

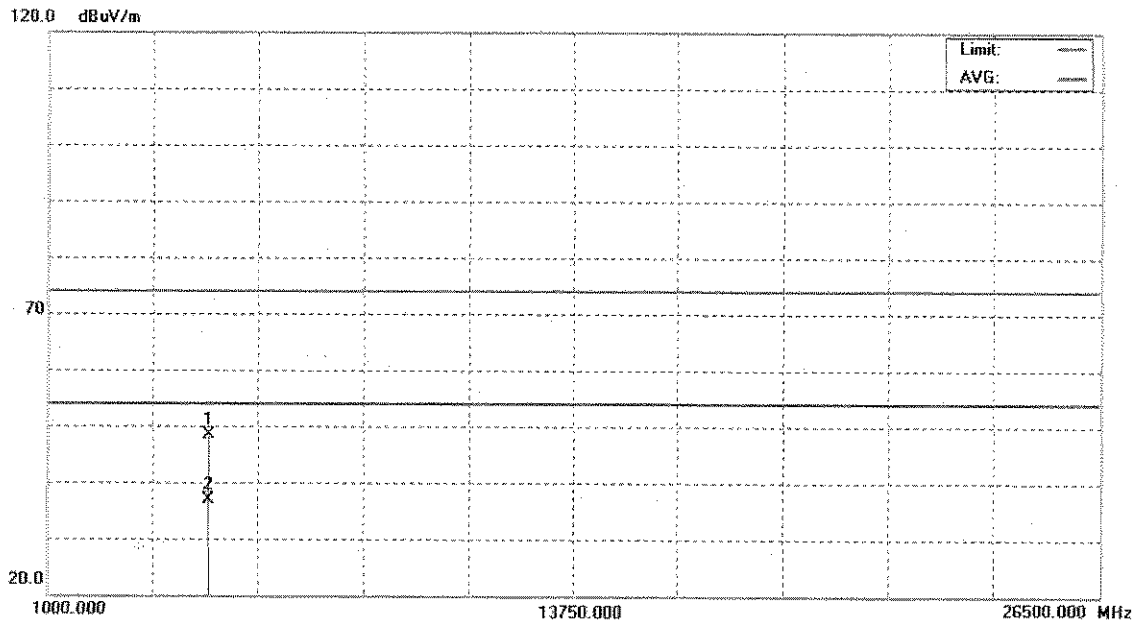
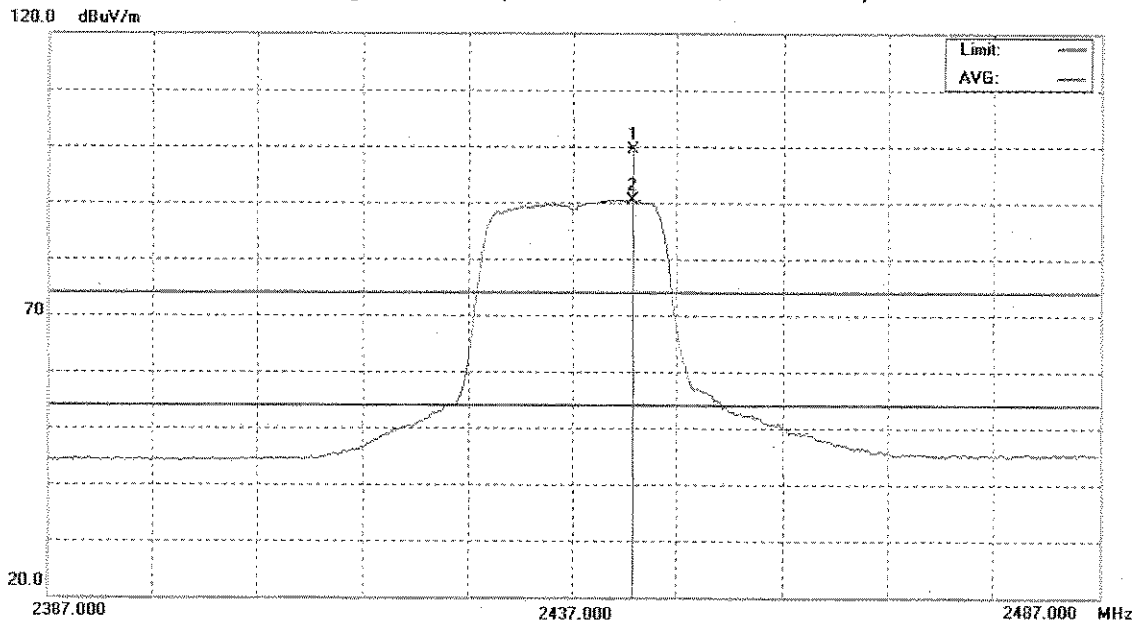
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25 °C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M/CH06 | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2442.80 | H | 66.54 | 57.57 | 32.87 | 99.41 | 90.44 | | | X/F |
| 4871.80 | H | 43.21 | 32.91 | 4.28 | 47.49 | 37.19 | 74.00 | 54.00 | X/H |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 「Note」 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform .
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes :
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis : X
802.11g/40M/CH06(Above 1000 MHz, Horizontal)



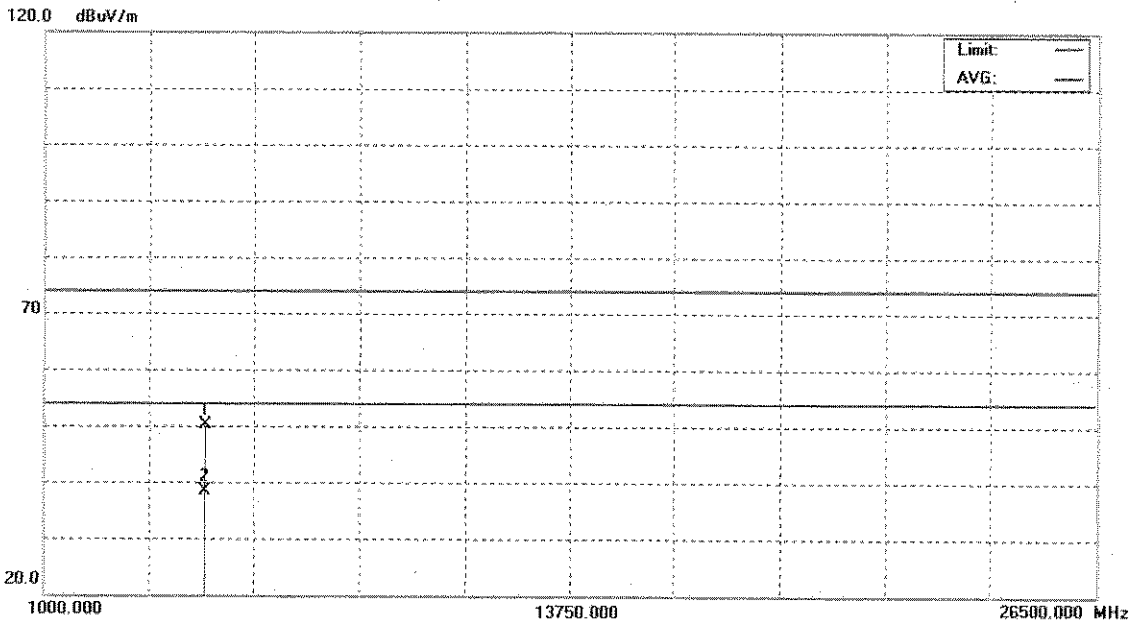
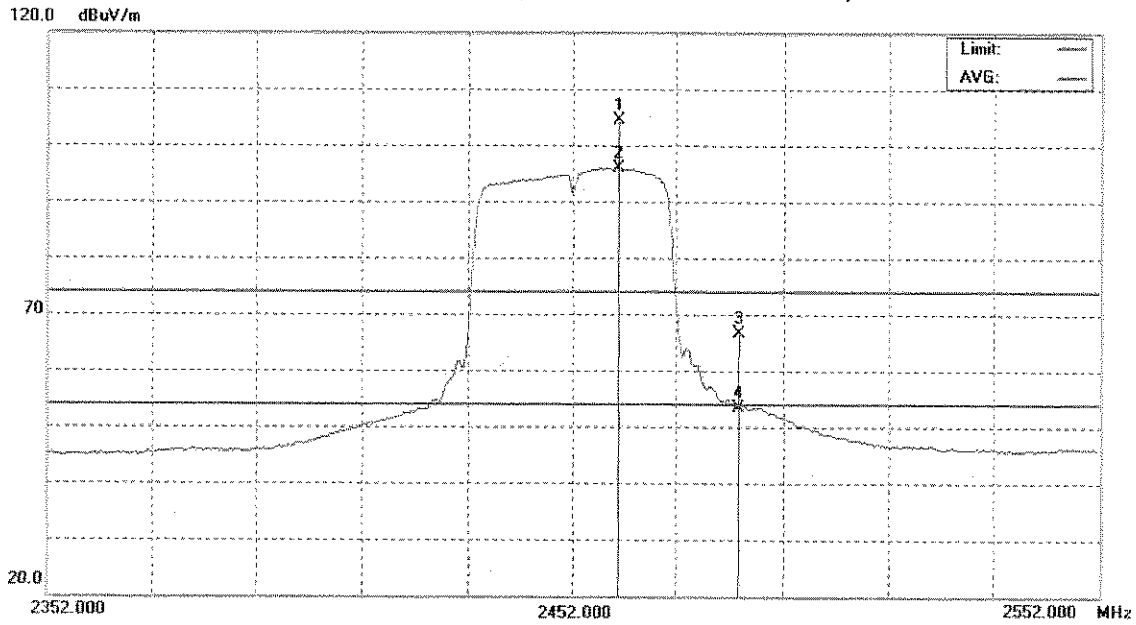
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25°C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M/CH09 | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2460.80 | V | 71.48 | 63.01 | 32.97 | 104.45 | 95.98 | | | X/F |
| 2483.50 | V | 33.54 | 20.39 | 33.10 | 66.64 | 53.49 | 74.00 | 54.00 | X/H |
| 4903.97 | V | 45.78 | 33.97 | 4.44 | 50.22 | 38.41 | 74.00 | 54.00 | X/H |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ◦
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency ◦ "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes :
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis : X
802.11g/40M/CH09(Above 1000 MHz, Vertical)



