

FCC Test Report (WLAN)

Report No.: RF131210E07R

FCC ID: 2AE3B-AEH-AR9485

Test Model: AEH-AR9485

Received Date: Feb. 09, 2017

Test Date: Feb. 22 to Mar. 17, 2017

Issued Date: Mar. 21, 2017

Applicant: VoxMicro LTD.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Release Control Record

| Issue No. | Description | Date Issued |
|--------------|-------------------|---------------|
| RF131210E07R | Original release. | Mar. 21, 2017 |

1 Certificate of Conformity

Product: 11n mPCIe SB WIFI 1x2 HB125 / AR5B125

Brand: AIRETOS

Test Model: AEH-AR9485

Sample Status: R&D SAMPLE

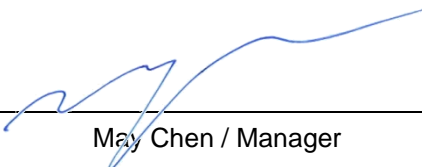
Applicant: VoxMicro LTD.

Test Date: Feb. 22 to Mar. 17, 2017

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :  , **Date:** Mar. 21, 2017
Claire Kuan / Specialist

Approved by :  , **Date:** Mar. 21, 2017
May Chen / Manager

2 Summary of Test Results

| 47 CFR FCC Part 15, Subpart C (SECTION 15.247) | | | |
|--|--|--------|---|
| FCC Clause | Test Item | Result | Remarks |
| 15.205 / 15.209 / 15.247(d) | Radiated Emissions and Band Edge Measurement | PASS | Meet the requirement of limit. Minimum passing margin is -4.9dB at 2483.5MHz & 4924.00MHz. |
| 15.247(b) | Conducted power | PASS | Meet the requirement of limit. |

NOTE: 1 This report is prepared for FCC Class II change. Only radiated emissions / conducted power were presented in this test report

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement | Frequency | Expanded Uncertainty (k=2) (\pm) |
|--------------------------------|---------------|--------------------------------------|
| Radiated Emissions up to 1 GHz | 30MHz ~ 1GHz | 5.30 dB |
| Radiated Emissions above 1 GHz | 1GHz ~ 6GHz | 4.78 dB |
| | 6GHz ~ 18GHz | 4.52 dB |
| | 18GHz ~ 40GHz | 5.08 dB |

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

| | |
|-----------------------|--|
| Product | 11n mPCIe SB WIFI 1x2 HB125 / AR5B125 |
| Brand | AIRETOS |
| Test Model | AEH-AR9485 |
| Status of EUT | R&D SAMPLE |
| Power Supply Rating | DC 3.3V from host equipment |
| Modulation Type | CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM |
| Modulation Technology | DSSS, OFDM |
| Transfer Rate | 802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n: up to 150Mbps |
| Operating Frequency | 2.412 ~ 2.462GHz |
| Number of Channel | 802.11b, 802.11g, 802.11n (HT20): 11 802.11n (HT40): 7 |
| Output Power | 258.821mW |
| Antenna Type | Refer to Note |
| Antenna Connector | Refer to Note |
| Accessory Device | NA |
| Data Cable Supplied | NA |

Note:

- This report is prepared for FCC Class II change. The difference compared with the original is as the following information:

◆ Added the one new antenna as following table:

| Original | | | | | | | |
|----------|---------|-----------------|------------------------------------|-----------------|----------------|-------------------|---------------------|
| No. | Brand | Model | Gain(dBi) (included cable loss) | Antenna Type | Connector | Cable Loss(dB) | Cable Length(mm) |
| 1 | WNC | 81-EBJ15.005 | 3.62 | PIFA | IPEX | 1.15 | 300 |
| 2 | INPAQ | DAMA1BM30000402 | 3.2 | Dipole | SMA Reverse | 0.5 | 290 |
| Newly | | | | | | | |
| No. | Brand | Model | Gain(dBi) (included cable loss) | Antenna Type | Connector | Cable Loss(dB) | Cable Length(mm) |
| 3 | TAOGLAS | FXP74.07.0100A | 4 | PIFA | IPEX | NA | 100 |

- According to above conditions, only radiated emissions / conducted power test item of newly antenna needs to be performed. And all data was verified to meet the requirements.

3. The EUT complies with 802.11n standards and backwards compatible with 802.11b, 802.11g products.
4. The EUT was pre-tested under the following modes:

| Test Mode | Data rate |
|---------------|-----------------|
| Mode A | 400ns GI |
| Mode B | 800ns GI |

From the above modes, the worst case was found in Mode B. Therefore only the test data of the mode was recorded in this report.

5. The EUT was pre-tested under the following versions:

| Test Version | Description |
|--------------------------------|---|
| Version A(Single antenna) | TX & RX share one antenna |
| Version B(Dual antenna) | each TX and RX has their own antenna |

Version A and Version B share same PCB design and Version A is RX only chain depopulated and terminated by 50 ohm terminator.

From the above Versions, The worst case was found in Version B. Therefore only the test data of the version was recorded in this report.

6. The EUT incorporates a SISO function.

| MODULATION MODE | DATA RATE (MCS) | TX & RX CONFIGURATION | |
|-----------------------|-----------------|-----------------------|-----|
| 802.11b | 1 ~ 11Mbps | 1TX | 1RX |
| 802.11g | 6 ~ 54Mbps | 1TX | 1RX |
| 802.11n (HT20) | MCS 0~7 | 1TX | 1RX |
| | MCS 8~15 | 1TX | 1RX |
| 802.11n (HT40) | MCS 0~7 | 1TX | 1RX |
| | MCS 8~15 | 1TX | 1RX |

7. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Description of Antenna

The antennas provided to the EUT, please refer to the following table:

| No. | Brand | Model | Gain(dBi) (included cable loss) | Antenna Type | Connector | Cable Loss(dB) | Cable Length(mm) |
|-----|---------|-----------------|------------------------------------|-----------------|----------------|-------------------|---------------------|
| 1 | WNC | 81-EBJ15.005 | 3.62 | PIFA | IPEX | 1.15 | 300 |
| 2 | INPAQ | DAMA1BM30000402 | 3.2 | Dipole | SMA Reverse | 0.5 | 290 |
| 3 | TAOGLAS | FXP74.07.0100A | 4 | PIFA | IPEX | NA | 100 |

3.3 Description of Test Modes

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 1 | 2412MHz | 7 | 2442MHz |
| 2 | 2417MHz | 8 | 2447MHz |
| 3 | 2422MHz | 9 | 2452MHz |
| 4 | 2427MHz | 10 | 2457MHz |
| 5 | 2432MHz | 11 | 2462MHz |
| 6 | 2437MHz | | |

7 channels are provided for 802.11n (HT40):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 3 | 2422MHz | 7 | 2442MHz |
| 4 | 2427MHz | 8 | 2447MHz |
| 5 | 2432MHz | 9 | 2452MHz |
| 6 | 2437MHz | | |

3.3.1 Test Mode Applicability and Tested Channel Detail

| EUT CONFIGURE MODE | APPLICABLE TO | | | DESCRIPTION |
|--------------------|---------------|-----------|------|--------------------|
| | RE \geq 1G | RE $<$ 1G | APCM | |
| - | √ | √ | √ | With antenna No. 3 |

Where **RE \geq 1G**: Radiated Emission above 1GHz & Bandedge Measurement
RE $<$ 1G: Radiated Emission below 1GHz
APCM: Antenna Port Conducted Measurement

NOTE: The EUT's antenna had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Y-plane.

Radiated Emission Test (Above 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

| MODE | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|----------------|-------------------|----------------|-----------------------|-----------------|------------------|
| 802.11b | 1 to 11 | 1, 6, 11 | DSSS | DBPSK | 1 |
| 802.11g | 1 to 11 | 1, 6, 11 | OFDM | BPSK | 6 |
| 802.11n (HT20) | 1 to 11 | 1, 6, 11 | OFDM | BPSK | 6.5 |
| 802.11n (HT40) | 3 to 9 | 3, 6, 9 | OFDM | BPSK | 13.5 |

Radiated Emission Test (Below 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

| MODE | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|---------|-------------------|----------------|-----------------------|-----------------|------------------|
| 802.11g | 1 to 11 | 6 | OFDM | BPSK | 6 |

Antenna Port Conducted Measurement:

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

| MODE | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|----------------|-------------------|----------------|-----------------------|-----------------|------------------|
| 802.11b | 1 to 11 | 1, 6, 11 | DSSS | DBPSK | 1 |
| 802.11g | 1 to 11 | 1, 6, 11 | OFDM | BPSK | 6 |
| 802.11n (HT20) | 1 to 11 | 1, 6, 11 | OFDM | BPSK | 6.5 |
| 802.11n (HT40) | 3 to 9 | 3, 6, 9 | OFDM | BPSK | 13.5 |

Test Condition:

| APPLICABLE TO | ENVIRONMENTAL CONDITIONS | INPUT POWER (System) | TESTED BY |
|---------------|--------------------------|----------------------|-----------|
| RE \geq 1G | 25deg. C, 65%RH | 120Vac, 60Hz | Weiwei Lo |
| RE<1G | 24deg. C, 67%RH | 120Vac, 60Hz | Weiwei Lo |
| APCM | 25deg. C, 60%RH | 120Vac, 60Hz | Weiwei Lo |

3.4 Description of Support Units

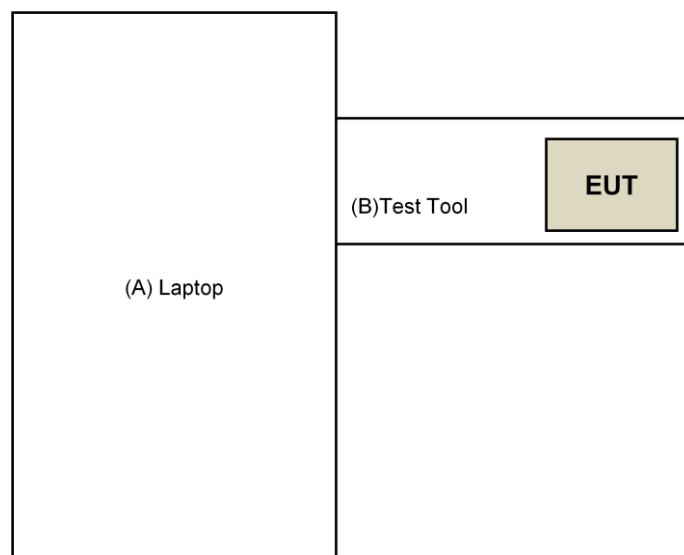
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| ID | Product | Brand | Model No. | Serial No. | FCC ID | Remarks |
|----|-----------|---------|-----------|------------|--------|--------------------|
| A. | Laptop | NA | NA | NA | NA | Supplied by client |
| B. | Test Tool | Atheros | NA | NA | NA | Supplied by client |

Note:

1. All power cords of the above support units are non-shielded (1.8m).

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.247)
KDB 558074 D01 DTS Meas Guidance v03r05
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

| Frequencies (MHz) | Field Strength (microvolts/meter) | Measurement Distance (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 |

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 Test Instruments

For Bandedge test:

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|--|---|----------------------------|---|---|
| Test Receiver Keysight | N9038A | MY54450088 | July 20, 2016 | July 19, 2017 |
| Horn_Antenna SCHWARZBECK | BBHA 9120D | 9120D-783 | Dec. 27, 2016 | Dec. 26, 2017 |
| Pre-Amplifier EMCI | EMC12630SE | 980385 | Feb. 02, 2017 | Feb. 01, 2018 |
| RF Cable | EMC104-SM-SM-2000 EMC104-SM-SM-5000 EMC104-SM-SM-5000 | 160923 150318 150323 | Feb. 02, 2017 Mar. 30, 2016 Mar. 30, 2016 | Feb. 01, 2018 Mar. 29, 2017 Mar. 29, 2017 |
| Pre-Amplifier EMCI | EMC184045SE | 980387 | Feb. 02, 2017 | Feb. 01, 2018 |
| Horn_Antenna SCHWARZBECK | BBHA 9170 | BBHA9170608 | Dec. 15, 2016 | Dec. 14, 2017 |
| RF Cable | SUCOFLEX 102 | 36432/2 36433/2 | Jan. 15, 2017 | Jan. 14, 2018 |
| Software | ADT_Radiated_V8.7.08 | NA | NA | NA |
| Antenna Tower & Turn Table Max-Full | MF-7802 | MF780208410 | NA | NA |
| Boresight Antenna Fixture | FBA-01 | FBA-SIP02 | NA | NA |

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 4.
3. The FCC Site Registration No. is 292998
4. The CANADA Site Registration No. is 20331-2
5. Tested Date: Mar. 17, 2017

For other test items:

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED DATE | CALIBRATED UNTIL |
|--|---|-------------------------------|---|---|
| Test Receiver Keysight | N9038A | MY54450088 | July 20, 2016 | July 19, 2017 |
| Pre-Amplifier ^(*) EMCI | EMC001340 | 980142 | Jan. 20, 2016 | Jan. 19, 2018 |
| Loop Antenna ^(*) Electro-Metrics | EM-6879 | 264 | Dec. 16, 2016 | Dec. 15, 2018 |
| RF Cable | NA | LOOPCAB-001 LOOPCAB-002 | Jan. 17, 2017 | Jan. 16, 2018 |
| Pre-Amplifier Mini-Circuits | ZFL-1000VH2B | AMP-ZFL-01 | Nov. 10, 2016 | Nov. 09, 2017 |
| Trilog Broadband Antenna SCHWARZBECK | VULB 9168 | 9168-406 | Dec. 13, 2016 | Dec. 12, 2017 |
| RF Cable | 8D | 966-4-1 966-4-2 966-4-3 | Apr. 02, 2016 | Apr. 01, 2017 |
| Fixed attenuator Mini-Circuits | UNAT-5+ | PAD-3m-4-01 | Oct. 05, 2016 | Oct. 04, 2017 |
| Horn_Antenna SCHWARZBECK | BBHA 9120D | 9120D-783 | Dec. 27, 2016 | Dec. 26, 2017 |
| Pre-Amplifier EMCI | EMC12630SE | 980385 | Feb. 02, 2017 | Feb. 01, 2018 |
| RF Cable | EMC104-SM-SM-2000 EMC104-SM-SM-5000 EMC104-SM-SM-5000 | 160923 150318 150323 | Feb. 02, 2017 Mar. 30, 2016 Mar. 30, 2016 | Feb. 01, 2018 Mar. 29, 2017 Mar. 29, 2017 |
| Pre-Amplifier EMCI | EMC184045SE | 980387 | Feb. 02, 2017 | Feb. 01, 2018 |
| Horn_Antenna SCHWARZBECK | BBHA 9170 | BBHA9170608 | Dec. 15, 2016 | Dec. 14, 2017 |
| RF Cable | SUCOFLEX 102 | 36432/2 36433/2 | Jan. 15, 2017 | Jan. 14, 2018 |
| Software | ADT_Radiated_V8.7.08 | NA | NA | NA |
| Antenna Tower & Turn Table Max-Full | MF-7802 | MF780208410 | NA | NA |
| Boresight Antenna Fixture | FBA-01 | FBA-SIP02 | NA | NA |
| Spectrum Analyzer Agilent | E4446A | MY48250253 | Dec. 21, 2016 | Dec. 20, 2017 |
| Power meter Anritsu | ML2495A | 1014008 | May 05, 2016 | May 04, 2017 |
| Power sensor Anritsu | MA2411B | 0917122 | May 05, 2016 | May 04, 2017 |

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 4.
3. The FCC Site Registration No. is 292998
4. The CANADA Site Registration No. is 20331-2
5. Tested Date: Feb. 22 to 23, 2017

4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Both X and Y axes of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

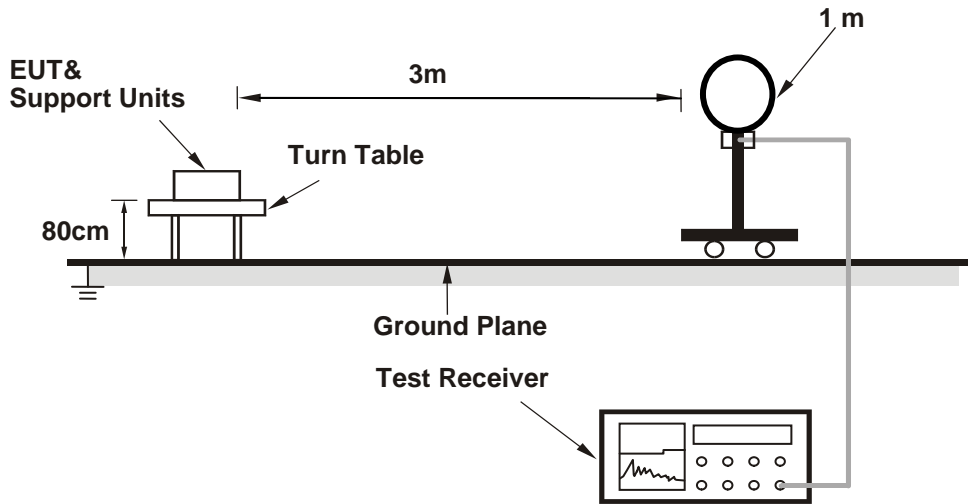
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

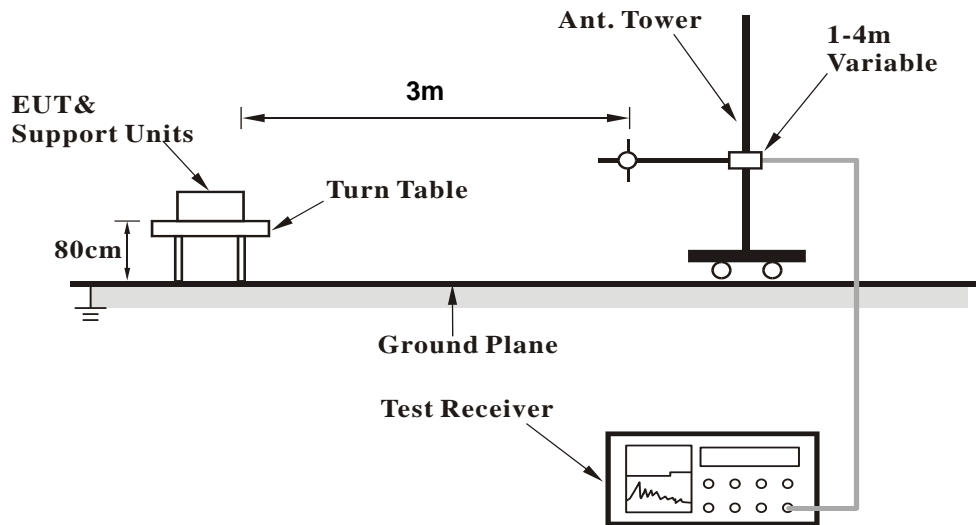
No deviation.

