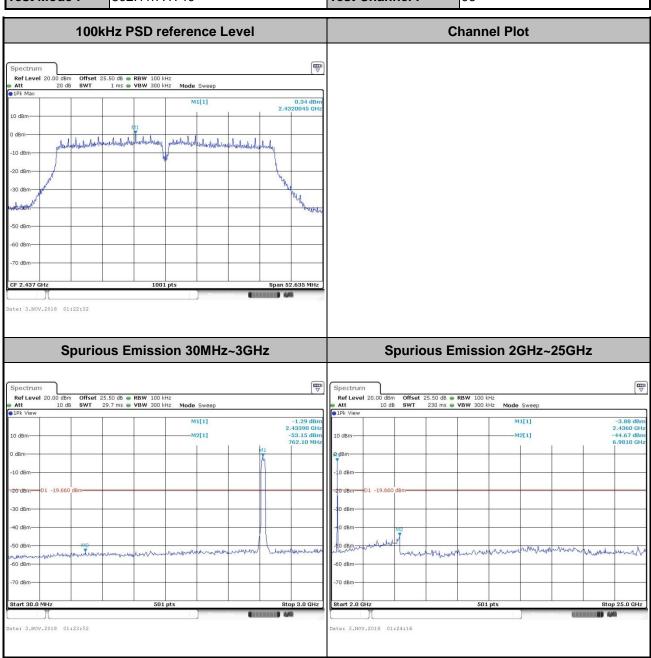
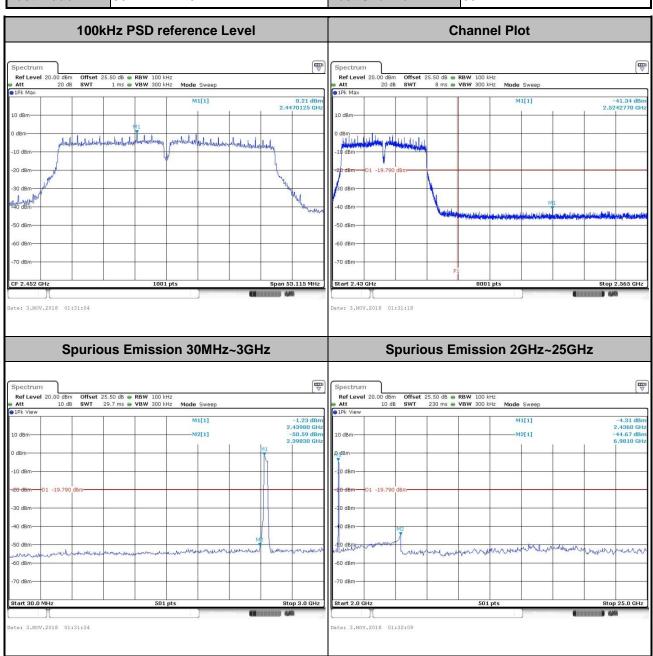
Test Mode: 802.11n HT40 Test Channel: 06

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3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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| Frequency | Field Strength | Measurement Distance | | |
|---------------|--------------------|----------------------|--|--|
| (MHz) | (microvolts/meter) | (meters) | | |
| 0.009 - 0.490 | 2400/F(kHz) | 300 | | |
| 0.490 – 1.705 | 24000/F(kHz) | 30 | | |
| 1.705 – 30.0 | 30 | 30 | | |
| 30 – 88 | 100 | 3 | | |
| 88 – 216 | 150 | 3 | | |
| 216 - 960 | 200 | 3 | | |
| Above 960 | 500 | 3 | | |

3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

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3.5.3 Test Procedures

- The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.

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- 3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level
- For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
- 7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \ge 1$ GHz for peak measurement. For average measurement:
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

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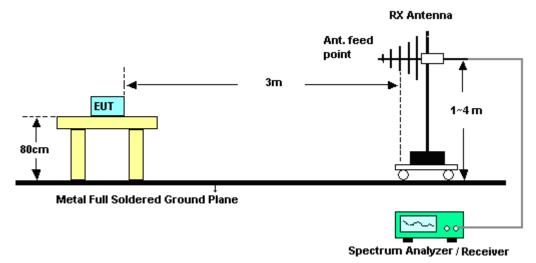
3.5.4 Test Setup

For radiated emissions below 30MHz



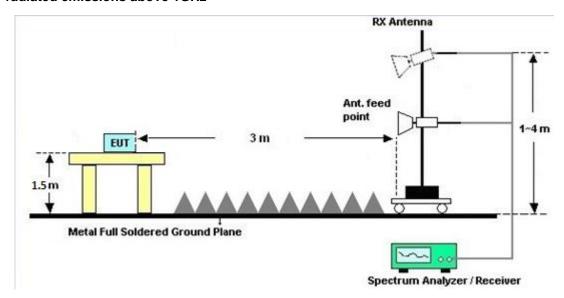
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For radiated emissions from 30MHz to 1GHz



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For radiated emissions above 1GHz



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3.5.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.5.7 Duty Cycle

Please refer to Appendix E.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.

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3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

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| Frequency of Emission | Conducted | Limit (dΒμV) |
|-----------------------|------------|--------------|
| (MHz) | Quasi-Peak | Average |
| 0.15-0.5 | 66 to 56* | 56 to 46* |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

^{*}Decreases with the logarithm of the frequency.

3.6.2 Measuring Instruments

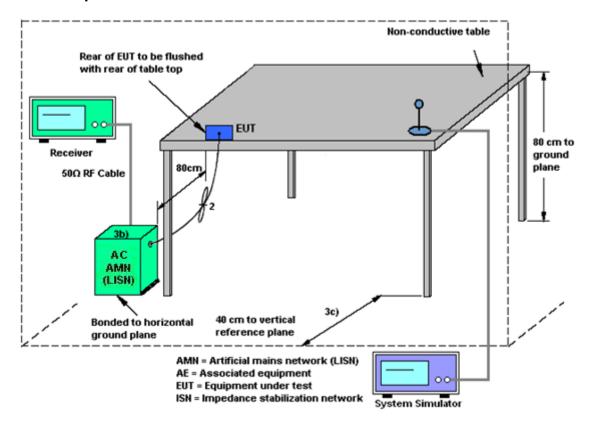
See list of measuring equipment of this test report.

3.6.3 Test Procedures

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

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3.6.4 Test Setup



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3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

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3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

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3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes>

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1) dB$.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \le 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F(2)f(i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

| <cdd mod<="" th=""><th>es></th><th></th><th></th><th></th><th></th><th></th></cdd> | es> | | | | | |
|---|--------|--------|-------|-------|-----------|-----------|
| | | | DG | DG | Power | PSD |
| | | | for | for | Limit | Limit |
| | Ant. 1 | Ant. 2 | Power | PSD | Reduction | Reduction |
| | (dBi) | (dBi) | (dBi) | (dBi) | (dB) | (dB) |
| 2.4 GHz | -2.40 | -5.60 | -2.40 | -0.84 | 0.00 | 0.00 |

Power Limit Reduction = DG(Power) - 6dBi, (min = 0)

 $PSD \ Limit \ Reduction = DG(PSD) - 6dBi, \ (min = 0)$

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4 List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|-------------------------|---|---------------------------------|-----------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------------------------|
| Power Meter | Anritsu | ML2495A | 1132003 | N/A | Aug. 16, 2018 | Oct. 17, 2018~ Nov. 14, 2018 | Aug. 15, 2019 | Conducted (TH05-HY) |
| Power Sensor | Anritsu MA2411B 1126017 300MHz~40GH Aug. 16 | | Aug. 16, 2018 | Oct. 17, 2018~ Nov. 14, 2018 | Aug. 15, 2019 | Conducted (TH05-HY) | | |
| Spectrum Analyzer | Rohde & Schwarz | FSP40 | 100057 | 9kHz-40GHz | Nov. 21, 2017 | Oct. 17, 2018~ Nov. 14, 2018 | Nov. 20, 2018 | Conducted (TH05-HY) |
| Spectrum Analyzer | Rohde & Schwarz | FSV 30 | 100895 | 9kHz~30GHz | Apr. 20, 2018 | Oct. 17, 2018~ Nov. 14, 2018 | Apr. 19, 2019 | Conducted (TH05-HY) |
| Switch Box & RF Cable | Burgeon | ETF-058 | EC130048 4 | N/A | Mar. 01, 2018 | Oct. 17, 2018~ Nov. 14, 2018 | Feb. 28, 2019 | Conducted (TH05-HY) |
| AC Power Source | ChainTek | APC-1000W | N/A | N/A | N/A | Oct. 29, 2018 | N/A | Conduction (CO05-HY) |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | 102388 | 9KHz~3.6GHz | Dec. 08, 2017 | Oct. 29, 2018 | Dec. 07, 2018 | Conduction (CO05-HY) |
| LISN | Rohde & Schwarz | ENV216 | 100080 | 9kHz~30MHz | Nov. 30, 2017 | Oct. 29, 2018 | Nov. 29, 2018 | Conduction (CO05-HY) |
| Software | Rohde & Schwarz | EMC32 V10.30 | N/A | N/A | N/A | Oct. 29, 2018 | N/A | Conduction (CO05-HY) |
| LF Cable | HUBER + SUHNER | RG-214/U | LF01 | N/A | Jan. 03, 2018 | Oct. 29, 2018 | Jan. 02, 2019 | Conduction (CO05-HY) |
| Pulse Limiter | Rohde & Schwarz | I FSH3-72 I 100851 I N/A I | | Jan. 03, 2018 | Oct. 29, 2018 | Jan. 02, 2019 | Conduction (CO05-HY) | |
| Loop Antenna | Rohde & Schwarz | HFH2-Z2 | 100488 | 9 kHz~30 MHz | Nov. 23, 2017 | Oct. 24, 2018~ Oct. 27, 2018 | Nov. 22, 2018 | Radiation (03CH15-HY) |
| Preamplifier | Jet-Power | JPA0118-55-3 03 | 171000180 00550006 | 1GHz~18GHz | Jul. 10, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Jul. 09, 2019 | Radiation (03CH15-HY) |
| Amplifier | SONOMA | 310N | 363440 | 9kHz~1GHz | Dec. 26, 2017 | Oct. 24, 2018~ Oct. 27, 2018 | Dec. 25, 2018 | Radiation (03CH15-HY) |
| Bilog Antenna | TESEQ | CBL6111D&0 0800N1D01N- 06 | 41912&05 | 30MHz to 1GHz | Jan. 10, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Jan. 09, 2019 | Radiation (03CH15-HY) |
| EMI Test Receiver | Keysight | N9038A(MXE) | MY541300 85 | 20Hz ~ 8.4GHz | Oct. 31, 2017 | Oct. 24, 2018~ Oct. 27, 2018 | Oct. 30, 2018 | Radiation (03CH15-HY) |
| Horn Antenna | SCHWARZBE CK | BBHA 9120D | 9120D-162 0 | 1G~18GHz | Oct. 17, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Oct. 16, 2019 | Radiation (03CH15-HY) |
| Preamplifier | Keysight | 83017A | MY532701 95 | 1GHz~26.5GHz | Aug. 23, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Aug. 22, 2019 | Radiation (03CH15-HY) |
| Spectrum Analyzer | Agilent | MY501801 | | Apr. 25, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Apr. 24, 2019 | Radiation (03CH15-HY) | |
| Antenna Mast | ChainTek | MBS-520-1 | N/A | 1m~4m | N/A | Oct. 24, 2018~ Oct. 27, 2018 | N/A | Radiation (03CH15-HY) |
| Turn Table | ChainTek | T-200-S-1 | N/A 0~360 Degree | | N/A | Oct. 24, 2018~ Oct. 27, 2018 | N/A | Radiation (03CH15-HY) |
| SHF-EHF Horn Antenna | SCHWARZBE CK | BBHA 9170 | BBHA9170 584 | 18GHz- 40GHz | Nov. 27, 2017 | Oct. 24, 2018~ Oct. 27, 2018 | Nov. 26, 2018 | Radiation (03CH15-HY) |
| Software | Audix | E3 6.2009-8-24 | RK-00045 | N/A | N/A | Oct. 24, 2018~ Oct. 27, 2018 | N/A | Radiation (03CH15-HY) |

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| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|------------|---|---|---|-----------------|---------------------|---------------------------------|---------------|--------------------------|
| RF Cable | HUBER + SUHNER / MTJ Cooperation | SUCOFLEX 104 / 000000-MT18 A-100 | MY36980/ 4, MY9838/4 PE, D3210 | 30MHz~1GHz | Mar. 15, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Mar. 14, 2019 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER / MTJ Cooperation | SUCOFLEX 104 / 000000-MT18 A-100 | MY36980/ 4, MY9838/4 PE, D3210 | 1GHz~18GHz | Mar. 15, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Mar. 14, 2019 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | MY2859/2 | 30M~40GHz | Mar. 14, 2018 | Oct. 24, 2018~ Oct. 27, 2018 | Mar. 13, 2019 | Radiation (03CH15-HY) |

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5 Uncertainty of Evaluation

<u>Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)</u>

| Measuring Uncertainty for a Level of Confidence | 2.2 |
|---|-----|
| of 95% (U = 2Uc(y)) | 2.2 |

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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

| Measuring Uncertainty for a Level of Confidence | F 2 |
|---|-----|
| of 95% (U = 2Uc(y)) | 5.2 |

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

| Measuring Uncertainty for a Level of Confidence | 5.5 |
|---|-----|
| of 95% (U = 2Uc(y)) | 5.5 |

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

| | - |
|---|--------------|
| Measuring Uncertainty for a Level of Confidence | 5.2 |
| of 95% (U = 2Uc(y)) | 5.2 |

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Appendix A. Test Result of Conducted Test Items

| Test Engineer: | Luffy Lin/Derek Hsu | Temperature: | 21~25 | °C |
|----------------|-----------------------|--------------------|-------|----|
| Test Date: | 2018/10/17~2018/11/14 | Relative Humidity: | 51~54 | % |

<u>TEST RESULTS DATA</u> 6dB and 99% Occupied Bandwidth

| | 2.4GHz Band | | | | | | | | | | | | | |
|------|--------------|-----|-------------|----------------|---------------|-----------------|------------|-------|--------------------------|-----------|--|--|--|--|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | 99% Occ (M | upied BW Hz) | 6dB (MI | | 6dB BW Limit (MHz) | Pass/Fail | | | | |
| | | | Ant 1 Ant 2 | | | Ant 2 | Ant 1 | Ant 2 | | | | | | |
| 11b | 1Mbps | 2 | 1 | 2412 | 13.99 | 13.89 | 9.01 | 8.53 | 0.50 | Pass | | | | |
| 11b | 1Mbps | 2 | 6 | 2437 | 13.69 | 13.89 | 8.53 | 8.53 | 0.50 | Pass | | | | |
| 11b | 1Mbps | 2 | 11 | 2462 | 14.34 | 13.59 | 8.53 | 9.03 | 0.50 | Pass | | | | |
| 11g | 6Mbps | 2 | 1 | 2412 | 16.93 | 16.78 | 15.70 | 16.00 | 0.50 | Pass | | | | |
| 11g | 6Mbps | 2 | 6 | 2437 | 16.68 | 16.63 | 15.11 | 15.92 | 0.50 | Pass | | | | |
| 11g | 6Mbps | 2 | 11 | 2462 | 17.03 | 16.68 | 16.30 | 15.31 | 0.50 | Pass | | | | |
| HT20 | MCS0 | 2 | 1 | 2412 | 18.03 | 17.88 | 16.52 | 16.90 | 0.50 | Pass | | | | |
| HT20 | MCS0 | 2 | 6 | 2437 | 17.73 | 17.83 | 15.11 | 16.08 | 0.50 | Pass | | | | |
| HT20 | MCS0 | 2 | 11 | 2462 | 18.23 | 17.83 | 17.56 | 16.78 | 0.50 | Pass | | | | |
| HT40 | MCS0 | 2 | 3 | 2422 | 36.76 36.46 | | 35.68 | 35.13 | 0.50 | Pass | | | | |
| HT40 | MCS0 | 2 | 6 | 2437 | 36.16 | 36.36 | 35.05 | 35.09 | 0.50 | Pass | | | | |
| HT40 | MCS0 | 2 | 9 | 2452 | 36.66 | 36.56 | 35.64 | 35.41 | 0.50 | Pass | | | | |

