19.7 | 14.9 | 46.0 |





Result for Idle:



Fig.A.7.2 AC Powerline Conducted Emission-Idle

Note1: The graphic result above is the maximum of the measurements for both phase line and neutral line. **Final Result 1**

| Frequency | QuasiPeak | Meas. | Bandwidth | Line | Corr. | Margin | Limit |
|-----------|-----------|-------|-----------|------|-------|--------|--------|
| (MHz) | (dBµV) | Time | (kHz) | | (dB) | (dB) | (dBµV) |
| | | (ms) | | | | | |
| 0.469500 | 45.9 | 5000. | 9.000 | L1 | 19.9 | 10.6 | 56.5 |
| 0.672000 | 38.0 | 5000. | 9.000 | L1 | 19.8 | 18.0 | 56.0 |
| 1.077000 | 36.9 | 5000. | 9.000 | L1 | 19.7 | 19.1 | 56.0 |
| 1.477500 | 40.0 | 5000. | 9.000 | L1 | 19.7 | 16.0 | 56.0 |
| 1.941000 | 40.0 | 5000. | 9.000 | L1 | 19.7 | 16.0 | 56.0 |
| 2.296500 | 39.7 | 5000. | 9.000 | L1 | 19.6 | 16.3 | 56.0 |

Final Result 2

| Frequency | Average | Meas. | Bandwidth | Line | Corr. | Margin | Limit |
|-----------|---------|--------|-----------|------|-------|--------|--------|
| (MHz) | (dBµV) | Time | (kHz) | | (dB) | (dB) | (dBµV) |
| | | (ms) | | | | | |
| 0.469500 | 37.8 | 5000.0 | 9.000 | L1 | 19.9 | 8.7 | 46.5 |
| 0.595500 | 33.4 | 5000.0 | 9.000 | L1 | 19.8 | 12.6 | 46.0 |
| 0.654000 | 26.2 | 5000.0 | 9.000 | Ν | 19.8 | 19.8 | 46.0 |
| 1.135500 | 31.3 | 5000.0 | 9.000 | L1 | 19.7 | 14.7 | 46.0 |
| 1.545000 | 31.3 | 5000.0 | 9.000 | L1 | 19.7 | 14.7 | 46.0 |
| 2.314500 | 27.0 | 5000.0 | 9.000 | N | 19.6 | 19.0 | 46.0 |

Note: The measurement results showed here are worst cases of the combinations of different AE





ANNEX B: EUT parameters

Disclaimer: The antenna gain provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate



END OF REPORT