4.1.5 Test Setup

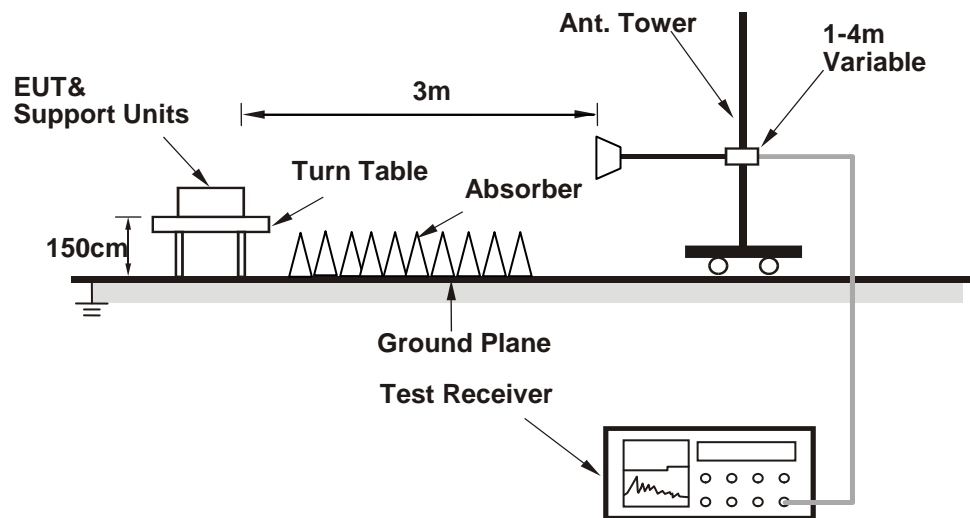
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

- a. Connected the EUT with the Laptop which is placed on table.
- b. Controlling software (Atheros Radio Test 2 (ART2-GUI)) has been activated to set the EUT on specific status.

4.1.7 Test Results (Bandedge)

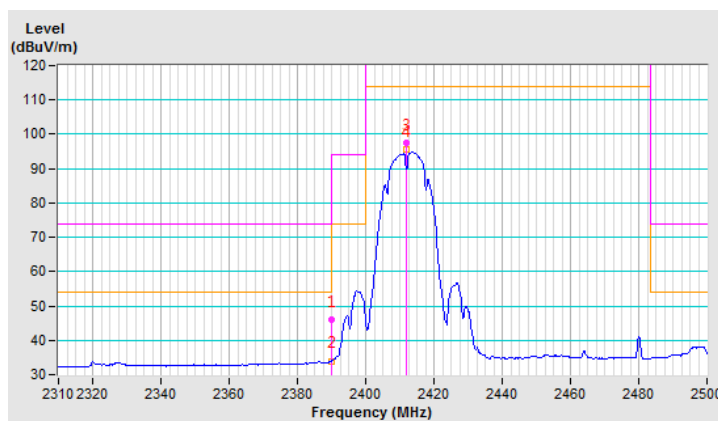
802.11b

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 2390.00 | 46.0 PK | 74.0 | -28.0 | 1.47 H | 21 | 48.1 | -2.1 |
| 2 | 2390.00 | 34.0 AV | 54.0 | -20.0 | 1.47 H | 21 | 36.1 | -2.1 |
| 3 | *2412.00 | 97.6 PK | | | 1.47 H | 21 | 99.6 | -2.0 |
| 4 | *2412.00 | 95.7 AV | | | 1.47 H | 21 | 97.7 | -2.0 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



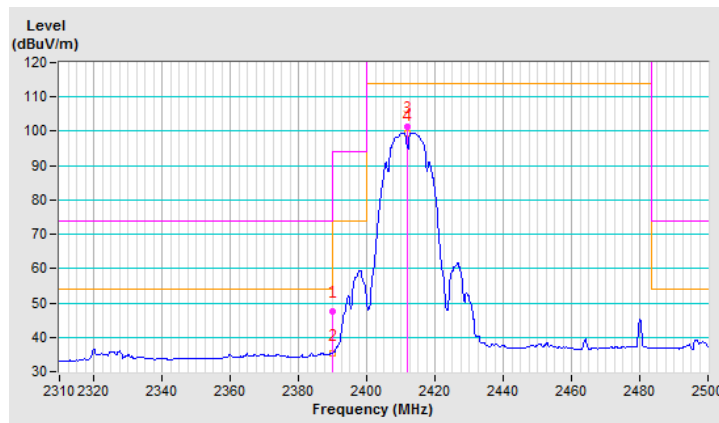
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 47.7 PK | 74.0 | -26.3 | 1.19 V | 151 | 49.8 | -2.1 |
| 2 | 2390.00 | 35.3 AV | 54.0 | -18.7 | 1.19 V | 151 | 37.4 | -2.1 |
| 3 | *2412.00 | 101.5 PK | | | 1.19 V | 151 | 103.5 | -2.0 |
| 4 | *2412.00 | 99.3 AV | | | 1.19 V | 151 | 101.3 | -2.0 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



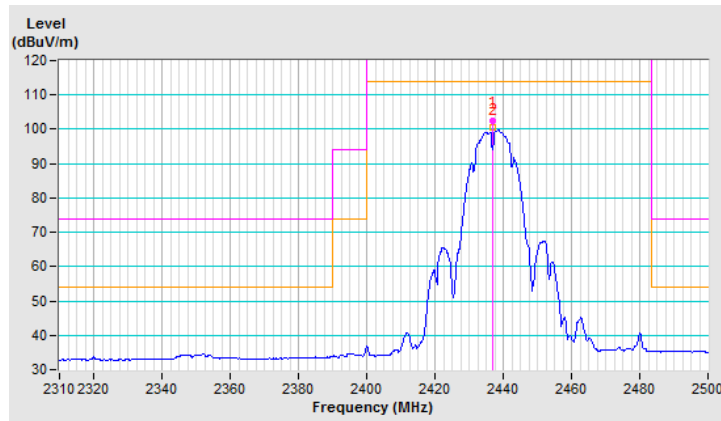
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2437.00 | 102.4 PK | | | 1.49 H | 23 | 104.3 | -1.9 |
| 2 | *2437.00 | 100.4 AV | | | 1.49 H | 23 | 102.3 | -1.9 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



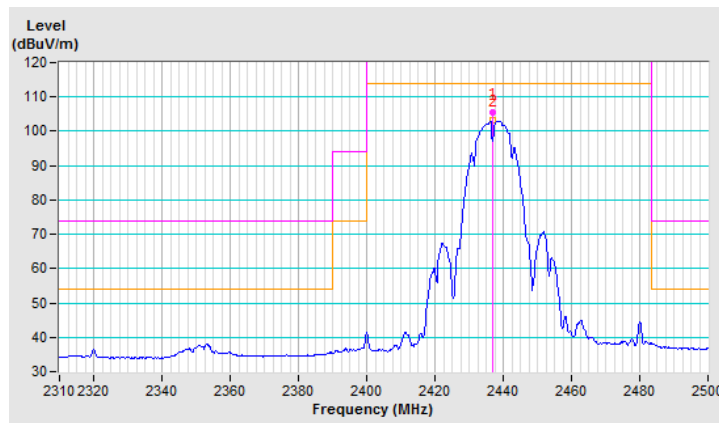
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2437.00 | 105.5 PK | | | 1.00 V | 129 | 107.4 | -1.9 |
| 2 | *2437.00 | 103.4 AV | | | 1.00 V | 129 | 105.3 | -1.9 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



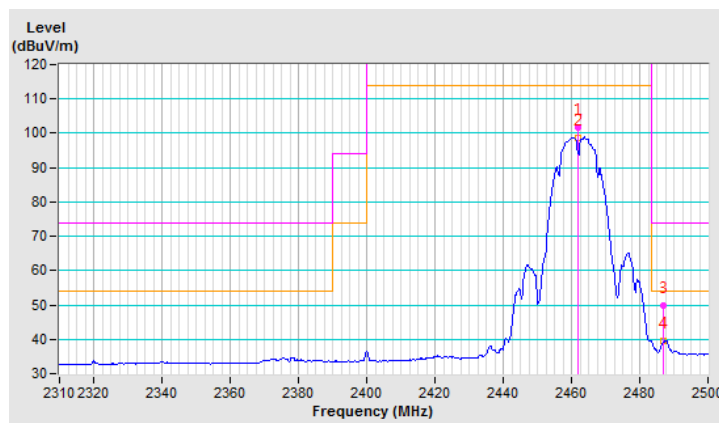
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2462.00 | 101.6 PK | | | 1.46 H | 37 | 103.4 | -1.8 |
| 2 | *2462.00 | 98.5 AV | | | 1.46 H | 37 | 100.3 | -1.8 |
| 3 | 2487.00 | 49.8 PK | 74.0 | -24.2 | 1.46 H | 37 | 51.5 | -1.7 |
| 4 | 2487.00 | 39.6 AV | 54.0 | -14.4 | 1.46 H | 37 | 41.3 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



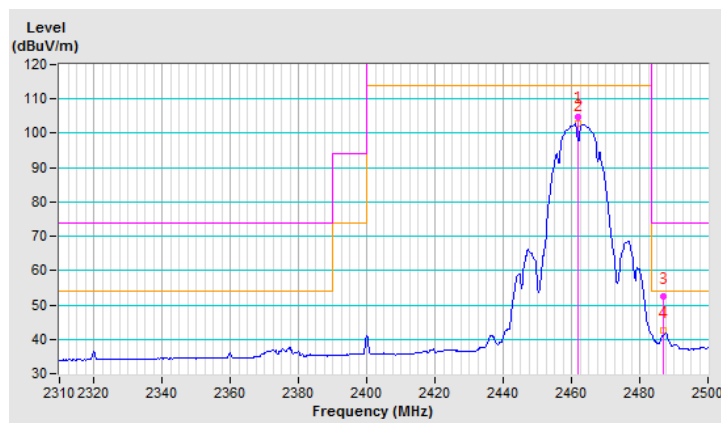
| | | | |
|------------------------|---------------|------------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1 | *2462.00 | 104.9 PK | | | 1.00 V | 129 | 106.7 | -1.8 |
| 2 | *2462.00 | 102.8 AV | | | 1.00 V | 129 | 104.6 | -1.8 |
| 3 | 2487.00 | 52.5 PK | 74.0 | -21.5 | 1.00 V | 129 | 54.2 | -1.7 |
| 4 | 2487.00 | 42.4 AV | 54.0 | -11.6 | 1.00 V | 129 | 44.1 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



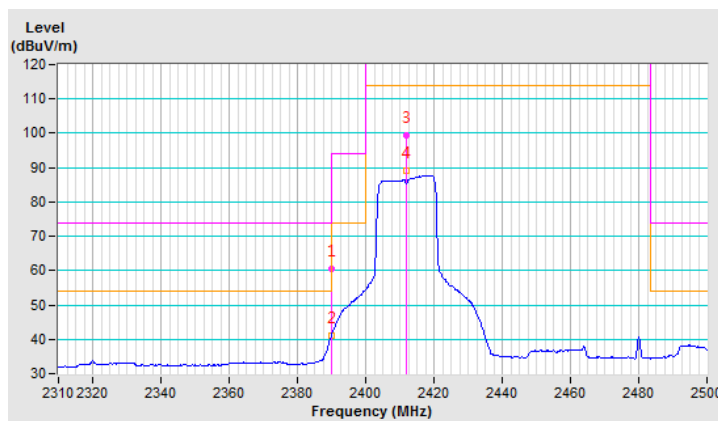
802.11g

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 2390.00 | 60.4 PK | 74.0 | -13.6 | 1.44 H | 25 | 62.5 | -2.1 |
| 2 | 2390.00 | 41.0 AV | 54.0 | -13.0 | 1.44 H | 25 | 43.1 | -2.1 |
| 3 | *2412.00 | 99.5 PK | | | 1.44 H | 25 | 101.5 | -2.0 |
| 4 | *2412.00 | 89.0 AV | | | 1.44 H | 25 | 91.0 | -2.0 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



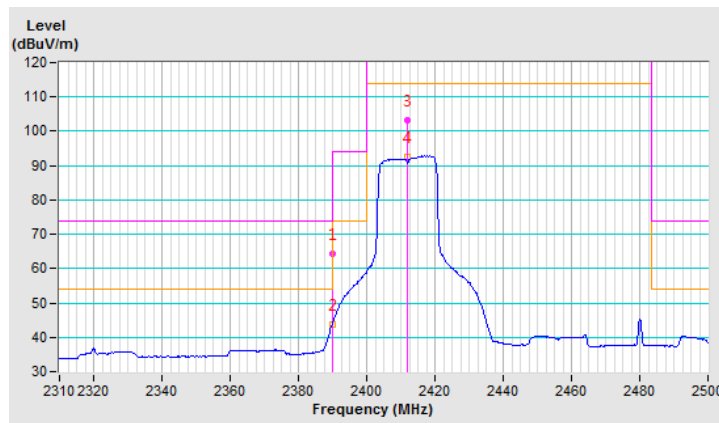
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 64.5 PK | 74.0 | -9.5 | 1.16 V | 149 | 66.6 | -2.1 |
| 2 | 2390.00 | 43.9 AV | 54.0 | -10.1 | 1.16 V | 149 | 46.0 | -2.1 |
| 3 | *2412.00 | 103.4 PK | | | 1.16 V | 149 | 105.4 | -2.0 |
| 4 | *2412.00 | 92.7 AV | | | 1.16 V | 149 | 94.7 | -2.0 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



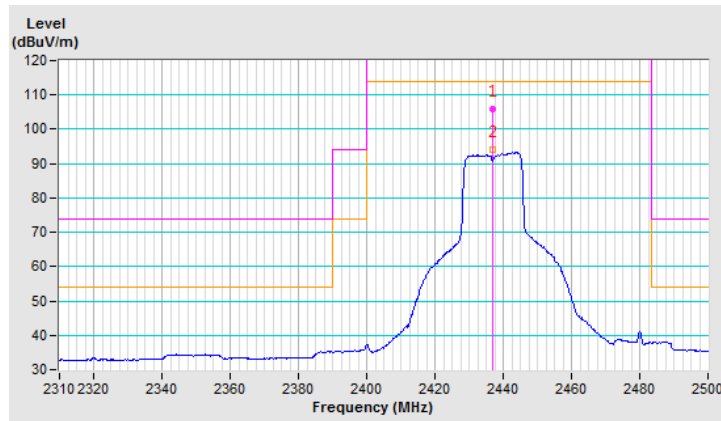
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2437.00 | 105.7 PK | | | 1.51 H | 43 | 107.6 | -1.9 |
| 2 | *2437.00 | 94.2 AV | | | 1.51 H | 43 | 96.1 | -1.9 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



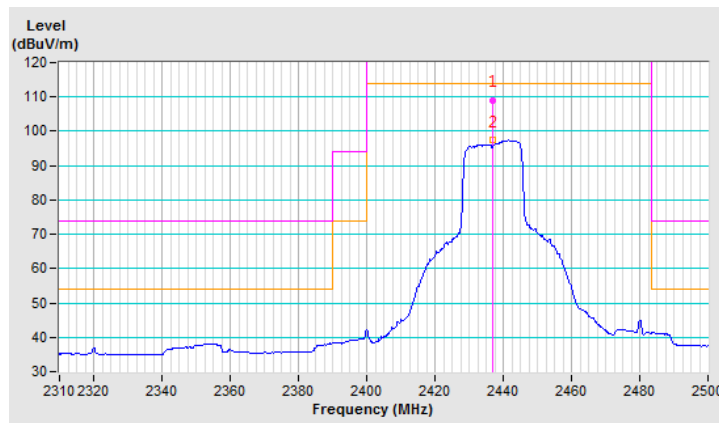
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2437.00 | 109.1 PK | | | 1.27 V | 146 | 111.0 | -1.9 |
| 2 | *2437.00 | 97.6 AV | | | 1.27 V | 146 | 99.5 | -1.9 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



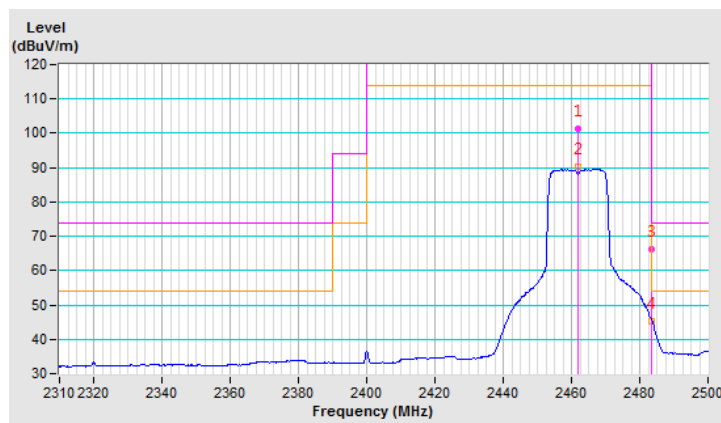
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2462.00 | 101.3 PK | | | 1.42 H | 36 | 103.1 | -1.8 |
| 2 | *2462.00 | 90.4 AV | | | 1.42 H | 36 | 92.2 | -1.8 |
| 3 | 2483.50 | 66.1 PK | 74.0 | -7.9 | 1.42 H | 36 | 67.8 | -1.7 |
| 4 | 2483.50 | 45.2 AV | 54.0 | -8.8 | 1.42 H | 36 | 46.9 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



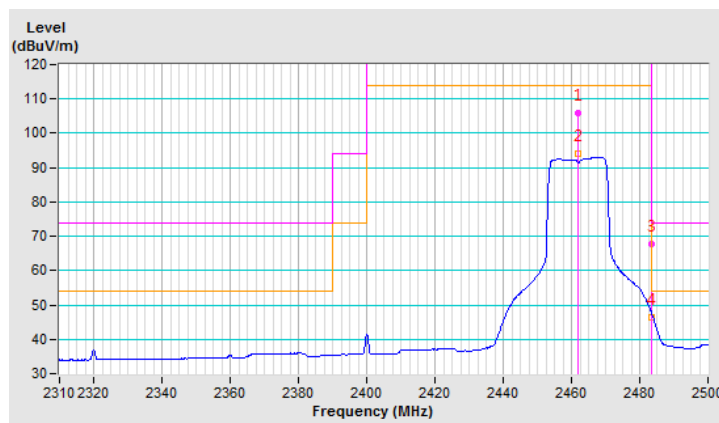
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2462.00 | 105.7 PK | | | 1.27 V | 251 | 107.5 | -1.8 |
| 2 | *2462.00 | 94.2 AV | | | 1.27 V | 251 | 96.0 | -1.8 |
| 3 | 2483.50 | 67.8 PK | 74.0 | -6.2 | 1.27 V | 251 | 69.5 | -1.7 |
| 4 | 2483.50 | 46.5 AV | 54.0 | -7.5 | 1.27 V | 251 | 48.2 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



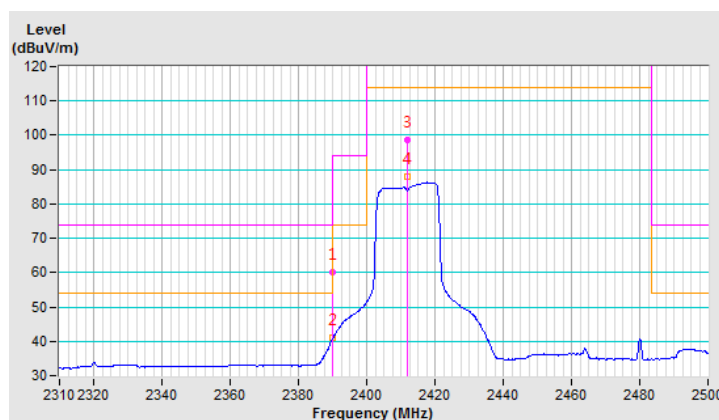
802.11n (HT20)