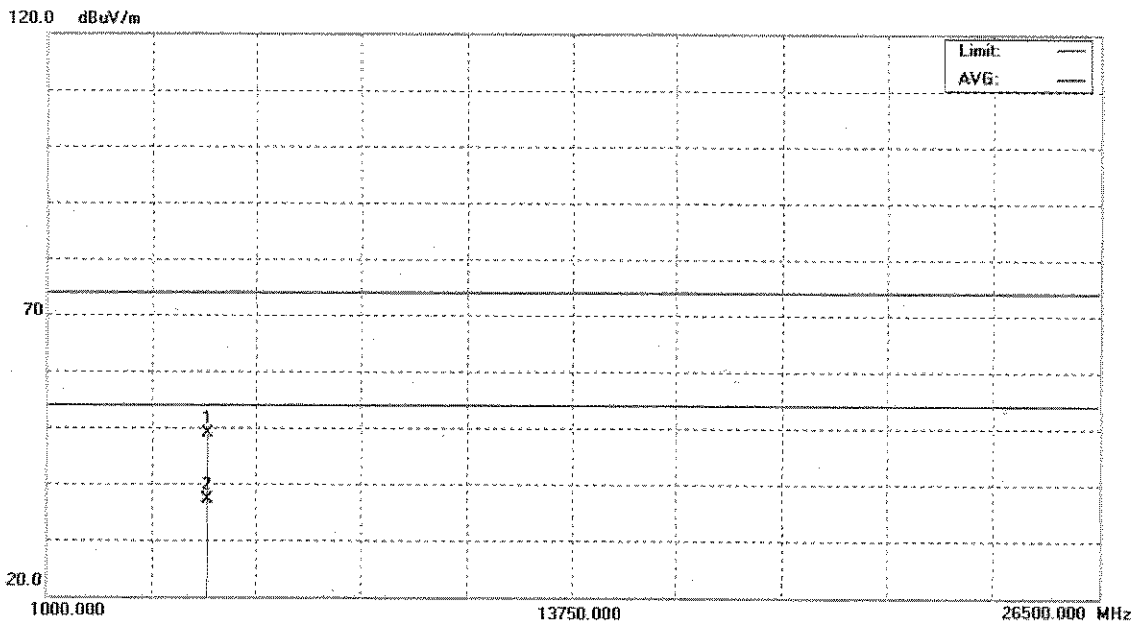
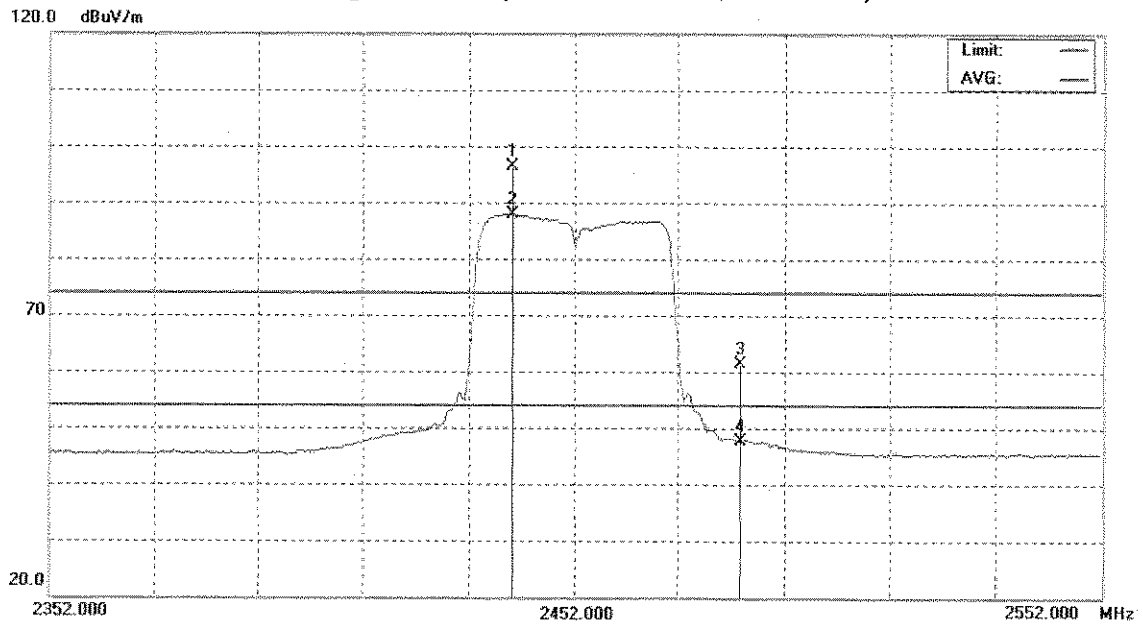
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25 °C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M/CH09 | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2440.00 | H | 63.53 | 55.01 | 32.85 | 96.38 | 87.86 | | | X/F |
| 2483.50 | H | 28.31 | 14.51 | 33.10 | 61.41 | 47.61 | 74.00 | 54.00 | X/H |
| 4903.12 | H | 44.38 | 32.64 | 4.43 | 48.81 | 37.07 | 74.00 | 54.00 | X/H |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated QP in column of 「Note」 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform .
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes :
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis : X
802.11g/40M/CH09(Above 1000 MHz, Horizontal)



4.2.9 TEST RESULTS-RESTRICTED BANDS REQUIREMENTS

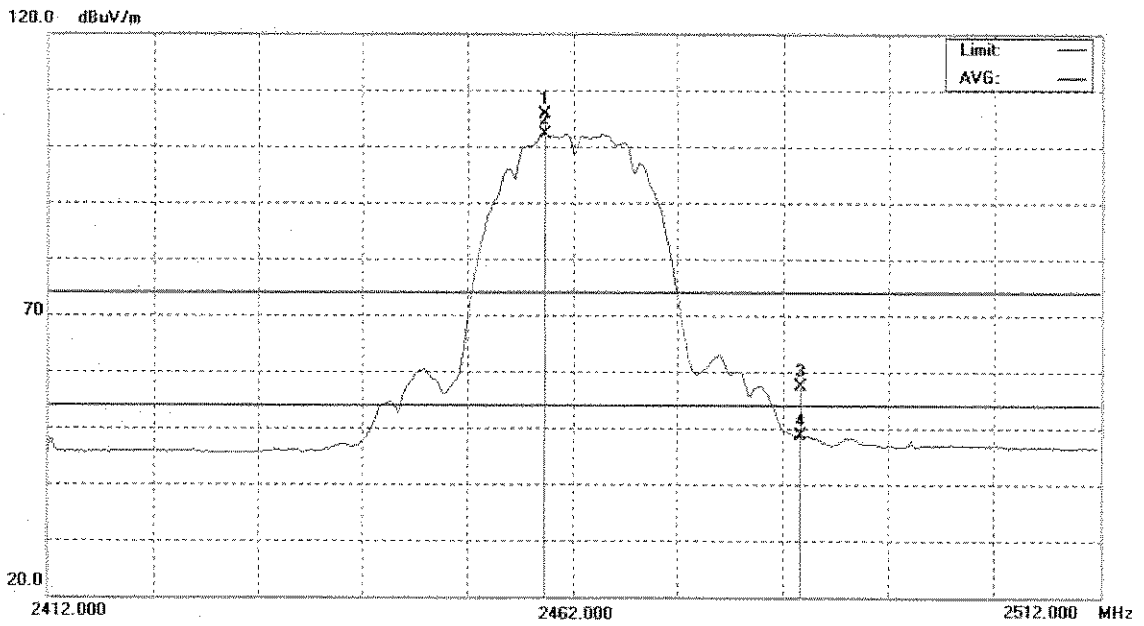
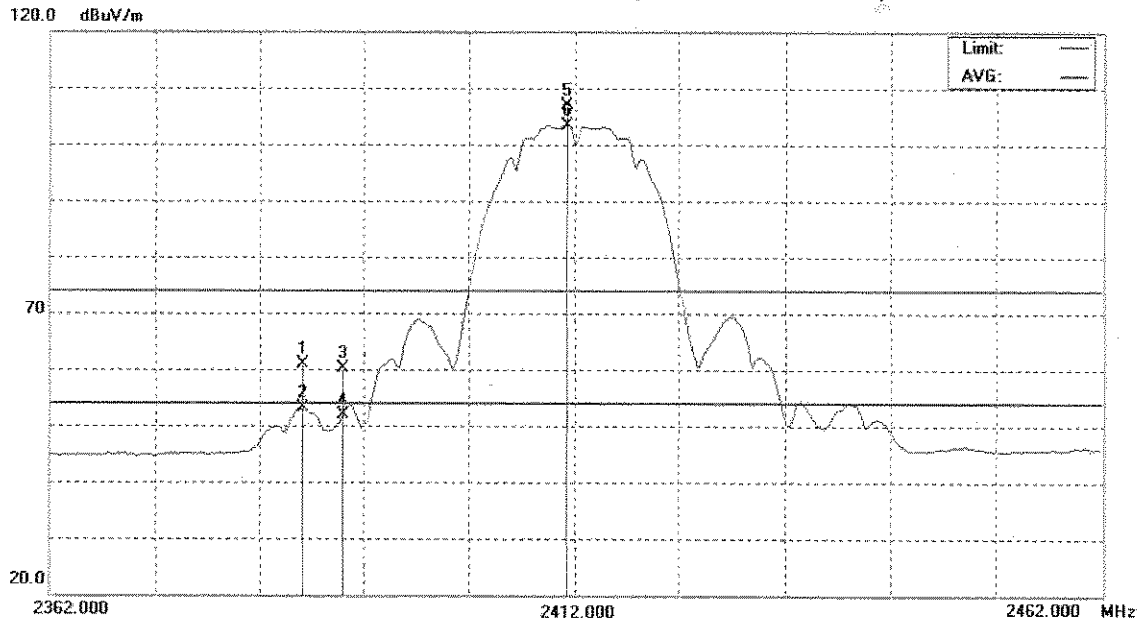
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25 °C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11b(Vertical) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH01/CH11 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH01). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH11). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2386.20 | V | 28.24 | 20.54 | 32.55 | 60.79 | 53.09 | 74.00 | 54.00 | X |
| 2483.50 | V | 24.34 | 15.53 | 33.10 | 57.44 | 48.63 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11b (Restricted Bands Requirements, Vertical)