TEST RESULTS DATA Peak Output Power

| | 2.4GHz Band | | | | | | | | | | | | | | | |
|------|--------------|-----|-----|----------------|-------|-------------------------------------|-------|------------------------|----------------------------|-------|----------|-------|------------------|------------------------|-------------------------|---------------|
| Mod. | Data Rate | Ntx | CH. | Freq. (MHz) | (| Peak Conducted Power (dBm) | d | Po ^r Liı | ucted wer mit Bm) | | G Bi) | Po | RP wer Bm) | Po ^r Lii | RP wer mit Bm) | Pass /Fail |
| | | | | | Ant 1 | Ant 2 | SUM | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | Ant 1 | Ant 2 | |
| 11b | 1Mbps | 1 | 1 | 2412 | 20.25 | 20.17 | - | 30.00 | 30.00 | -2.40 | -5.60 | 17.85 | 14.57 | 36.00 | 36.00 | Pass |
| 11b | 1Mbps | | 6 | 2437 | 20.28 | 20.25 | - | 30.00 | 30.00 | -2.40 | -5.60 | 17.88 | 14.65 | 36.00 | 36.00 | Pass |
| 11b | 1Mbps | 1 | 11 | 2462 | 20.36 | 20.31 | - | 30.00 | 30.00 | -2.40 | -5.60 | 17.96 | 14.71 | 36.00 | 36.00 | Pass |
| 11g | 6Mbps | 1 | 1 | 2412 | 20.32 | 20.63 | - | 30.00 | 30.00 | -2.40 | -5.60 | 17.92 | 15.03 | 36.00 | 36.00 | Pass |
| 11g | 6Mbps | 1 | 6 | 2437 | 20.35 | 20.51 | - | 30.00 | 30.00 | -2.40 | -5.60 | 17.95 | 14.91 | 36.00 | 36.00 | Pass |
| 11g | 6Mbps | 1 | 11 | 2462 | 20.42 | 20.49 | - | 30.00 30.00 | | -2.40 | -5.60 | 18.02 | 14.89 | 36.00 | 36.00 | Pass |
| HT20 | MCS0 | 1 | 1 | 2412 | 18.97 | 18.69 | - | 30.00 | 30.00 30.00 | | -5.60 | 16.57 | 13.09 | 36.00 | 36.00 | Pass |
| HT20 | MCS0 | 1 | 6 | 2437 | 19.00 | 18.58 | - | 30.00 | 30.00 | -2.40 | -5.60 | 16.60 | 12.98 | 36.00 | 36.00 | Pass |
| HT20 | MCS0 | 1 | 11 | 2462 | 18.62 | 18.45 | - | 30.00 | 30.00 | -2.40 | -5.60 | 16.22 | 12.85 | 36.00 | 36.00 | Pass |
| HT40 | MCS0 | 1 | 3 | 2422 | 20.40 | 19.93 | - | 30.00 | 30.00 | -2.40 | -5.60 | 18.00 | 14.33 | 36.00 | 36.00 | Pass |
| HT40 | MCS0 | 1 | 6 | 2437 | 19.71 | 19.99 | - | 30.00 | 30.00 | -2.40 | -5.60 | 17.31 | 14.39 | 36.00 | 36.00 | Pass |
| HT40 | MCS0 | 1 | 9 | 2452 | 20.14 | 20.08 | - | 30.00 | 30.00 | -2.40 | -5.60 | 17.74 | 14.48 | 36.00 | 36.00 | Pass |
| 11b | 1Mbps | 2 | 1 | 2412 | 19.98 | 20.51 | 23.26 | 30 | .00 | -2. | .40 | 20.86 | | 36.00 | | Pass |
| 11b | 1Mbps | 2 | 6 | 2437 | 20.14 | 20.45 | 23.31 | 30 | .00 | -2. | .40 | 20.91 | | 36.00 | | Pass |
| 11b | 1Mbps | 2 | 11 | 2462 | 19.84 | 20.83 | 23.37 | 30 | .00 | -2. | .40 | 20 | .97 | 36 | .00 | Pass |
| 11g | 6Mbps | 2 | 1 | 2412 | 20.19 | 21.03 | 23.64 | 30 | .00 | -2. | .40 | 21. | .24 | 36 | .00 | Pass |
| 11g | 6Mbps | 2 | 6 | 2437 | 20.12 | 20.88 | 23.53 | 30 | .00 | -2. | .40 | 21. | .13 | 36 | .00 | Pass |
| 11g | 6Mbps | 2 | 11 | 2462 | 20.09 | 20.93 | 23.54 | 30 | .00 | -2. | .40 | 21. | .14 | 36 | .00 | Pass |
| HT20 | MCS0 | 2 | 1 | 2412 | 18.46 | 19.49 | 22.02 | 30 | .00 | -2. | .40 | 19 | .62 | 36 | .00 | Pass |
| HT20 | MCS0 | 2 | 6 | 2437 | 18.63 | 19.41 | 22.05 | 30.00 | | -2. | .40 | 19 | .65 | 36 | .00 | Pass |
| HT20 | MCS0 | 2 | 11 | 2462 | 18.18 | 19.26 | 21.76 | 30.00 | | -2. | .40 | 19 | .36 | 36 | .00 | Pass |
| HT40 | MCS0 | 2 | 3 | 2422 | 20.14 | 20.66 | 23.42 | 30 | .00 | -2. | .40 | 21 | .02 | 36 | .00 | Pass |
| HT40 | MCS0 | 2 | 6 | 2437 | 19.69 | 20.45 | 23.10 | 30 | .00 | -2. | .40 | 20 | .70 | 36 | .00 | Pass |
| HT40 | MCS0 | 2 | 9 | 2452 | 19.76 | 20.54 | 23.18 | 30 | .00 | -2. | .40 | 20 | .78 | 36 | .00 | Pass |

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA Average Output Power

| | | | | 2.4GI | Iz Band | | | | |
|------|--------------|-----|-----|----------------|---------|-------------------|-------|--|-------|
| Mod. | Data Rate | Ntx | CH. | Freq. (MHz) | Fac | uty ctor B) | (| Average Conducted Power (dBm) | d |
| | | | | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | SUM |
| 11b | 1Mbps | 1 | 1 | 2412 | 0.05 | 0.05 | 17.91 | 17.92 | |
| 11b | 1Mbps | 1 | 6 | 2437 | 0.05 | 0.05 | 17.94 | 17.96 | |
| 11b | 1Mbps | 1 | 11 | 2462 | 0.05 | 0.05 | 17.98 | 17.98 | |
| 11g | 6Mbps | 1 | 1 | 2412 | 0.11 | 0.09 | 15.65 | 15.85 | |
| 11g | 6Mbps | 1 | 6 | 2437 | 0.11 | 0.09 | 15.69 | 15.74 | |
| 11g | 6Mbps | 1 | 11 | 2462 | 0.11 | 0.09 | 15.76 | 15.68 | |
| HT20 | MCS0 | 1 | 1 | 2412 | 0.09 | 0.11 | 13.90 | 13.88 | - |
| HT20 | MCS0 | 1 | 6 | 2437 | 0.09 | 0.11 | 13.92 | 13.81 | |
| HT20 | MCS0 | 1 | 11 | 2462 | 0.09 | 0.11 | 13.74 | 13.67 | |
| HT40 | MCS0 | 1 | 3 | 2422 | 0.27 | 0.25 | 13.88 | 13.78 | |
| HT40 | MCS0 | 1 | 6 | 2437 | 0.27 | 0.25 | 13.73 | 13.81 | |
| HT40 | MCS0 | 1 | 9 | 2452 | 0.27 | 0.25 | 13.61 | 13.83 | |
| 11b | 1Mbps | 2 | 1 | 2412 | 0.05 | 0.06 | 17.68 | 18.18 | 20.95 |
| 11b | 1Mbps | 2 | 6 | 2437 | 0.05 | 0.06 | 17.80 | 18.14 | 20.98 |
| 11b | 1Mbps | 2 | 11 | 2462 | 0.05 | 0.06 | 17.59 | 18.34 | 20.99 |
| 11g | 6Mbps | 2 | 1 | 2412 | 0.07 | 0.11 | 15.38 | 16.35 | 18.90 |
| 11g | 6Mbps | 2 | 6 | 2437 | 0.07 | 0.11 | 15.50 | 15.99 | 18.76 |
| 11g | 6Mbps | 2 | 11 | 2462 | 0.07 | 0.11 | 15.39 | 16.11 | 18.78 |
| HT20 | MCS0 | 2 | 1 | 2412 | 0.10 | 0.09 | 13.41 | 14.33 | 16.90 |
| HT20 | MCS0 | 2 | 6 | 2437 | 0.10 | 0.09 | 13.51 | 14.31 | 16.94 |
| HT20 | MCS0 | 2 | 11 | 2462 | 0.10 | 0.09 | 13.38 | 14.15 | 16.79 |
| HT40 | MCS0 | 2 | 3 | 2422 | 0.25 | 0.25 | 13.45 | 14.11 | 16.80 |
| HT40 | MCS0 | 2 | 6 | 2437 | 0.25 | 0.25 | 13.45 | 14.23 | 16.87 |
| HT40 | MCS0 | 2 | 9 | 2452 | 0.25 | 0.25 | 13.33 | 14.28 | 16.84 |

Note: Measured power (dBm) has offset with cable loss.

<u>TEST RESULTS DATA</u> <u>Peak Power Spectral Density</u>

| | | | | | | 2 | 2.4GHz Band | d | | | | | | | | | | | | | | | | | | |
|------|--------------|-----|-----|-----------|--------|------------------------|-------------|-------|----------|-------|----------------------|-----------|--|-------|----|-------|--|-------|--|-------|----|-------|--|-----|----|------|
| Mod. | Data Rate | NTX | CH. | Freq. | | Peak PSD (dBm/3kHz) | | | G Bi) | Lir | PSD nit (3kHz) | Pass/Fail | | | | | | | | | | | | | | |
| | Nate | | | (1011 12) | Ant 1 | 3 | | Ant 1 | Ant 2 | Ant 1 | Ant 2 | | | | | | | | | | | | | | | |
| 11b | 1Mbps | 2 | 1 | 2412 | -4.72 | -3.16 | -0.15 | -0.84 | | 8.0 | 00 | Pass | | | | | | | | | | | | | | |
| 11b | 1Mbps | 2 | 6 | 2437 | -4.11 | -3.63 | -0.62 | -0. | 84 | 8.0 | 00 | Pass | | | | | | | | | | | | | | |
| 11b | 1Mbps | 2 | 11 | 2462 | -4.48 | -3.19 | -0.18 | -0.84 | | 8.0 | 00 | Pass | | | | | | | | | | | | | | |
| 11g | 6Mbps | 2 | 1 | 2412 | -12.29 | -10.41 | -7.40 | -0.84 | | 8.0 | 00 | Pass | | | | | | | | | | | | | | |
| 11g | 6Mbps | 2 | 6 | 2437 | -10.83 | -10.88 | -7.82 | -0. | -0.84 | | 00 | Pass | | | | | | | | | | | | | | |
| 11g | 6Mbps | 2 | 11 | 2462 | -11.03 | -9.92 | -6.91 | -0. | -0.84 | | 00 | Pass | | | | | | | | | | | | | | |
| HT20 | MCS0 | 2 | 1 | 2412 | -13.85 | -13.32 | -10.31 | -0.84 | | -0.84 | | -0.84 | | -0.84 | | -0.84 | | -0.84 | | -0.84 | | -0.84 | | 8.0 | 00 | Pass |
| HT20 | MCS0 | 2 | 6 | 2437 | -12.36 | -11.79 | -8.78 | -0.84 | | -0.84 | | -0.84 | | -0.84 | | -0.84 | | -0.84 | | 8.0 | 00 | Pass | | | | |
| HT20 | MCS0 | 2 | 11 | 2462 | -13.38 | -12.56 | -9.55 | -0.84 | | -0.84 | | -0.84 | | 8.0 | 00 | Pass | | | | | | | | | | |
| HT40 | MCS0 | 2 | 3 | 2422 | -16.88 | -16.32 | -13.31 | -0. | 84 | 8.0 | 00 | Pass | | | | | | | | | | | | | | |
| HT40 | MCS0 | 2 | 6 | 2437 | -15.70 | -15.56 | -12.55 | -0. | 84 | 8.0 | 00 | Pass | | | | | | | | | | | | | | |
| HT40 | MCS0 | 2 | 9 | 2452 | -16.23 | -16.06 | -13.05 | -0. | 84 | 8.0 | 00 | Pass | | | | | | | | | | | | | | |

Measured power density (dBm) has offset with cable loss.