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 2390.00 | 60.0 PK | 74.0 | -14.0 | 1.40 H | 51 | 62.1 | -2.1 |
| 2 | 2390.00 | 40.9 AV | 54.0 | -13.1 | 1.40 H | 51 | 43.0 | -2.1 |
| 3 | *2412.00 | 98.5 PK | | | 1.40 H | 51 | 100.5 | -2.0 |
| 4 | *2412.00 | 88.0 AV | | | 1.40 H | 51 | 90.0 | -2.0 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



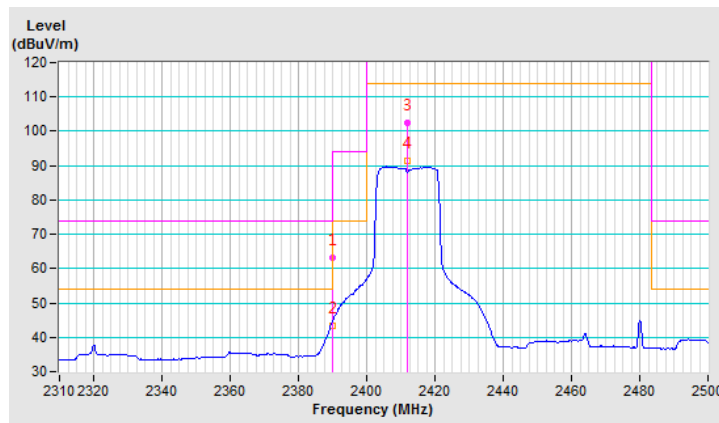
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 63.1 PK | 74.0 | -10.9 | 1.16 V | 149 | 65.2 | -2.1 |
| 2 | 2390.00 | 43.3 AV | 54.0 | -10.7 | 1.16 V | 149 | 45.4 | -2.1 |
| 3 | *2412.00 | 102.4 PK | | | 1.16 V | 149 | 104.4 | -2.0 |
| 4 | *2412.00 | 91.3 AV | | | 1.16 V | 149 | 93.3 | -2.0 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



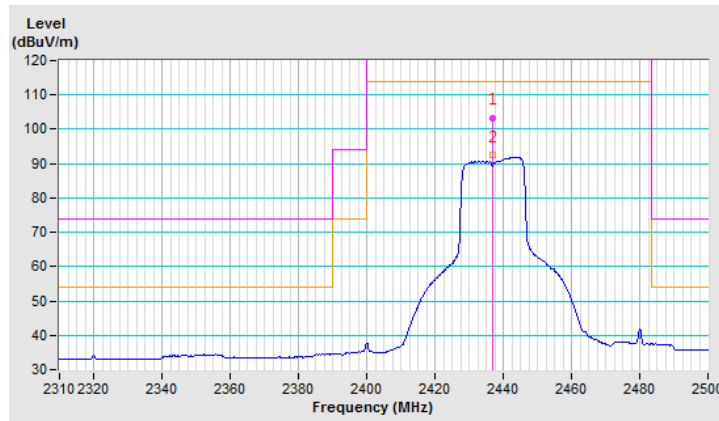
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2437.00 | 103.4 PK | | | 1.50 H | 29 | 105.3 | -1.9 |
| 2 | *2437.00 | 92.6 AV | | | 1.50 H | 29 | 94.5 | -1.9 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



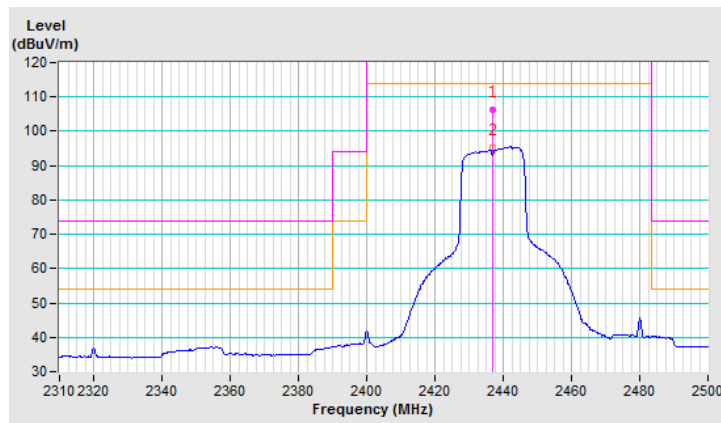
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2437.00 | 106.3 PK | | | 1.16 V | 144 | 108.2 | -1.9 |
| 2 | *2437.00 | 95.3 AV | | | 1.16 V | 144 | 97.2 | -1.9 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



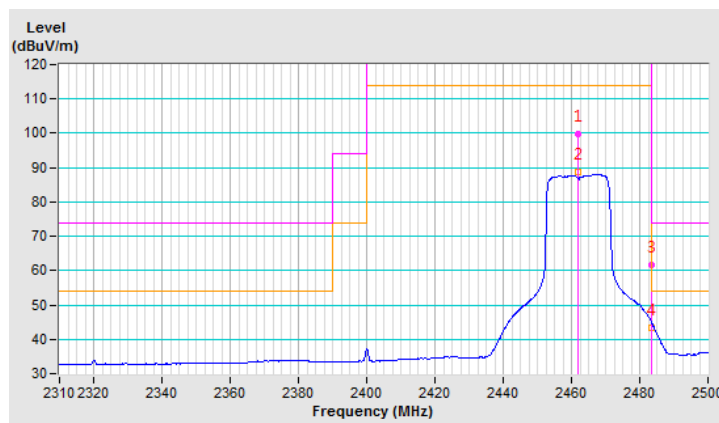
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2462.00 | 99.6 PK | | | 1.40 H | 44 | 101.4 | -1.8 |
| 2 | *2462.00 | 88.7 AV | | | 1.40 H | 44 | 90.5 | -1.8 |
| 3 | 2483.50 | 61.6 PK | 74.0 | -12.4 | 1.40 H | 44 | 63.3 | -1.7 |
| 4 | 2483.50 | 43.2 AV | 54.0 | -10.8 | 1.40 H | 44 | 44.9 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

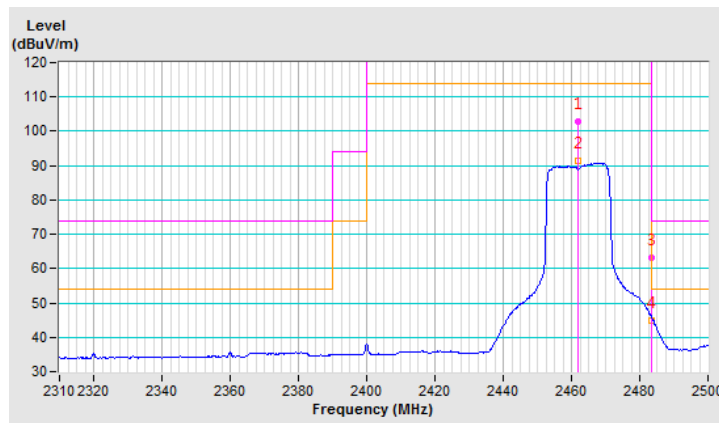


| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *2462.00 | 102.7 PK | | | 1.16 V | 170 | 104.5 | -1.8 |
| 2 | *2462.00 | 91.4 AV | | | 1.16 V | 170 | 93.2 | -1.8 |
| 3 | 2483.50 | 63.3 PK | 74.0 | -10.7 | 1.16 V | 170 | 65.0 | -1.7 |
| 4 | 2483.50 | 44.8 AV | 54.0 | -9.2 | 1.16 V | 170 | 46.5 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



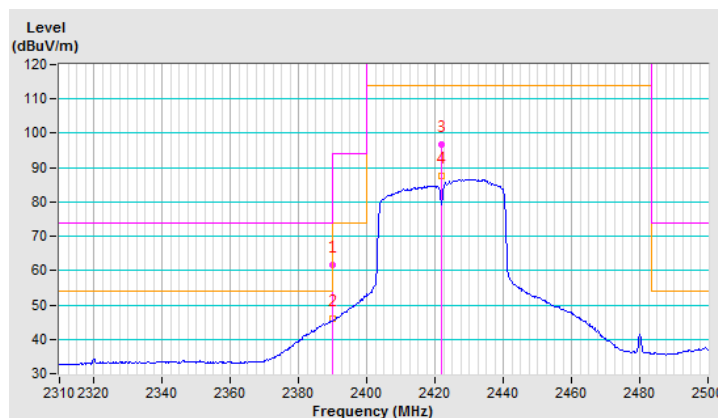
802.11n (HT40)

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 3 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | 2390.00 | 61.6 PK | 74.0 | -12.4 | 1.47 H | 40 | 63.7 | -2.1 |
| 2 | 2390.00 | 46.0 AV | 54.0 | -8.0 | 1.47 H | 40 | 48.1 | -2.1 |
| 3 | *2422.00 | 96.7 PK | | | 1.47 H | 40 | 98.8 | -2.1 |
| 4 | *2422.00 | 87.4 AV | | | 1.47 H | 40 | 89.5 | -2.1 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



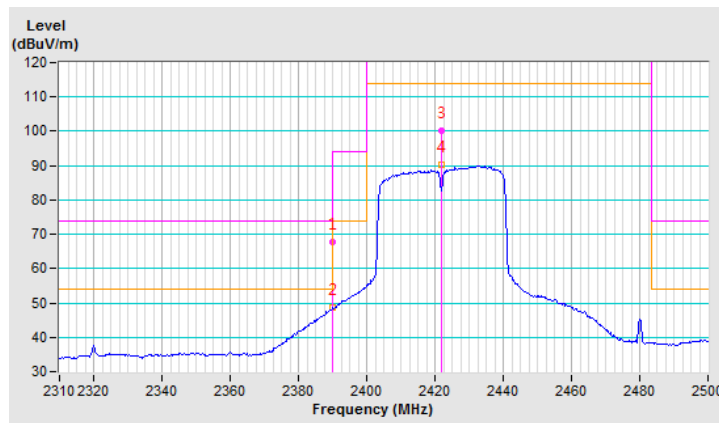
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 3 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 67.6 PK | 74.0 | -6.4 | 1.00 V | 130 | 69.7 | -2.1 |
| 2 | 2390.00 | 48.5 AV | 54.0 | -5.5 | 1.00 V | 130 | 50.6 | -2.1 |
| 3 | *2422.00 | 100.2 PK | | | 1.00 V | 130 | 102.3 | -2.1 |
| 4 | *2422.00 | 90.3 AV | | | 1.00 V | 130 | 92.4 | -2.1 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



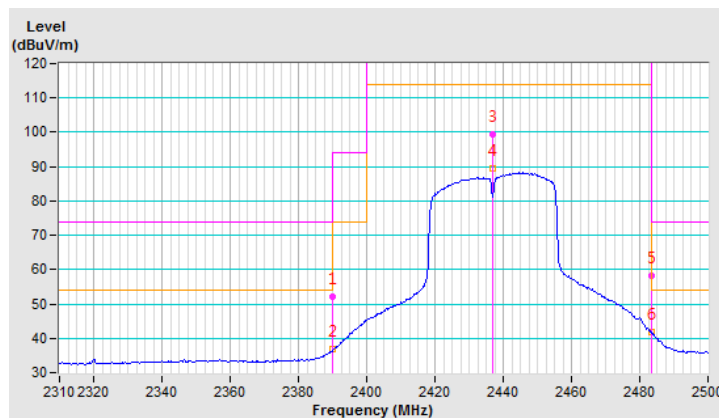
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 52.1 PK | 74.0 | -21.9 | 1.51 H | 35 | 54.2 | -2.1 |
| 2 | 2390.00 | 36.8 AV | 54.0 | -17.2 | 1.51 H | 35 | 38.9 | -2.1 |
| 3 | *2437.00 | 99.4 PK | | | 1.51 H | 35 | 101.3 | -1.9 |
| 4 | *2437.00 | 89.6 AV | | | 1.51 H | 35 | 91.5 | -1.9 |
| 5 | 2483.50 | 58.2 PK | 74.0 | -15.8 | 1.51 H | 35 | 59.9 | -1.7 |
| 6 | 2483.50 | 41.7 AV | 54.0 | -12.3 | 1.51 H | 35 | 43.4 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



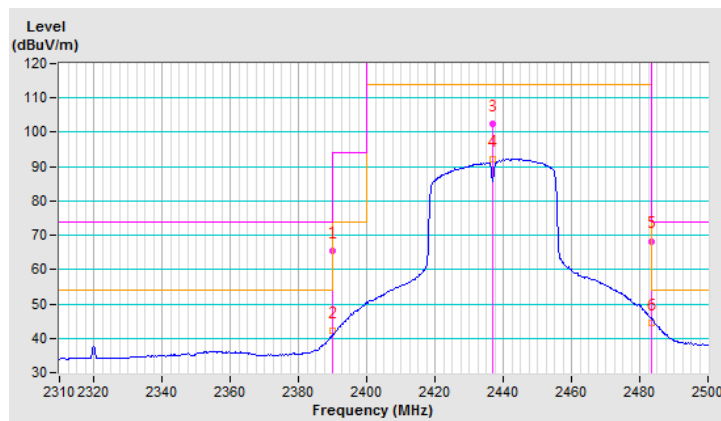
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 65.3 PK | 74.0 | -8.7 | 1.00 V | 129 | 67.4 | -2.1 |
| 2 | 2390.00 | 42.1 AV | 54.0 | -11.9 | 1.00 V | 129 | 44.2 | -2.1 |
| 3 | *2437.00 | 102.5 PK | | | 1.00 V | 129 | 104.4 | -1.9 |
| 4 | *2437.00 | 92.2 AV | | | 1.00 V | 129 | 94.1 | -1.9 |
| 5 | 2483.50 | 68.3 PK | 74.0 | -5.7 | 1.00 V | 129 | 70.0 | -1.7 |
| 6 | 2483.50 | 44.5 AV | 54.0 | -9.5 | 1.00 V | 129 | 46.2 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



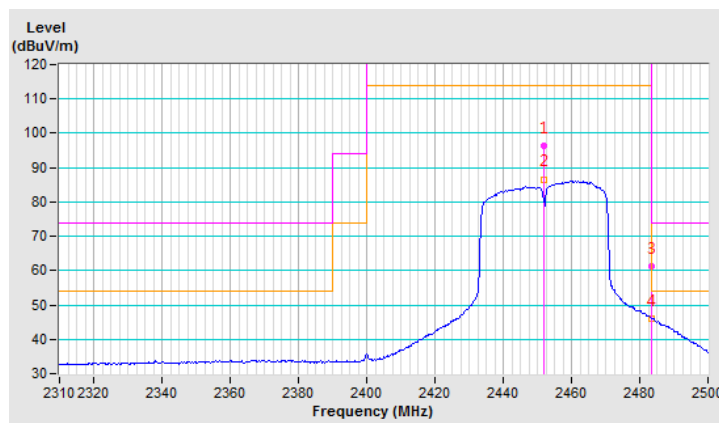
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 9 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | *2452.00 | 96.5 PK | | | 1.48 H | 33 | 98.3 | -1.8 |
| 2 | *2452.00 | 86.6 AV | | | 1.48 H | 33 | 88.4 | -1.8 |
| 3 | 2483.50 | 61.1 PK | 74.0 | -12.9 | 1.48 H | 33 | 62.8 | -1.7 |
| 4 | 2483.50 | 46.1 AV | 54.0 | -7.9 | 1.48 H | 33 | 47.8 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

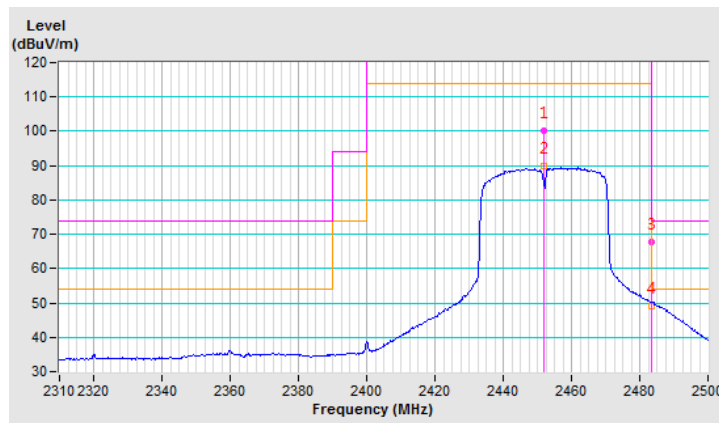


| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 9 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|---|----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | *2452.00 | 100.1 PK | | | 1.00 V | 98 | 101.9 | -1.8 |
| 2 | *2452.00 | 89.8 AV | | | 1.00 V | 98 | 91.6 | -1.8 |
| 3 | 2483.50 | 67.7 PK | 74.0 | -6.3 | 1.00 V | 98 | 69.4 | -1.7 |
| 4 | 2483.50 | 49.1 AV | 54.0 | -4.9 | 1.00 V | 98 | 50.8 | -1.7 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.



