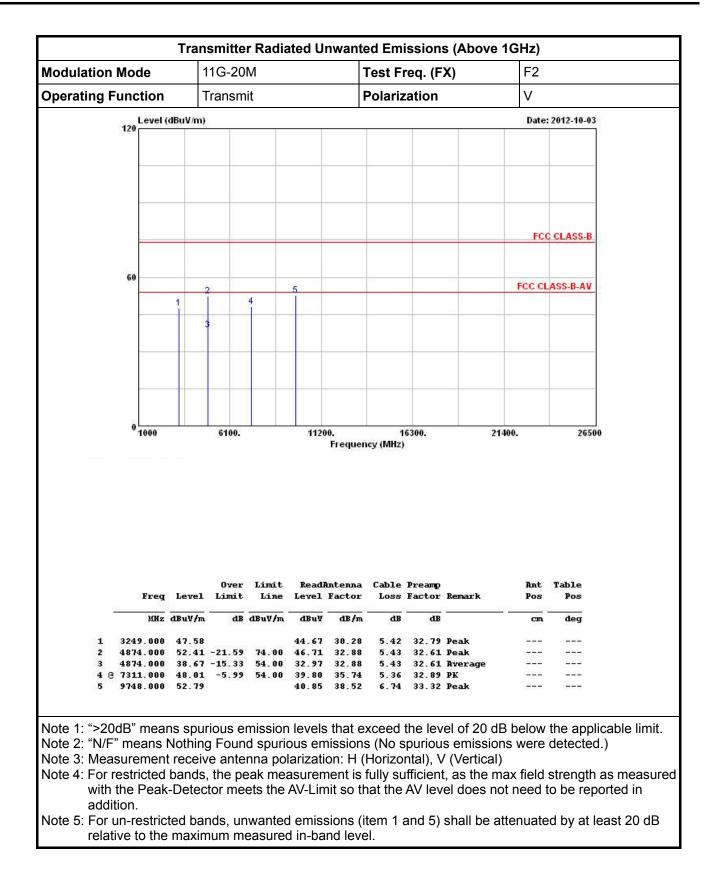


### 3.6.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11G-20M-N<sub>Tx</sub>1

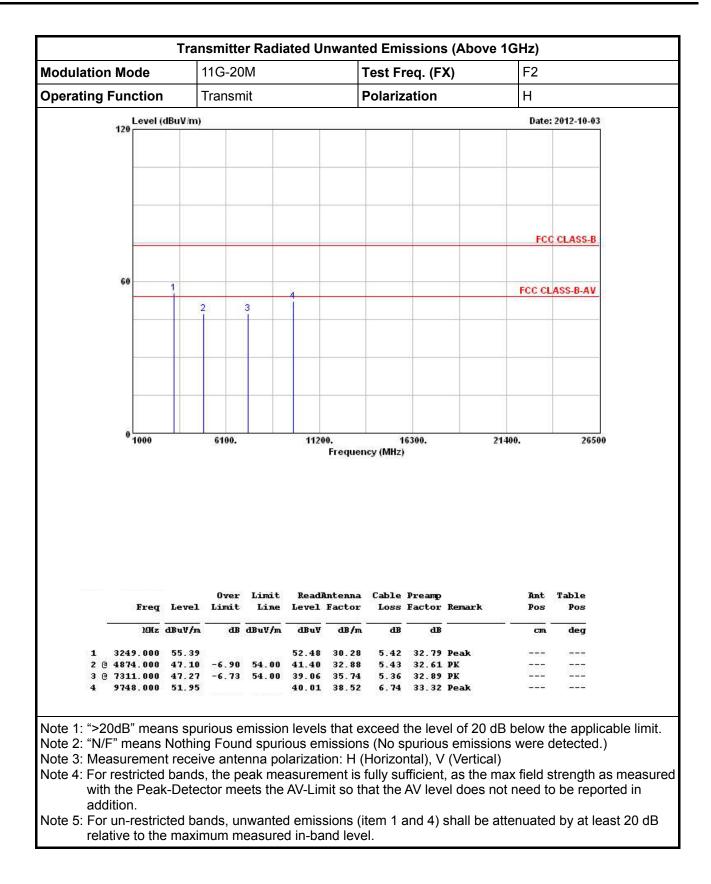


|                    | Modulation Mode                     |                          |                               | 11G-20M        |  |                                   | Test Freq. (FX)                     |                        |                          | F1                   |                    |
|--------------------|-------------------------------------|--------------------------|-------------------------------|----------------|--|-----------------------------------|-------------------------------------|------------------------|--------------------------|----------------------|--------------------|
| Operating Function |                                     | Tra                      | Transmit                      |                |  | Po                                | Polarization                        |                        |                          | Н                    |                    |
|                    | Level (                             | dBuV/m)                  | /m) Date: 2012-10-(           |                |  |                                   |                                     |                        |                          |                      |                    |
|                    | 120                                 |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          | FC                   | CLASS-             |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    | 60                                  |                          |                               |                |  |                                   |                                     |                        |                          | 500.01               |                    |
|                    |                                     | 31<br>                   | -                             | 3              | 4  |                                   |                                     | _                      |                          | FCC CL               | ASS-B-A            |
|                    |                                     | 2                        |                               | 3              | -  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    | -                                   |                          |                               |                | -  |                                   | -                                   |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    |                                     |                          |                               |                |  |                                   |                                     |                        |                          |                      |                    |
|                    | 0 1000                              |                          | 6100.                         |                | 1120                                     |                                   | 1<br>nev (MHz)                      | 6300.                  | 2                        | 21400.               | 26                 |
|                    | 1000                                | Level                    | Over                          | Limit<br>Line  |  | Frequer                           | Cable                               | Preamp                 | Remark                   | 21400.<br>Ant<br>Pos | 26<br>Table<br>Pos |
|                    | - 1000<br>Freq                      | Level<br>dBuV/m          | Over<br>Limit                 |                | ReadA                                    | Frequer                           | Cable                               | Preamp                 | Remark                   | Ant                  | Table              |
| 1                  | - 1000<br>Freq<br>                  | dBuV/m<br>53.85          | Over<br>Limit<br>dB           | Line<br>dBuV/m | ReadA<br>Level<br>dBuV<br>51.01          | ntenna<br>Factor<br>dB/m<br>30.21 | Cable<br>Loss<br>dB<br>5.42         | Preamp<br>Factor       | Remark                   | Ant<br>Pos           | Table<br>Pos       |
| 1<br>2<br>3        | Егеq<br>МНz<br>3216.000<br>4824.000 | dBuV/m<br>53.85<br>42.87 | Over<br>Limit<br>dB<br>-11.13 | Line<br>dBuV/m | ReadR<br>Level<br>dBuV<br>51.01<br>37.27 | ntenna<br>Factor<br>dB/m<br>30.21 | Cable<br>Loss<br>dB<br>5.42<br>5.43 | Preamp<br>Factor<br>dB | Remark<br><br>Peak<br>PK | Ant<br>Pos           | Table<br>Pos       |