Appendix B. AC Conducted Emission Test Results

| Tool Engineer | limmy Chang | Temperature : | 24~26 ℃ |
|-----------------|--------------|---------------------|----------------|
| Test Engineer : | Jiminy Chang | Relative Humidity : | 51~53% |

Report No.: FR8O0518C

TEL: 886-3-327-3456 Page Number : B1 of B

EUT Information

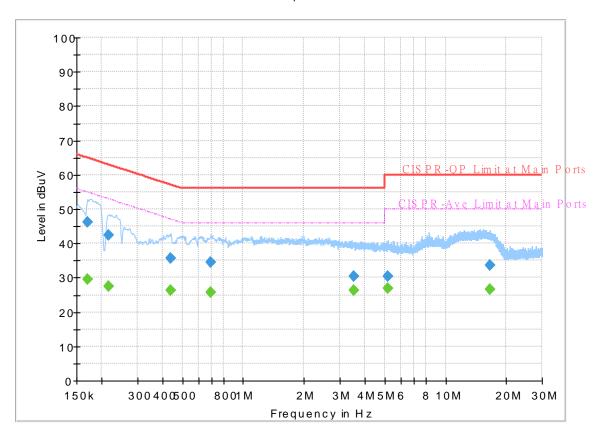
 Report NO :
 800518

 Test Mode :
 Mode 1

 Test Voltage :
 120Vac/60Hz

Phase: Line

FullSpectrum



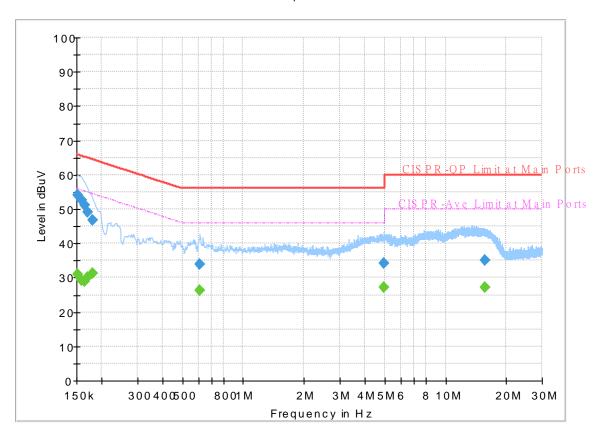
Final_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|--------------------|---------------------|--------------------|-----------------|----------------|------|--------|---------------|
| 0.170250 | (uzu:) | 29.55 | 54.95 | 25.40 | L1 | OFF | 19.5 |
| 0.170250 | 46.09 | | 64.95 | 18.86 | L1 | OFF | 19.5 |
| 0.215250 | | 27.61 | 53.00 | 25.39 | L1 | OFF | 19.5 |
| 0.215250 | 42.33 | | 63.00 | 20.67 | L1 | OFF | 19.5 |
| 0.440250 | | 26.43 | 47.06 | 20.63 | L1 | OFF | 19.5 |
| 0.440250 | 35.54 | | 57.06 | 21.52 | L1 | OFF | 19.5 |
| 0.690000 | | 25.76 | 46.00 | 20.24 | L1 | OFF | 19.6 |
| 0.690000 | 34.41 | | 56.00 | 21.59 | L1 | OFF | 19.6 |
| 3.516000 | | 26.40 | 46.00 | 19.60 | L1 | OFF | 19.7 |
| 3.516000 | 30.48 | | 56.00 | 25.52 | L1 | OFF | 19.7 |
| 5.172000 | | 26.83 | 50.00 | 23.17 | L1 | OFF | 19.7 |
| 5.172000 | 30.32 | | 60.00 | 29.68 | L1 | OFF | 19.7 |
| 16.658250 | | 26.71 | 50.00 | 23.29 | L1 | OFF | 20.1 |
| 16.658250 | 33.60 | | 60.00 | 26.40 | L1 | OFF | 20.1 |

EUT Information

Report NO: 800518
Test Mode: Mode 1
Test Voltage: 120Vac/60Hz
Phase: Neutral

FullSpectrum



Final_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|--------------------|---------------------|--------------------|-----------------|----------------|------|--------|---------------|
| 0.152250 | | 30.90 | 55.88 | 24.98 | N | OFF | 19.5 |
| 0.152250 | 53.97 | | 65.88 | 11.91 | N | OFF | 19.5 |
| 0.159000 | - | 29.38 | 55.52 | 26.14 | N | OFF | 19.5 |
| 0.159000 | 52.66 | | 65.52 | 12.86 | N | OFF | 19.5 |
| 0.163500 | | 28.92 | 55.28 | 26.36 | N | OFF | 19.5 |
| 0.163500 | 51.22 | | 65.28 | 14.06 | N | OFF | 19.5 |
| 0.170250 | | 30.02 | 54.95 | 24.93 | N | OFF | 19.5 |
| 0.170250 | 49.14 | | 64.95 | 15.81 | N | OFF | 19.5 |
| 0.179250 | | 31.23 | 54.52 | 23.29 | N | OFF | 19.5 |
| 0.179250 | 46.72 | | 64.52 | 17.80 | N | OFF | 19.5 |
| 0.609000 | - | 26.18 | 46.00 | 19.82 | N | OFF | 19.6 |
| 0.609000 | 33.90 | | 56.00 | 22.10 | N | OFF | 19.6 |
| 4.967250 | | 27.23 | 46.00 | 18.77 | N | OFF | 19.7 |
| 4.967250 | 34.08 | | 56.00 | 21.92 | N | OFF | 19.7 |
| 15.598500 | | 27.32 | 50.00 | 22.68 | N | OFF | 20.1 |
| 15.598500 | 35.02 | | 60.00 | 24.98 | N | OFF | 20.1 |

Appendix C. Radiated Spurious Emission

| Toot Engineer | Watt Tseng, Karl Hou, and Big-show Wang | Temperature : | 23~26°C |
|-----------------|---|---------------------|---------|
| Test Engineer : | wall iselig, Kali Hou, and big-show wallg | Relative Humidity : | 51~59% |

Report No.: FR8O0518C

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|------------------|------|-----------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|-------|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 1+2 | | (MHz) | (dBµV/m) | (dB) | (dBµV/m) | (dBµV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| | | 2361.03 | 53.27 | -20.73 | 74 | 40.75 | 27.67 | 15.73 | 30.88 | 378 | 333 | Р | Н |
| | | 2389.485 | 42.93 | -11.07 | 54 | 30.42 | 27.6 | 15.77 | 30.86 | 378 | 333 | Α | Н |
| | * | 2412 | 104.69 | - | - | 92.13 | 27.6 | 15.81 | 30.85 | 378 | 333 | Р | Н |
| | * | 2412 | 101.57 | - | - | 89.01 | 27.6 | 15.81 | 30.85 | 378 | 333 | Α | Н |
| 802.11b | | | | | | | | | | | | | Н |
| CH 01 | | | | | | | | | | | | | Н |
| 2412MHz | | 2321.55 | 53.51 | -20.49 | 74 | 40.96 | 27.77 | 15.67 | 30.89 | 384 | 227 | Р | V |
| 2412111112 | | 2389.695 | 42.55 | -11.45 | 54 | 30.04 | 27.6 | 15.77 | 30.86 | 384 | 227 | Α | V |
| | * | 2412 | 101.55 | - | - | 88.99 | 27.6 | 15.81 | 30.85 | 384 | 227 | Р | V |
| | * | 2412 | 98.28 | - | - | 85.72 | 27.6 | 15.81 | 30.85 | 384 | 227 | Α | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 2354.94 | 53.28 | -20.72 | 74 | 40.77 | 27.67 | 15.72 | 30.88 | 369 | 333 | Р | Н |
| | | 2389.8 | 42.65 | -11.35 | 54 | 30.13 | 27.6 | 15.77 | 30.85 | 369 | 333 | Α | Н |
| | * | 2437 | 105.89 | - | - | 93.29 | 27.6 | 15.84 | 30.84 | 369 | 333 | Р | Н |
| | * | 2437 | 102.61 | - | - | 90.01 | 27.6 | 15.84 | 30.84 | 369 | 333 | Α | Н |
| 000 441 | | 2486.07 | 53.17 | -20.83 | 74 | 40.61 | 27.47 | 15.91 | 30.82 | 369 | 333 | Р | Н |
| 802.11b | | 2483.97 | 42.48 | -11.52 | 54 | 29.92 | 27.47 | 15.91 | 30.82 | 369 | 333 | Α | Н |
| CH 06 2437MHz | | 2378.18 | 53.06 | -20.94 | 74 | 40.53 | 27.63 | 15.76 | 30.86 | 366 | 242 | Р | V |
| 2437 WITIZ | | 2358.72 | 42.38 | -11.62 | 54 | 29.86 | 27.67 | 15.73 | 30.88 | 366 | 242 | Α | V |
| | * | 2437 | 101.92 | - | - | 89.32 | 27.6 | 15.84 | 30.84 | 366 | 242 | Р | V |
| | * | 2437 | 98.7 | - | - | 86.1 | 27.6 | 15.84 | 30.84 | 366 | 242 | Α | V |
| | | 2487.26 | 52.29 | -21.71 | 74 | 39.73 | 27.47 | 15.91 | 30.82 | 366 | 242 | Р | V |
| | | 2485.72 | 42.23 | -11.77 | 54 | 29.67 | 27.47 | 15.91 | 30.82 | 366 | 242 | Α | V |

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FCC RADIO TEST REPORT

| | _ | | 1 | 1 | | 1 | 1 | T . | | | | | - |
|---------|-------|------------------|--------------|----------|-------------|----------|-------|-------|-------|-----|-----|---|---|
| | * | 2462 | 106.03 | - | - | 93.45 | 27.53 | 15.88 | 30.83 | 356 | 331 | Р | Н |
| | * | 2462 | 102.94 | - | - | 90.36 | 27.53 | 15.88 | 30.83 | 356 | 331 | Α | Н |
| | | 2484.2 | 53.22 | -20.78 | 74 | 40.66 | 27.47 | 15.91 | 30.82 | 356 | 331 | Р | Н |
| | | 2487.32 | 42.91 | -11.09 | 54 | 30.35 | 27.47 | 15.91 | 30.82 | 356 | 331 | Α | Н |
| | | | | | | | | | | | | | Н |
| 802.11b | | | | | | | | | | | | | Н |
| CH 11 | * | 2462 | 102.61 | - | - | 90.03 | 27.53 | 15.88 | 30.83 | 362 | 242 | Р | V |
| 2462MHz | * | 2462 | 99.35 | - | - | 86.77 | 27.53 | 15.88 | 30.83 | 362 | 242 | Α | V |
| | | 2491.88 | 53.26 | -20.74 | 74 | 40.75 | 27.4 | 15.92 | 30.81 | 362 | 242 | Р | ٧ |
| | | 2483.52 | 42.33 | -11.67 | 54 | 29.77 | 27.47 | 15.91 | 30.82 | 362 | 242 | Α | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | 1. No | o other spurious | s found | • | | • | • | • | • | | | | |
| Remark | | · | | | | | | | | | | | |
| | 2. Al | I results are PA | SS against l | Peak and | Average lim | it line. | | | | | | | |

Report No. : FR8O0518C

TEL: 886-3-327-3456 Page Number : C2 of C12

2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

WIFI 802.11b (Harmonic @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|----------|--------|------------------|--------------|----------|--------------|-------------------------|----------|--------|--------|--------|-------|-------|------|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 1+2 | | (MHz) | (dBµV/m) | | (dBµV/m) | (dB _µ V) | (dB/m) | (dB) | (dB) | (cm) | | (P/A) | |
| | | 4824 | 36.27 | -37.73 | 74 | 54.53 | 31.3 | 8.5 | 58.06 | 100 | 0 | Р | Н |
| | | | | | | | | | | | | | Н |
| 000 446 | | | | | | | | | | | | | Н |
| 802.11b | | | | | | | | | | | | | Н |
| CH 01 | | 4824 | 36.95 | -37.05 | 74 | 55.21 | 31.3 | 8.5 | 58.06 | 100 | 0 | Р | V |
| 2412MHz | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 4874 | 36.01 | -37.99 | 74 | 54.16 | 31.3 | 8.65 | 58.1 | 100 | 0 | Р | Н |
| | | 7311 | 42.79 | -31.21 | 74 | 53.66 | 36.2 | 11.27 | 58.34 | 100 | 0 | Р | Н |
| | | | | | | | | | | | | | Н |
| 802.11b | | | | | | | | | | | | | Н |
| CH 06 | | 4874 | 36.57 | -37.43 | 74 | 54.72 | 31.3 | 8.65 | 58.1 | 100 | 0 | Р | V |
| 2437MHz | | 7311 | 43.31 | -30.69 | 74 | 54.18 | 36.2 | 11.27 | 58.34 | 100 | 0 | Р | V |
| | | | | | | | | | | | | | ٧ |
| | | | | | | | | | | | | | V |
| | | 4924 | 36.57 | -37.43 | 74 | 54.54 | 31.37 | 8.8 | 58.14 | 100 | 0 | Р | Н |
| | | 7386 | 43.67 | -30.33 | 74 | 54.21 | 36.5 | 11.28 | 58.32 | 100 | 0 | Р | Н |
| 000 441- | | | | | | | | | | | | | Н |
| 802.11b | | | | | | | | | | | | | Н |
| CH 11 | | 4924 | 36.14 | -37.86 | 74 | 54.11 | 31.37 | 8.8 | 58.14 | 100 | 0 | Р | V |
| 2462MHz | | 7386 | 43.74 | -30.26 | 74 | 54.28 | 36.5 | 11.28 | 58.32 | 100 | 0 | Р | V |
| | | | | | | | | | | | | | ٧ |
| | | | | | | | | | | | | | ٧ |
| | 1 Na | o other spurious | s found | | | | I | | 1 | I | I | l | |
| Remark | | results are PA | | eak and | Average lim | it line | | | | | | | |
| | د. All | Tesults ale FA | oo ayanist r | can allu | Average IIII | it iii i c . | | | | | | | |

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2.4GHz 2400~2483.5MHz WIFI 802.11g (Band Edge @ 3m)

Report No.: FR8O0518C

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|------------------|------|-----------|------------|---------------|--------------------|-------------------|-----------------|--------------|-------------|-------------|----------------|---------------|------|
| Ant. 1+2 | | (MHz) | (dBµV/m) | Limit (dB) | Line (dBµV/m) | Level (dBµV) | Factor (dB/m) | Loss (dB) | Factor (dB) | Pos (cm) | Pos (deg) | Avg. (P/A) | |
| | | 2390 | 56.44 | -17.56 | 74 | 43.91 | 27.6 | 15.78 | 30.85 | 377 | 330 | P | Н |
| | | 2390 | 47.51 | -6.49 | 54 | 34.98 | 27.6 | 15.78 | 30.85 | 377 | 330 | Α | Н |
| | * | 2412 | 105.32 | - | - | 92.76 | 27.6 | 15.81 | 30.85 | 377 | 330 | Р | Н |
| | * | 2412 | 97.54 | - | - | 84.99 | 27.6 | 15.8 | 30.85 | 377 | 330 | Α | Н |
| 802.11g | | | | | | | | | | | | | Н |
| CH 01 | | | | | | | | | | | | | Н |
| 2412MHz | | 2388.96 | 55.29 | -18.71 | 74 | 42.78 | 27.6 | 15.77 | 30.86 | 385 | 229 | Р | V |
| | | 2390 | 46.06 | -7.94 | 54 | 33.53 | 27.6 | 15.78 | 30.85 | 385 | 229 | Α | V |
| | * | 2412 | 102.31 | - | - | 89.75 | 27.6 | 15.81 | 30.85 | 385 | 229 | Р | V |
| | * | 2412 | 94.77 | - | - | 82.21 | 27.6 | 15.81 | 30.85 | 385 | 229 | Α | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 2388.26 | 53.76 | -20.24 | 74 | 41.25 | 27.6 | 15.77 | 30.86 | 369 | 332 | Р | Н |
| | | 2389.8 | 43.7 | -10.3 | 54 | 31.18 | 27.6 | 15.77 | 30.85 | 369 | 332 | Α | Н |
| | * | 2437 | 105.5 | - | - | 92.9 | 27.6 | 15.84 | 30.84 | 369 | 332 | Р | I |
| | * | 2437 | 97.86 | - | - | 85.26 | 27.6 | 15.84 | 30.84 | 369 | 332 | Α | Н |
| // | | 2486 | 52.97 | -21.03 | 74 | 40.41 | 27.47 | 15.91 | 30.82 | 369 | 332 | Р | Н |
| 802.11g | | 2487.54 | 43.47 | -10.53 | 54 | 30.98 | 27.4 | 15.91 | 30.82 | 369 | 332 | Α | Н |
| CH 06 2437MHz | | 2349.48 | 52.94 | -21.06 | 74 | 40.41 | 27.7 | 15.71 | 30.88 | 375 | 242 | Р | ٧ |
| 2437 WIFI2 | | 2388.26 | 43.26 | -10.74 | 54 | 30.75 | 27.6 | 15.77 | 30.86 | 375 | 242 | Α | V |
| | * | 2437 | 102.61 | - | - | 90.01 | 27.6 | 15.84 | 30.84 | 375 | 242 | Р | V |
| | * | 2437 | 94.54 | - | - | 81.94 | 27.6 | 15.84 | 30.84 | 375 | 242 | Α | V |
| | | 2485.58 | 52.47 | -21.53 | 74 | 39.91 | 27.47 | 15.91 | 30.82 | 375 | 242 | Р | V |
| | | 2497.97 | 43.06 | -10.94 | 54 | 30.54 | 27.4 | 15.93 | 30.81 | 375 | 242 | Α | ٧ |