4.1.8 Test Results (Radiated)

Above 1GHz Data:

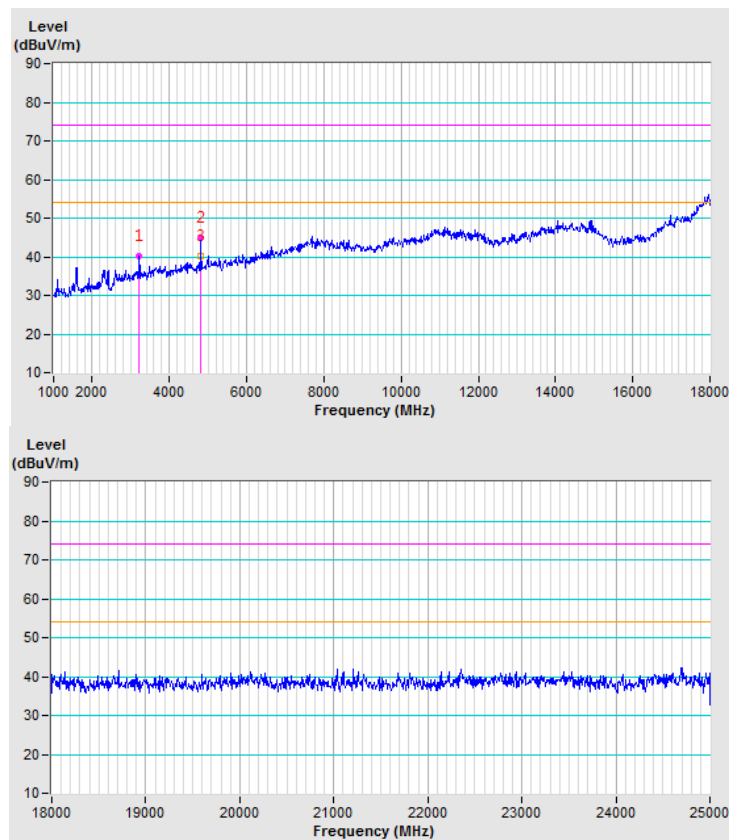
802.11b

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #3216.37 | 40.1 PK | - | - | 1.11 H | 221 | 40.7 | -0.6 |
| 2 | 4824.00 | 45.0 PK | 74.0 | -29.0 | 2.86 H | 332 | 42.8 | 2.2 |
| 3 | 4824.00 | 40.3 AV | 54.0 | -13.7 | 2.86 H | 332 | 38.1 | 2.2 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



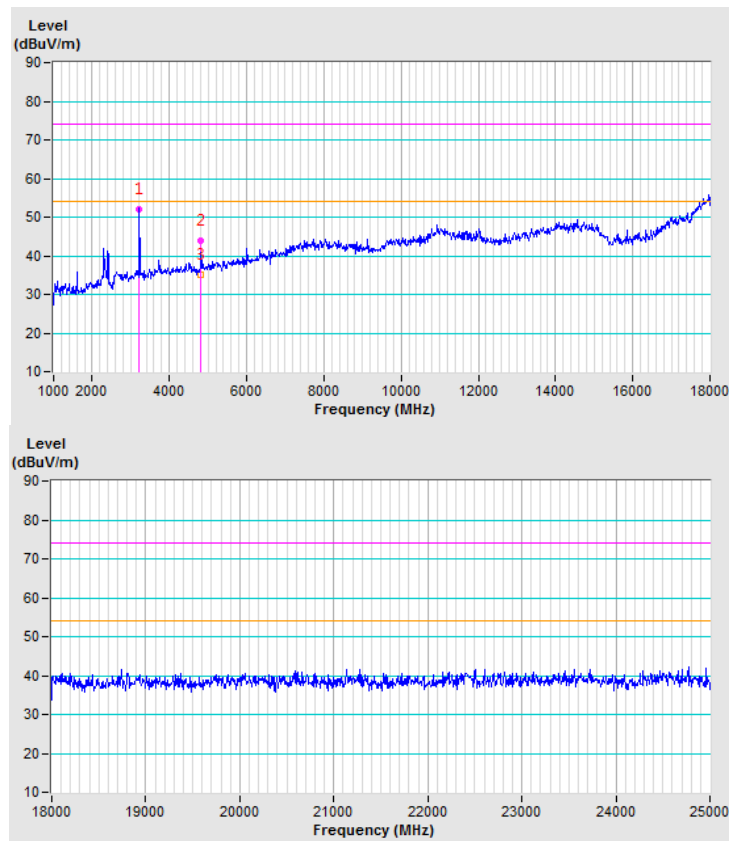
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3216.37 | 52.2 PK | - | - | 1.00 V | 38 | 52.8 | -0.6 |
| 2 | 4824.00 | 43.9 PK | 74.0 | -30.1 | 1.06 V | 181 | 41.7 | 2.2 |
| 3 | 4824.00 | 35.2 AV | 54.0 | -18.8 | 1.06 V | 181 | 33.0 | 2.2 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. "#": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



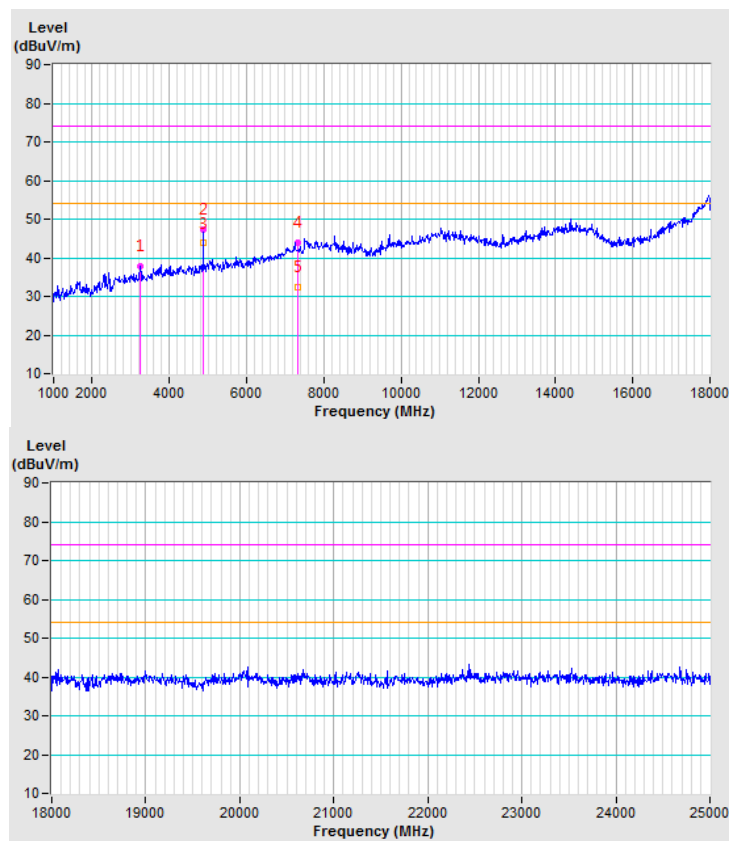
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3249.95 | 37.9 PK | - | - | 1.14 H | 112 | 38.5 | -0.6 |
| 2 | 4874.00 | 47.3 PK | 74.0 | -26.7 | 2.56 H | 325 | 45.0 | 2.3 |
| 3 | 4874.00 | 43.8 AV | 54.0 | -10.2 | 2.56 H | 325 | 41.5 | 2.3 |
| 4 | 7311.00 | 44.0 PK | 74.0 | -30.0 | 1.50 H | 33 | 35.6 | 8.4 |
| 5 | 7311.00 | 32.3 AV | 54.0 | -21.7 | 1.50 H | 33 | 23.9 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



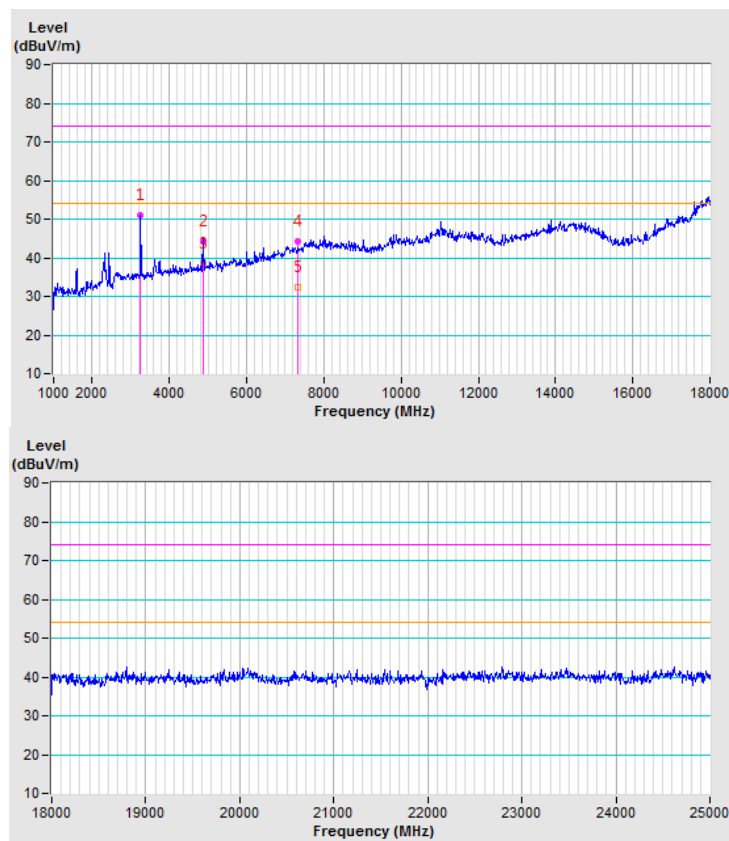
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3249.95 | 51.0 PK | - | - | 1.22 V | 21 | 51.6 | -0.6 |
| 2 | 4874.00 | 44.3 PK | 74.0 | -29.7 | 1.05 V | 183 | 42.0 | 2.3 |
| 3 | 4874.00 | 38.6 AV | 54.0 | -15.4 | 1.05 V | 183 | 36.3 | 2.3 |
| 4 | 7311.00 | 44.2 PK | 74.0 | -29.8 | 1.50 V | 166 | 35.8 | 8.4 |
| 5 | 7311.00 | 32.4 AV | 54.0 | -21.6 | 1.50 V | 166 | 24.0 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



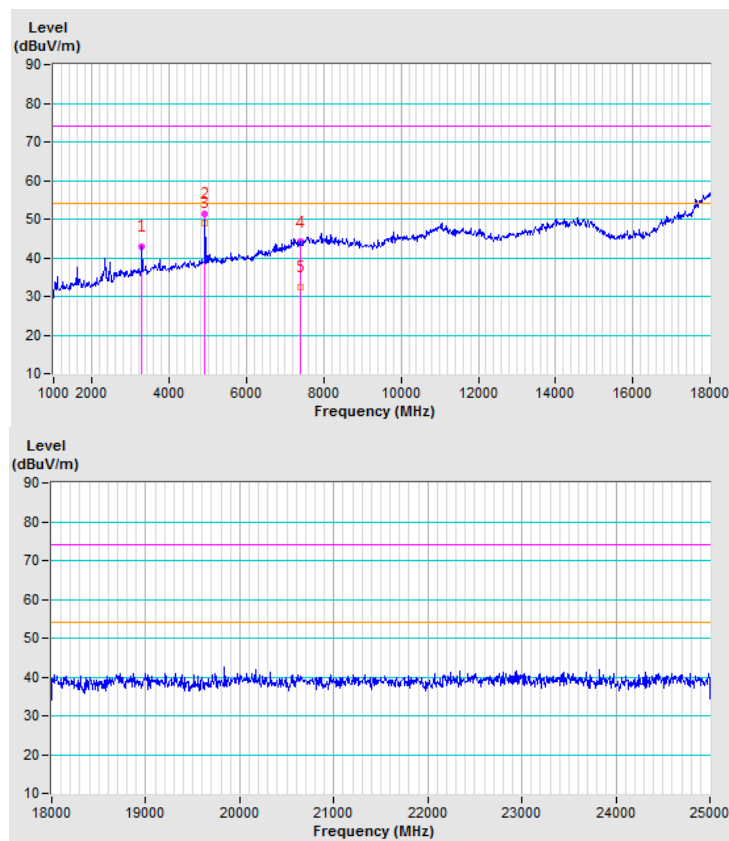
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|----------|----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3283.10 | 42.9 PK | - | - | 1.24 H | 22 | 43.3 | -0.4 |
| 2 | 4924.00 | 51.3 PK | 74.0 | -22.7 | 2.64 H | 329 | 48.9 | 2.4 |
| 3 | 4924.00 | 49.1 AV | 54.0 | -4.9 | 2.64 H | 329 | 46.7 | 2.4 |
| 4 | 7386.00 | 44.1 PK | 74.0 | -29.9 | 1.51 H | 17 | 35.6 | 8.5 |
| 5 | 7386.00 | 32.5 AV | 54.0 | -21.5 | 1.51 H | 17 | 24.0 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



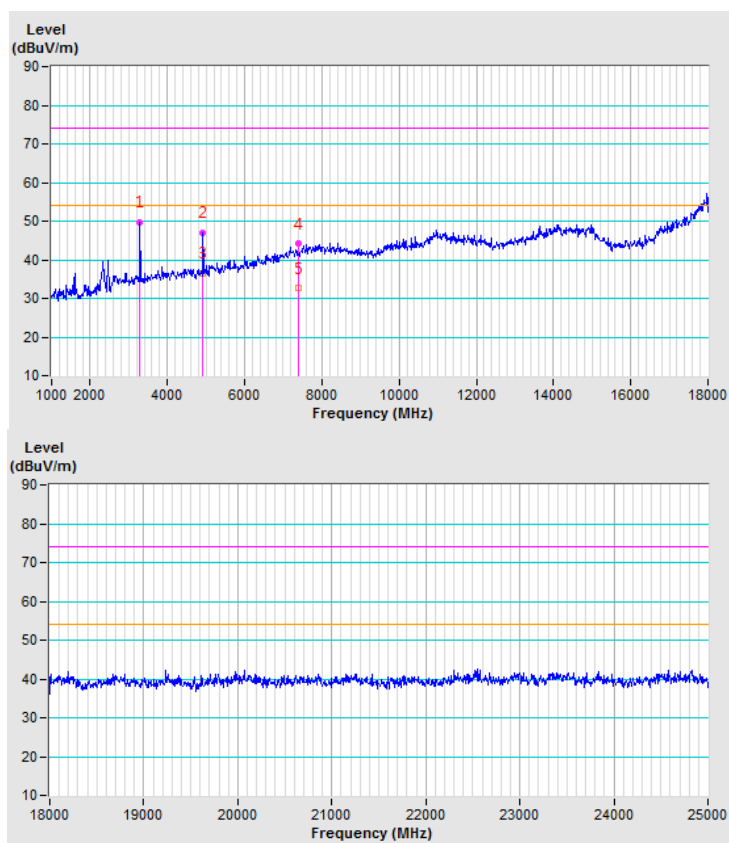
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3283.10 | 49.6 PK | - | - | 1.00 V | 43 | 50.0 | -0.4 |
| 2 | 4924.00 | 47.0 PK | 74.0 | -27.0 | 1.10 V | 172 | 44.6 | 2.4 |
| 3 | 4924.00 | 36.5 AV | 54.0 | -17.5 | 1.10 V | 172 | 34.1 | 2.4 |
| 4 | 7386.00 | 44.1 PK | 74.0 | -29.9 | 1.54 V | 153 | 35.6 | 8.5 |
| 5 | 7386.00 | 32.6 AV | 54.0 | -21.4 | 1.54 V | 153 | 24.1 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



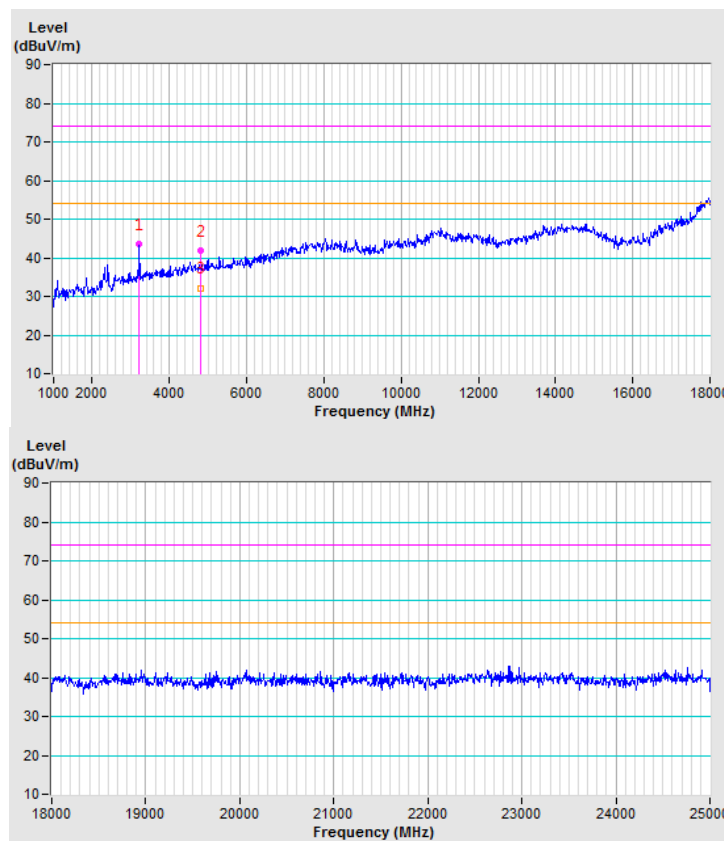
802.11g

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #3216.80 | 43.4 PK | - | - | 1.11 H | 122 | 44.0 | -0.6 |
| 2 | 4824.00 | 41.7 PK | 74.0 | -32.3 | 2.55 H | 308 | 39.5 | 2.2 |
| 3 | 4824.00 | 32.2 AV | 54.0 | -21.8 | 2.55 H | 308 | 30.0 | 2.2 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



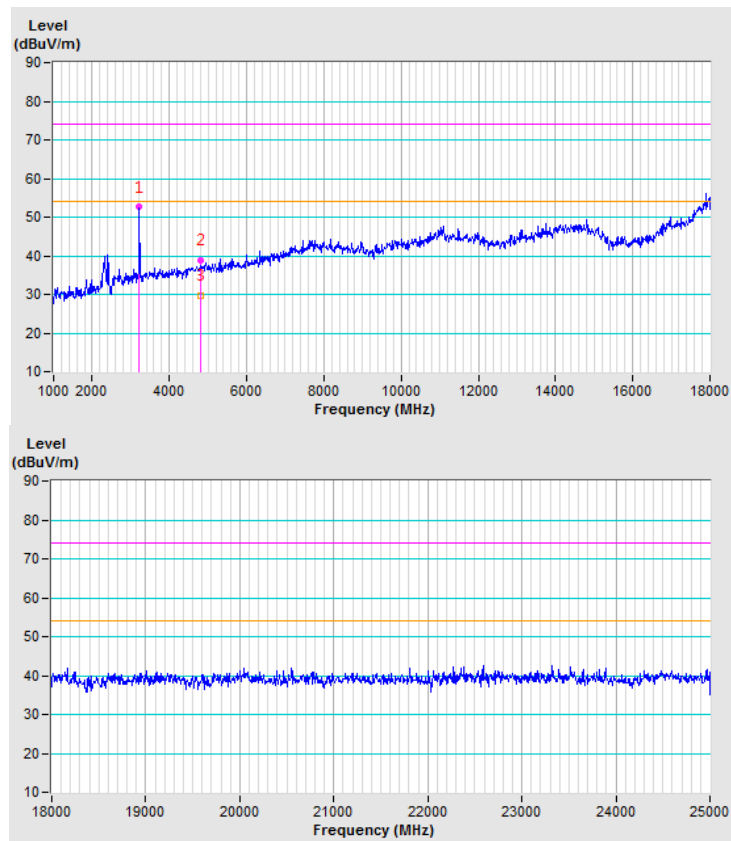
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3216.37 | 52.6 PK | - | - | 1.22 V | 35 | 53.2 | -0.6 |
| 2 | 4824.00 | 38.8 PK | 74.0 | -35.2 | 1.52 V | 280 | 36.6 | 2.2 |
| 3 | 4824.00 | 29.8 AV | 54.0 | -24.2 | 1.52 V | 280 | 27.6 | 2.2 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