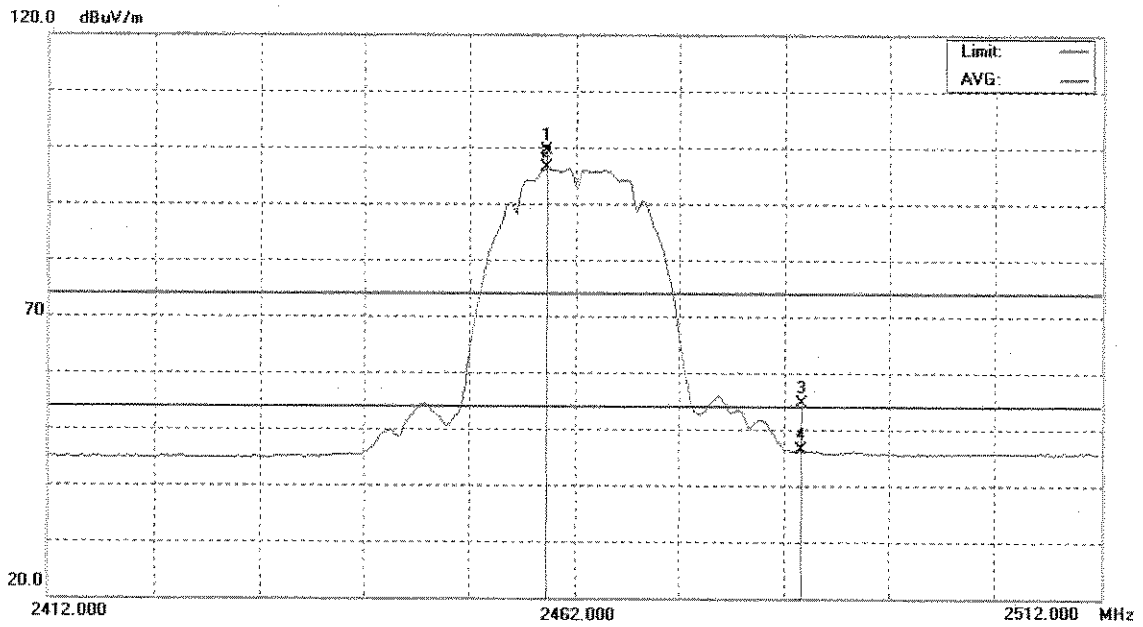
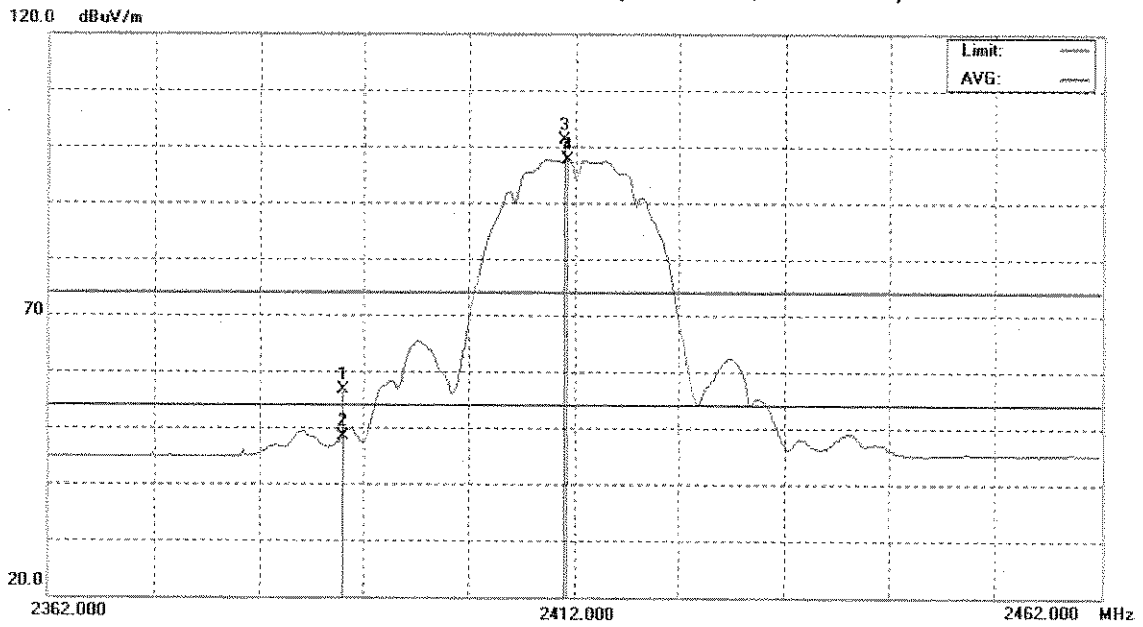
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25 °C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11b(Horizontal) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH01/CH11 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH01). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH11). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2390.00 | H | 24.03 | 15.91 | 32.57 | 56.60 | 48.48 | 74.00 | 54.00 | X |
| 2483.50 | H | 21.59 | 13.17 | 33.10 | 54.69 | 46.27 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11b (Restricted Bands Requirements, Horizontal)



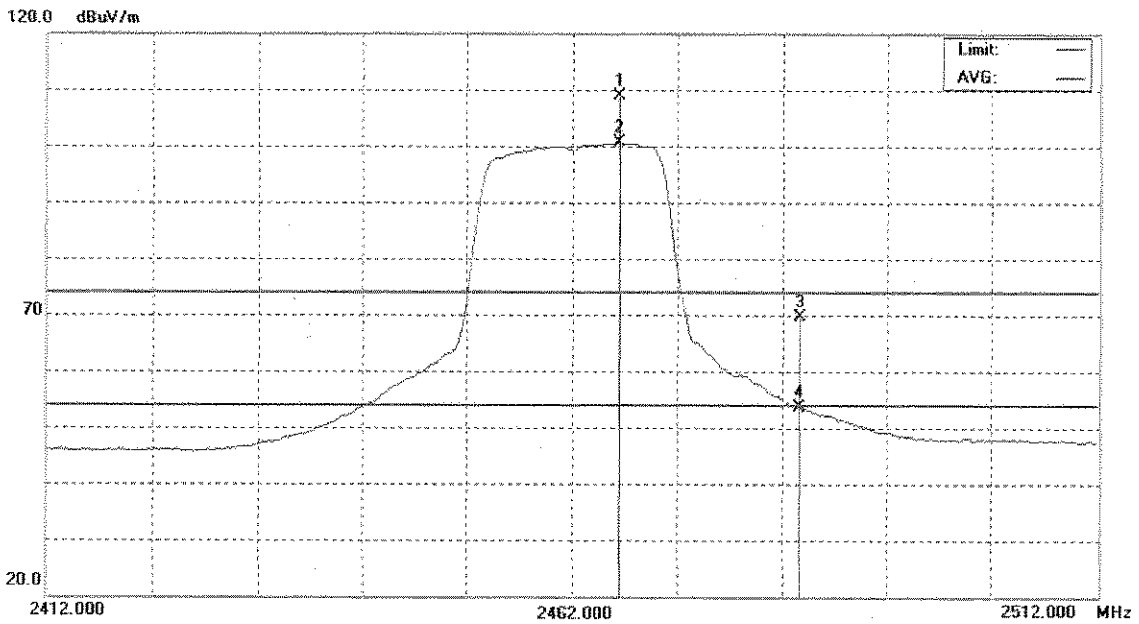
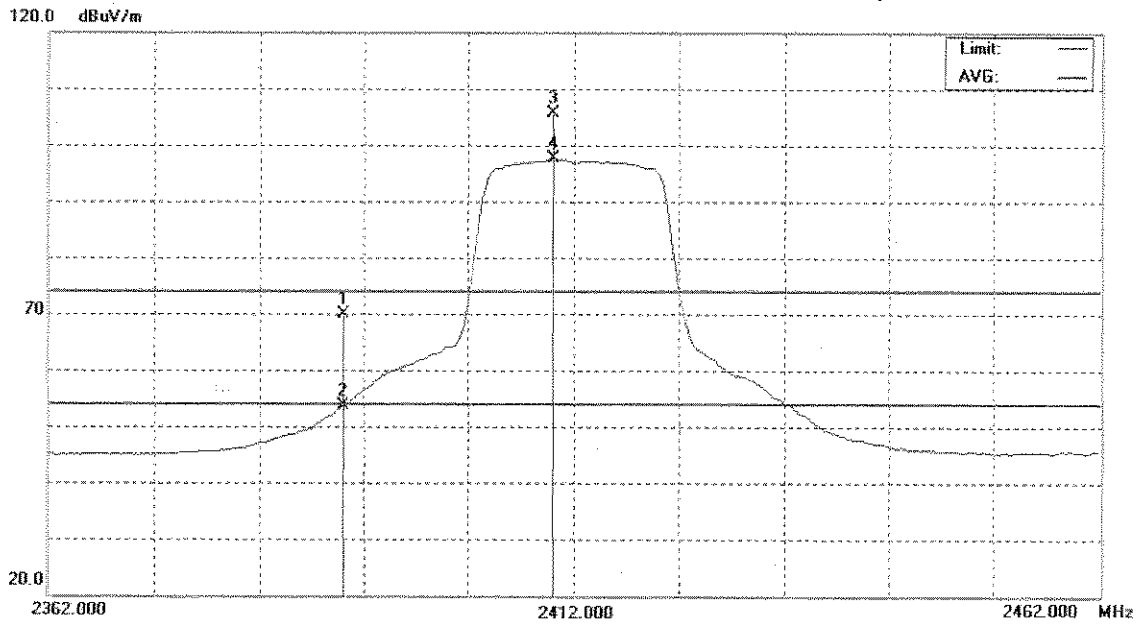
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25 °C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11g(Vertical) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH01/CH11 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH01). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH11). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2390.00 | V | 37.25 | 21.01 | 32.57 | 69.82 | 53.58 | 74.00 | 54.00 | X |
| 2483.50 | V | 36.59 | 20.48 | 33.10 | 69.69 | 53.58 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11g (Restricted Bands Requirements, Vertical)