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FCC RADIO TEST REPORT

| | * | 2462 | 105.91 | - | - | 93.33 | 27.53 | 15.88 | 30.83 | 357 | 332 | Р | Н |
|------------------|---|------------------|--------|----------|-------------|----------|-------|-------|-------|-----|-----|---|---|
| | * | 2462 | 97.94 | - | - | 85.36 | 27.53 | 15.88 | 30.83 | 357 | 332 | Α | Н |
| | | 2483.76 | 57.95 | -16.05 | 74 | 45.39 | 27.47 | 15.91 | 30.82 | 357 | 332 | Р | Н |
| | | 2483.64 | 46.65 | -7.35 | 54 | 34.09 | 27.47 | 15.91 | 30.82 | 357 | 332 | Α | Н |
| 000.44 | | | | | | | | | | | | | Н |
| 802.11g | | | | | | | | | | | | | Н |
| CH 11 2462MHz | * | 2462 | 102.25 | - | - | 89.67 | 27.53 | 15.88 | 30.83 | 362 | 230 | Р | V |
| 2402WITI2 | * | 2462 | 94.99 | - | - | 82.41 | 27.53 | 15.88 | 30.83 | 362 | 230 | Α | V |
| | | 2483.52 | 54.99 | -19.01 | 74 | 42.43 | 27.47 | 15.91 | 30.82 | 362 | 230 | Р | V |
| | | 2483.8 | 44.76 | -9.24 | 54 | 32.2 | 27.47 | 15.91 | 30.82 | 362 | 230 | Α | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| Remark | | o other spurious | | Peak and | Average lim | nit line | | | | | | | |

Report No. : FR8O0518C

TEL: 886-3-327-3456 Page Number : C5 of C12

2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

WIFI 802.11g (Harmonic @ 3m)

| Ant. 1+2 | | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|------------------|-------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|-------|
| 1+2 | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 174 | (MHz) | (dBµV/m) | (dB) | (dBµV/m) | (dBµV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| | 4824 | 36.5 | -37.5 | 74 | 54.76 | 31.3 | 8.5 | 58.06 | 100 | 0 | Р | Н |
| | | | | | | | | | | | | Н |
| 000 44 | | | | | | | | | | | | Н |
| 802.11g | | | | | | | | | | | | Н |
| CH 01 | 4824 | 36.14 | -37.86 | 74 | 54.4 | 31.3 | 8.5 | 58.06 | 100 | 0 | Р | V |
| 2412MHz | | | | | | | | | | | | V |
| | | | | | | | | | | | | V |
| | | | | | | | | | | | | V |
| | 4874 | 36.84 | -37.16 | 74 | 54.99 | 31.3 | 8.65 | 58.1 | 100 | 0 | Р | Н |
| | 7311 | 41.65 | -32.35 | 74 | 52.52 | 36.2 | 11.27 | 58.34 | 100 | 0 | Р | Н |
| 000.44 | | | | | | | | | | | | Н |
| 802.11g | | | | | | | | | | | | Н |
| CH 06 2437MHz | 4874 | 37.43 | -36.57 | 74 | 55.58 | 31.3 | 8.65 | 58.1 | 100 | 0 | Р | V |
| 2437 WIF12 | 7311 | 41.93 | -32.07 | 74 | 52.8 | 36.2 | 11.27 | 58.34 | 100 | 0 | Р | V |
| | | | | | | | | | | | | V |
| | | | | | | | | | | | | V |
| | 4924 | 36.29 | -37.71 | 74 | 54.26 | 31.37 | 8.8 | 58.14 | 100 | 0 | Р | Н |
| | 7386 | 41.98 | -32.02 | 74 | 52.52 | 36.5 | 11.28 | 58.32 | 100 | 0 | Р | Н |
| 902 44 ~ | | | | | | | | | | | | Н |
| 802.11g CH 11 | | | | | | | | | | | | Н |
| 2462MHz | 4924 | 37.28 | -36.72 | 74 | 55.25 | 31.37 | 8.8 | 58.14 | 100 | 0 | Р | V |
| 2402111112 | 7386 | 42.32 | -31.68 | 74 | 52.86 | 36.5 | 11.28 | 58.32 | 100 | 0 | Р | V |
| | | | | | | | | | | | | V |
| | | | | | | | | | | | | V |

TEL: 886-3-327-3456 Page Number : C6 of C12

2.4GHz 2400~2483.5MHz WIFI 802.11n HT40 (Band Edge @ 3m)

Report No.: FR8O0518C

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|-------------|------|-----------|------------|---------------|--------------------|-------------------|-----------------|--------------|---------------|-------------|----------------|------|------|
| Ant. 1+2 | | (MHz) | (dBµV/m) | Limit (dB) | Line (dBµV/m) | Level (dBµV) | Factor (dB/m) | Loss (dB) | Factor (dB) | Pos (cm) | Pos (deg) | Avg. | |
| | | 2389.52 | 56.04 | -17.96 | 74 | 43.53 | 27.6 | 15.77 | 30.86 | 370 | 331 | P | Н |
| | | 2389.38 | 48.5 | -5.5 | 54 | 35.99 | 27.6 | 15.77 | 30.86 | 370 | 331 | Α | Н |
| | * | 2422 | 100.82 | - | - | 88.24 | 27.6 | 15.82 | 30.84 | 370 | 331 | Р | Н |
| | * | 2422 | 92.96 | - | - | 80.38 | 27.6 | 15.82 | 30.84 | 370 | 331 | Α | Н |
| 802.11n | | 2489.43 | 53.24 | -20.76 | 74 | 40.74 | 27.4 | 15.92 | 30.82 | 370 | 331 | Р | Н |
| HT40 | | 2488.45 | 44.07 | -9.93 | 54 | 31.58 | 27.4 | 15.91 | 30.82 | 370 | 331 | Α | Н |
| CH 03 | | 2388.68 | 53.71 | -20.29 | 74 | 41.2 | 27.6 | 15.77 | 30.86 | 375 | 241 | Р | V |
| 2422MHz | | 2389.52 | 46.04 | -7.96 | 54 | 33.53 | 27.6 | 15.77 | 30.86 | 375 | 241 | Α | V |
| | * | 2422 | 98.85 | - | - | 86.27 | 27.6 | 15.82 | 30.84 | 375 | 241 | Р | V |
| | * | 2422 | 90.99 | - | - | 78.41 | 27.6 | 15.82 | 30.84 | 375 | 241 | Α | V |
| | | 2494.26 | 53.78 | -20.22 | 74 | 41.27 | 27.4 | 15.92 | 30.81 | 375 | 241 | Р | V |
| | | 2488.73 | 43.95 | -10.05 | 54 | 31.46 | 27.4 | 15.91 | 30.82 | 375 | 241 | Α | V |
| | | 2344.16 | 53.1 | -20.9 | 74 | 40.57 | 27.7 | 15.71 | 30.88 | 369 | 331 | Р | Н |
| | | 2388.12 | 44.61 | -9.39 | 54 | 32.1 | 27.6 | 15.77 | 30.86 | 369 | 331 | Α | Н |
| | * | 2437 | 101.15 | - | - | 88.55 | 27.6 | 15.84 | 30.84 | 369 | 331 | Р | Н |
| | * | 2437 | 93.44 | - | - | 80.84 | 27.6 | 15.84 | 30.84 | 369 | 331 | Α | Н |
| 802.11n | | 2485.02 | 52.94 | -21.06 | 74 | 40.38 | 27.47 | 15.91 | 30.82 | 369 | 331 | Р | Н |
| HT40 | | 2483.55 | 44.32 | -9.68 | 54 | 31.76 | 27.47 | 15.91 | 30.82 | 369 | 331 | Α | Н |
| CH 06 | | 2330.72 | 54.63 | -19.37 | 74 | 42.06 | 27.77 | 15.69 | 30.89 | 376 | 229 | Р | V |
| 2437MHz | | 2389.66 | 44 | -10 | 54 | 31.49 | 27.6 | 15.77 | 30.86 | 376 | 229 | Α | V |
| | * | 2437 | 98.1 | - | - | 85.5 | 27.6 | 15.84 | 30.84 | 376 | 229 | Р | V |
| | * | 2437 | 90.39 | - | - | 77.79 | 27.6 | 15.84 | 30.84 | 376 | 229 | Α | V |
| | | 2494.4 | 53.69 | -20.31 | 74 | 41.18 | 27.4 | 15.92 | 30.81 | 376 | 229 | Р | V |
| | | 2498.53 | 44.02 | -9.98 | 54 | 31.5 | 27.4 | 15.93 | 30.81 | 376 | 229 | Α | V |

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FCC RADIO TEST REPORT

| | | 2310.98 | 53.1 | -20.9 | 74 | 40.51 | 27.83 | 15.66 | 30.9 | 363 | 332 | Р | Н |
|---------|---|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| | | 2364.88 | 44.13 | -9.87 | 54 | 31.58 | 27.67 | 15.74 | 30.86 | 363 | 332 | Α | Н |
| | * | 2452 | 100.51 | - | - | 87.88 | 27.6 | 15.86 | 30.83 | 363 | 332 | Р | Н |
| | * | 2452 | 92.61 | - | - | 79.98 | 27.6 | 15.86 | 30.83 | 363 | 332 | Α | Н |
| 802.11n | | 2484.11 | 57.88 | -16.12 | 74 | 45.32 | 27.47 | 15.91 | 30.82 | 363 | 332 | Р | Н |
| HT40 | | 2483.5 | 49.01 | -4.99 | 54 | 36.45 | 27.47 | 15.91 | 30.82 | 363 | 332 | Α | Н |
| CH 09 | | 2385.18 | 52.97 | -21.03 | 74 | 40.43 | 27.63 | 15.77 | 30.86 | 369 | 229 | Р | V |
| 2452MHz | | 2312.38 | 44.2 | -9.8 | 54 | 31.61 | 27.83 | 15.66 | 30.9 | 369 | 229 | Α | V |
| | * | 2452 | 96.76 | - | - | 84.13 | 27.6 | 15.86 | 30.83 | 369 | 229 | Р | V |
| | * | 2452 | 89.32 | - | - | 76.69 | 27.6 | 15.86 | 30.83 | 369 | 229 | Α | V |
| | | 2485.37 | 54.88 | -19.12 | 74 | 42.32 | 27.47 | 15.91 | 30.82 | 369 | 229 | Р | V |
| | | 2483.76 | 45.7 | -8.3 | 54 | 33.14 | 27.47 | 15.91 | 30.82 | 369 | 229 | Α | V |

Report No.: FR8O0518C

Remark

1. No other spurious found.

TEL: 886-3-327-3456 Page Number : C8 of C12

^{2.} All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

WIFI 802.11n HT40 (Harmonic @ 3m)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---------|------|-----------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|------|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 1+2 | | (MHz) | (dBµV/m) | (dB) | (dBµV/m) | (dBµV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V |
| | | 4844 | 35.77 | -38.23 | 74 | 53.99 | 31.3 | 8.56 | 58.08 | 100 | 0 | Р | Н |
| | | 7266 | 42.61 | -31.39 | 74 | 53.5 | 36.2 | 11.26 | 58.35 | 100 | 0 | Р | Н |
| 802.11n | | | | | | | | | | | | | Н |
| HT40 | | | | | | | | | | | | | Н |
| CH 03 | | 4844 | 36.86 | -37.14 | 74 | 55.08 | 31.3 | 8.56 | 58.08 | 100 | 0 | Р | V |
| 2422MHz | | 7266 | 42.81 | -31.19 | 74 | 53.68 | 36.2 | 11.27 | 58.34 | 100 | 0 | Р | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 4874 | 37.2 | -36.8 | 74 | 55.35 | 31.3 | 8.65 | 58.1 | 100 | 0 | Р | Н |
| | | 7311 | 43.2 | -30.8 | 74 | 54.07 | 36.2 | 11.27 | 58.34 | 100 | 0 | Р | Н |
| 802.11n | | | | | | | | | | | | | Н |
| HT40 | | | | | | | | | | | | | Н |
| CH 06 | | 4874 | 36.14 | -37.86 | 74 | 54.29 | 31.3 | 8.65 | 58.1 | 400 | 0 | Р | V |
| 2437MHz | | 7311 | 41.84 | -32.16 | 74 | 52.71 | 36.2 | 11.27 | 58.34 | 100 | 0 | Р | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | 4904 | 36.04 | -37.96 | 74 | 54.09 | 31.33 | 8.74 | 58.12 | 100 | 0 | Р | Н |
| | | 7356 | 41.39 | -32.61 | 74 | 52.14 | 36.3 | 11.28 | 58.33 | 100 | 0 | Р | Н |
| 802.11n | | | | | | | | | | | | | Н |
| HT40 | | | | | | | | | | | | | Н |
| CH 09 | | 4904 | 36.18 | -37.82 | 74 | 54.23 | 31.33 | 8.74 | 58.12 | 100 | 0 | Р | V |
| 2452MHz | | 7356 | 40.94 | -33.06 | 74 | 51.69 | 36.3 | 11.28 | 58.33 | 100 | 0 | Р | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

Remark

1. No other spurious found.

2. All results are PASS against Peak and Average limit line.

TEL: 886-3-327-3456 Page Number: C9 of C12

Emission below 1GHz

Report No.: FR8O0518C

2.4GHz WIFI 802.11n HT40 (LF)