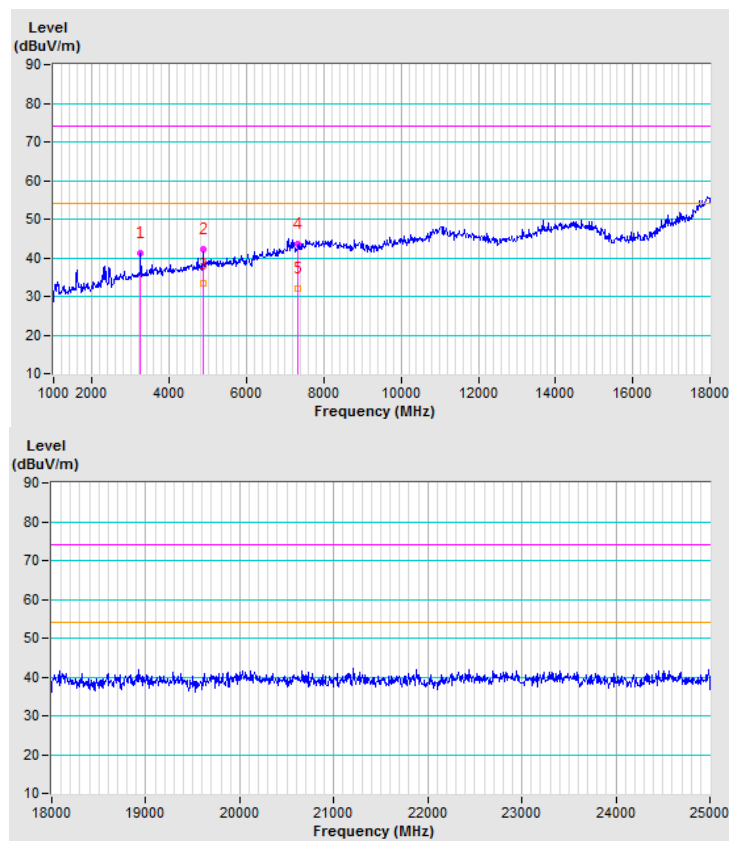
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3249.95 | 41.2 PK | - | - | 1.22 H | 21 | 41.8 | -0.6 |
| 2 | 4874.00 | 42.2 PK | 74.0 | -31.8 | 2.56 H | 325 | 39.9 | 2.3 |
| 3 | 4874.00 | 33.3 AV | 54.0 | -20.7 | 2.56 H | 325 | 31.0 | 2.3 |
| 4 | 7311.00 | 43.7 PK | 74.0 | -30.3 | 1.50 H | 26 | 35.3 | 8.4 |
| 5 | 7311.00 | 32.2 AV | 54.0 | -21.8 | 1.50 H | 26 | 23.8 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



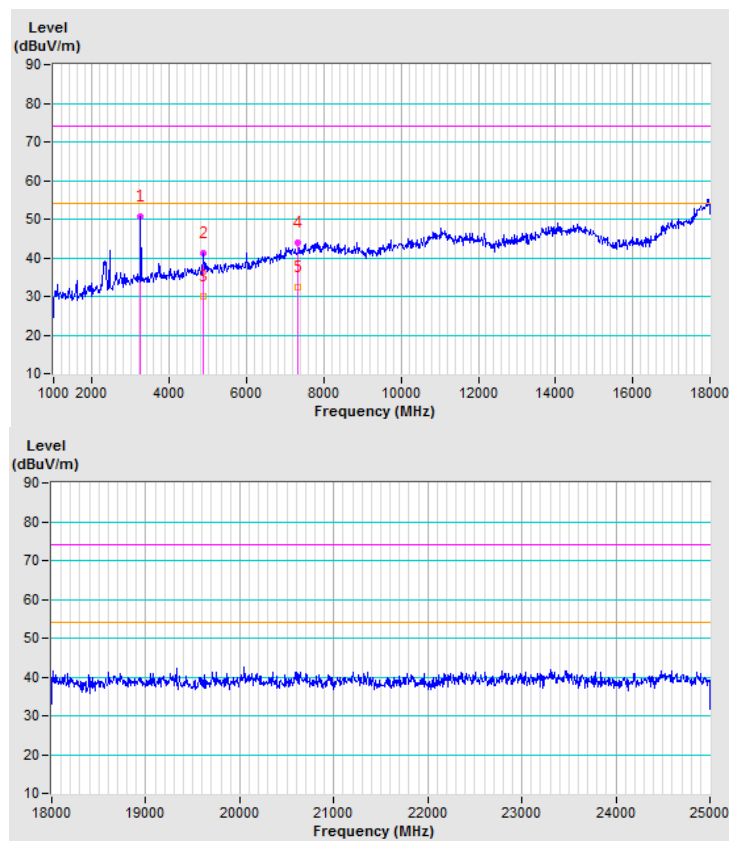
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3249.95 | 50.7 PK | - | - | 1.11 V | 41 | 51.3 | -0.6 |
| 2 | 4874.00 | 41.2 PK | 74.0 | -32.8 | 1.55 V | 277 | 38.9 | 2.3 |
| 3 | 4874.00 | 30.1 AV | 54.0 | -23.9 | 1.55 V | 277 | 27.8 | 2.3 |
| 4 | 7311.00 | 43.9 PK | 74.0 | -30.1 | 1.44 V | 171 | 35.5 | 8.4 |
| 5 | 7311.00 | 32.4 AV | 54.0 | -21.6 | 1.44 V | 171 | 24.0 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



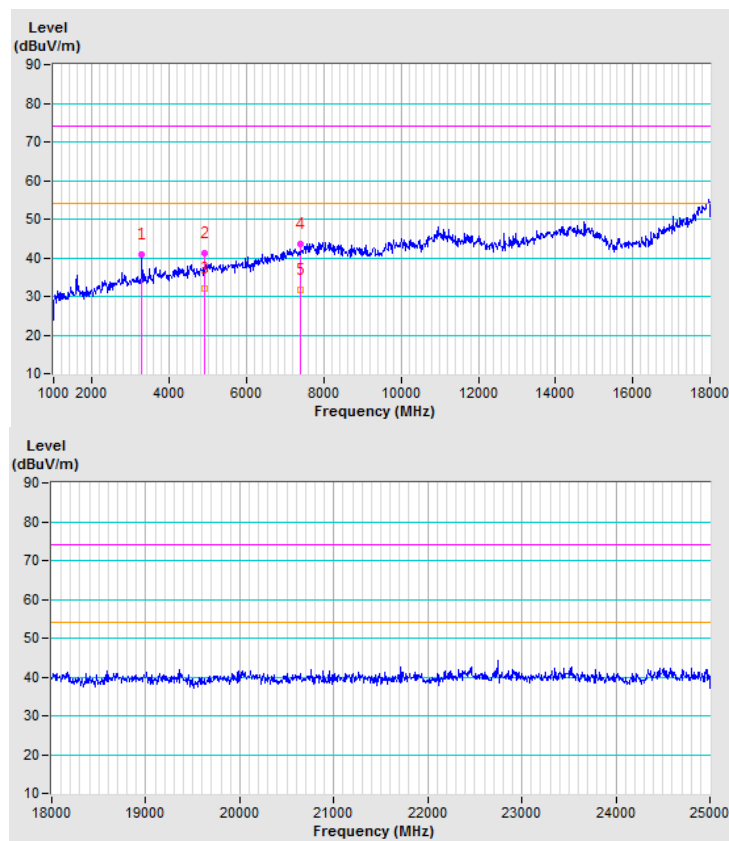
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3283.53 | 40.9 PK | - | - | 1.44 H | 22 | 41.3 | -0.4 |
| 2 | 4924.00 | 41.2 PK | 74.0 | -32.8 | 2.58 H | 313 | 38.8 | 2.4 |
| 3 | 4924.00 | 32.1 AV | 54.0 | -21.9 | 2.58 H | 313 | 29.7 | 2.4 |
| 4 | 7386.00 | 43.5 PK | 74.0 | -30.5 | 1.49 H | 40 | 35.0 | 8.5 |
| 5 | 7386.00 | 31.7 AV | 54.0 | -22.3 | 1.49 H | 40 | 23.2 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



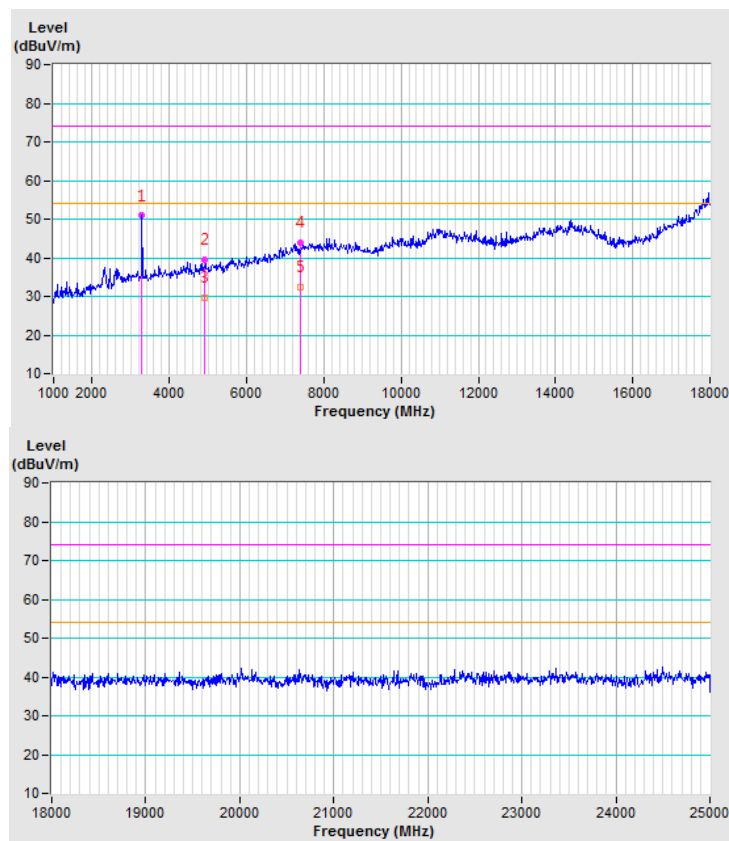
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3283.10 | 50.9 PK | - | - | 1.21 V | 48 | 51.3 | -0.4 |
| 2 | 4924.00 | 39.5 PK | 74.0 | -34.5 | 1.59 V | 286 | 37.1 | 2.4 |
| 3 | 4924.00 | 29.7 AV | 54.0 | -24.3 | 1.59 V | 286 | 27.3 | 2.4 |
| 4 | 7386.00 | 43.9 PK | 74.0 | -30.1 | 1.46 V | 179 | 35.4 | 8.5 |
| 5 | 7386.00 | 32.5 AV | 54.0 | -21.5 | 1.46 V | 179 | 24.0 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



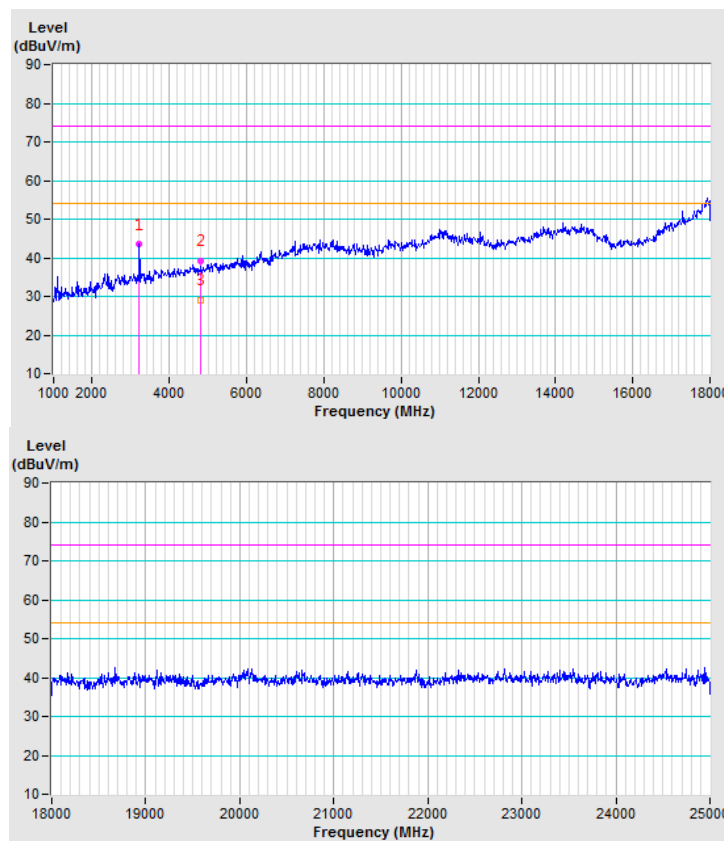
802.11n (HT20)

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #3216.37 | 43.4 PK | - | - | 1.22 H | 33 | 44.0 | -0.6 |
| 2 | 4824.00 | 39.2 PK | 74.0 | -34.8 | 2.54 H | 318 | 37.0 | 2.2 |
| 3 | 4824.00 | 29.0 AV | 54.0 | -25.0 | 2.54 H | 318 | 26.8 | 2.2 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



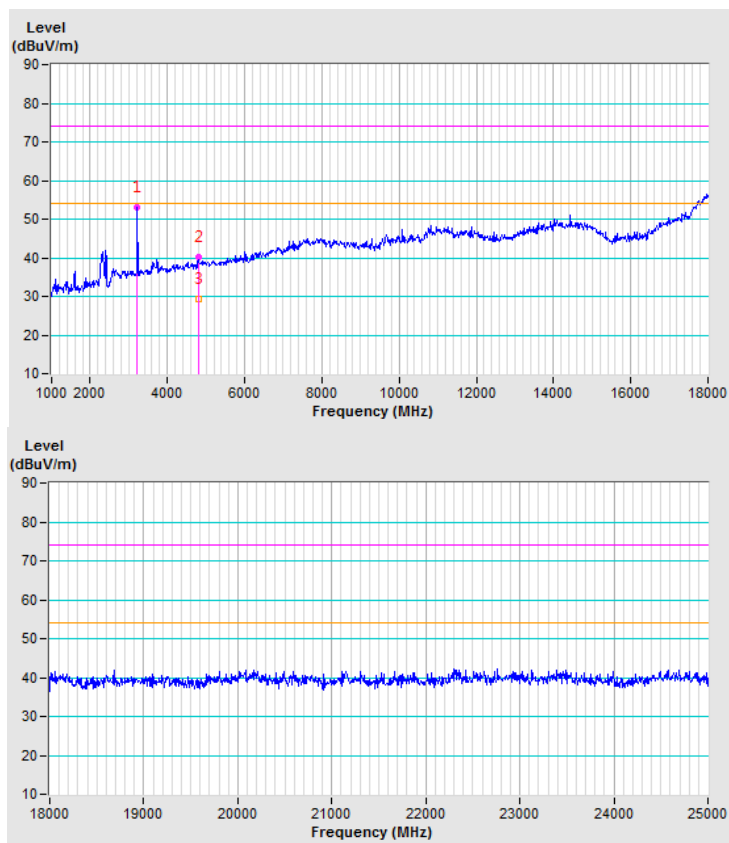
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 1 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3216.37 | 53.2 PK | - | - | 1.12 V | 123 | 53.8 | -0.6 |
| 2 | 4824.00 | 40.2 PK | 74.0 | -33.8 | 1.57 V | 287 | 38.0 | 2.2 |
| 3 | 4824.00 | 29.3 AV | 54.0 | -24.7 | 1.57 V | 287 | 27.1 | 2.2 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. "#": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



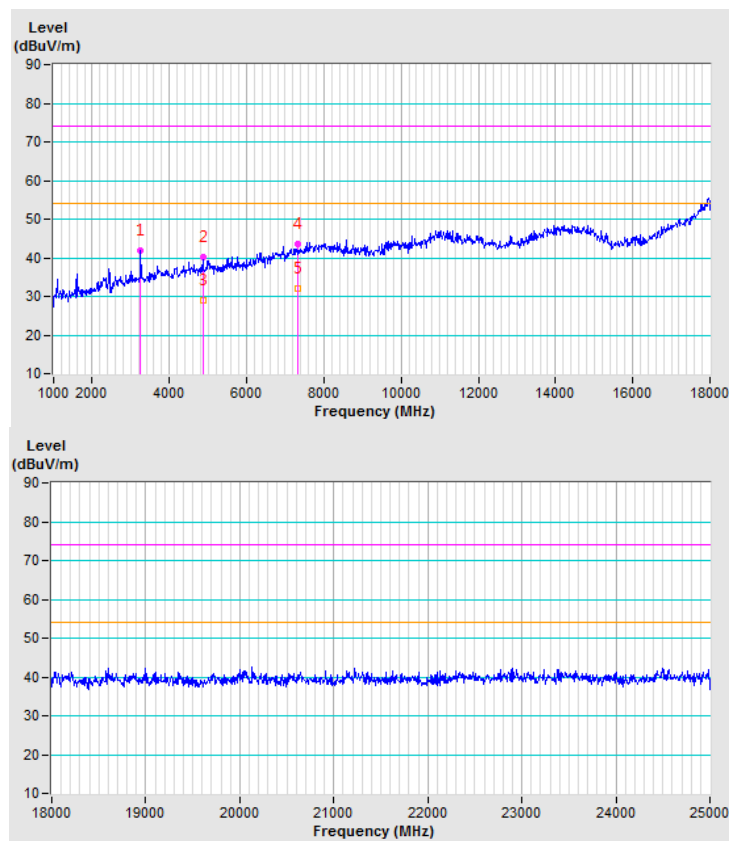
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3249.95 | 41.8 PK | - | - | 1.26 H | 111 | 42.4 | -0.6 |
| 2 | 4874.00 | 40.2 PK | 74.0 | -33.8 | 2.56 H | 323 | 37.9 | 2.3 |
| 3 | 4874.00 | 29.1 AV | 54.0 | -24.9 | 2.56 H | 323 | 26.8 | 2.3 |
| 4 | 7311.00 | 43.5 PK | 74.0 | -30.5 | 1.54 H | 29 | 35.1 | 8.4 |
| 5 | 7311.00 | 32.1 AV | 54.0 | -21.9 | 1.54 H | 29 | 23.7 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