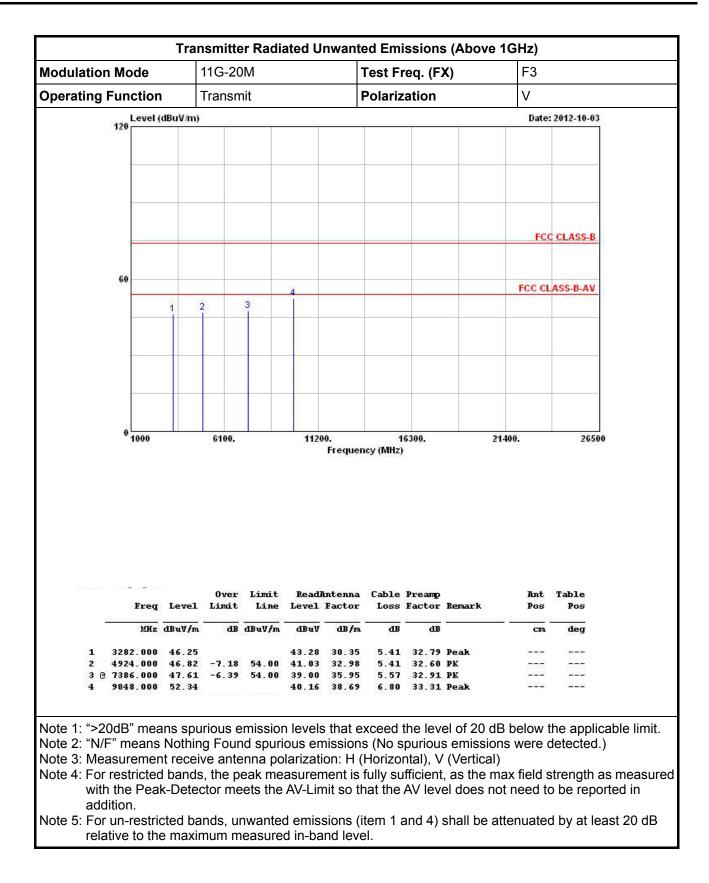




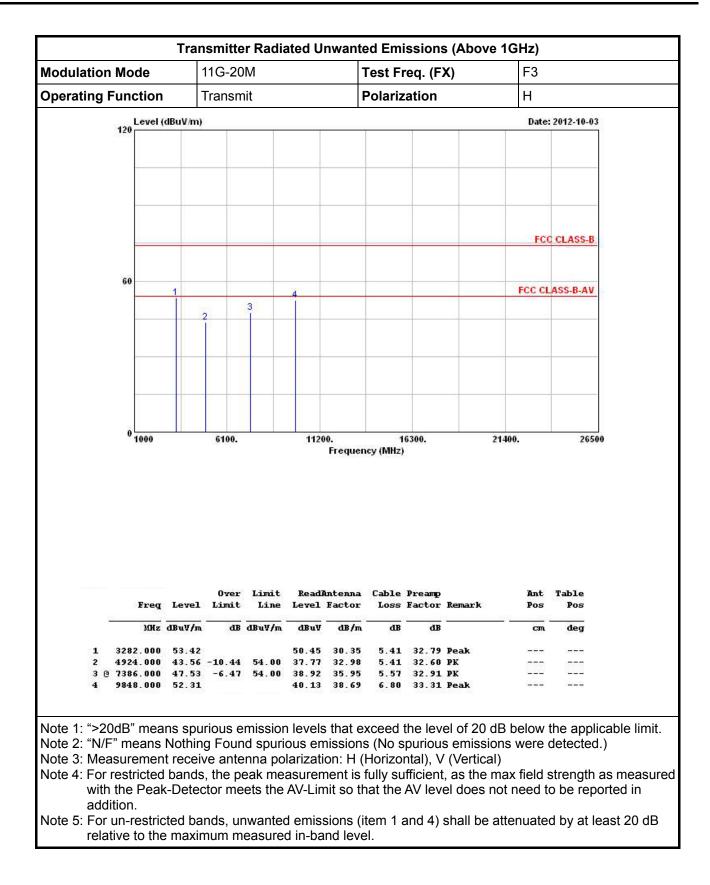




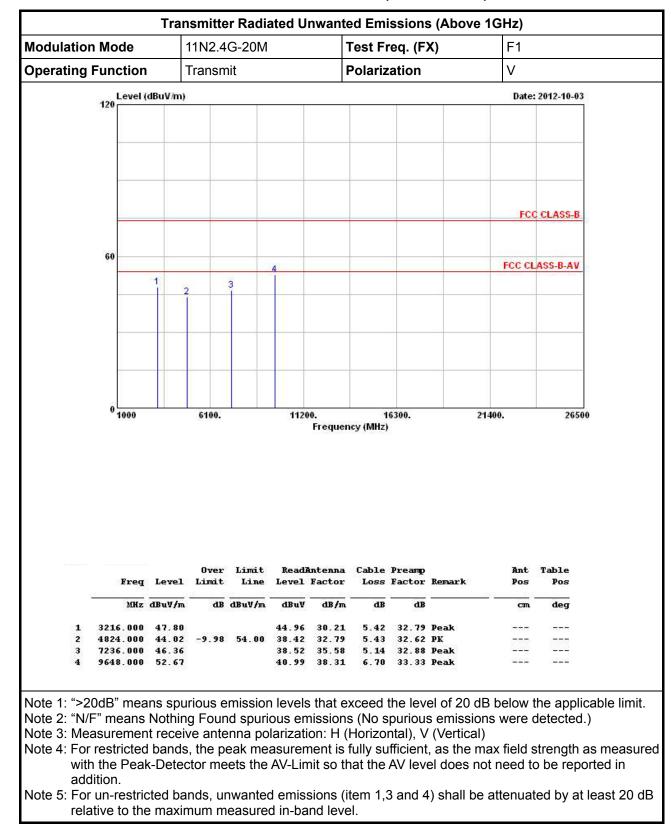






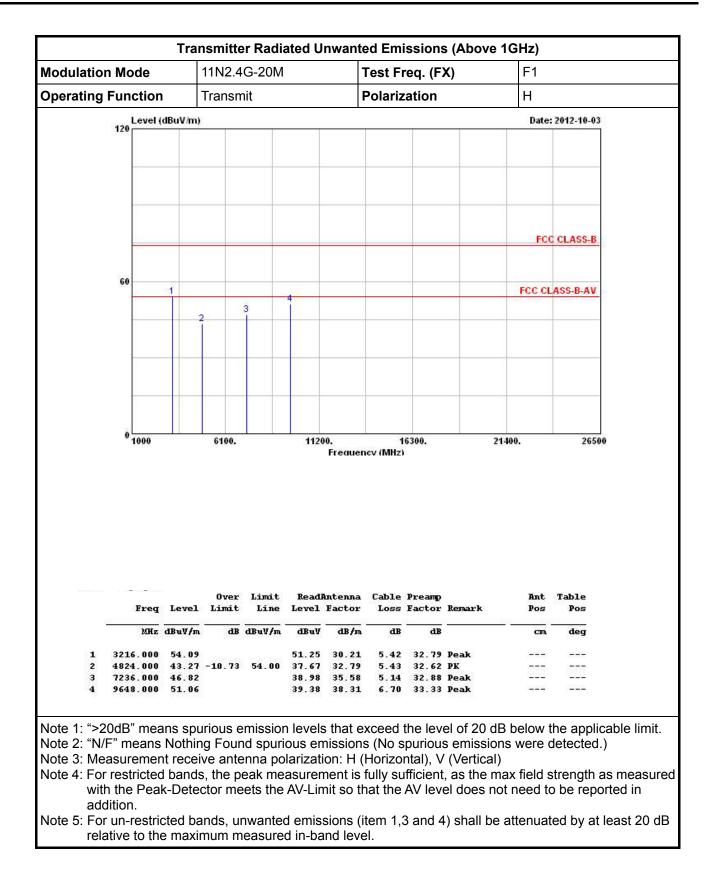




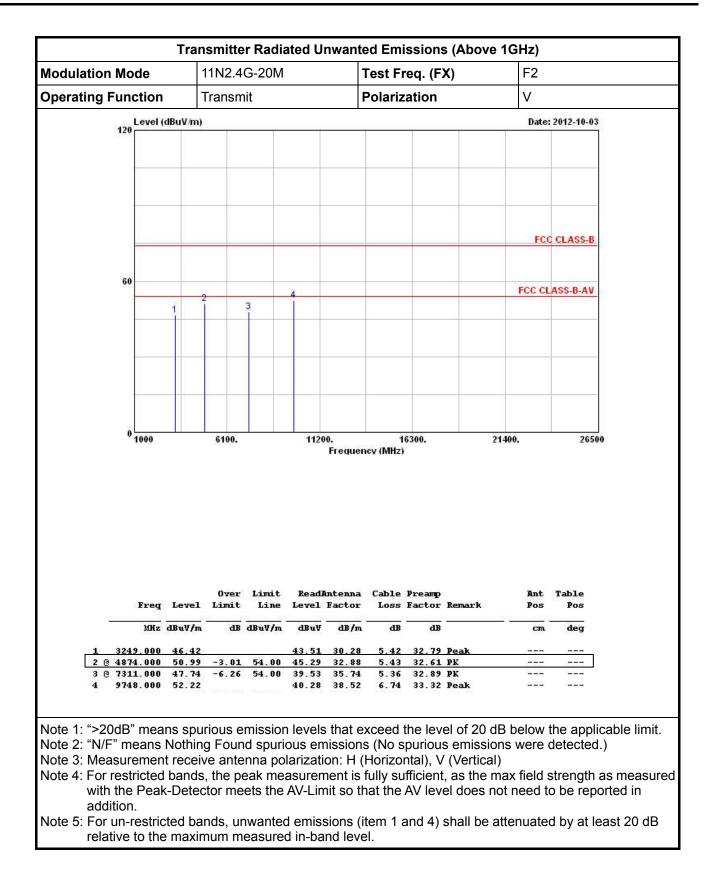


#### 3.6.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11N2.4G-20M-NTX 1

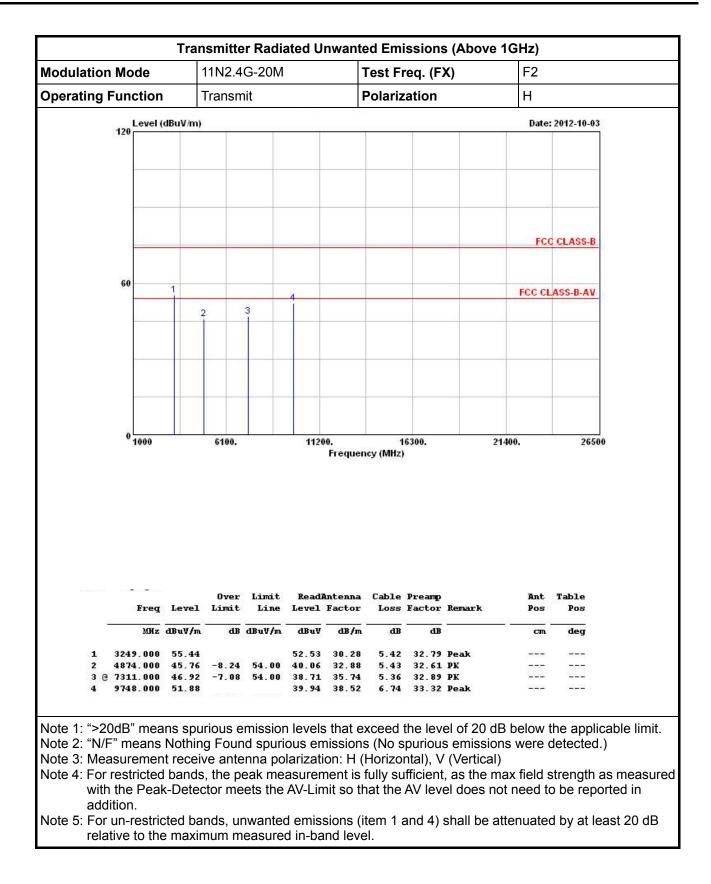




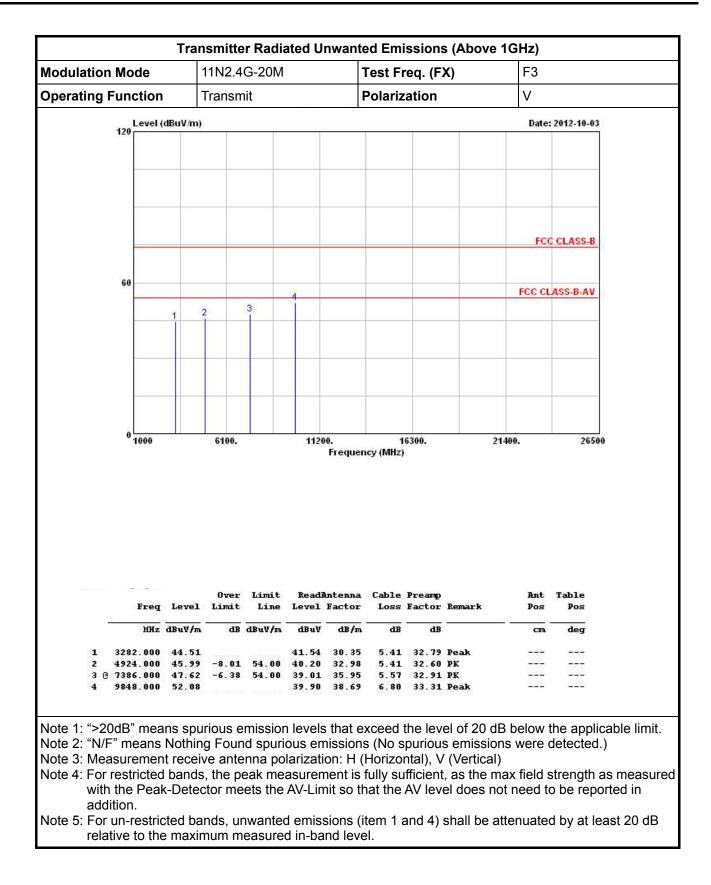




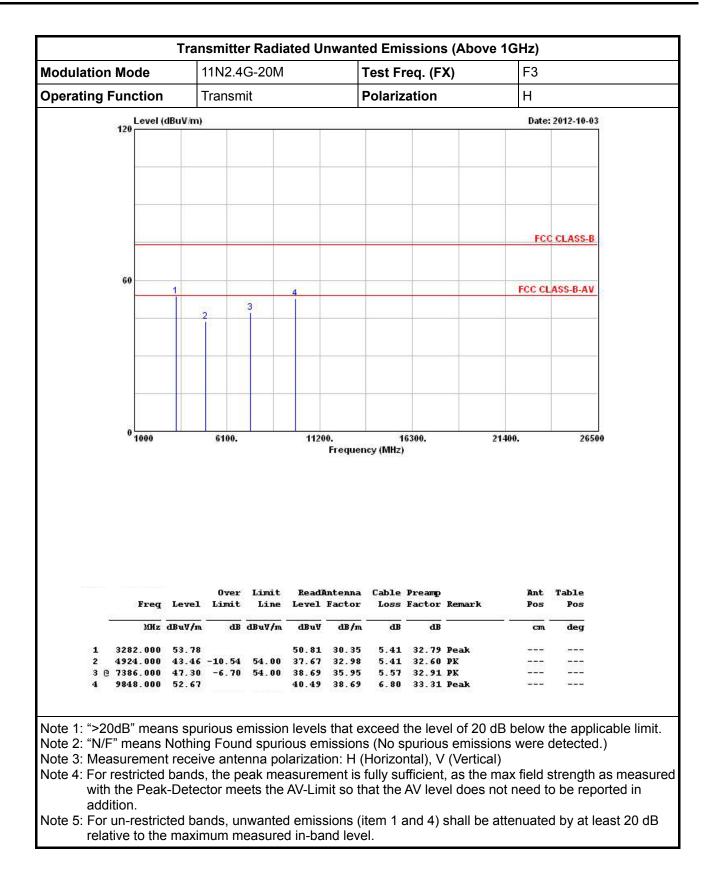










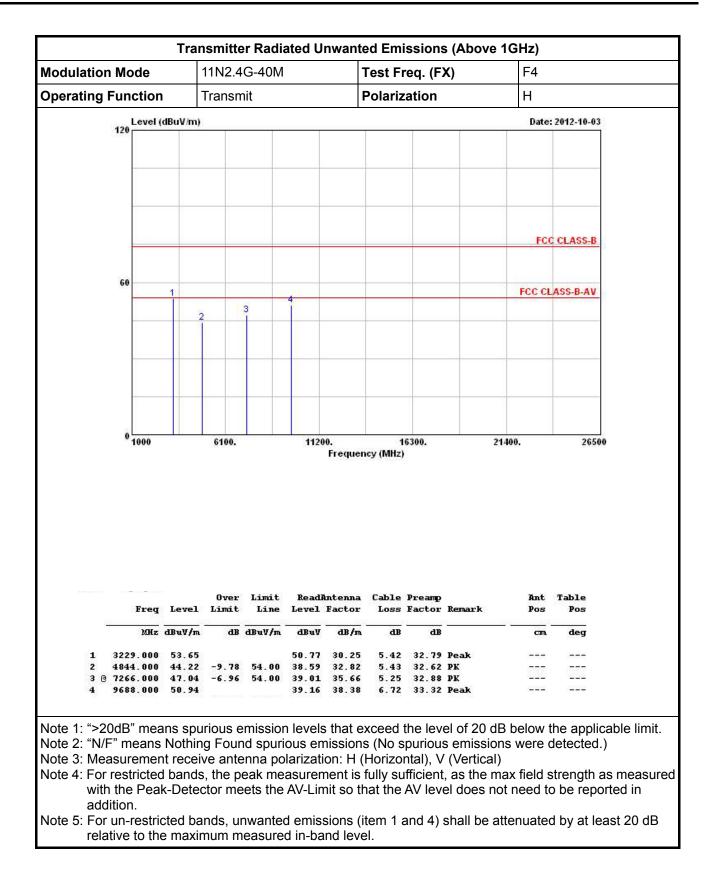




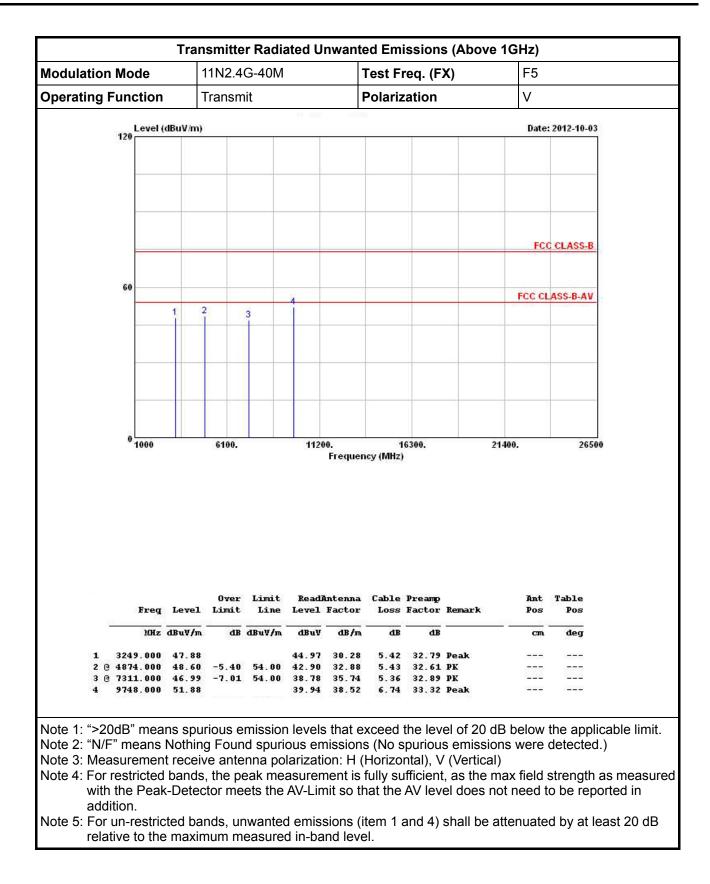
#### Transmitter Radiated Unwanted Emissions (Above 1GHz) **Modulation Mode** 11N2.4G-40M Test Freq. (FX) F4 Transmit V **Operating Function** Polarization Level (dBuV/m) Date: 2012-10-03 120 FCC CLASS-B 60 FCC CLASS-B-AV 3 0 1000 6100. 11200. 16300. 21400. 26500 Frequency (MHz) Ant Table Over Limit ReadAntenna Cable Preamp Freq Level Limit Line Level Factor Loss Factor Remark Pos Pos dB dBuV/m MHz dBuV/m dBuV dB/m dB dB deg cm 3229.000 46.86 43.98 30.25 5.42 32.79 Peak 1 ---4844.000 43.30 -10.70 54.00 37.67 32.82 2 5.43 32.62 PK \_\_\_\_ 7266.000 45.82 -8.18 54.00 37.79 35.66 32.88 PK 3 5.25 \_\_\_\_ 9688.000 51.32 39.54 38.38 6.72 33.32 Peak Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit. Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.) Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical) Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition. Note 5: For un-restricted bands, unwanted emissions (item 1 and 4) shall be attenuated by at least 20 dB relative to the maximum measured in-band level.