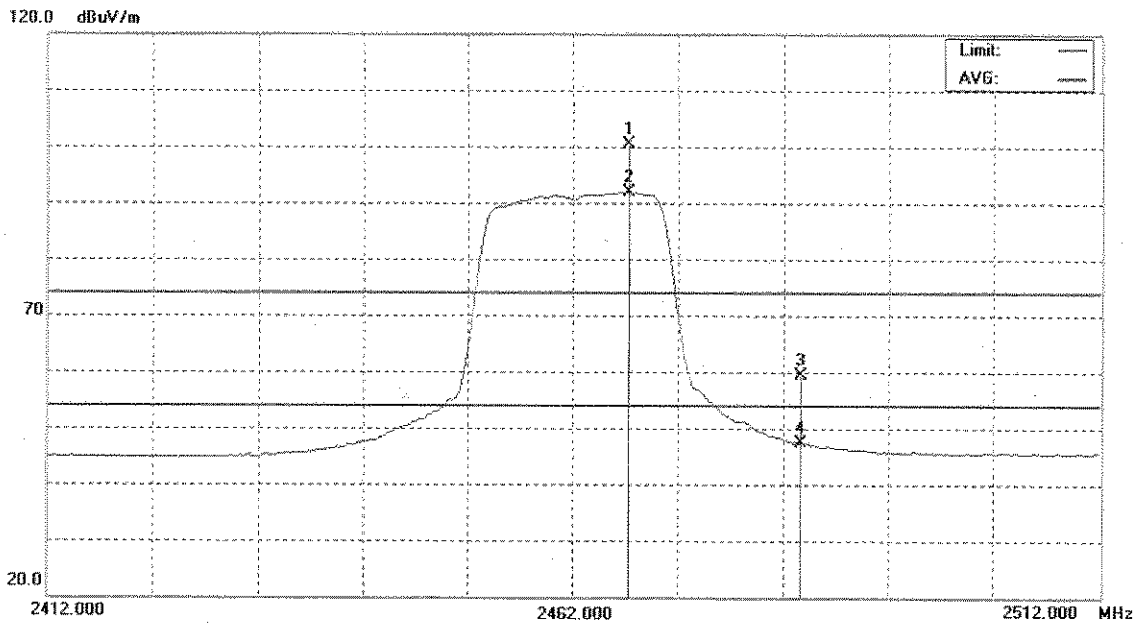
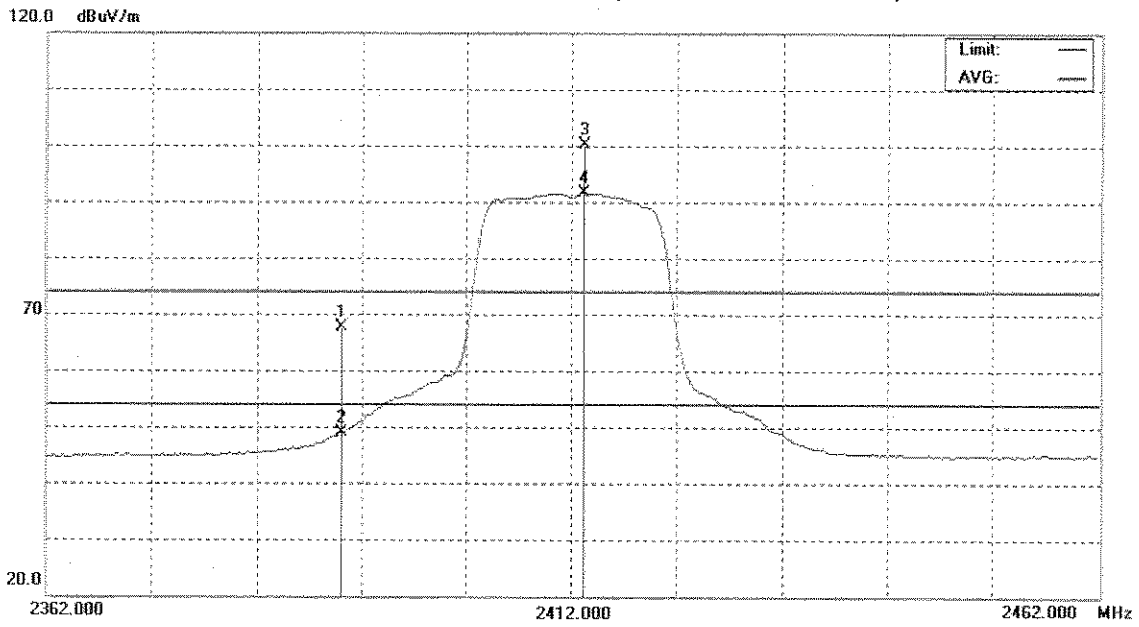
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25 °C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11g(Horizontal) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH01/CH11 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH01). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH11). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2390.00 | H | 35.16 | 16.25 | 32.57 | 67.73 | 48.82 | 74.00 | 54.00 | X |
| 2483.50 | H | 26.22 | 14.40 | 33.10 | 59.32 | 47.50 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11g (Restricted Bands Requirements, Horizontal)



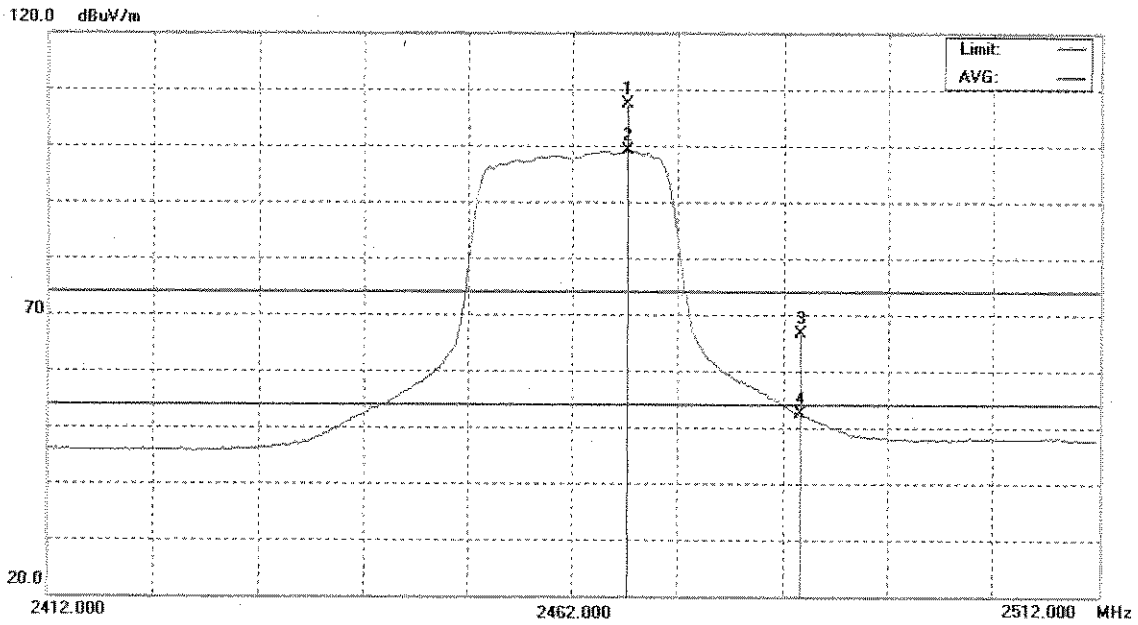
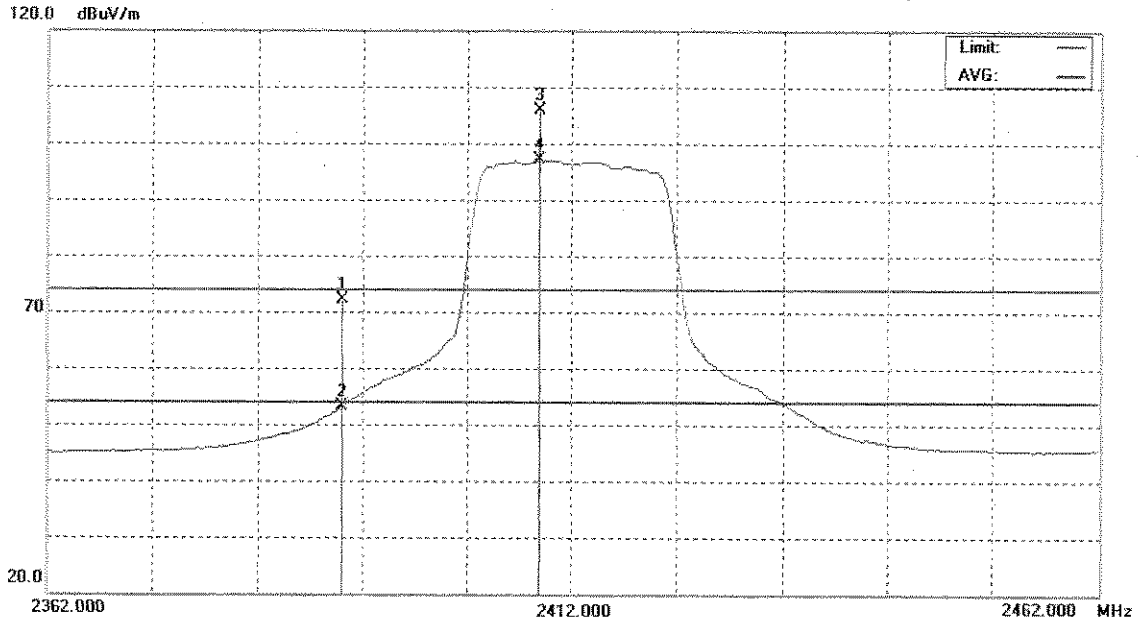
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25°C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11n/20M(Vertical) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH01/CH11 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH01). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH11). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant. Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|------------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2390.00 | V | 39.61 | 20.60 | 32.57 | 72.18 | 53.17 | 74.00 | 54.00 | X |
| 2483.50 | V | 33.52 | 19.26 | 33.10 | 66.62 | 52.36 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ◦
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11n/20M (Restricted Bands Requirements, Vertical)