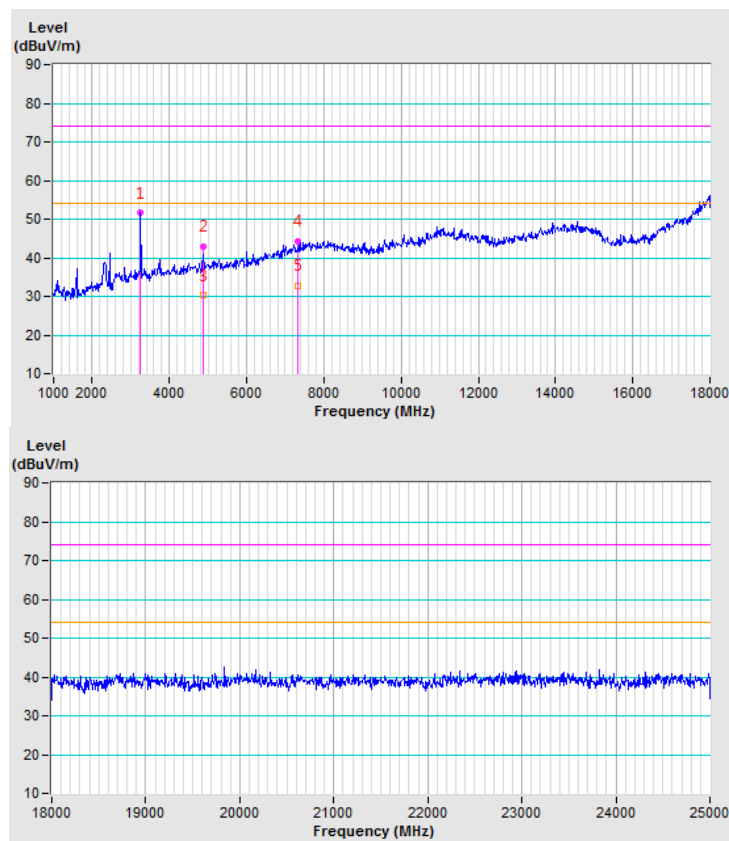
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3249.95 | 51.6 PK | - | - | 1.12 V | 12 | 52.2 | -0.6 |
| 2 | 4874.00 | 43.0 PK | 74.0 | -31.0 | 1.55 V | 263 | 40.7 | 2.3 |
| 3 | 4874.00 | 30.2 AV | 54.0 | -23.8 | 1.55 V | 263 | 27.9 | 2.3 |
| 4 | 7311.00 | 44.3 PK | 74.0 | -29.7 | 1.40 V | 172 | 35.9 | 8.4 |
| 5 | 7311.00 | 32.8 AV | 54.0 | -21.2 | 1.40 V | 172 | 24.4 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



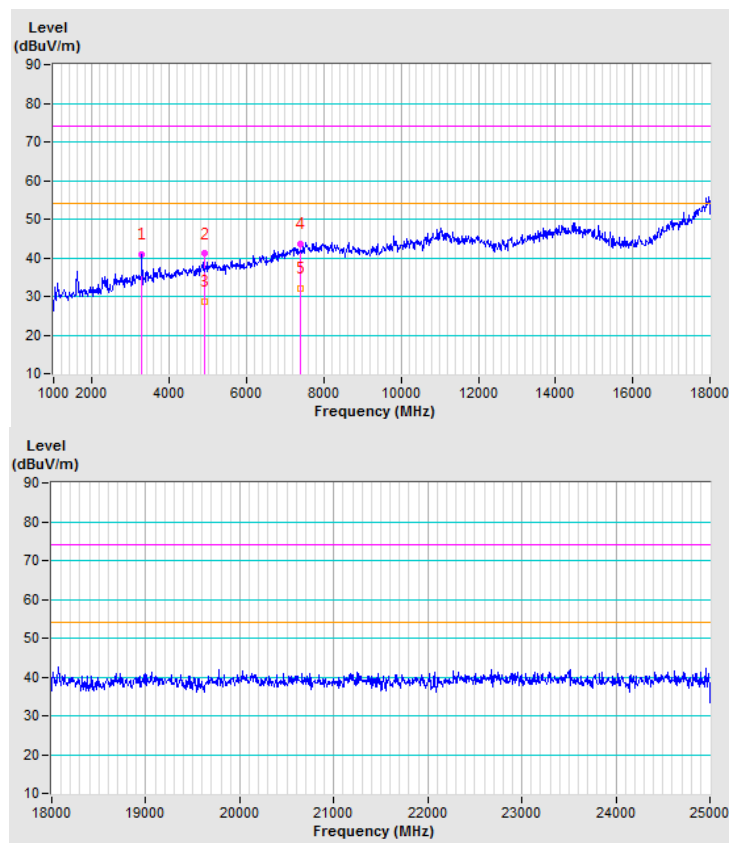
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3283.10 | 40.9 PK | - | - | 1.23 H | 21 | 41.3 | -0.4 |
| 2 | 4924.00 | 41.1 PK | 74.0 | -32.9 | 2.61 H | 316 | 38.7 | 2.4 |
| 3 | 4924.00 | 28.7 AV | 54.0 | -25.3 | 2.61 H | 316 | 26.3 | 2.4 |
| 4 | 7386.00 | 43.5 PK | 74.0 | -30.5 | 1.59 H | 28 | 35.0 | 8.5 |
| 5 | 7386.00 | 32.1 AV | 54.0 | -21.9 | 1.59 H | 28 | 23.6 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



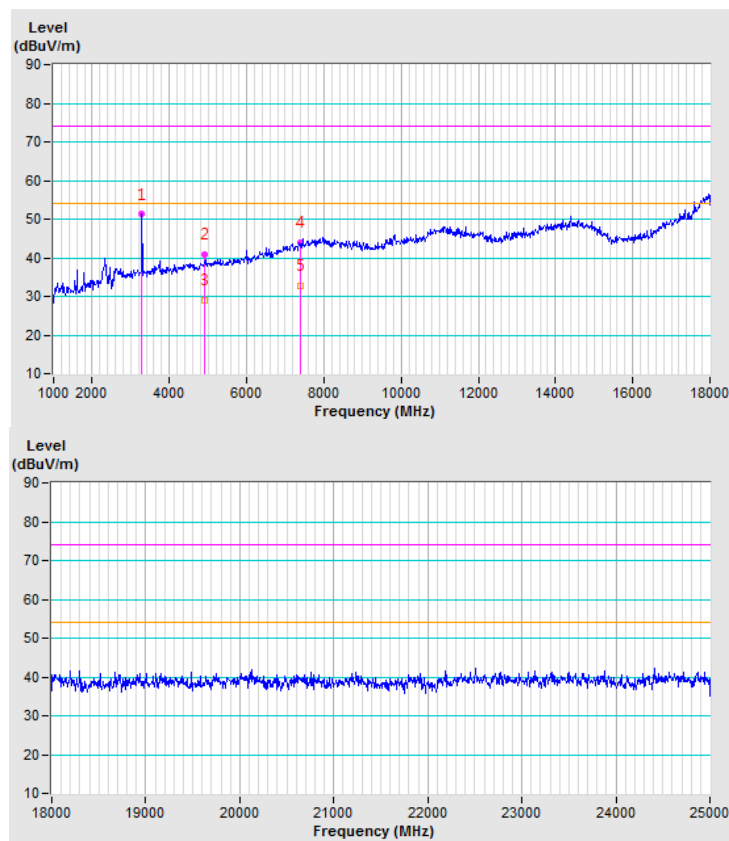
| | | | |
|------------------------|---------------|--------------------------|--------------|
| CHANNEL | TX Channel 11 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3283.10 | 51.2 PK | - | - | 1.10 V | 21 | 51.6 | -0.4 |
| 2 | 4924.00 | 40.9 PK | 74.0 | -33.1 | 1.59 V | 277 | 38.5 | 2.4 |
| 3 | 4924.00 | 29.1 AV | 54.0 | -24.9 | 1.59 V | 277 | 26.7 | 2.4 |
| 4 | 7386.00 | 43.9 PK | 74.0 | -30.1 | 1.39 V | 161 | 35.4 | 8.5 |
| 5 | 7386.00 | 32.7 AV | 54.0 | -21.3 | 1.39 V | 161 | 24.2 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



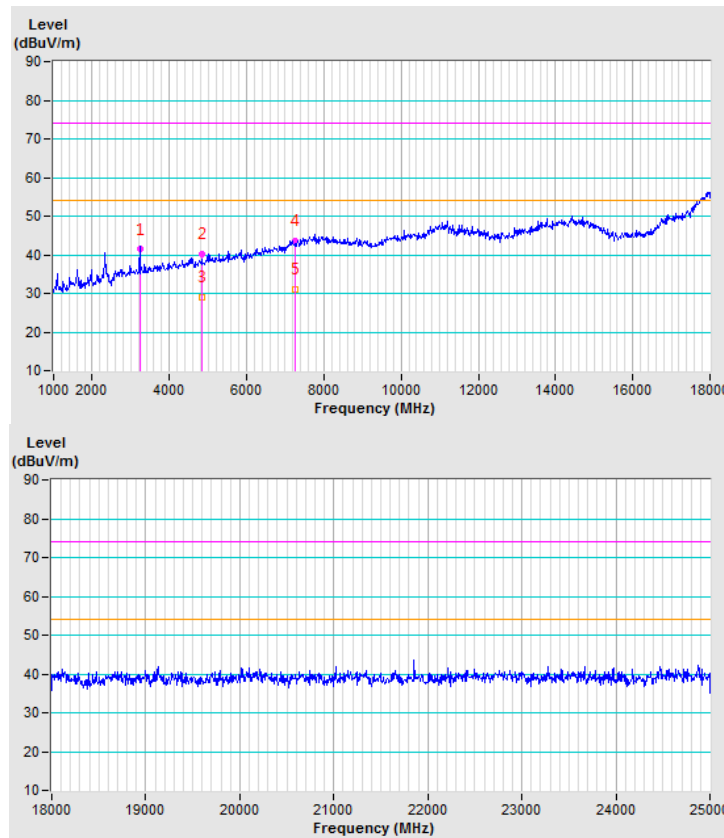
802.11n (HT40)

| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 3 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|---|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
| 1 | #3229.97 | 41.4 PK | - | - | 1.25 H | 111 | 42.0 | -0.6 |
| 2 | 4844.00 | 40.1 PK | 74.0 | -33.9 | 2.56 H | 331 | 37.8 | 2.3 |
| 3 | 4844.00 | 29.1 AV | 54.0 | -24.9 | 2.56 H | 331 | 26.8 | 2.3 |
| 4 | 7266.00 | 43.6 PK | 74.0 | -30.4 | 1.51 H | 43 | 35.2 | 8.4 |
| 5 | 7266.00 | 31.0 AV | 54.0 | -23.0 | 1.51 H | 43 | 22.6 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



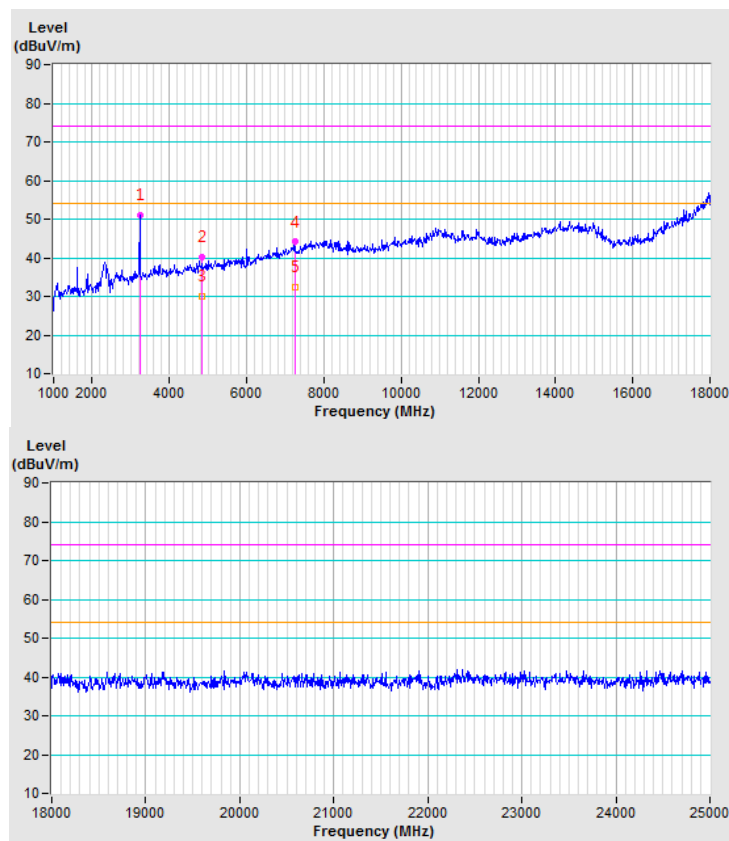
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 3 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3229.97 | 51.0 PK | - | - | 1.12 V | 211 | 51.6 | -0.6 |
| 2 | 4844.00 | 40.3 PK | 74.0 | -33.7 | 1.60 V | 289 | 38.0 | 2.3 |
| 3 | 4844.00 | 30.0 AV | 54.0 | -24.0 | 1.60 V | 289 | 27.7 | 2.3 |
| 4 | 7266.00 | 44.1 PK | 74.0 | -29.9 | 1.39 V | 164 | 35.7 | 8.4 |
| 5 | 7266.00 | 32.4 AV | 54.0 | -21.6 | 1.39 V | 164 | 24.0 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



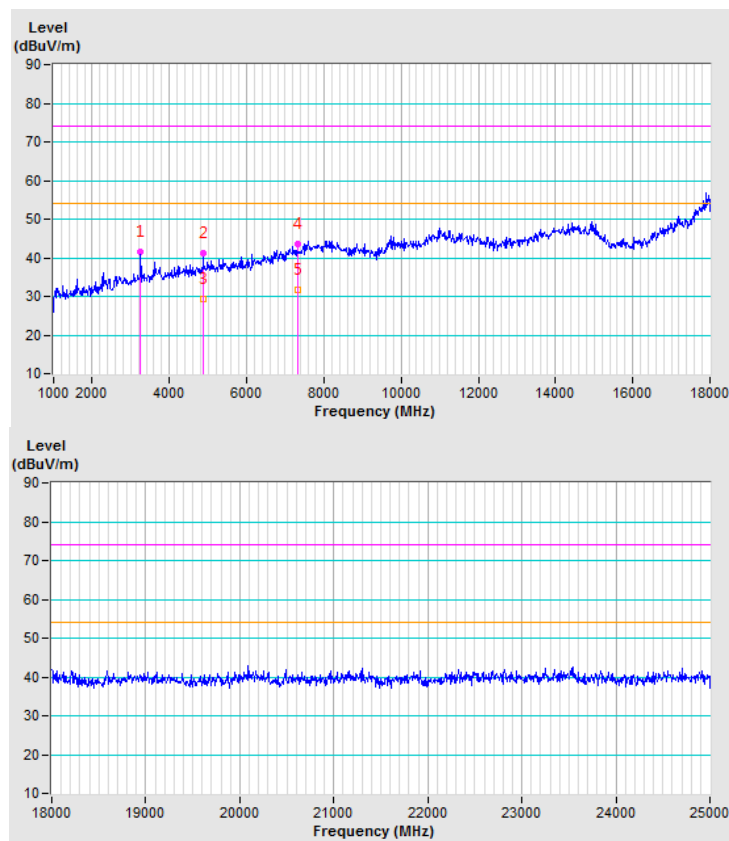
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3249.95 | 41.6 PK | - | - | 1.02 H | 21 | 42.2 | -0.6 |
| 2 | 4874.00 | 41.3 PK | 74.0 | -32.7 | 2.52 H | 322 | 39.0 | 2.3 |
| 3 | 4874.00 | 29.3 AV | 54.0 | -24.7 | 2.52 H | 322 | 27.0 | 2.3 |
| 4 | 7311.00 | 43.5 PK | 74.0 | -30.5 | 1.51 H | 20 | 35.1 | 8.4 |
| 5 | 7311.00 | 31.7 AV | 54.0 | -22.3 | 1.51 H | 20 | 23.3 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



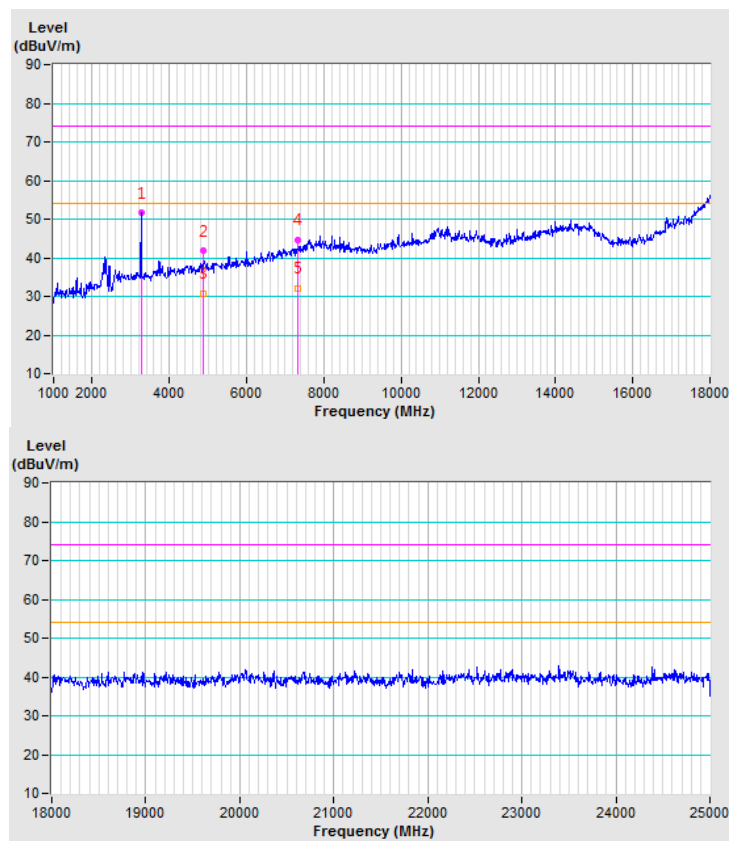
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3250.12 | 51.6 PK | - | - | 1.00 V | 12 | 52.0 | -0.4 |
| 2 | 4874.00 | 41.7 PK | 74.0 | -32.3 | 1.59 V | 291 | 39.4 | 2.3 |
| 3 | 4874.00 | 30.6 AV | 54.0 | -23.4 | 1.59 V | 291 | 28.3 | 2.3 |
| 4 | 7311.00 | 44.5 PK | 74.0 | -29.5 | 1.50 V | 172 | 36.1 | 8.4 |
| 5 | 7311.00 | 32.2 AV | 54.0 | -21.8 | 1.50 V | 172 | 23.8 | 8.4 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



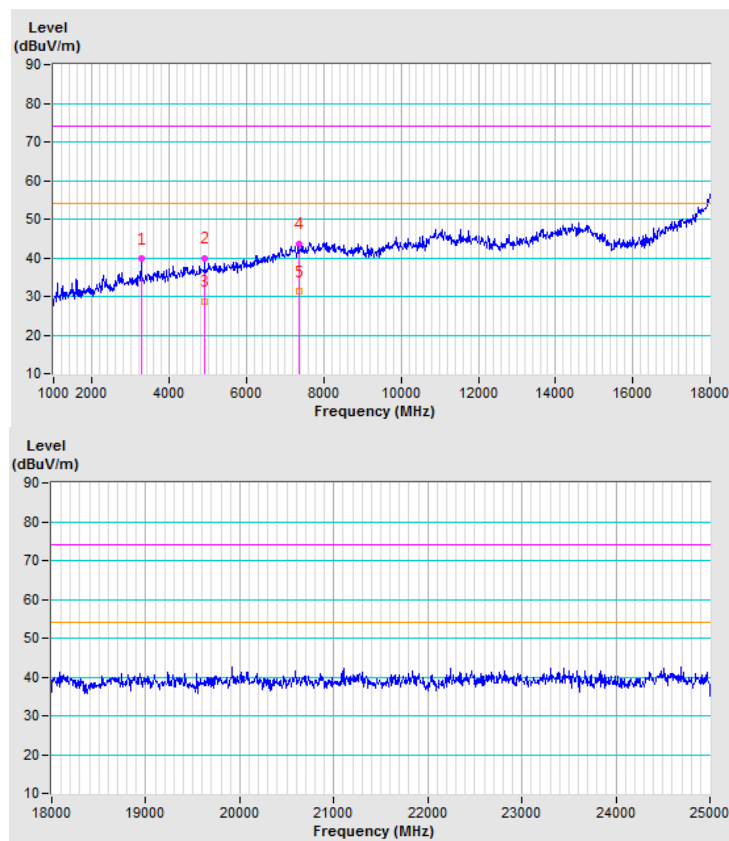
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 9 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3269.93 | 39.7 PK | - | - | 1.02 H | 21 | 40.1 | -0.4 |
| 2 | 4904.00 | 39.9 PK | 74.0 | -34.1 | 2.60 H | 339 | 37.5 | 2.4 |
| 3 | 4904.00 | 28.8 AV | 54.0 | -25.2 | 2.60 H | 339 | 26.4 | 2.4 |
| 4 | 7356.00 | 43.7 PK | 74.0 | -30.3 | 1.55 H | 22 | 35.2 | 8.5 |
| 5 | 7356.00 | 31.2 AV | 54.0 | -22.8 | 1.55 H | 22 | 22.7 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