#### 3.6.9 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11N2.4G-40M-NTX 1

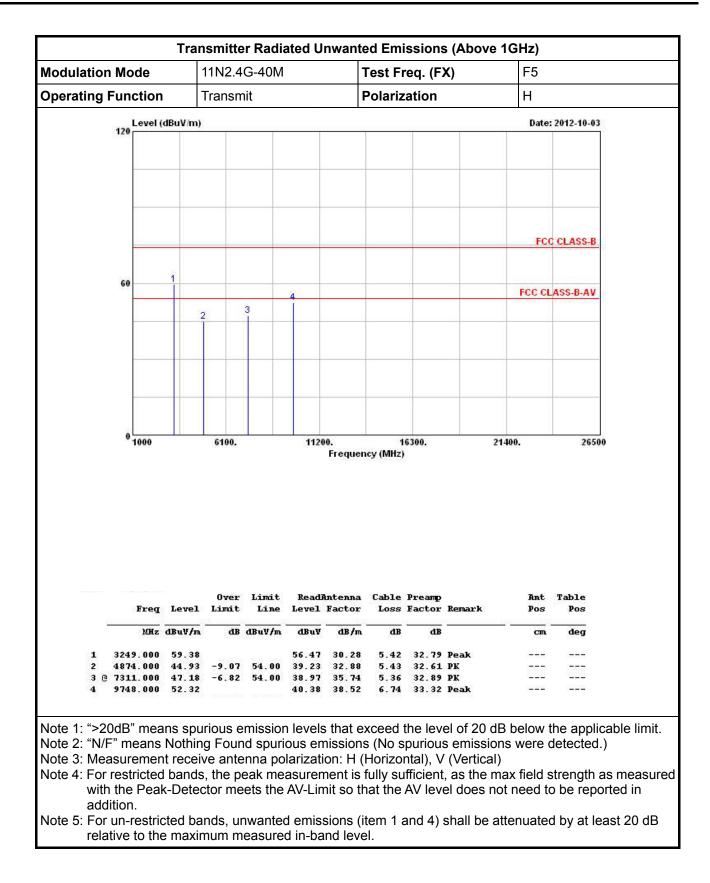




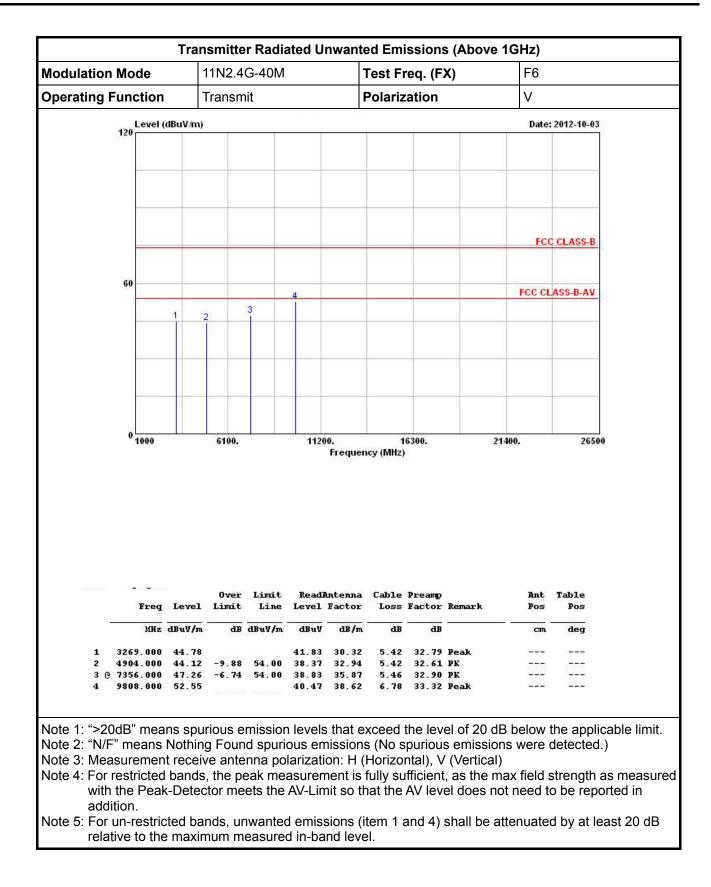




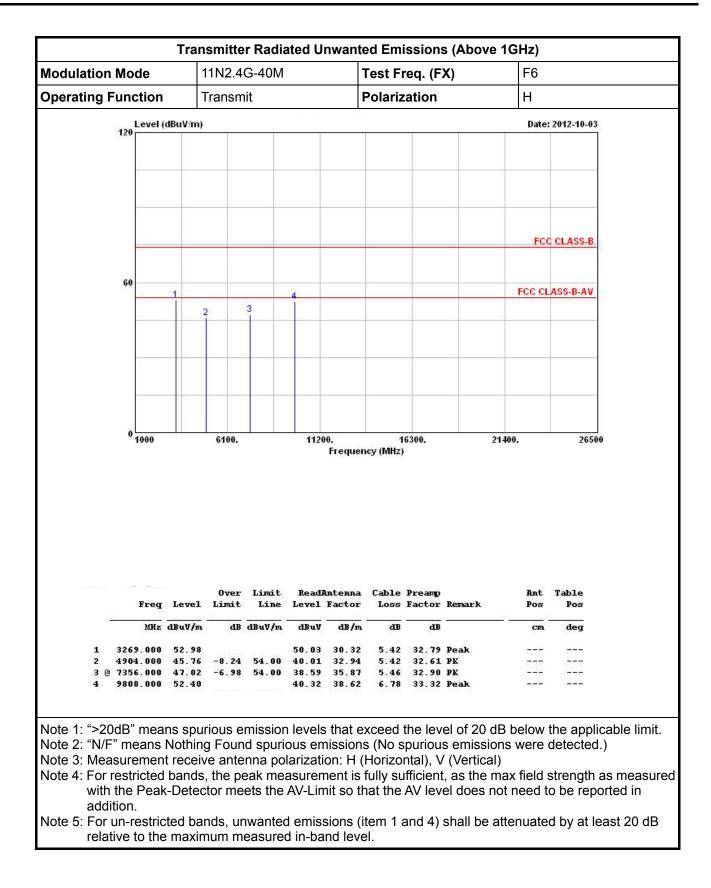




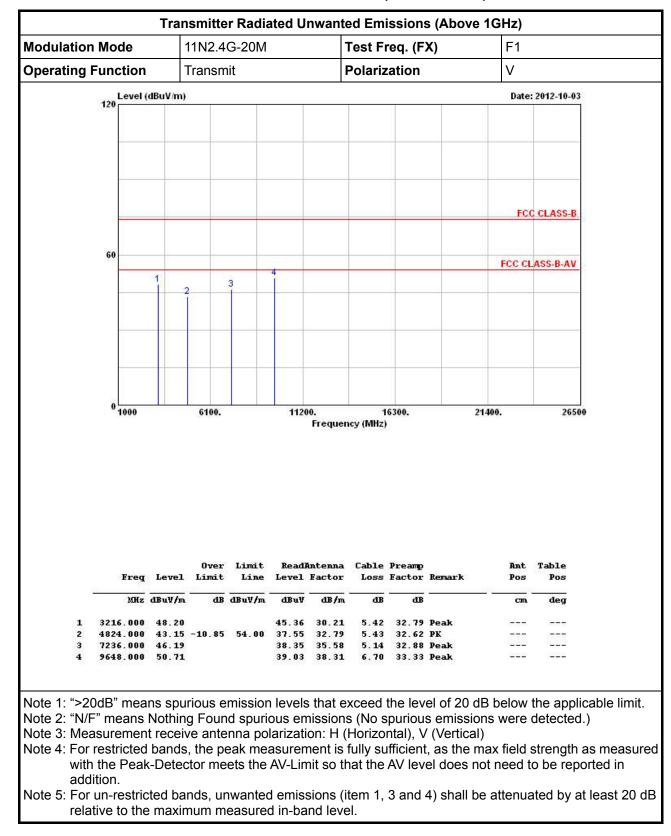






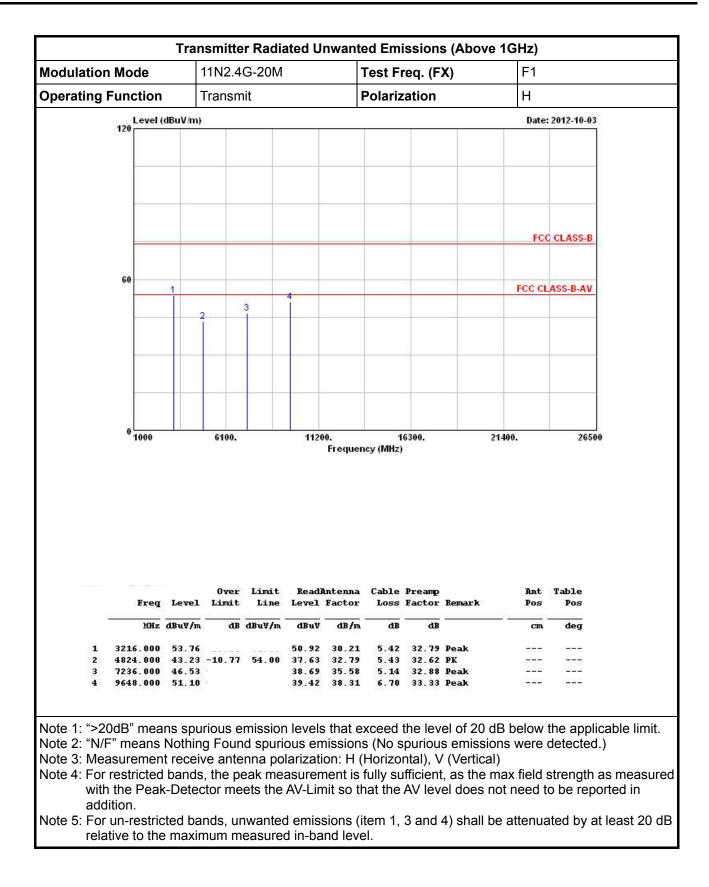




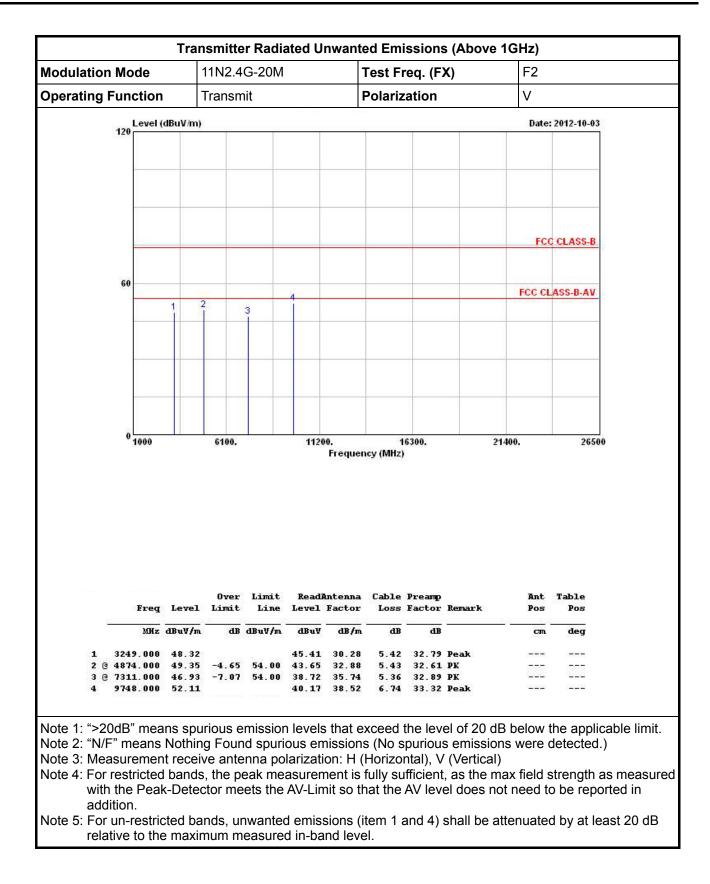


#### 3.6.10 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11N2.4G-20M-NTX 2

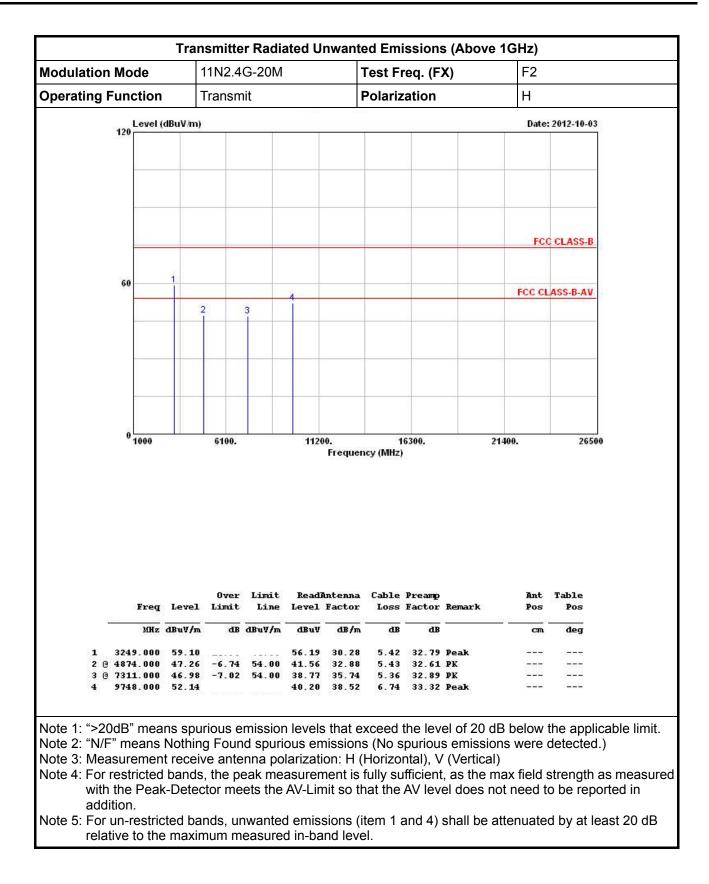




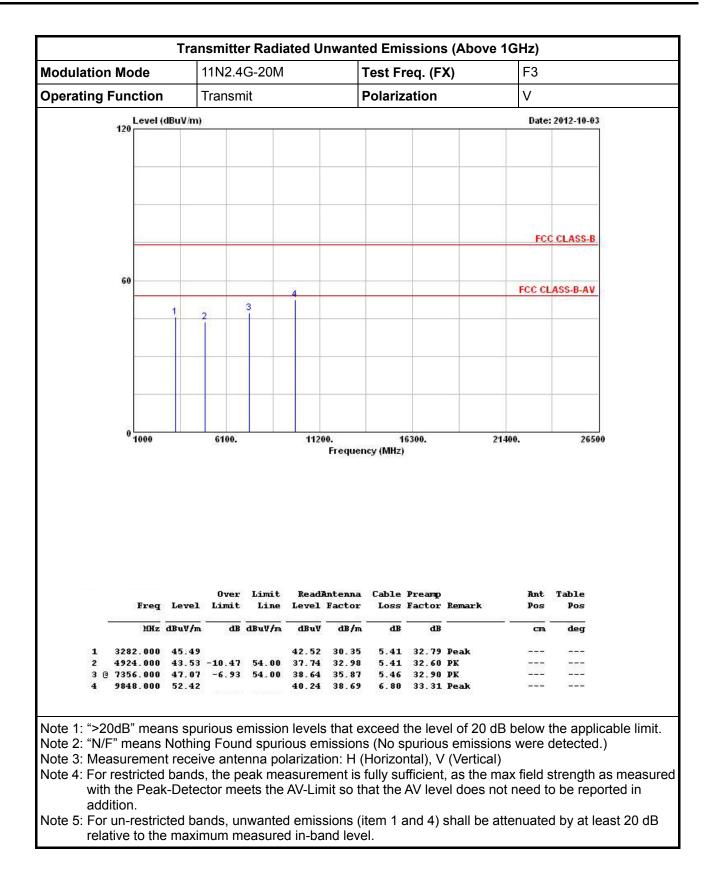




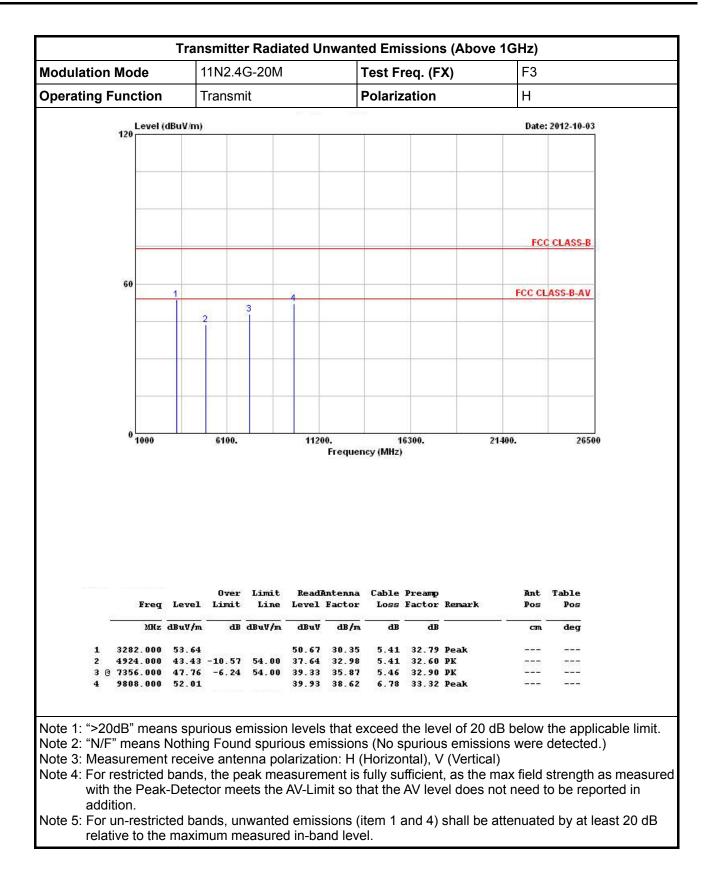




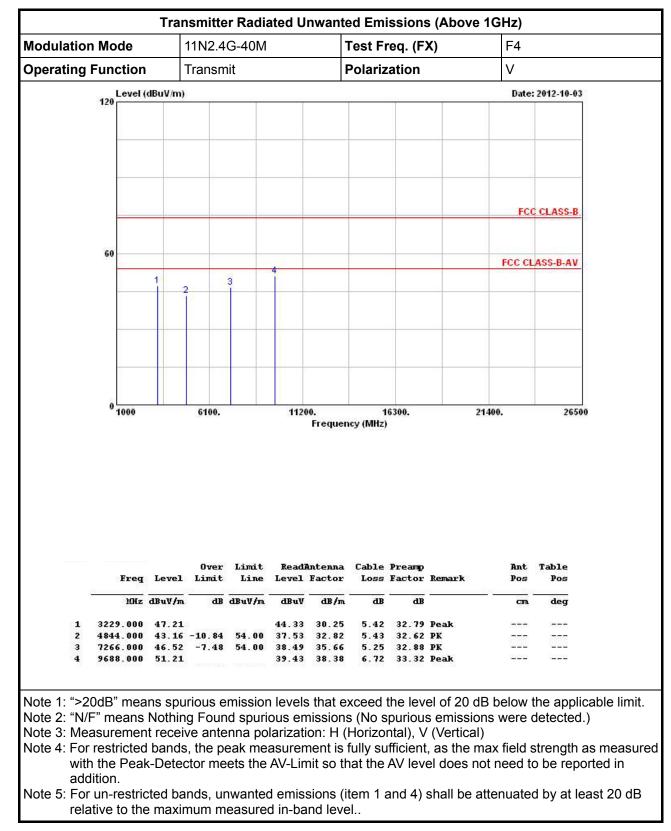






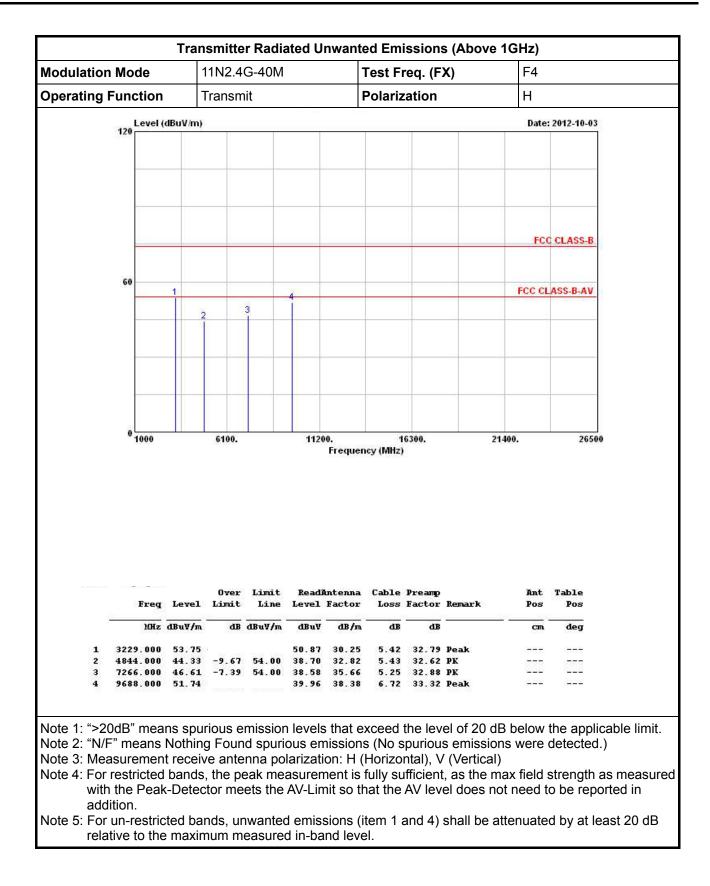




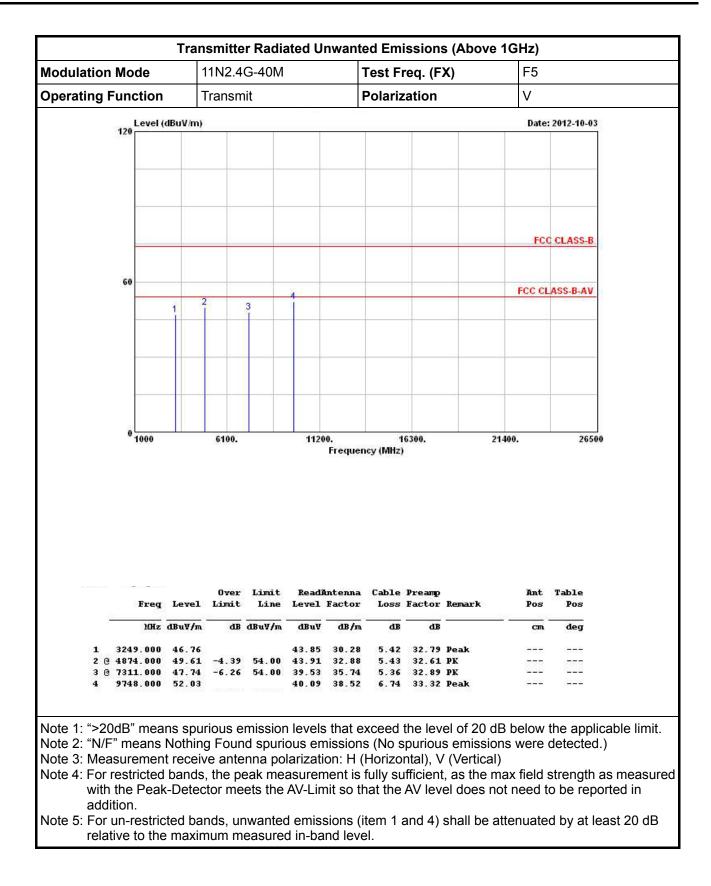


### 3.6.11 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 11N2.4G-40M-NTX 2

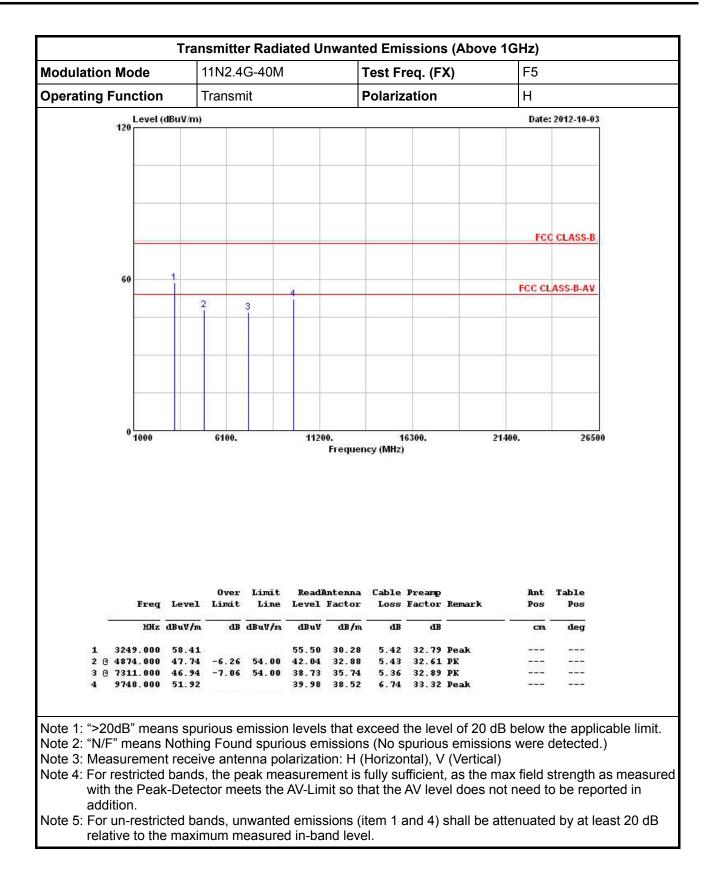




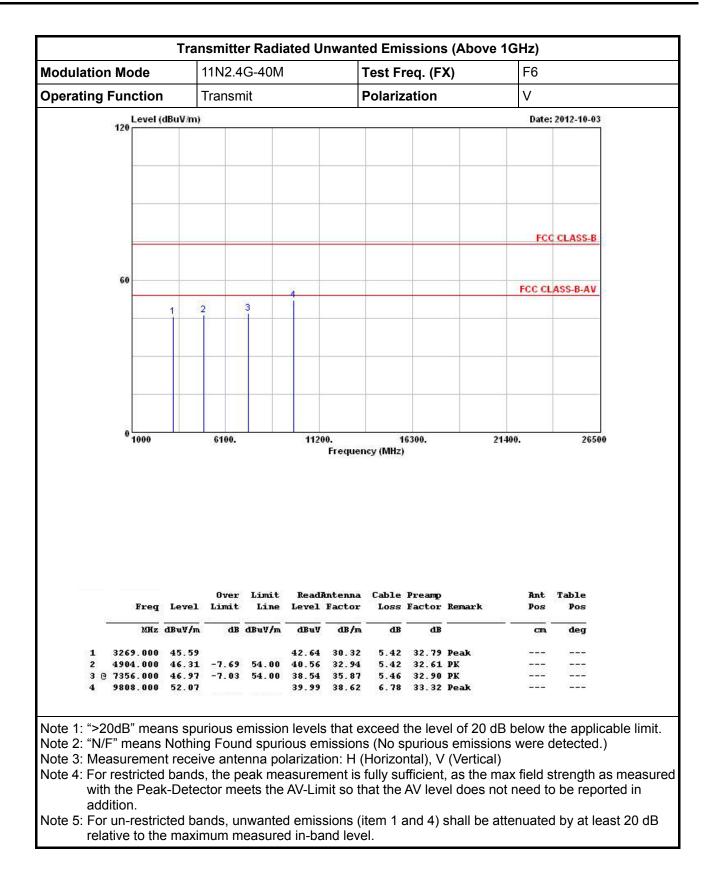




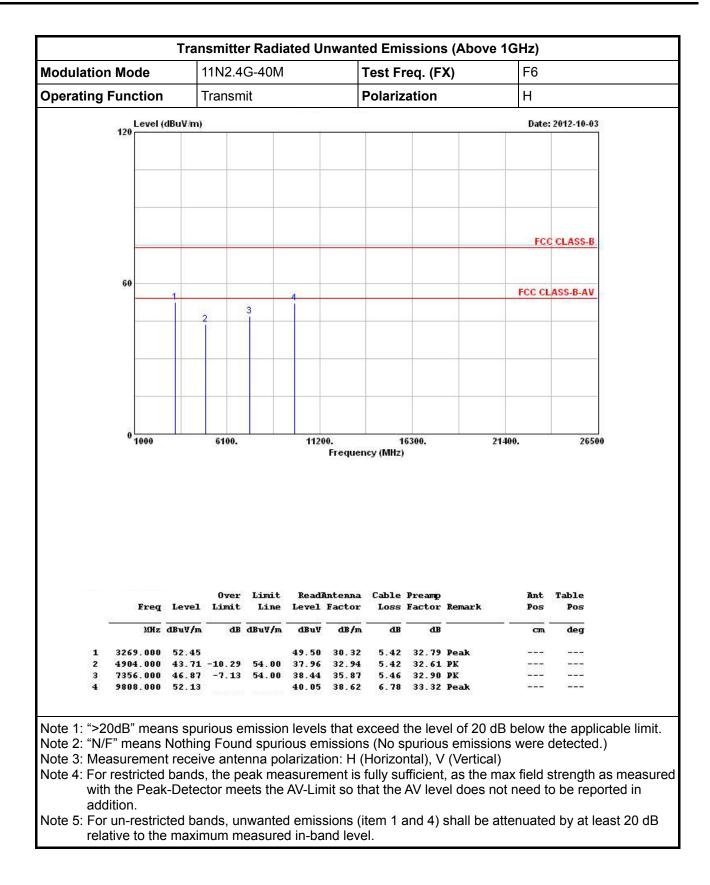














# 4 Test Equipment and Calibration Data

| Instrument             | Manufacturer                   | Model No. | Serial No. | Characteristics | Calibration Date | Remark                  |
|------------------------|--------------------------------|-----------|------------|-----------------|------------------|-------------------------|
| EMC Receiver           | R&S                            | ESCS 30   | 100174     | 9kHz ~ 2.75GHz  | Mar. 23, 2012    | Conduction<br>(CO04-HY) |
| LISN                   | SCHWARZBECK<br>MESS-ELEKTRONIK | NSLK 8127 | 8127-477   | 9kHz ~ 30MHz    | Feb. 08, 2012    | Conduction<br>(CO04-HY) |
| LISN<br>(Support Unit) | EMCO                           | 3810/2NM  | 9703-1839  | 9kHz ~ 30MHz    | Apr. 20, 2012    | Conduction<br>(CO04-HY) |