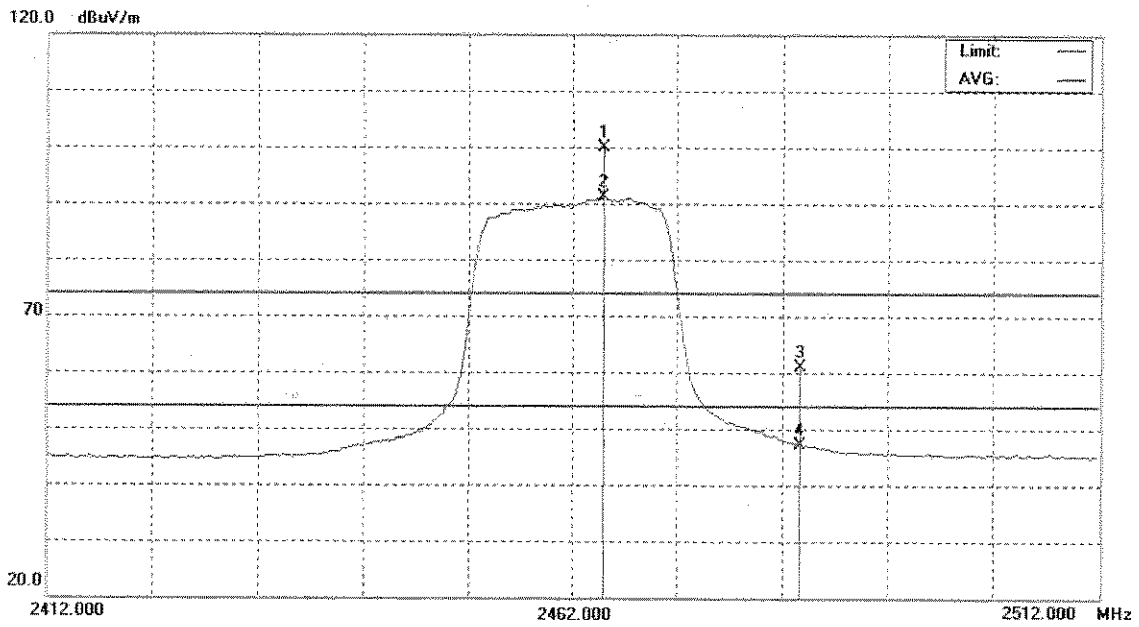
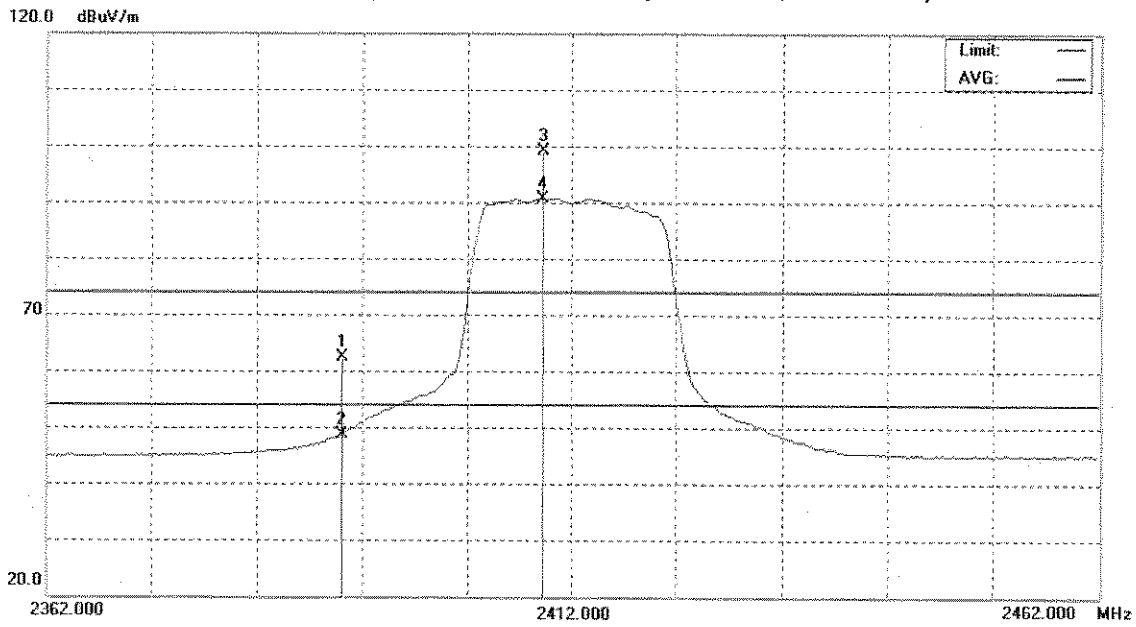
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25° C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11n/20M(Horizontal) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH01/CH11 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH01). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH11). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant. Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|------------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2390.00 | H | 29.79 | 16.12 | 32.57 | 62.36 | 48.69 | 74.00 | 54.00 | X |
| 2483.50 | H | 27.87 | 14.04 | 33.10 | 60.97 | 47.14 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11n/20M (Restricted Bands Requirements, Horizontal)



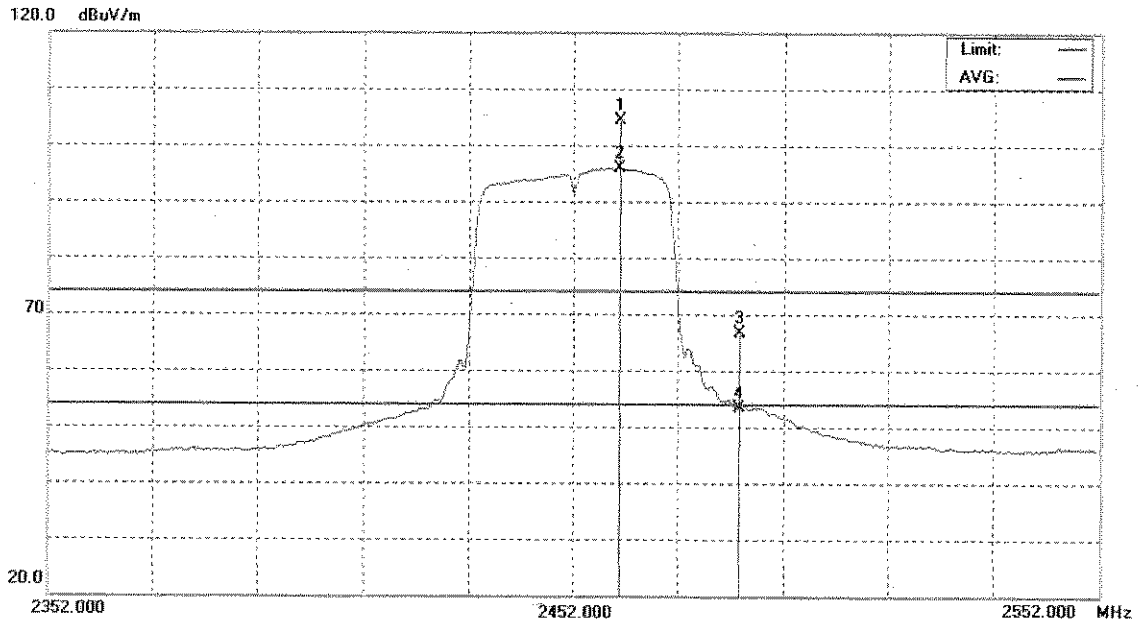
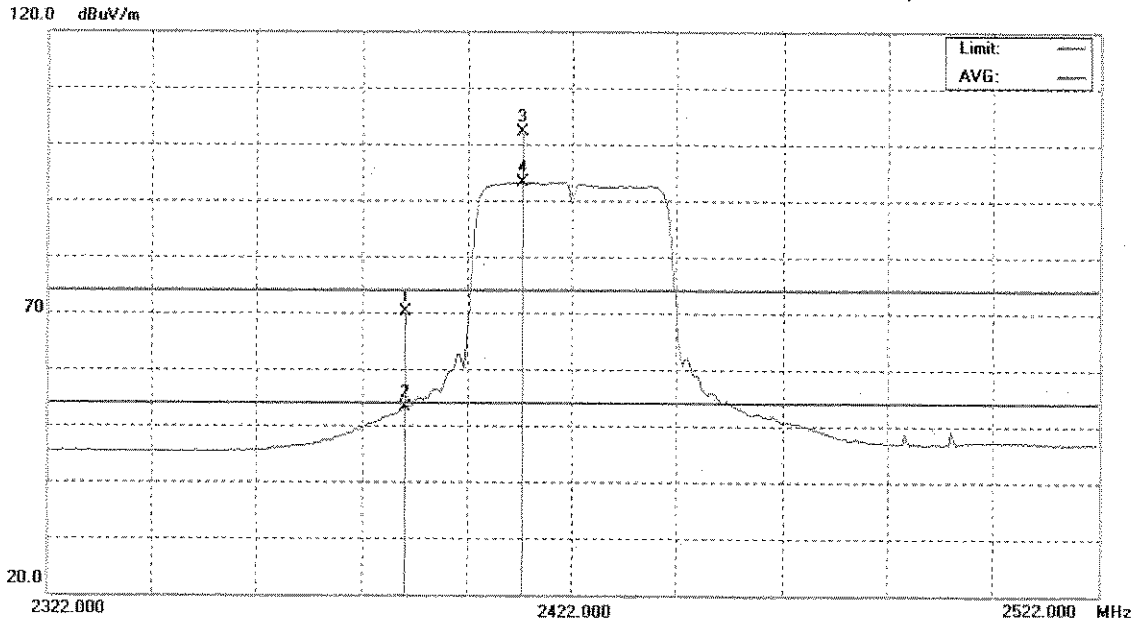
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25° C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M(Vertical) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH03/CH09 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH03). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH09). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant.Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|-----------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2390.00 | V | 37.54 | 20.66 | 32.57 | 70.11 | 53.23 | 74.00 | 54.00 | X |
| 2483.50 | V | 33.54 | 20.39 | 33.10 | 66.64 | 53.49 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11n/40M (Restricted Bands Requirements, Vertical)



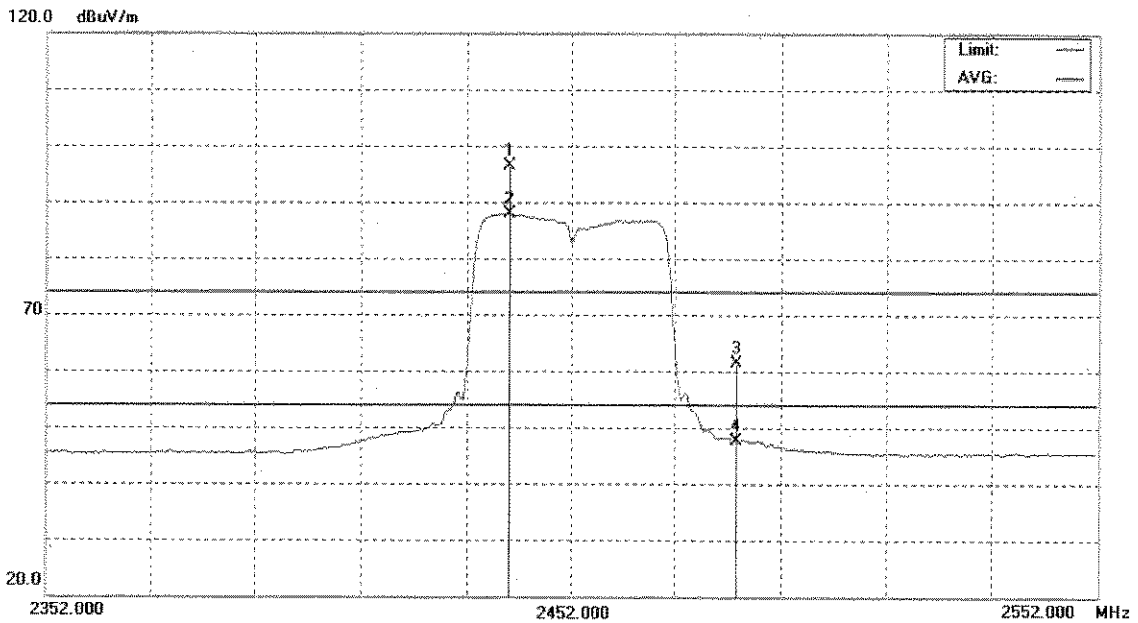
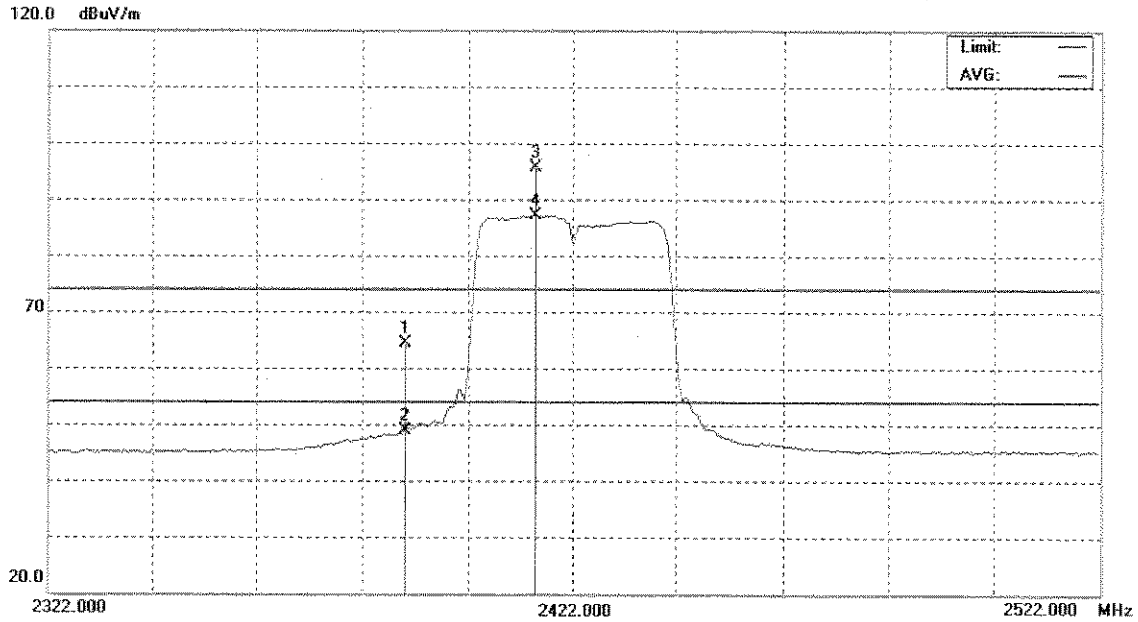
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 25 °C | Relative Humidity : | 76% |
| Pressure : | 1015 hPa | Test Voltage : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M(Horizontal) | | |
| Note : | <p>The emission of the carrier radiated field strength is measured for CH03/CH09 (Peak and AV) as following:</p> <ol style="list-style-type: none"> 1. The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel (CH03). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was configured with the worst case antenna and setup to transmit at the highest channel (CH09). Then the field strength was measured at 2483.5-2500 MHz. | | |