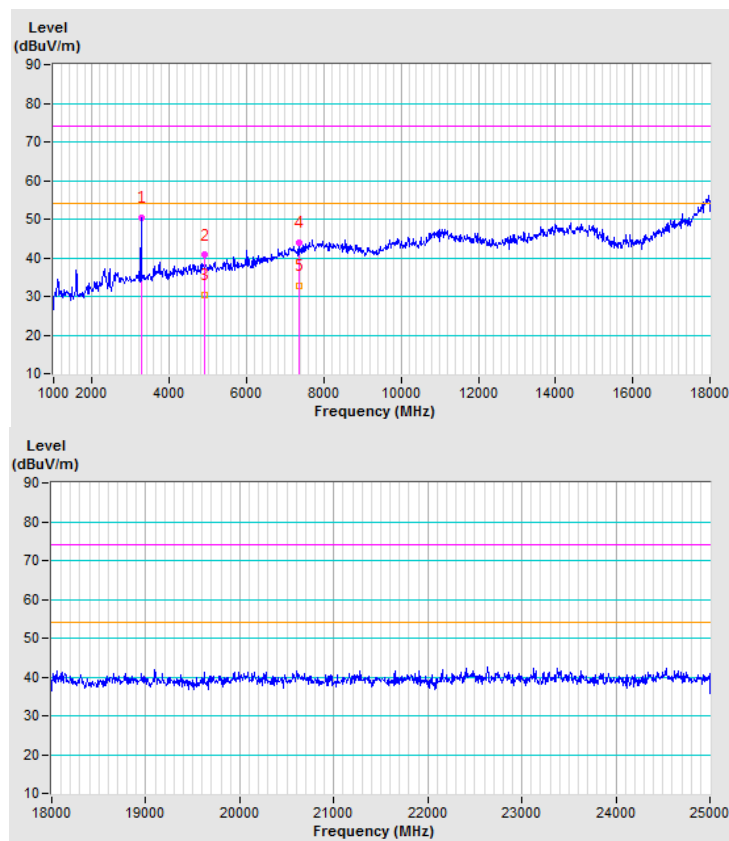
| | | | |
|------------------------|--------------|--------------------------|--------------|
| CHANNEL | TX Channel 9 | DETECTOR FUNCTION | Peak (PK) |
| FREQUENCY RANGE | 1GHz ~ 25GHz | | Average (AV) |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | #3269.93 | 50.4 PK | - | - | 1.12 V | 101 | 50.8 | -0.4 |
| 2 | 4904.00 | 40.7 PK | 74.0 | -33.3 | 1.59 V | 267 | 38.3 | 2.4 |
| 3 | 4904.00 | 30.5 AV | 54.0 | -23.5 | 1.59 V | 267 | 28.1 | 2.4 |
| 4 | 7356.00 | 43.9 PK | 74.0 | -30.1 | 1.41 V | 182 | 35.4 | 8.5 |
| 5 | 7356.00 | 32.7 AV | 54.0 | -21.3 | 1.41 V | 182 | 24.2 | 8.5 |

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " # ": The radiated frequency is out of the restricted band, the test results refer to section 4.3.



Below 1GHz Data:

802.11g

| | | | |
|------------------------|--------------|------------------------------|-----------------|
| CHANNEL | TX Channel 6 | DETECTOR FUNCTION | Quasi-Peak (QP) |
| FREQUENCY RANGE | 9kHz ~ 1GHz | | |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1 | 55.37 | 31.8 QP | 40.0 | -8.2 | 1.00 H | 0 | 40.2 | -8.4 |
| 2 | 88.73 | 31.2 QP | 43.5 | -12.3 | 1.00 H | 293 | 45.7 | -14.5 |
| 3 | 110.66 | 31.1 QP | 43.5 | -12.4 | 1.50 H | 197 | 42.2 | -11.1 |
| 4 | 132.60 | 24.8 QP | 43.5 | -18.7 | 2.00 H | 243 | 33.9 | -9.1 |
| 5 | 497.93 | 27.1 QP | 46.0 | -18.9 | 2.00 H | 156 | 29.9 | -2.8 |
| 6 | 796.64 | 32.9 QP | 46.0 | -13.1 | 1.00 H | 218 | 30.6 | 2.3 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| NO. | FREQ. (MHz) | EMISSION LEVEL (dBuV/m) | LIMIT (dBuV/m) | MARGIN (dB) | ANTENNA HEIGHT (m) | TABLE ANGLE (Degree) | RAW VALUE (dBuV) | CORRECTION FACTOR (dB/m) |
|-----|----------------|-------------------------------|-------------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| 1 | 66.84 | 34.0 QP | 40.0 | -6.0 | 1.00 V | 192 | 43.6 | -9.6 |
| 2 | 88.93 | 37.4 QP | 43.5 | -6.1 | 2.00 V | 85 | 51.9 | -14.5 |
| 3 | 112.94 | 33.0 QP | 43.5 | -10.5 | 1.50 V | 344 | 43.7 | -10.7 |
| 4 | 298.76 | 39.4 QP | 46.0 | -6.6 | 1.50 V | 59 | 47.3 | -7.9 |
| 5 | 499.87 | 24.9 QP | 46.0 | -21.1 | 1.50 V | 151 | 27.7 | -2.8 |
| 6 | 796.66 | 32.1 QP | 46.0 | -13.9 | 1.50 V | 148 | 29.8 | 2.3 |

REMARKS:

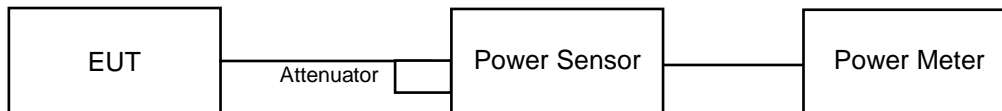
1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 Conducted Output Power Measurement

4.2.1 Limits of Conducted Output Power Measurement

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

4.2.2 Test Setup



4.2.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.2.4 Test Procedures

A peak / average power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak / average power sensor. Record the power level.

4.2.5 Deviation from Test Standard

No deviation.

4.2.6 EUT Operating Conditions

Same as Item 4.1.6.

4.2.7 Test Results

802.11b

| Channel | Frequency (MHz) | Peak Power (mW) | Peak Power (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|-----------------|------------------|-------------|-----------|
| 1 | 2412 | 67.92 | 18.32 | 30 | Pass |
| 6 | 2437 | 94.624 | 19.76 | 30 | Pass |
| 11 | 2462 | 91.833 | 19.63 | 30 | Pass |

802.11g

| Channel | Frequency (MHz) | Peak Power (mW) | Peak Power (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|-----------------|------------------|-------------|-----------|
| 1 | 2412 | 136.458 | 21.35 | 30 | Pass |
| 6 | 2437 | 258.821 | 24.13 | 30 | Pass |
| 11 | 2462 | 119.399 | 20.77 | 30 | Pass |

802.11n (HT20)

| Channel | Frequency (MHz) | Peak Power (mW) | Peak Power (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|-----------------|------------------|-------------|-----------|
| 1 | 2412 | 108.143 | 20.34 | 30 | Pass |
| 6 | 2437 | 195.434 | 22.91 | 30 | Pass |
| 11 | 2462 | 102.802 | 20.12 | 30 | Pass |

802.11n (HT40)

| Channel | Frequency (MHz) | Peak Power (mW) | Peak Power (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|-----------------|------------------|-------------|-----------|
| 3 | 2422 | 107.399 | 20.31 | 30 | Pass |
| 6 | 2437 | 169.044 | 22.28 | 30 | Pass |
| 9 | 2452 | 90.365 | 19.56 | 30 | Pass |

FOR AVERAGE POWER

802.11b

| Channel | Frequency (MHz) | Average Power (mW) | Average Power (dBm) |
|---------|-----------------|--------------------|---------------------|
| 1 | 2412 | 42.073 | 16.24 |
| 6 | 2437 | 63.387 | 18.02 |
| 11 | 2462 | 62.23 | 17.94 |

802.11g

| Channel | Frequency (MHz) | Average Power (mW) | Average Power (dBm) |
|---------|-----------------|--------------------|---------------------|
| 1 | 2412 | 28.708 | 14.58 |
| 6 | 2437 | 62.661 | 17.97 |
| 11 | 2462 | 22.856 | 13.59 |

802.11n (HT20)

| Channel | Frequency (MHz) | Average Power (mW) | Average Power (dBm) |
|---------|-----------------|--------------------|---------------------|
| 1 | 2412 | 21.281 | 13.28 |
| 6 | 2437 | 43.551 | 16.39 |
| 11 | 2462 | 18.03 | 12.56 |

802.11n (HT40)

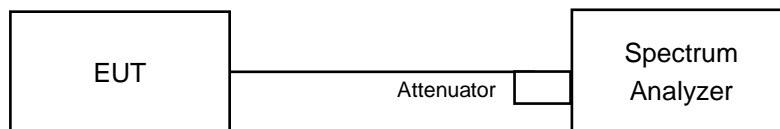
| Channel | Frequency (MHz) | Average Power (mW) | Average Power (dBm) |
|---------|-----------------|--------------------|---------------------|
| 3 | 2422 | 16.943 | 12.29 |
| 6 | 2437 | 27.416 | 14.38 |
| 9 | 2452 | 14.622 | 11.65 |

4.3 Conducted Out of Band Emission Measurement

4.3.1 Limits of Conducted Out of Band Emission Measurement

Below 20dBc of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.3.2 Test Setup



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Condition

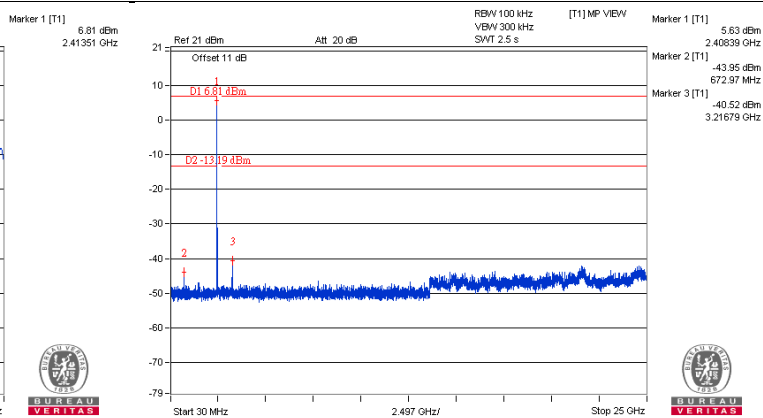
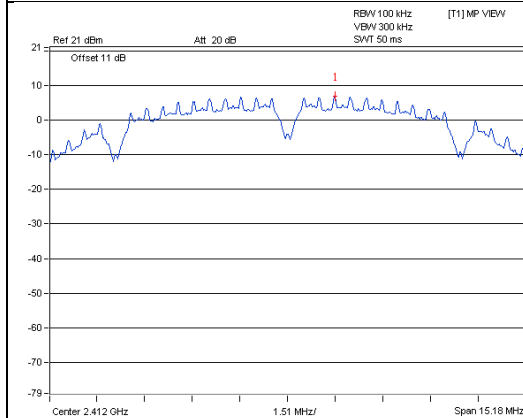
Same as Item 4.1.6

4.3.7 Test Results

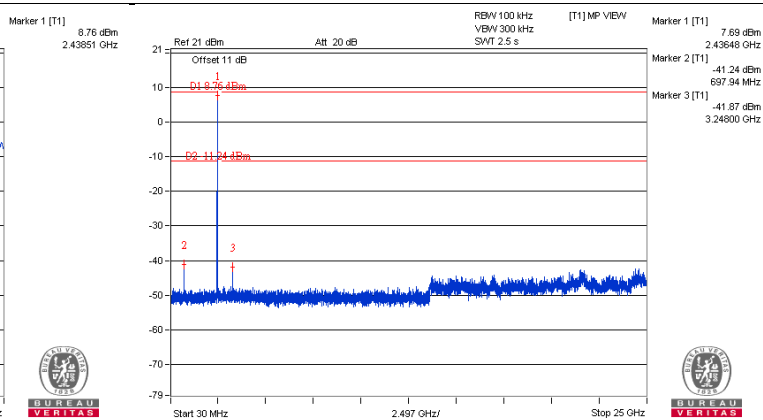
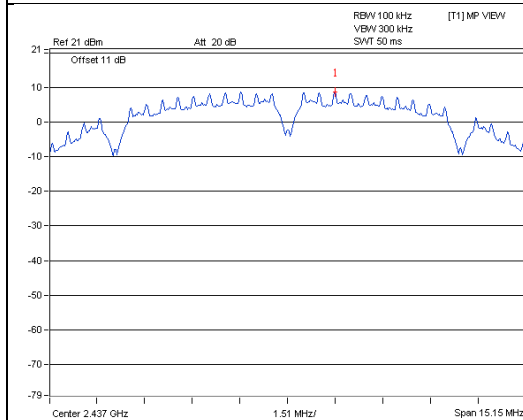
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dBc offset below D1. It shows compliance with the requirement.

802.11b

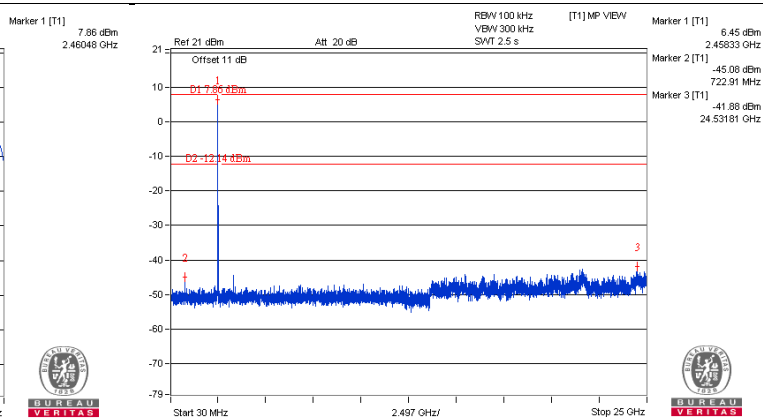
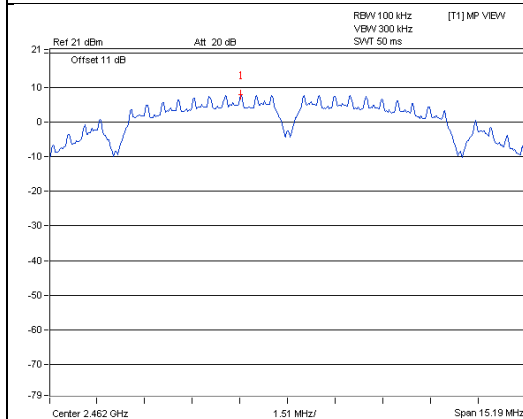
CH 1



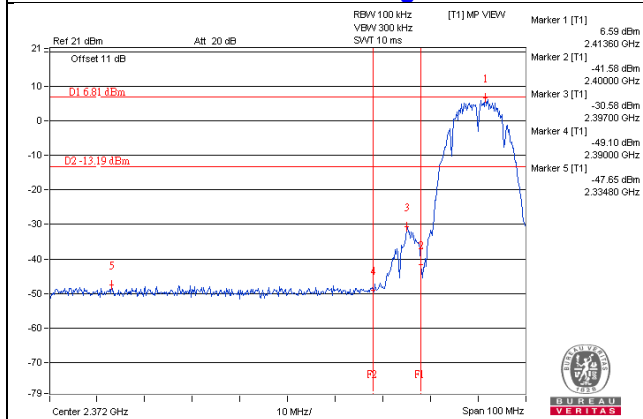
CH 6



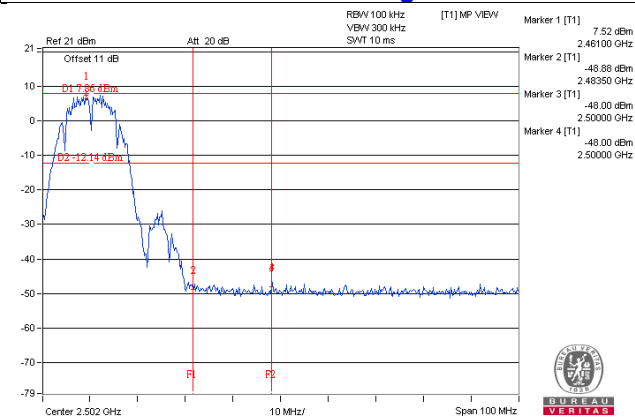
CH 11



CH 1 Band edge

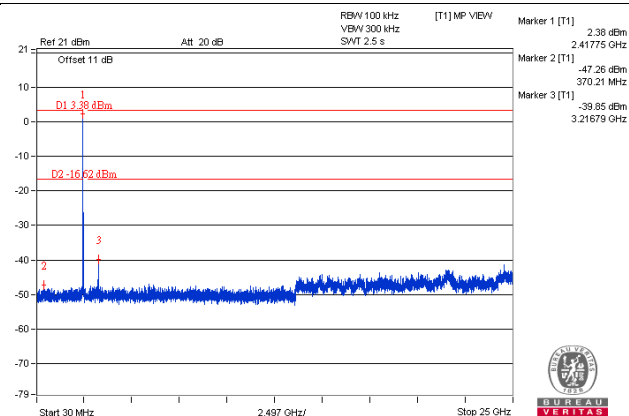
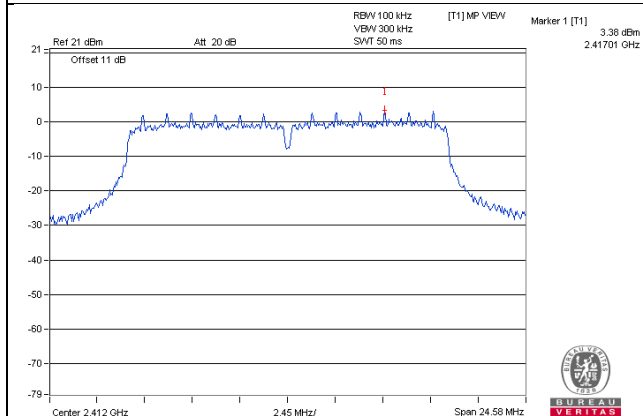