| RF Cable-CON           | HUBER+SUHNER                   | RG213/U   | CB049      | 9kHz ~ 30MHz    | Apr. 25, 2012    | Conduction<br>(CO04-HY) |

Note: Calibration Interval of instruments listed above is one year.

| Instrument                    | Manufacturer | Model No.        | Serial No.  | Characteristics    | Calibration Date | Remark                 |
|-------------------------------|--------------|------------------|-------------|--------------------|------------------|------------------------|
| Spectrum Analyzer             | R&S          | FSP 40           | 100305      | 9KHz~40GHz         | Feb. 21, 2012    | Conducted<br>(TH01-HY) |
| Spectrum Analyzer             | R&S          | FSV 40           | 15195-01-00 | 9KHz~40GHz         | Jan. 06, 2012    | Conducted<br>(TH01-HY) |
| DC Power Source               | G.W.         | GPC-6030D        | C671845     | DC 1V ~ 60V        | Jun. 19, 2012    | Conducted<br>(TH01-HY) |
| AC Power Source               | G.W          | APS-9102         | EL920581    | AC 0V ~ 300V       | Jul. 02, 2012    | Conducted<br>(TH01-HY) |
| Temp. and Humidity<br>Chamber | Giant Force  | GTH-225-20-SP-SD | MAA1112-007 | <b>-20 ~ 100</b> ℃ | Dec. 07, 2011    | Conducted<br>(TH01-HY) |
| Signal Generator              | R&S          | SMR40            | 100302      | 10MHz ~ 40GHz      | Nov. 22, 2011    | Conducted<br>(TH01-HY) |
| Power Sensor                  | Anritsu      | MA2411B          | 1027452     | 300MHz ~ 40GHz     | Jan. 12, 2012    | Conducted<br>(TH01-HY) |
| Power Meter                   | Anritsu      | ML2495A          | 1124009     | 300MHz ~ 40GHz     | Jan. 12, 2012    | Conducted<br>(TH01-HY) |