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol |
|---------|------|-----------|------------|--------|------------|--------|----------|--------|--------|--------|-------|-------|------|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 1+2 | | (MHz) | (dBµV/m) | (dB) | (dBµV/m) | (dBµV) | (dB/m) | (dB) | (dB) | (cm) | | (P/A) | (H/V |
| | | 70.23 | 30.28 | -9.72 | 40 | 49.37 | 12.41 | 1.1 | 32.6 | 100 | 0 | Р | Н |
| | | 102.9 | 31.02 | -12.48 | 43.5 | 45.96 | 16.32 | 1.31 | 32.57 | - | - | Р | Н |
| | | 207.66 | 30.22 | -13.28 | 43.5 | 45.38 | 15.5 | 1.88 | 32.54 | - | - | Р | Н |
| | | 498.8 | 28.19 | -17.81 | 46 | 33.81 | 24.18 | 2.75 | 32.55 | - | - | Р | Н |
| | | 859.3 | 32.26 | -13.74 | 46 | 31.29 | 29.23 | 3.65 | 31.91 | - | - | Р | Н |
| | | 940.5 | 33.97 | -12.03 | 46 | 30.63 | 30.84 | 3.86 | 31.36 | - | - | Р | Н |
| | | | | | | | | | | | | | Н |
| | | | | | | | | | | | | | Н |
| | | | | | | | | | | | | | Н |
| | | | | | | | | | | | | | Н |
| 2.4GHz | | | | | | | | | | | | | Н |
| 802.11n | | | | | | | | | | | | | Н |
| HT40 | | 70.5 | 35.44 | -4.56 | 40 | 54.5 | 12.44 | 1.1 | 32.6 | 100 | 0 | Р | V |
| LF | | 169.05 | 27.37 | -16.13 | 43.5 | 42.33 | 15.83 | 1.76 | 32.55 | - | - | Р | V |
| | | 206.31 | 23.36 | -20.14 | 43.5 | 38.61 | 15.42 | 1.87 | 32.54 | - | - | Р | V |
| | | 532.4 | 28.69 | -17.31 | 46 | 33.69 | 24.68 | 2.88 | 32.56 | - | - | Р | V |
| | | 766.2 | 30.16 | -15.84 | 46 | 30.87 | 28.22 | 3.38 | 32.31 | - | - | Р | V |
| | | 955.2 | 33.87 | -12.13 | 46 | 30.11 | 31.09 | 3.9 | 31.23 | - | - | Р | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

2. All results are PASS against limit line.

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Note symbol

Report No. : FR8O0518C

| * | Fundamental Frequency which can be ignored. However, the level of any unwanted emissions |
|-----|--|
| | shall not exceed the level of the fundamental frequency. |
| ! | Test result is over limit line. |
| P/A | Peak or Average |
| H/V | Horizontal or Vertical |

TEL: 886-3-327-3456 Page Number : C11 of C12

A calculation example for radiated spurious emission is shown as below:

Report No.: FR8O0518C

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Path | Preamp | Ant | Table | Peak | Pol. |
|---------|------|-----------|------------|--------|------------|--------|----------|------|--------|--------|-------|-------|-------|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 1+2 | | (MHz) | (dBµV/m) | (dB) | (dBµV/m) | (dBµV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| 802.11b | | 2390 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | Р | Н |
| CH 01 | | | | | | | | | | | | | |
| 2412MHz | | 2390 | 43.54 | -10.46 | 54 | 42.6 | 32.22 | 4.58 | 35.86 | 103 | 308 | Α | Н |

- 1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
- 2. Level($dB\mu V/m$) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBµV) - Preamp Factor(dB)

3. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)

For Peak Limit @ 2390MHz:

- 1. Level(dBµV/m)
- = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBµV) Preamp Factor(dB)
- $= 32.22(dB/m) + 4.58(dB) + 54.51(dB\mu V) 35.86 (dB)$
- $= 55.45 (dB\mu V/m)$
- 2. Over Limit(dB)
- = Level(dBµV/m) Limit Line(dBµV/m)
- $= 55.45(dB\mu V/m) 74(dB\mu V/m)$
- = -18.55(dB)

For Average Limit @ 2390MHz:

- Level(dBµV/m)
- = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dB μ V) Preamp Factor(dB)
- $= 32.22(dB/m) + 4.58(dB) + 42.6(dB\mu V) 35.86 (dB)$
- $= 43.54 (dB\mu V/m)$
- 2. Over Limit(dB)
- = Level($dB\mu V/m$) Limit Line($dB\mu V/m$)
- $= 43.54(dB\mu V/m) 54(dB\mu V/m)$
- = -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".

TEL: 886-3-327-3456 Page Number : C12 of C12

Appendix D. Radiated Spurious Emission Plots

| Test Engineer : | Watt Tseng, Karl Hou, and Big-show Wang | Temperature : | 23~26°C |
|-----------------|---|---------------------|---------|
| rest Engineer . | | Relative Humidity : | 51~59% |

Report No.: FR8O0518C

Note symbol

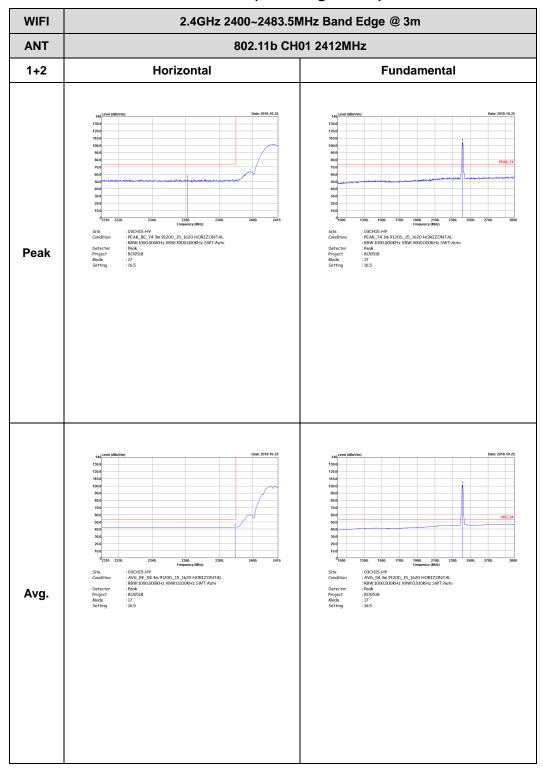
| -L | Low channel location |
|----|-----------------------|
| -R | High channel location |

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2.4GHz 2400~2483.5MHz

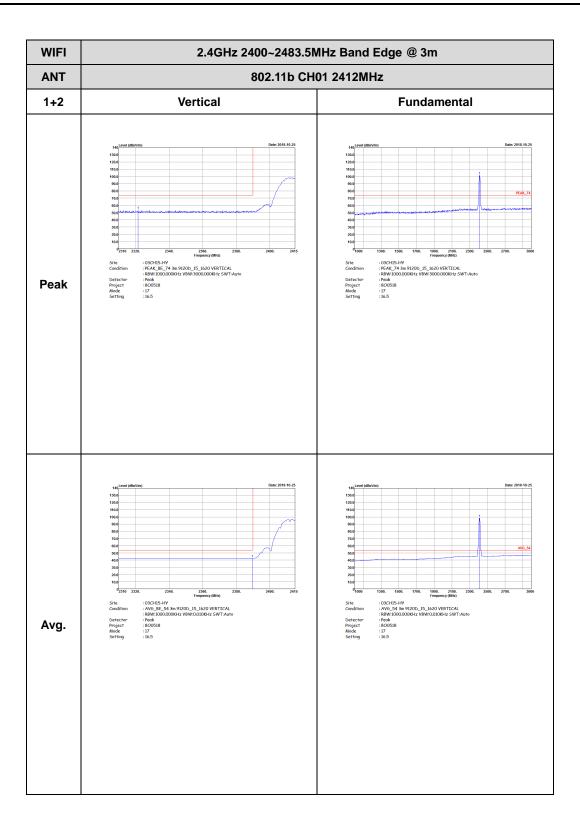
Report No.: FR8O0518C

WIFI 802.11b (Band Edge @ 3m)



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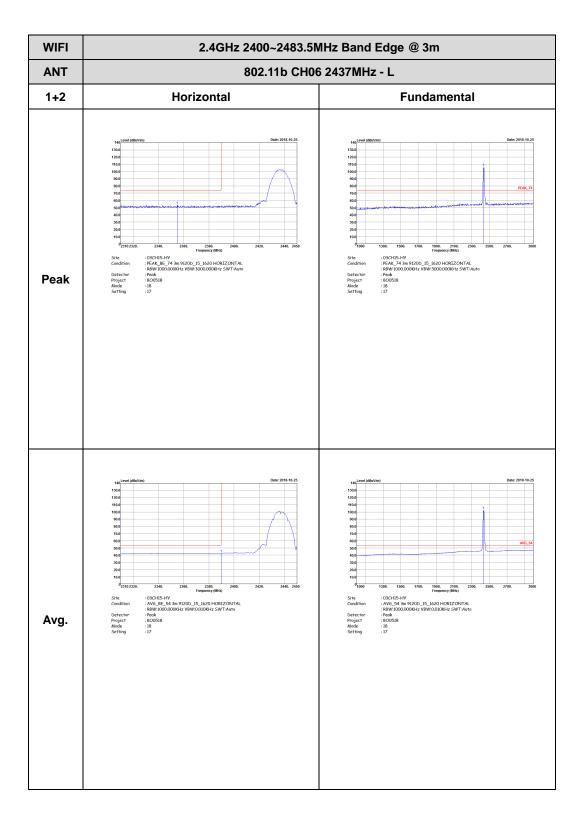
SPORTON LAB. FCC RADIO TEST REPORT



Report No.: FR8O0518C

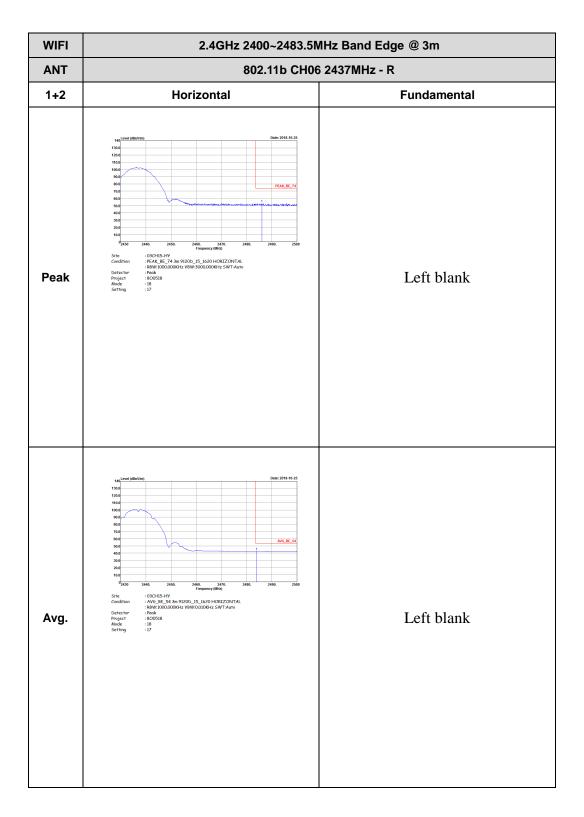
TEL: 886-3-327-3456 Page Number: D3 of D39





Report No.: FR8O0518C

TEL: 886-3-327-3456 Page Number : D4 of D39



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WIFI 2.4GHz 2400~2483.5MHz Band Edge @ 3m ANT 802.11b CH06 2437MHz - L 1+2 Vertical **Fundamental** Peak Avg.

Report No.: FR8O0518C

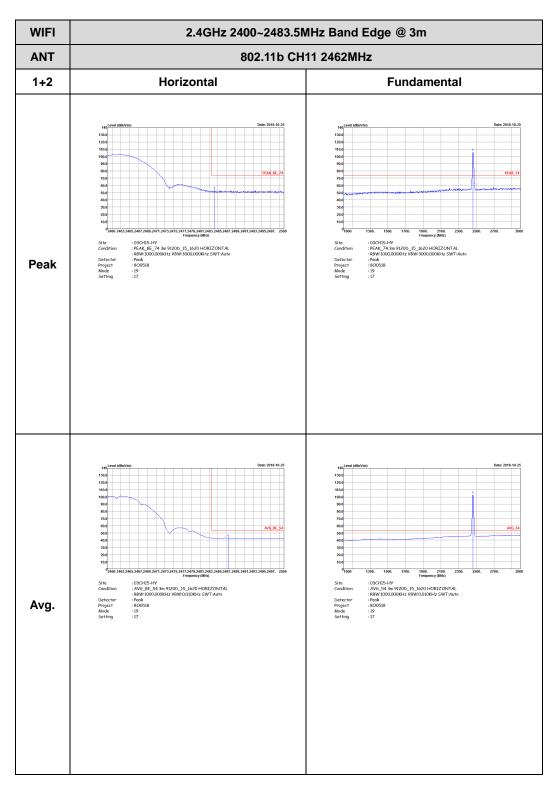
TEL: 886-3-327-3456 Page Number: D6 of D39

WIFI 2.4GHz 2400~2483.5MHz Band Edge @ 3m ANT 802.11b CH06 2437MHz - R 1+2 Vertical **Fundamental** Left blank Peak Left blank Avg.

Report No.: FR8O0518C

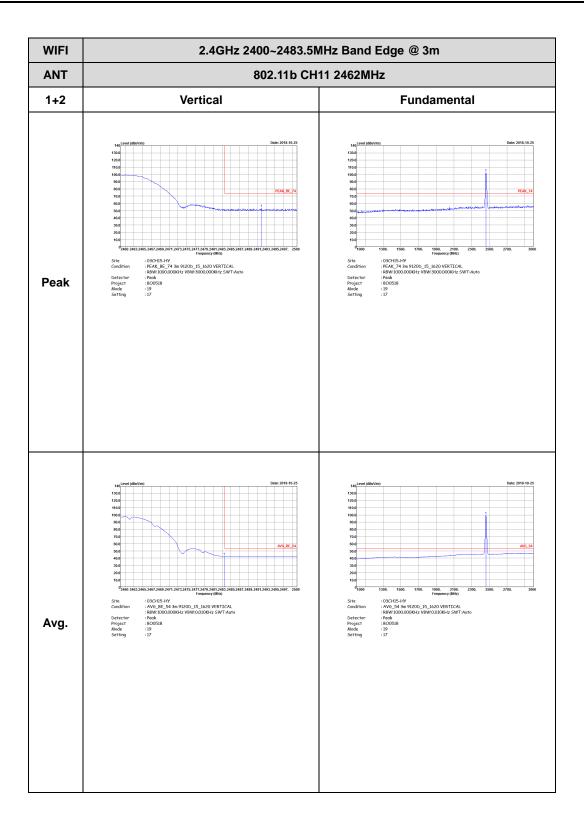
TEL: 886-3-327-3456 Page Number: D7 of D39





TEL: 886-3-327-3456 Page Number: D8 of D39



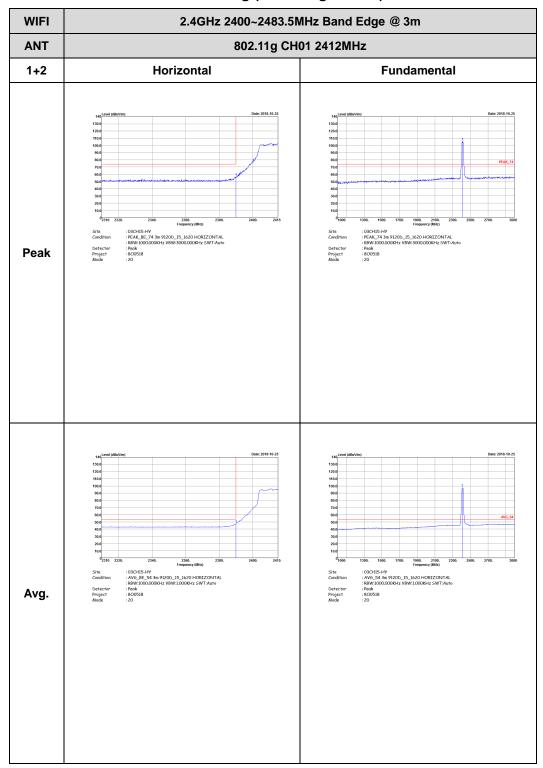


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2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

WIFI 802.11g (Band Edge @ 3m)



TEL: 886-3-327-3456 Page Number: D10 of D39

WIFI 2.4GHz 2400~2483.5MHz Band Edge @ 3m ANT 802.11g CH01 2412MHz 1+2 Vertical **Fundamental** Peak Avg.