CH 11 Band edge

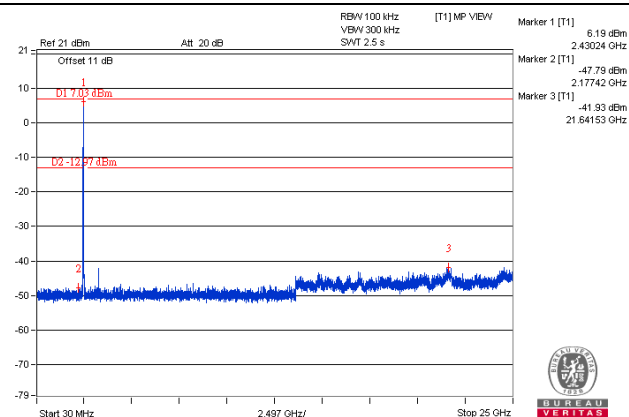
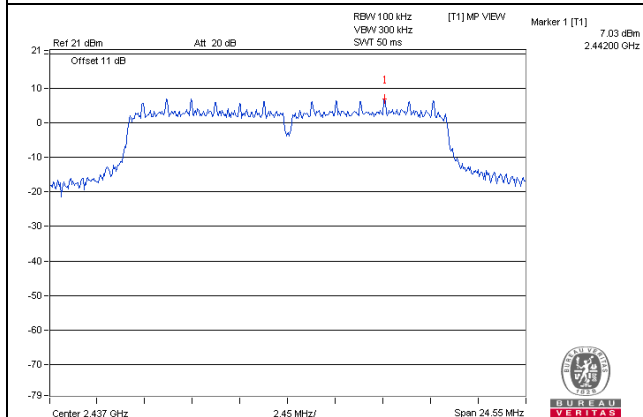


802.11g:

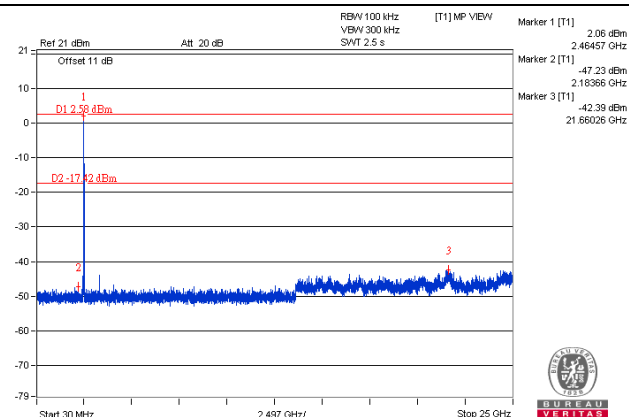
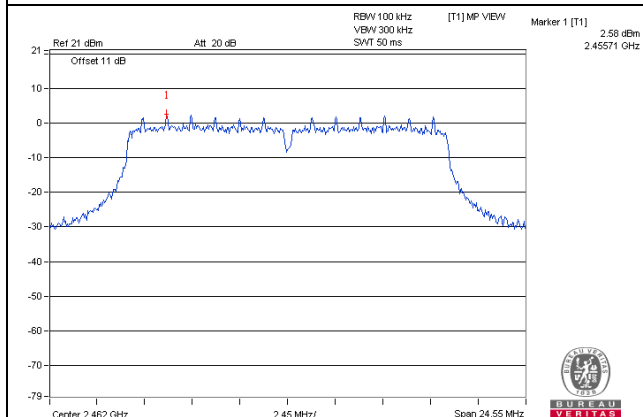
CH 1



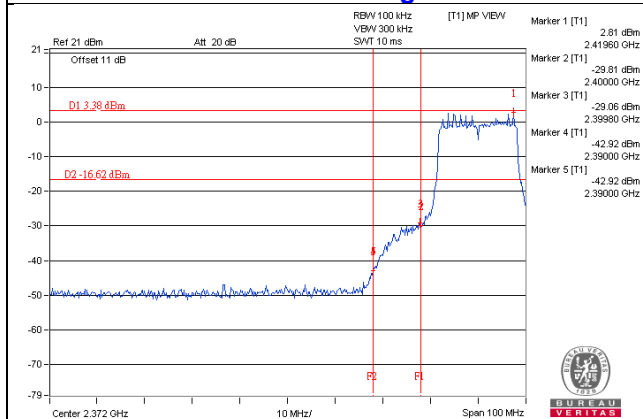
CH 6



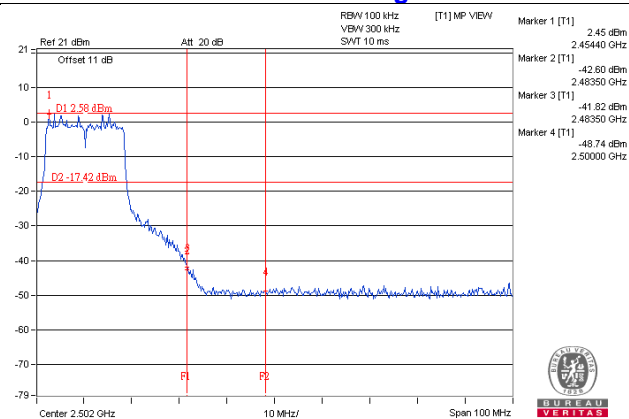
CH 11



CH 1 Band edge

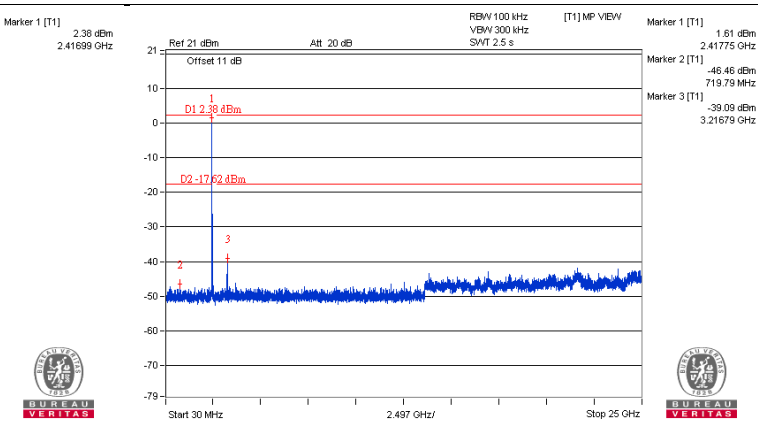
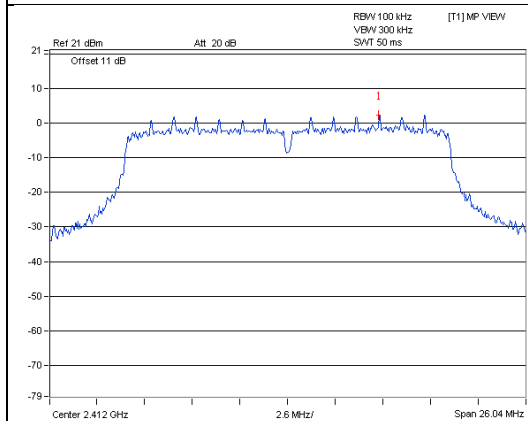


CH 11 Band edge

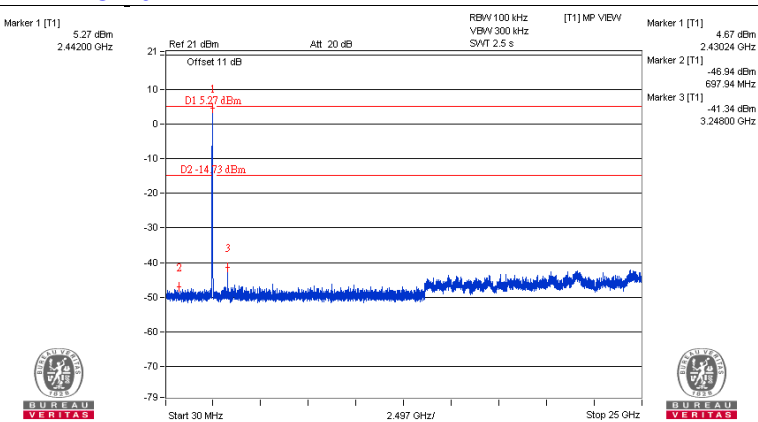
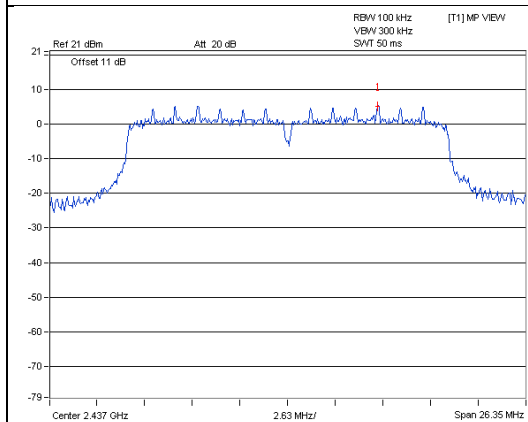


802.11n (HT20):

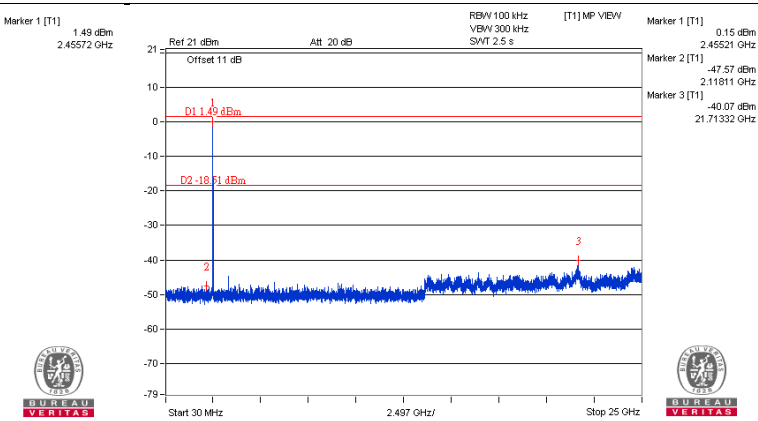
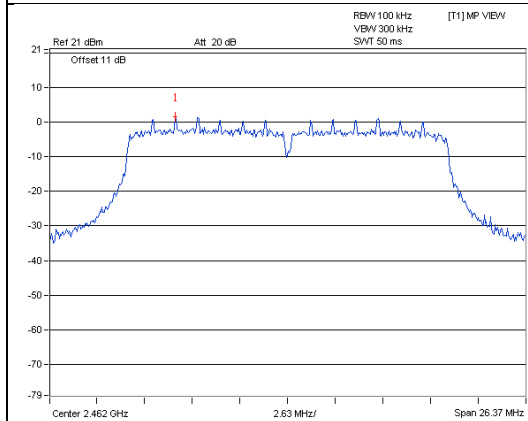
CH 1



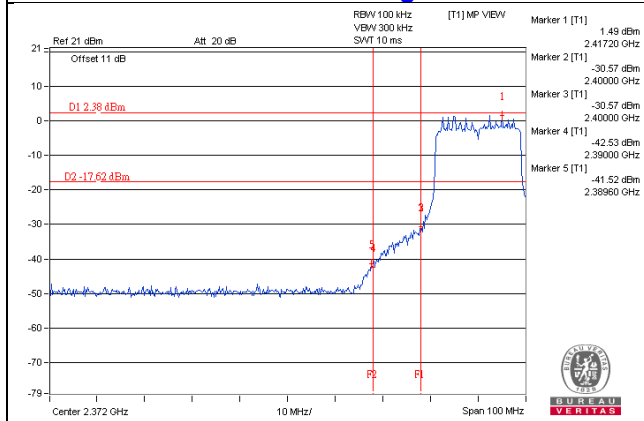
CH 6



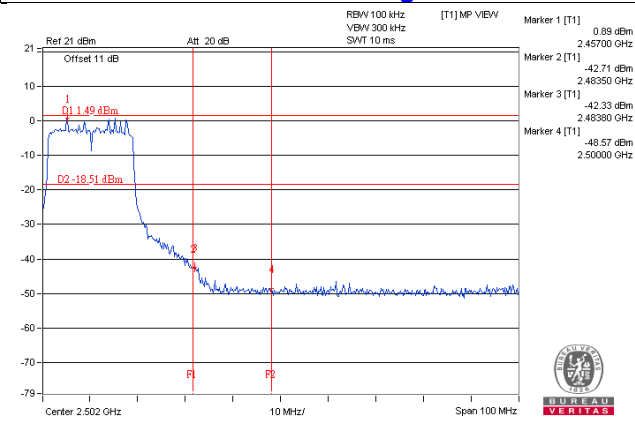
CH 11



CH 1 Band edge

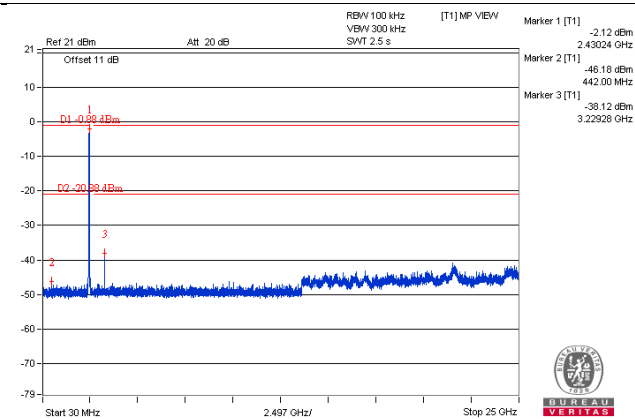
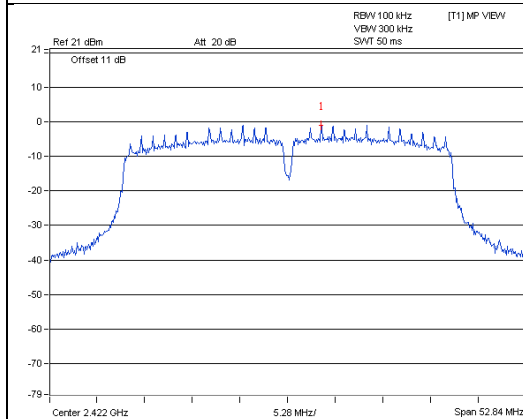


CH 11 Band edge

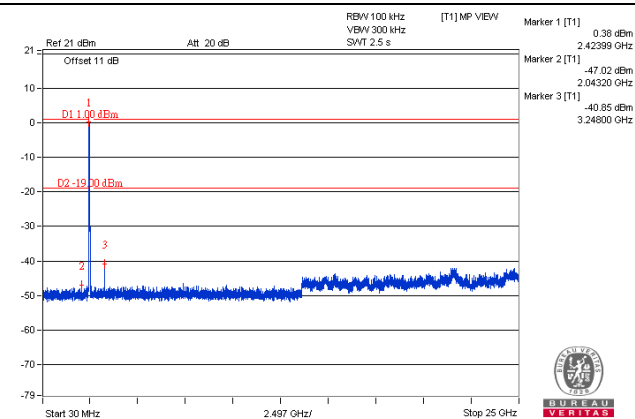
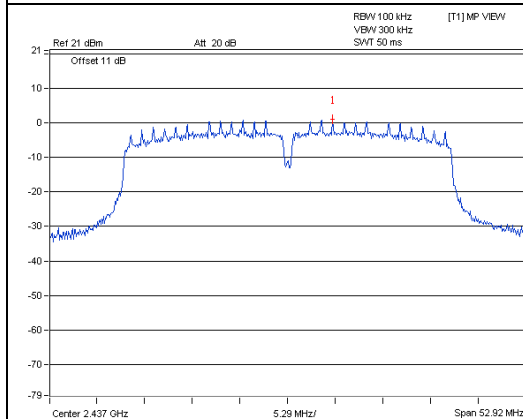


802.11n (HT40):

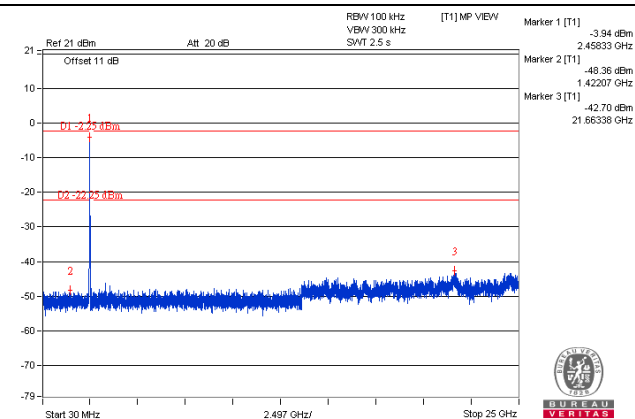
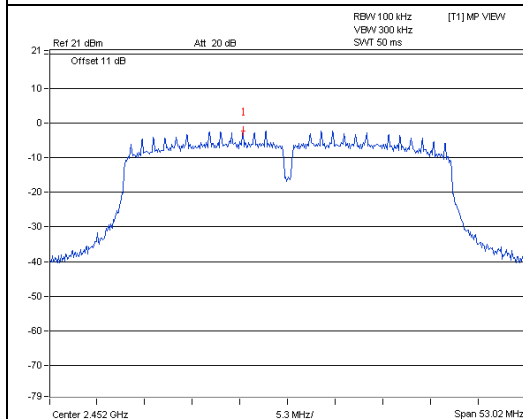
CH 3



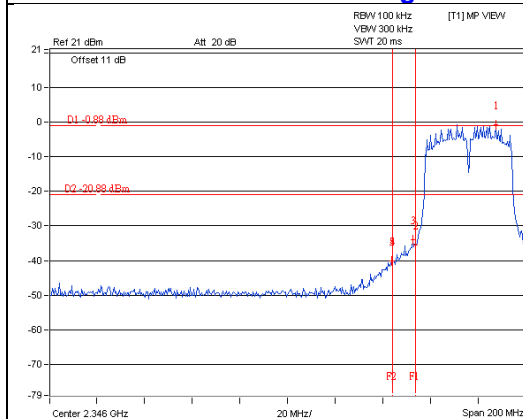
CH 6



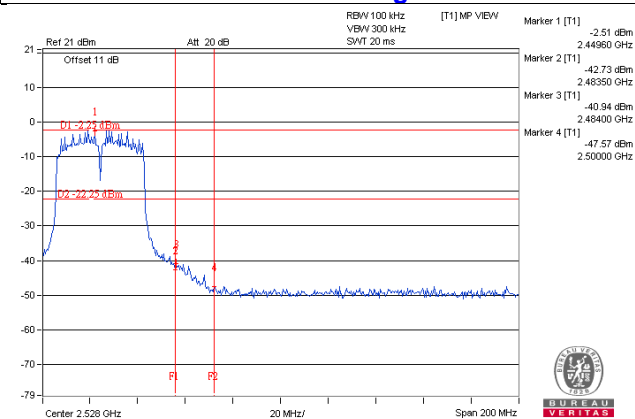
CH 9



CH 3 Band edge



CH 9 Band edge



5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab

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Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

--- END ---