| RF Cable-2m                   | HUBER+SUHNER | SUCOFLEX_104     | SN 345672/4 | 1GHz ~ 26.5GHz     | Dec. 03, 2011    | Conducted<br>(TH01-HY) |
| RF Cable-3m                   | HUBER+SUHNER | SUCOFLEX_104     | SN 345668/4 | 1GHz ~ 26.5GHz     | Dec. 03, 2011    | Conducted<br>(TH01-HY) |

Note: Calibration Interval of instruments listed above is one year.



| Instrument                  | Manufacturer   | Model No.    | Serial No.    | Characteristics    | Calibration<br>Date | Remark                   |
|-----------------------------|----------------|--------------|---------------|--------------------|---------------------|--------------------------|
| 3m Semi Anechoic<br>Chamber | SIDT FRANKONIA | SAC-3M       | 03CH03-HY     | 30MHz ~ 1GHz<br>3m | Dec. 12, 2011       | Radiation<br>(03CH03-HY) |
| Amplifier                   | HP             | 8447D        | 2944A08033    | 10kHz ~ 1.3GHz     | May. 10, 2012       | Radiation<br>(03CH03-HY) |
| Amplifier                   | Agilent        | 8449B        | 3008A02120    | 1GHz ~ 26.5GHz     | Aug 16 2012         | Radiation<br>(03CH03-HY) |
| Spectrum<br>Analyzer        | R&S            | FSP30        | 1164.4391.130 | 9kHz ~ 30GHz       | Sep. 27, 2012       | Radiation<br>(03CH03-HY) |
| Bilog Antenna               | SCHAFFNER      | CBL 6112D    | 22237         | 30MHz ~ 1GHz       | Oct. 22, 2011       | Radiation<br>(03CH03-HY) |
| Horn Antenna                | EMCO           | 3115         | 6741          | 1GHz ~ 18GHz       | May 30, 2012        | Radiation<br>(03CH03-HY) |
| Horn Antenna                | SCHWARZBECK    | BBHA9170     | BBHA9170154   | 15GHz ~ 40GHz      | Jan.13, 2012        | Radiation<br>(03CH03-HY) |