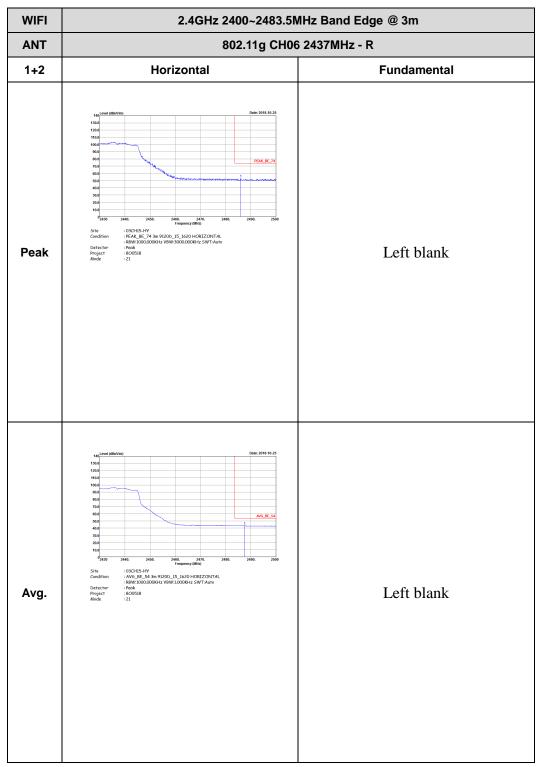
Report No.: FR8O0518C

TEL: 886-3-327-3456 Page Number : D11 of D39 FAX: 886-3-328-4978

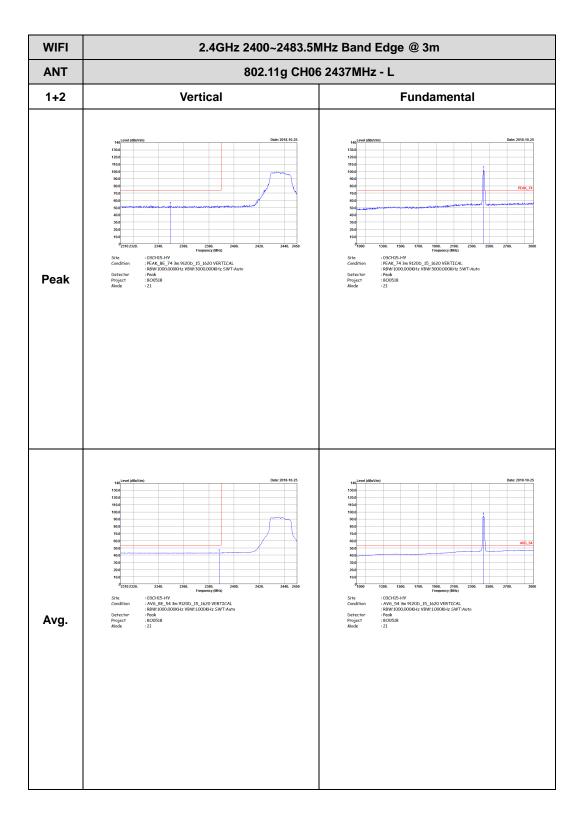
WIFI 2.4GHz 2400~2483.5MHz Band Edge @ 3m ANT 802.11g CH06 2437MHz - L 1+2 Horizontal **Fundamental** Peak Avg.

Report No.: FR8O0518C

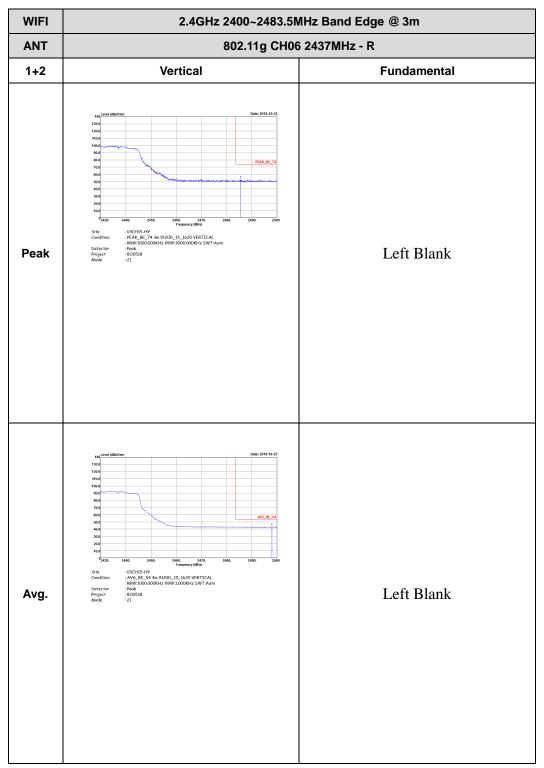
TEL: 886-3-327-3456 Page Number : D12 of D39



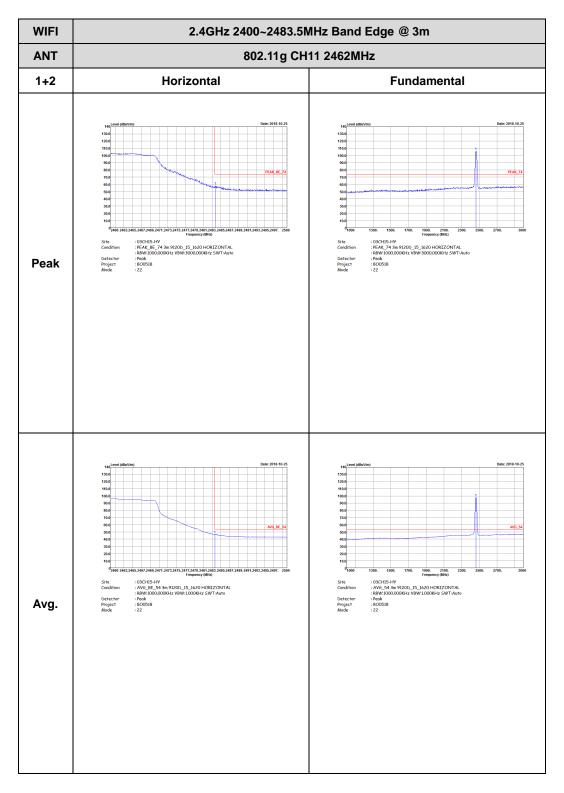
TEL: 886-3-327-3456 Page Number : D13 of D39



TEL: 886-3-327-3456 Page Number : D14 of D39



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TEL: 886-3-327-3456 Page Number : D16 of D39

WIFI

2.4GHz 2400~2483.5MHz Band Edge @ 3m

ANT

802.11g CH11 2462MHz

1+2

Vertical

Fundamental

Peak

Peak

Peak

Peak

Peak

Peak

Peak

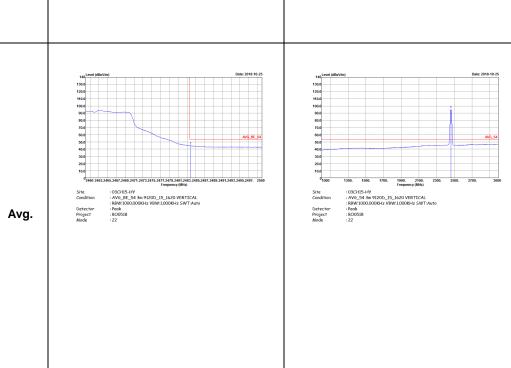
Report No. : FR800518C

300.11g CH11 2462MHz

Fundamental

Peak

Pea

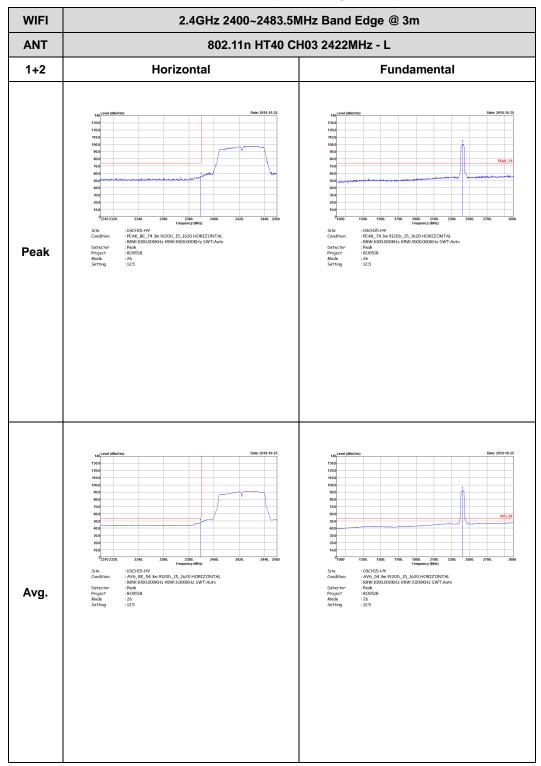


TEL: 886-3-327-3456 Page Number: D17 of D39

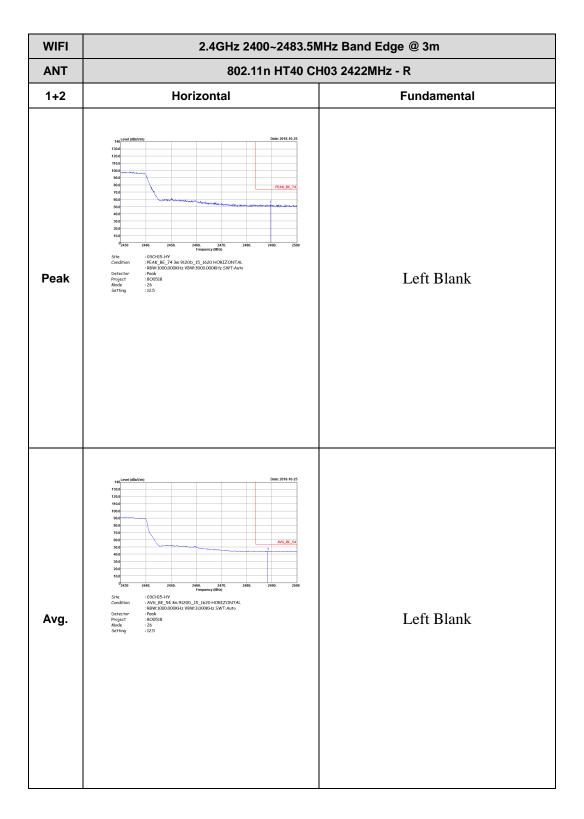
2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

WIFI 802.11n HT40 (Band Edge @ 3m)