| Freq. (MHz) | Ant. Pol. H/V | Reading | | Ant./CF CF(dB) | Act. | | Limit | | Note |
|----------------|------------------|----------------|--------------|-------------------|------------------|----------------|------------------|----------------|------|
| | | Peak (dBuV) | AV (dBuV) | | Peak (dBuV/m) | AV (dBuV/m) | Peak (dBuV/m) | AV (dBuV/m) | |
| 2390.00 | H | 31.87 | 16.35 | 32.57 | 64.44 | 48.92 | 74.00 | 54.00 | X |
| 2483.50 | H | 28.31 | 14.51 | 33.10 | 61.41 | 47.61 | 74.00 | 54.00 | X |

Remark :

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 25GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (3) EUT Orthogonal Axes :
 "X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand

802.11n/40M (Restricted Bands Requirements, Horizontal)



5. BANDWIDTH TEST**5.1 APPLIED PROCEDURES / LIMIT**

| FCC Part15, Subpart C | | | |
|-----------------------|------------------------------|-----------------------|--------|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Bandwidth | >= 500KHz (6dB bandwidth) | 2400-2483.5 | PASS |

5.1.1 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|---------------------------|--------------|----------|------------|------------------|
| 1 | Spectrum Analyzer (1G) | R&S | FSP-40 | 100129 | Sep. 09, 2009 |

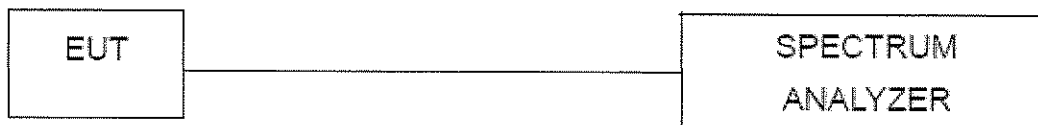
Remark: " N/A" denotes No Model No. , Serial No. or No Calibration specified.

5.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = Auto.

5.1.3 DEVIATION FROM STANDARD

No deviation.

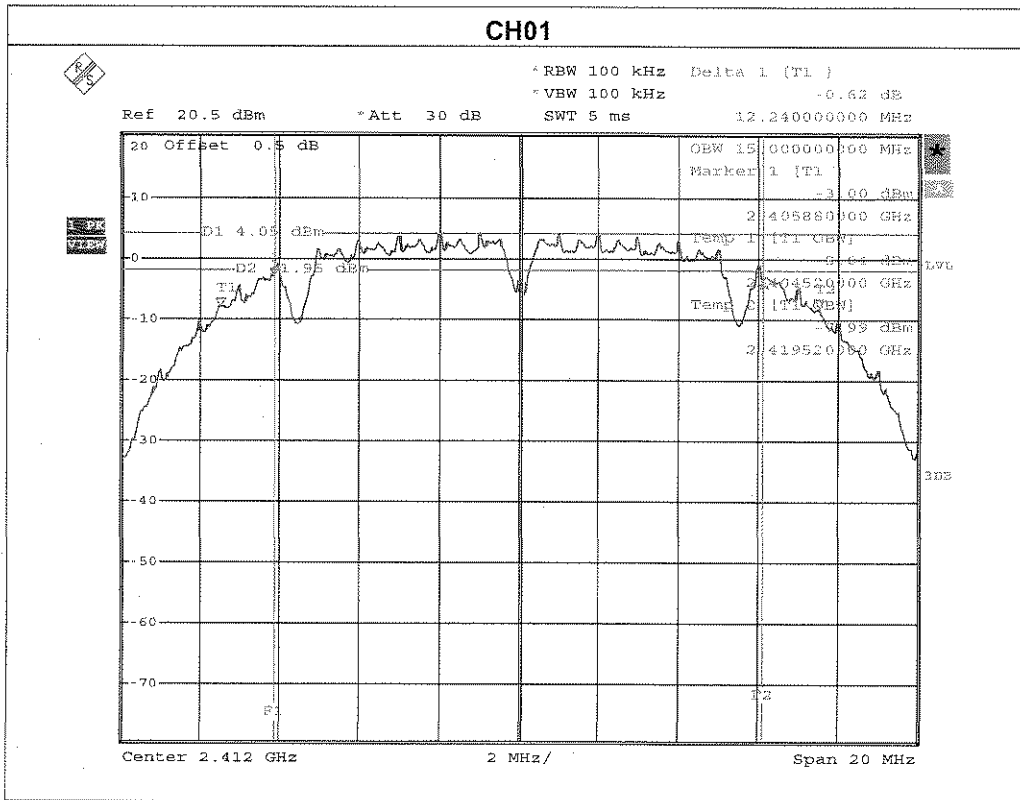
5.1.4 TEST SETUP**5.1.5 EUT OPERATION CONDITIONS**

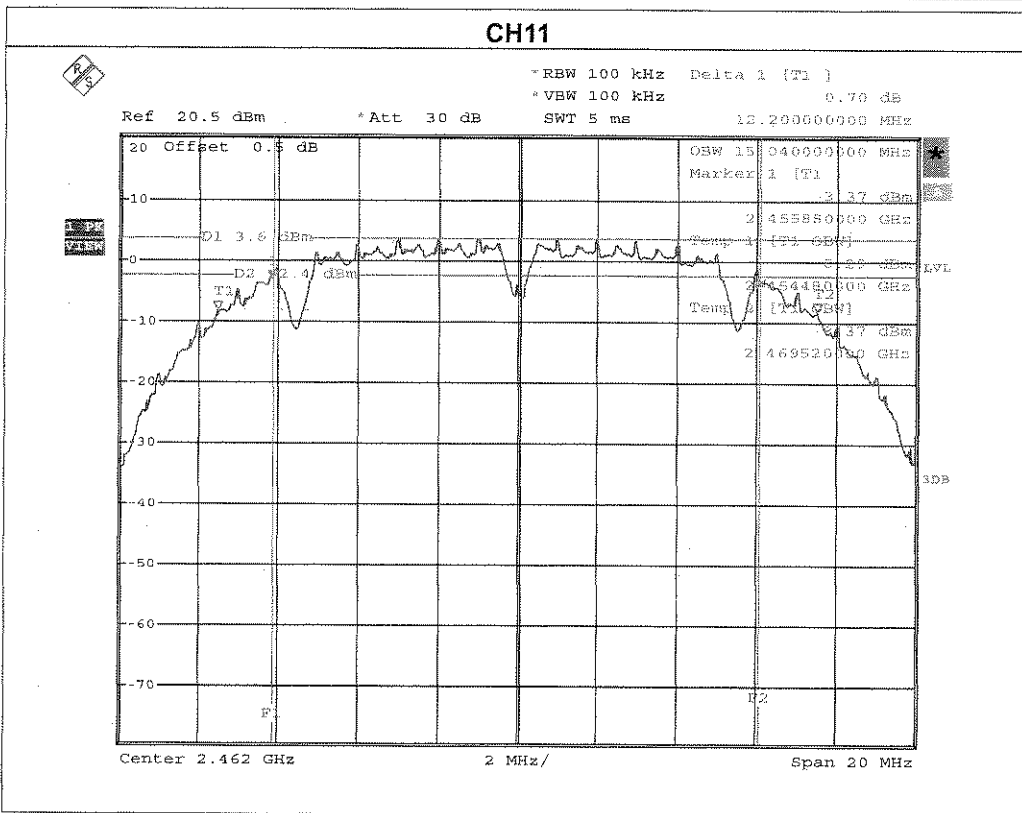
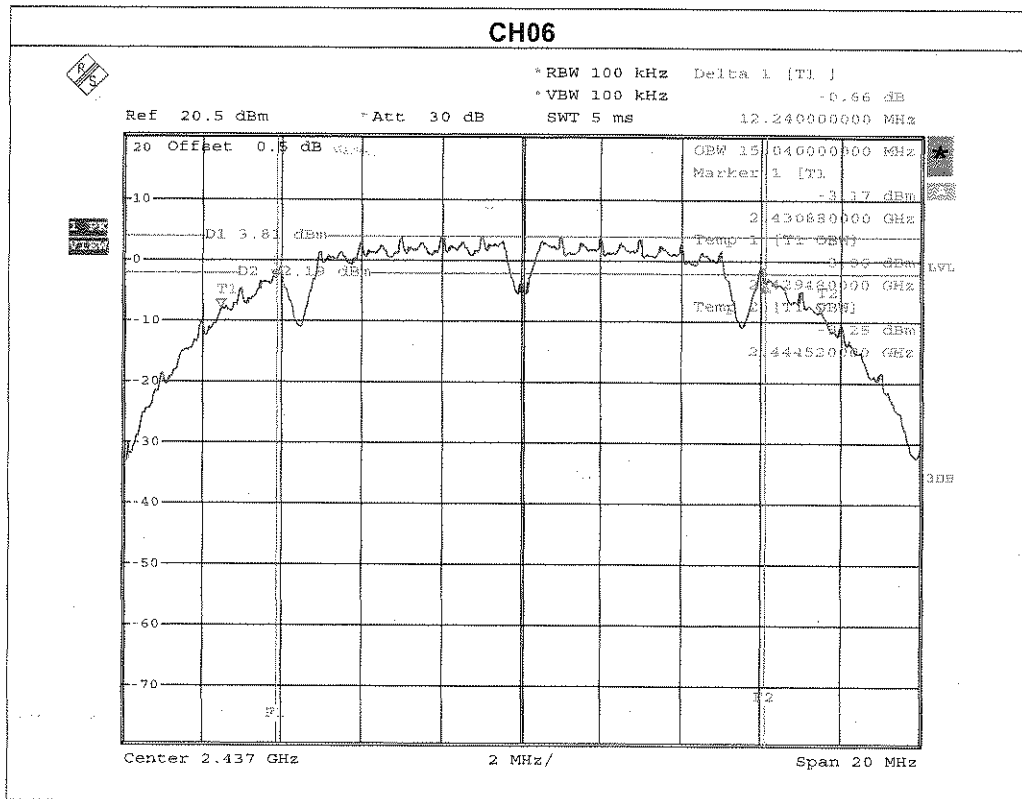
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.6 TEST RESULTS