| RF Cable-R03m               | Jye Bao        | RG142        | CB021         | 30MHz ~ 1GHz       | Jan. 18, 2012       | Radiation<br>(03CH03-HY) |
| RF Cable-high               | SUHNER         | SUCOFLEX 106 | 03CH03-HY     | 1GHz ~ 40GHz       | Jan. 18, 2012       | Radiation<br>(03CH03-HY) |
| Turn Table                  | HD             | DS 420       | 420/650/00    | 0 ~ 360 degree     | N/A                 | Radiation<br>(03CH03-HY) |
| Antenna Mast                | MF             | MF-7802      | MF780208179   | 1 ~ 4 m            | N/A                 | Radiation<br>(03CH03-HY) |
| Loop Antenna                | R&S            | HFH2-Z2      | 860004/001    | 9kHz ~ 30MHz       | Jul. 29, 2010       | Radiation<br>(03CH03-HY) |

Note: Calibration Interval of instruments listed above is one year.



FCC RADIO TEST REPORT

## 5 Certification of TAF Accreditation Certificate No. : L1190-120405 財團法人全國認證基金會 **Taiwan Accreditation Foundation Certificate of Accreditation** This is to certify that Sporton International Inc. **EMC & Wireless Communications Laboratory** No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. is accredited in respect of laboratory **Accreditation Criteria** : ISO/IEC 17025:2005 **Accreditation Number** 1190 . **Originally Accredited** 1 December 15, 2003 **Effective Period** : January 10, 2010 to January 09, 2013 Accredited Scope : Testing Field, see described in the Appendix **Specific Accreditation** Accreditation Program for Designated Testing Laboratory 1 Program for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory Accreditation Program for BSMI Mutual Recognition Arrangment with Foreign Authorities - San Chen Jay-San Chen President, Taiwan Accreditation Foundation Date: April 05, 2012 P1, total 24 pages