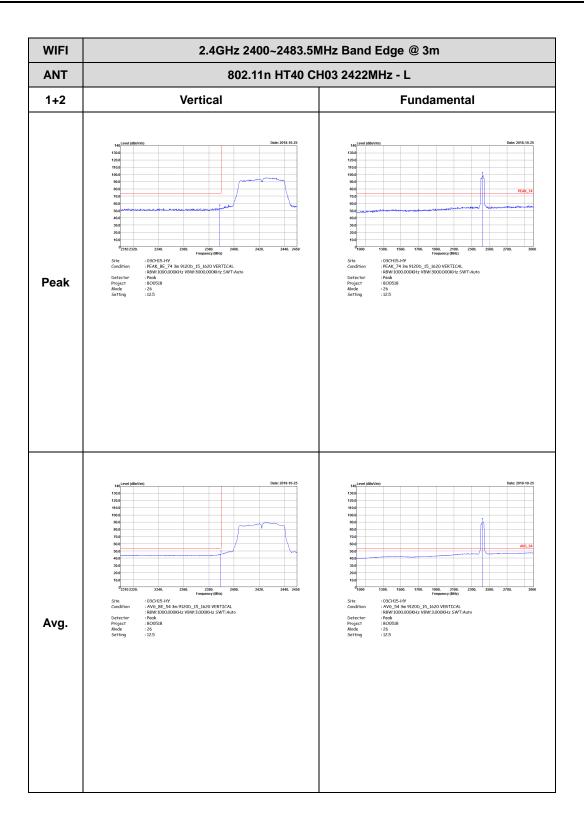


TEL: 886-3-327-3456 Page Number : D18 of D39

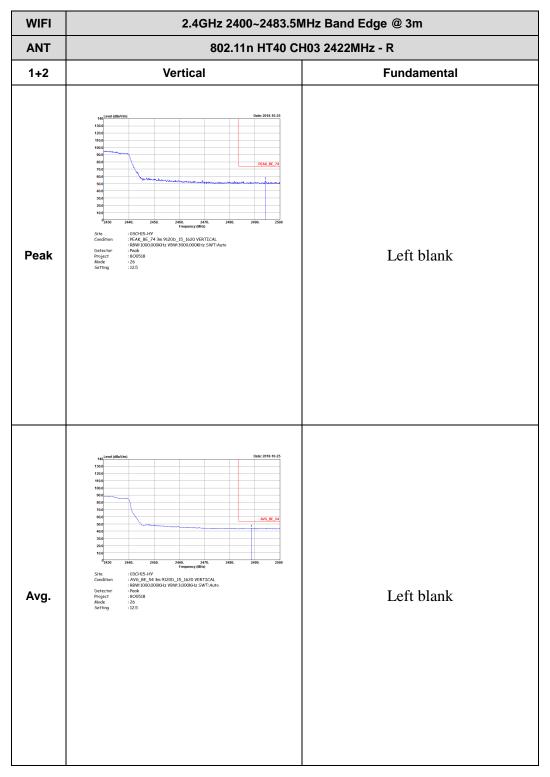


TEL: 886-3-327-3456 Page Number : D19 of D39



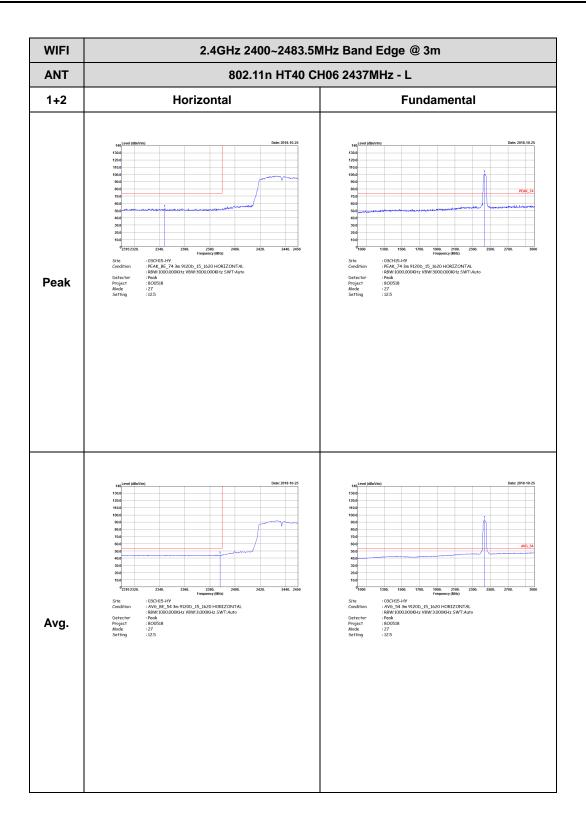


TEL: 886-3-327-3456 Page Number : D20 of D39



TEL: 886-3-327-3456 Page Number : D21 of D39

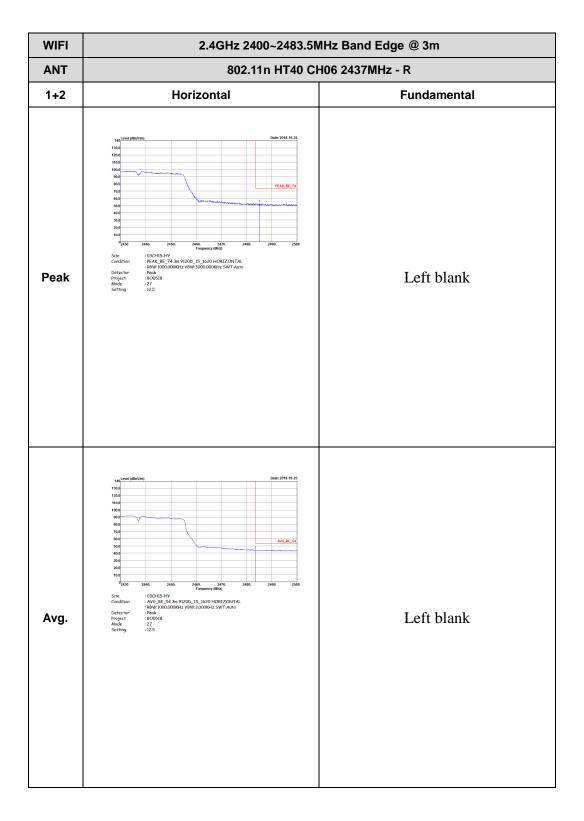




TEL: 886-3-327-3456 Page Number : D22 of D39

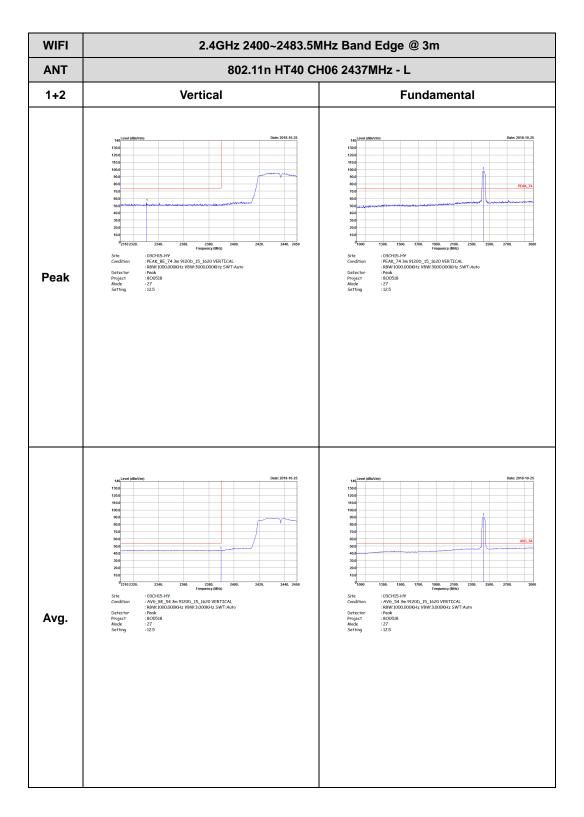
FCC RADIO TEST REPORT

Report No.: FR8O0518C

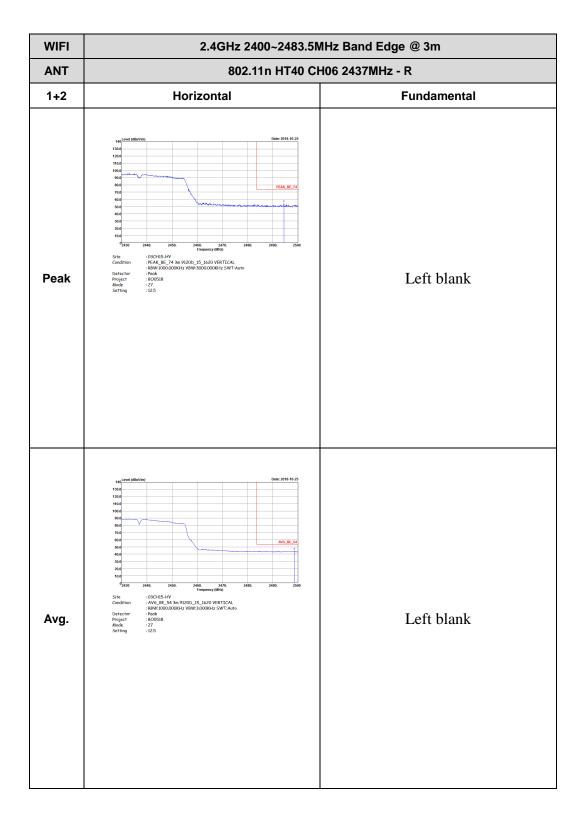


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TEL: 886-3-327-3456 Page Number : D24 of D39

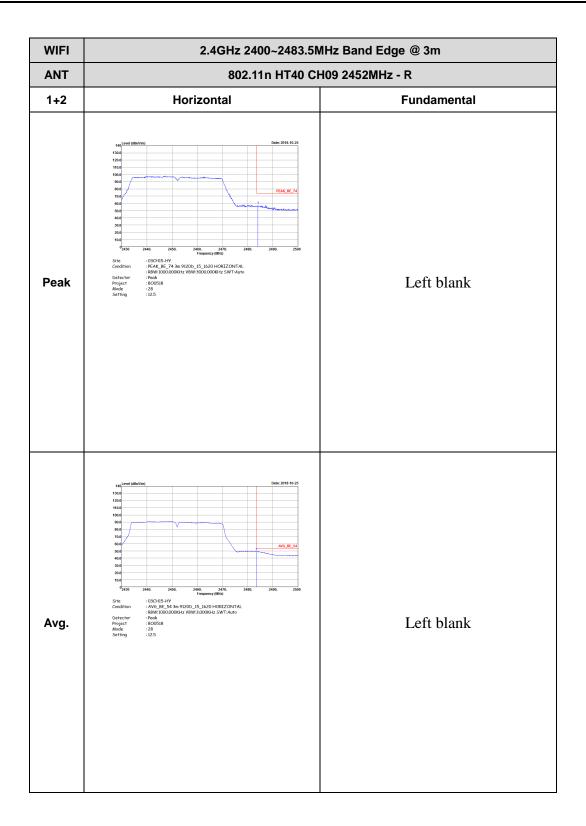


TEL: 886-3-327-3456 Page Number : D25 of D39

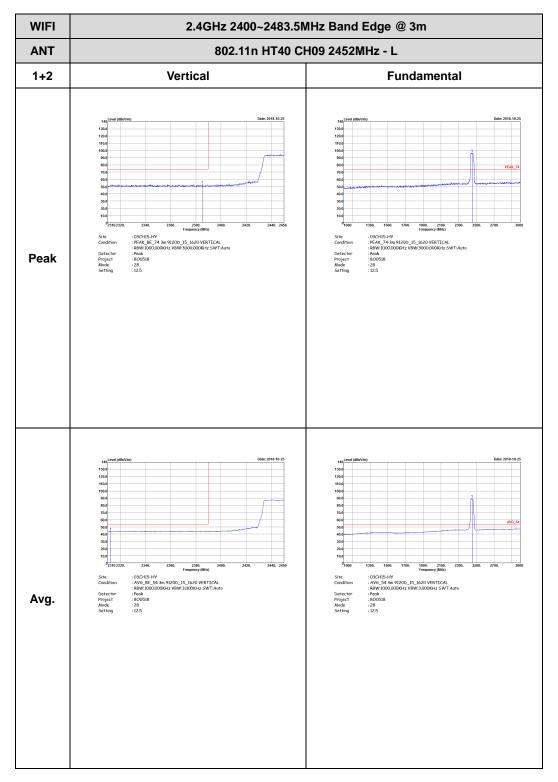
WIFI 2.4GHz 2400~2483.5MHz Band Edge @ 3m ANT 802.11n HT40 CH09 2452MHz - L 1+2 Horizontal **Fundamental** Peak Avg.

Report No.: FR8O0518C

TEL: 886-3-327-3456 Page Number : D26 of D39

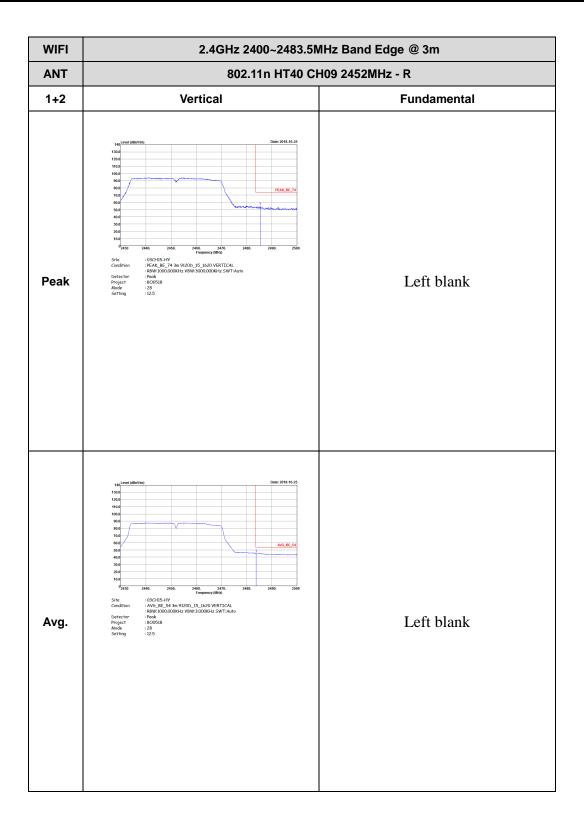


TEL: 886-3-327-3456 Page Number : D27 of D39



TEL: 886-3-327-3456 Page Number : D28 of D39



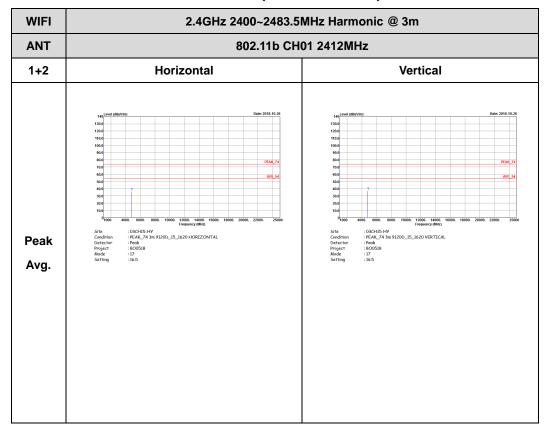


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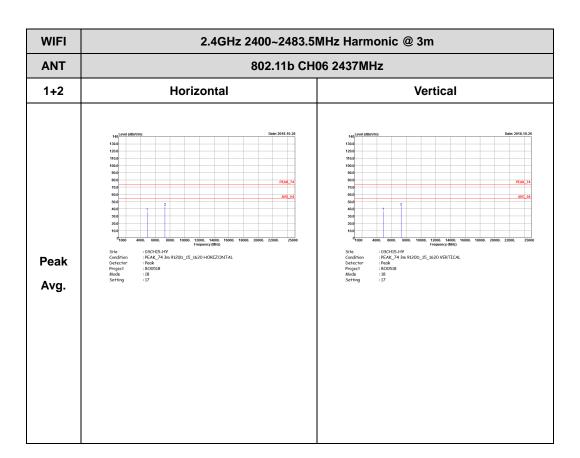
2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

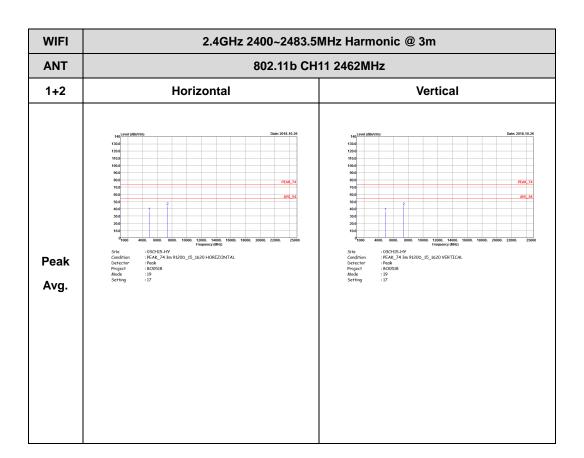
WIFI 802.11b (Harmonic @ 3m)



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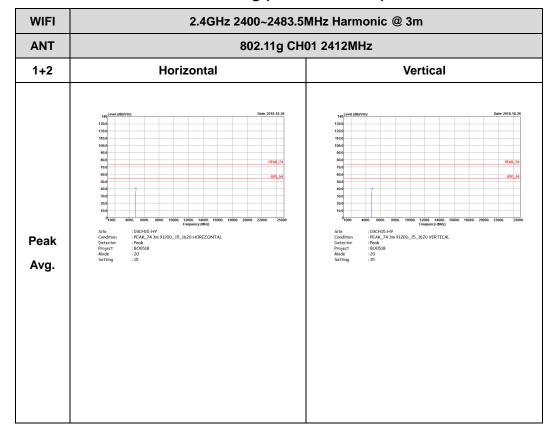


TEL: 886-3-327-3456 Page Number: D32 of D39

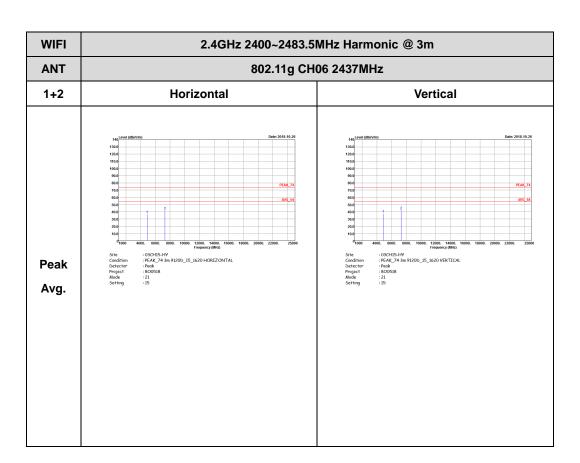
2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