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11b/CH01, CH06, CH11 | | |

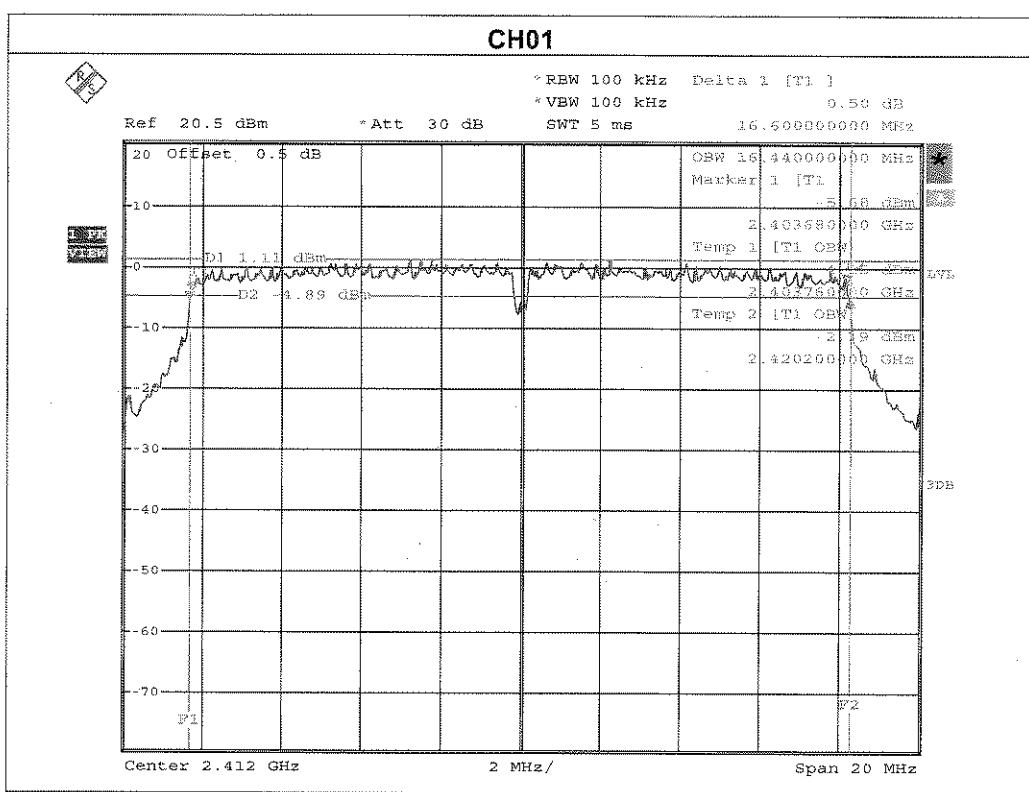
| Test Channel | Frequency (MHz) | Bandwidth (MHz) | LIMIT (MHz) |
|--------------|--------------------|--------------------|----------------|
| CH01 | 2412 | 12.24 | >=500KHz |
| CH06 | 2437 | 12.24 | >=500KHz |
| CH11 | 2462 | 12.20 | >=500KHz |

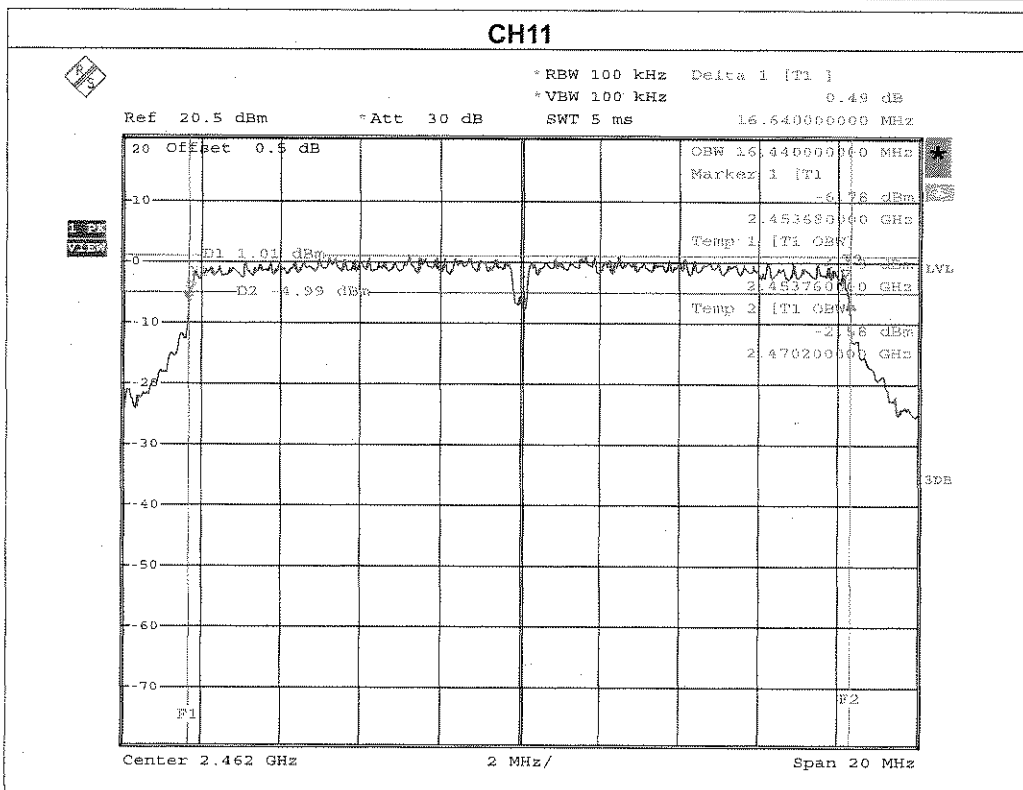
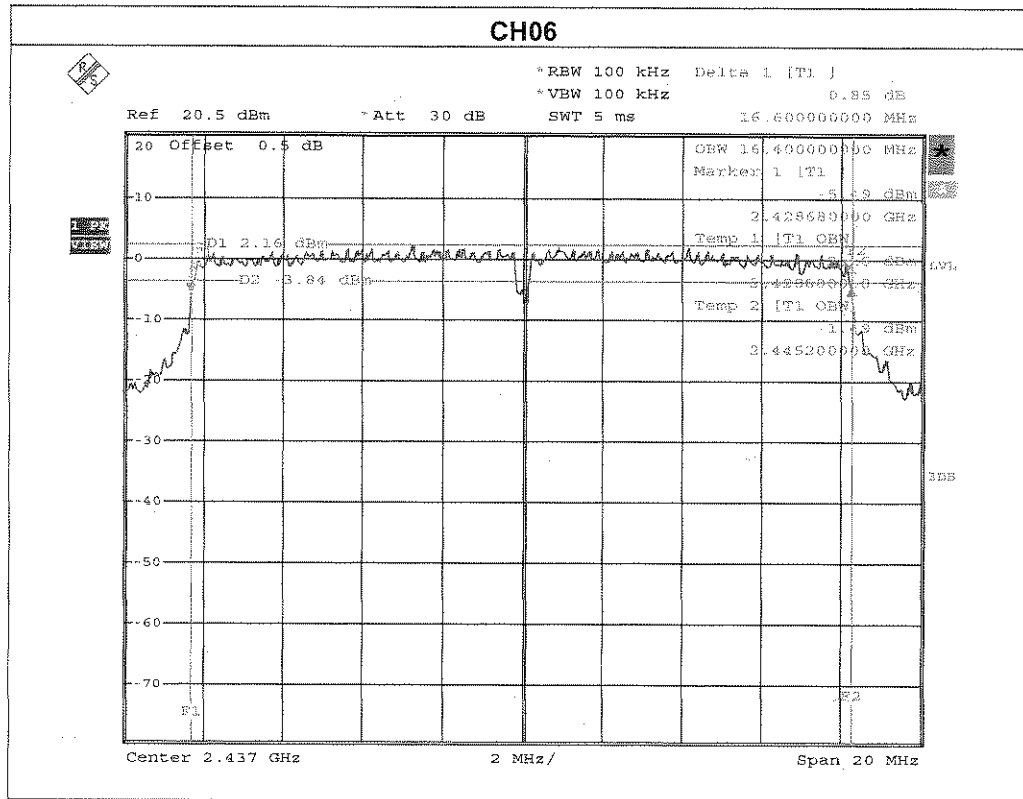