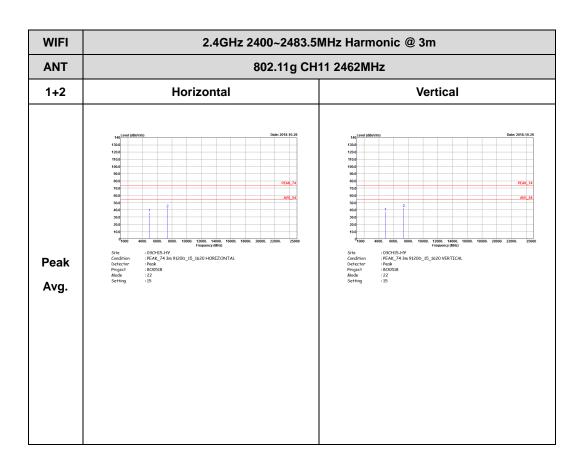
WIFI 802.11g (Harmonic @ 3m)



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TEL: 886-3-327-3456 Page Number : D34 of D39

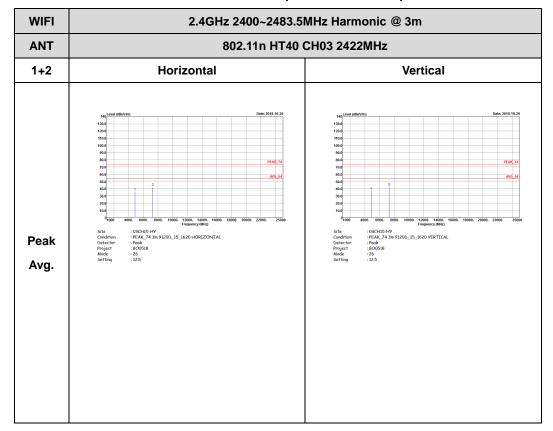


TEL: 886-3-327-3456 Page Number: D35 of D39

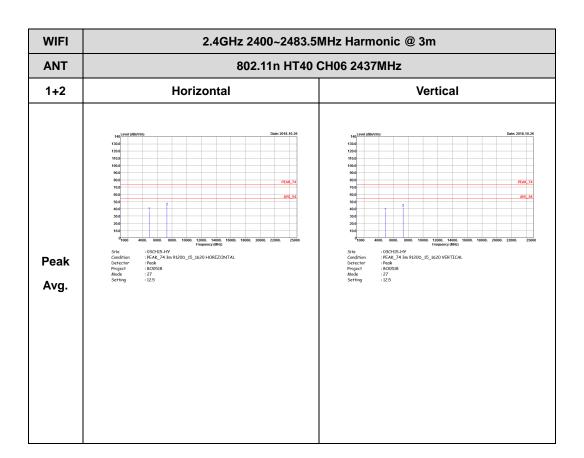
2.4GHz 2400~2483.5MHz

Report No.: FR8O0518C

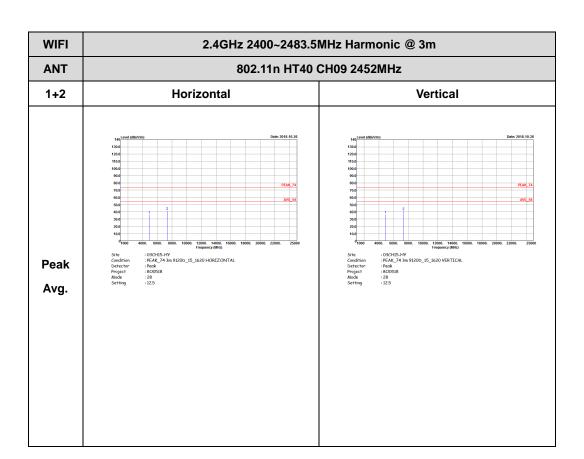
WIFI 802.11n HT40 (Harmonic @ 3m)



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TEL: 886-3-327-3456 Page Number: D37 of D39

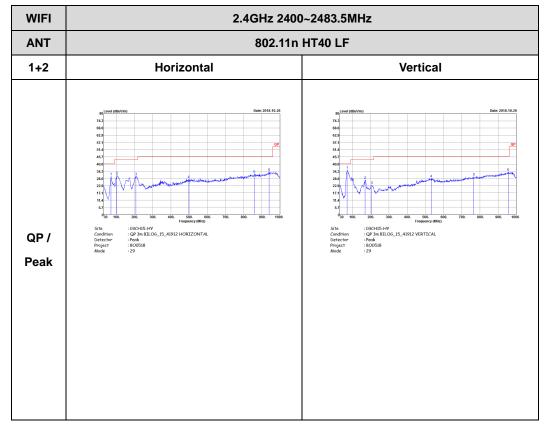


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Emission below 1GHz

Report No.: FR8O0518C

2.4GHz WIFI 802.11n HT40 (LF)



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FCC RADIO TEST REPORT

Appendix E. Duty Cycle Plots

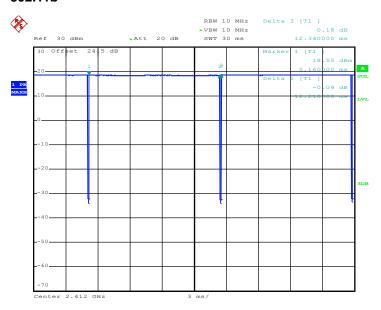
| Antenna | Band | Duty Cycle (%) | T(us) | 1/T(kHz) | VBW Setting | Duty Factor (dB) |
|---------|--------------------------------|-------------------|---------|----------|----------------|------------------|
| 1 | 802.11b | 98.95 | - | - | 10Hz | 0.05 |
| 2 | 802.11b | 98.95 | - | - | 10Hz | 0.05 |
| 1+2 | 802.11b for Ant. 1 | 98.75 | - | - | 10Hz | 0.05 |
| 1+2 | 802.11b for Ant. 2 | 98.71 | - | - | 10Hz | 0.06 |
| 1 | 802.11g | 97.60 | 2030.00 | 0.49 | 1kHz | 0.11 |
| 2 | 802.11g | 97.84 | 2040.00 | 0.49 | 1kHz | 0.09 |
| 1+2 | 802.11g for Ant. 1 | 98.31 | - | - | 10Hz | 0.07 |
| 1+2 | 802.11g for Ant. 2 | 97.60 | 2030.00 | 0.49 | 1kHz | 0.11 |
| 1 | 2.4GHz 802.11n HT20 | 97.93 | 1890.00 | 0.53 | 1kHz | 0.09 |
| 2 | 2.4GHz 802.11n HT20 | 97.42 | 1890.00 | 0.53 | 1kHz | 0.11 |
| 1+2 | 2.4GHz 802.11n HT20 for Ant. 1 | 97.67 | 1890.00 | 0.53 | 1kHz | 0.10 |
| 1+2 | 2.4GHz 802.11n HT20 for Ant. 2 | 97.93 | 1890.00 | 0.53 | 1kHz | 0.09 |
| 1 | 2.4GHz 802.11n HT40 | 93.91 | 925.00 | 1.08 | 3kHz | 0.27 |
| 2 | 2.4GHz 802.11n HT40 | 94.42 | 930.00 | 1.08 | 3kHz | 0.25 |
| 1+2 | 2.4GHz 802.11n HT40 for Ant. 1 | 94.42 | 930.00 | 1.08 | 3kHz | 0.25 |
| 1+2 | 2.4GHz 802.11n HT40 for Ant. 2 | 94.42 | 930.00 | 1.08 | 3kHz | 0.25 |

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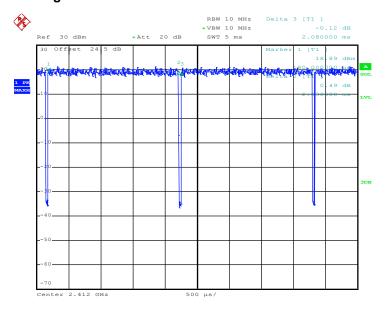
Report No.: FR8O0518C

<Ant. 1> 802.11b



Date: 18.OCT.2018 00:01:25

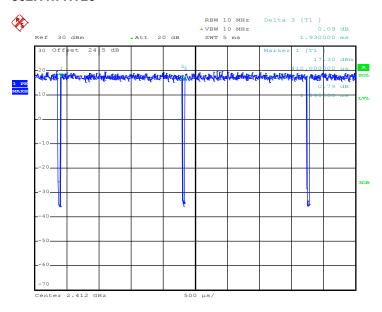
802.11g



Date: 18.OCT.2018 00:18:25

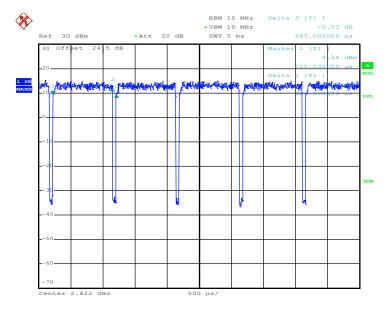
TEL: 886-3-327-3456 Page Number: E2 of E9

802.11n HT20



Date: 18.OCT.2018 00:42:33

802.11n HT40

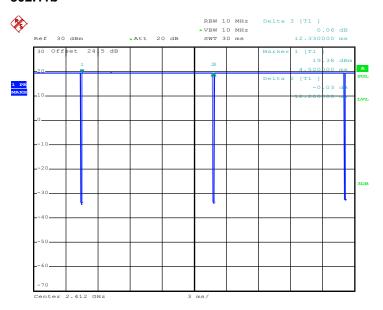


Date: 18.OCT.2018 01:28:22

TEL: 886-3-327-3456 Page Number : E3 of E9

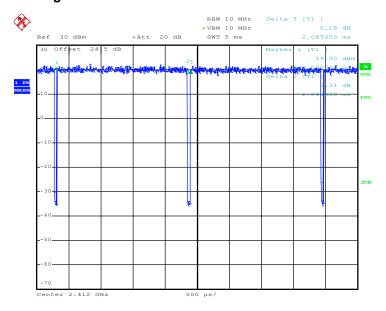
Report No.: FR8O0518C

<Ant. 2> 802.11b



Date: 18.OCT.2018 00:02:43

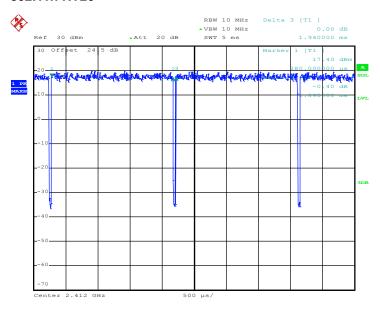
802.11g



Date: 18.OCT.2018 00:19:28

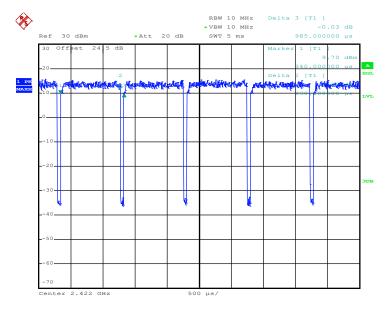
TEL: 886-3-327-3456 Page Number : E4 of E9





Date: 18.OCT.2018 00:46:33

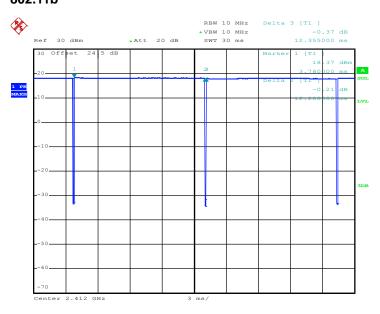
802.11n HT40



Date: 18.OCT.2018 01:32:56

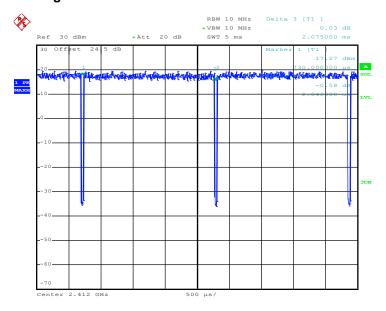
TEL: 886-3-327-3456 Page Number : E5 of E9

MIMO <Ant. 1> 802.11b



Date: 18.OCT.2018 00:29:07

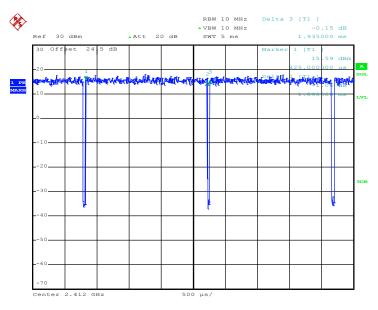
802.11g



Date: 18.OCT.2018 00:33:33

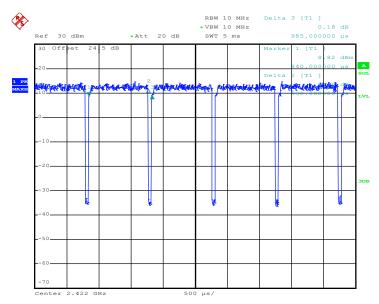
TEL: 886-3-327-3456 Page Number : E6 of E9





Date: 18.OCT.2018 00:49:35

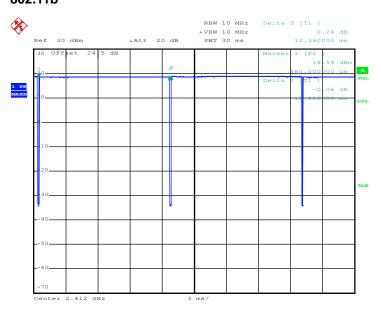
802.11n HT40



Date: 18.OCT.2018 01:41:29

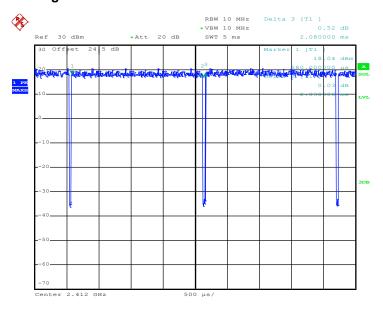
TEL: 886-3-327-3456 Page Number: E7 of E9

MIMO <Ant. 2> 802.11b



Date: 18.OCT.2018 00:30:27

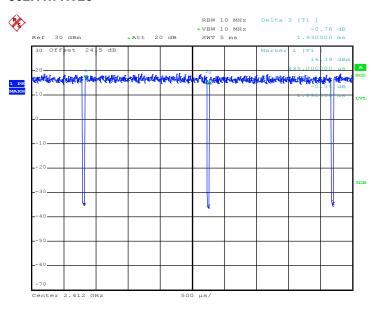
802.11g



Date: 18.OCT.2018 00:34:38

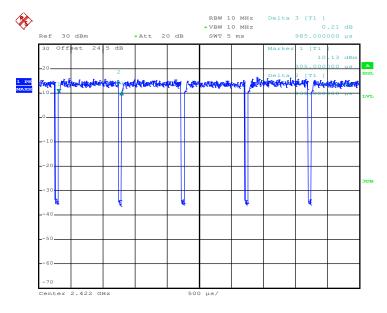
TEL: 886-3-327-3456 Page Number : E8 of E9





Date: 18.OCT.2018 00:50:34

802.11n HT40



Date: 18.OCT.2018 01:42:16

TEL: 886-3-327-3456 Page Number : E9 of E9