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11g/CH01, CH06, CH11 | | |

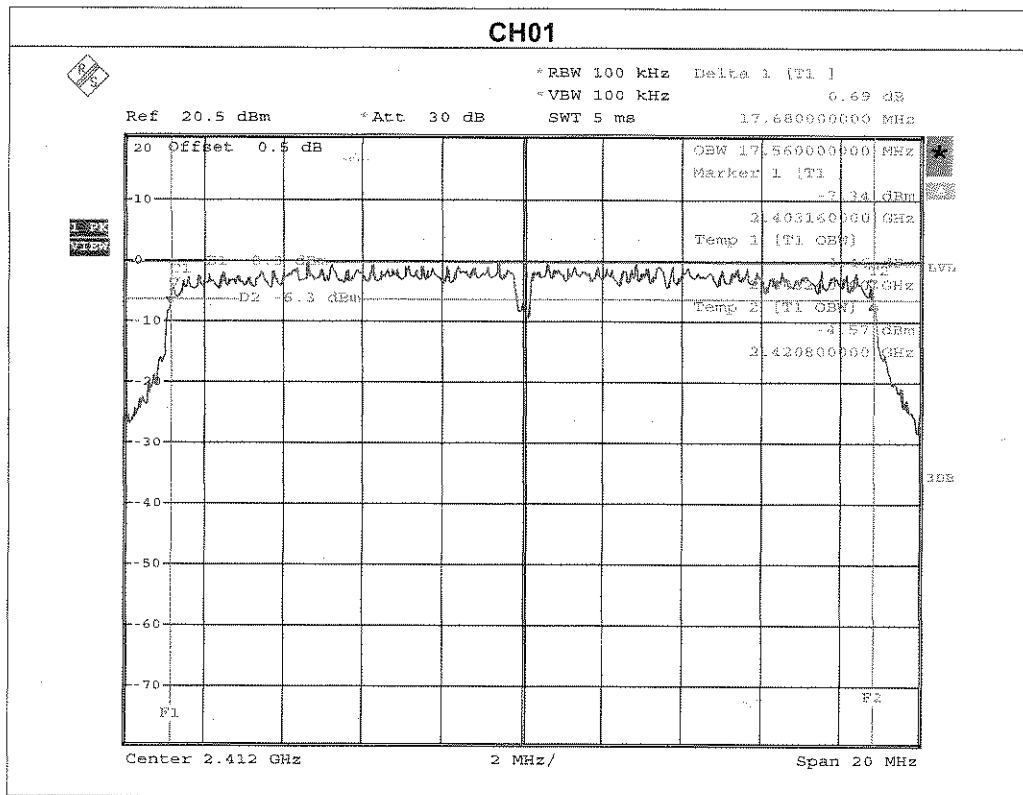
| Test Channel | Frequency (MHz) | Bandwidth (MHz) | LIMIT (MHz) |
|--------------|-----------------|-----------------|-------------|
| CH01 | 2412 | 16.60 | >=500KHz |
| CH06 | 2437 | 16.60 | >=500KHz |
| CH11 | 2462 | 16.64 | >=500KHz |

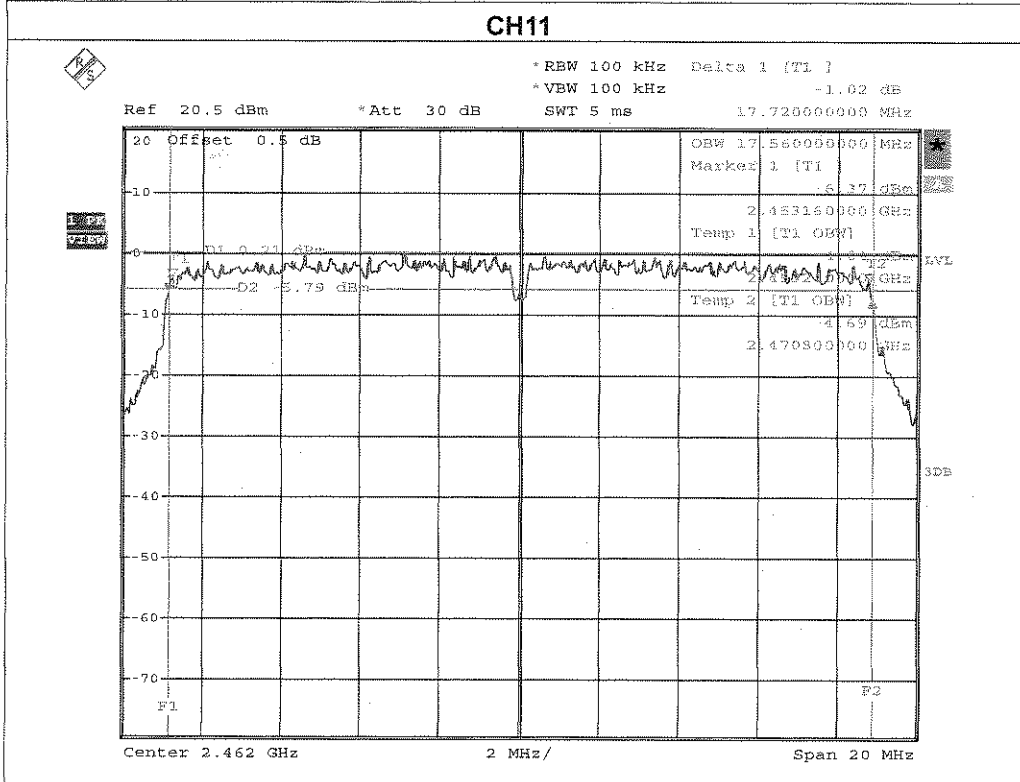
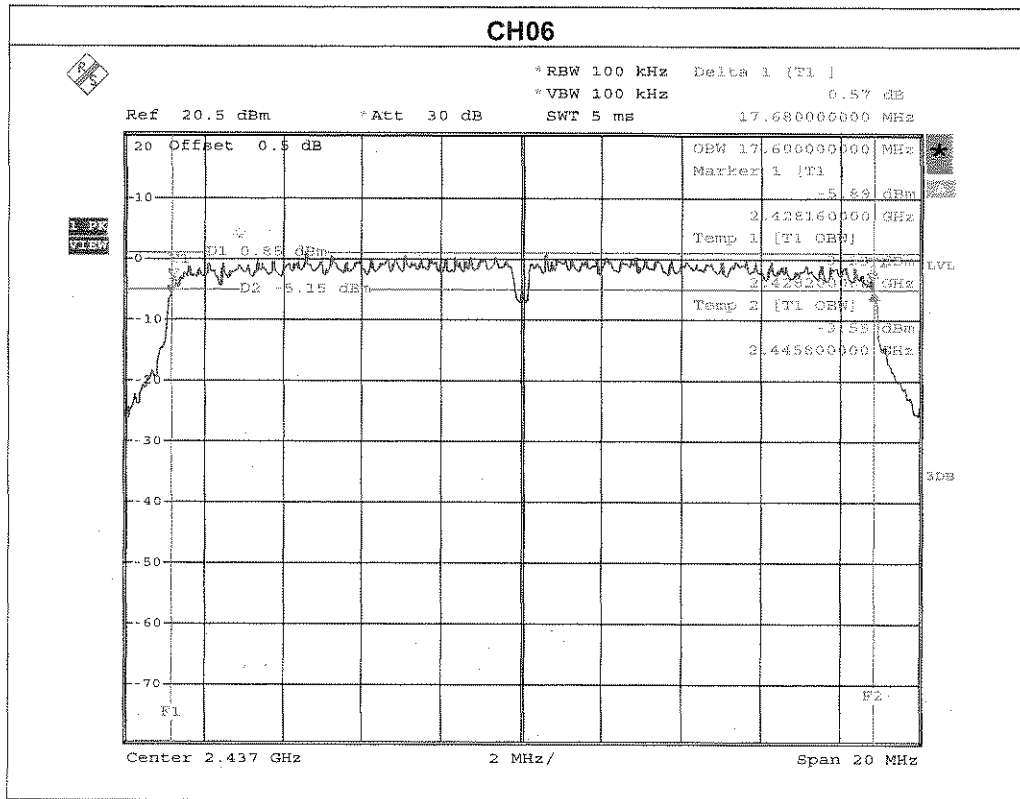




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/20M/CH01, CH06, CH11 | | |

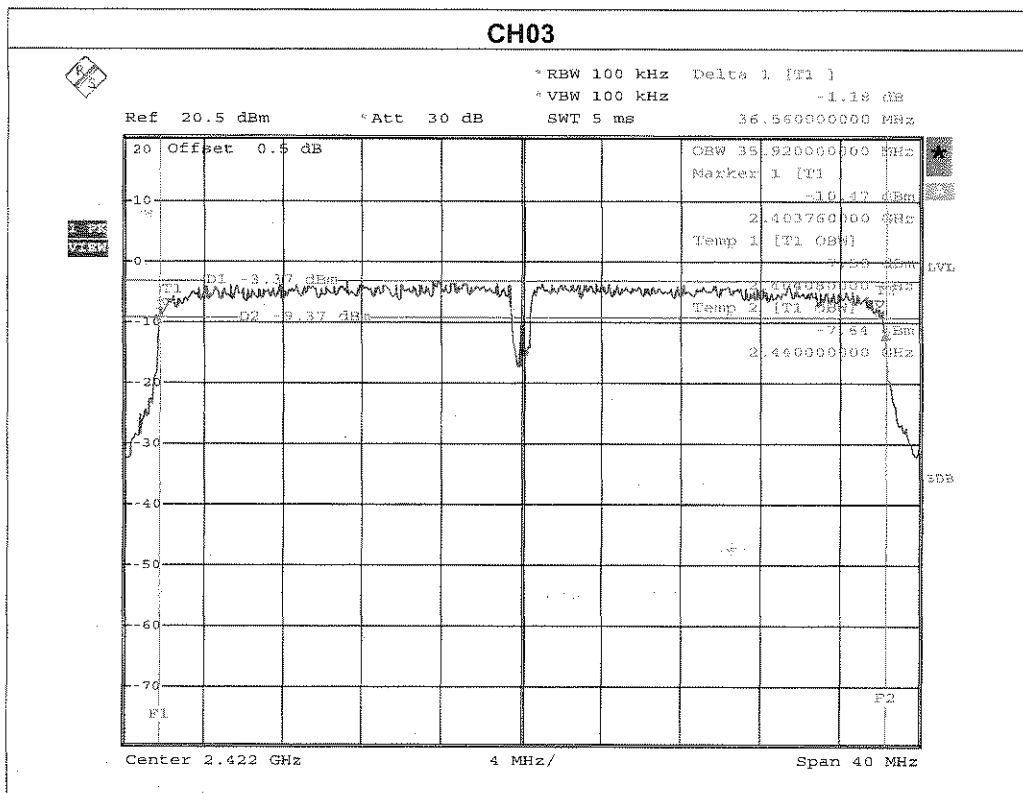
| Test Channel | Frequency (MHz) | Bandwidth (MHz) | LIMIT (MHz) |
|--------------|-----------------|-----------------|-------------|
| CH01 | 2412 | 17.68 | >=500KHz |
| CH06 | 2437 | 17.68 | >=500KHz |
| CH11 | 2462 | 17.72 | >=500KHz |

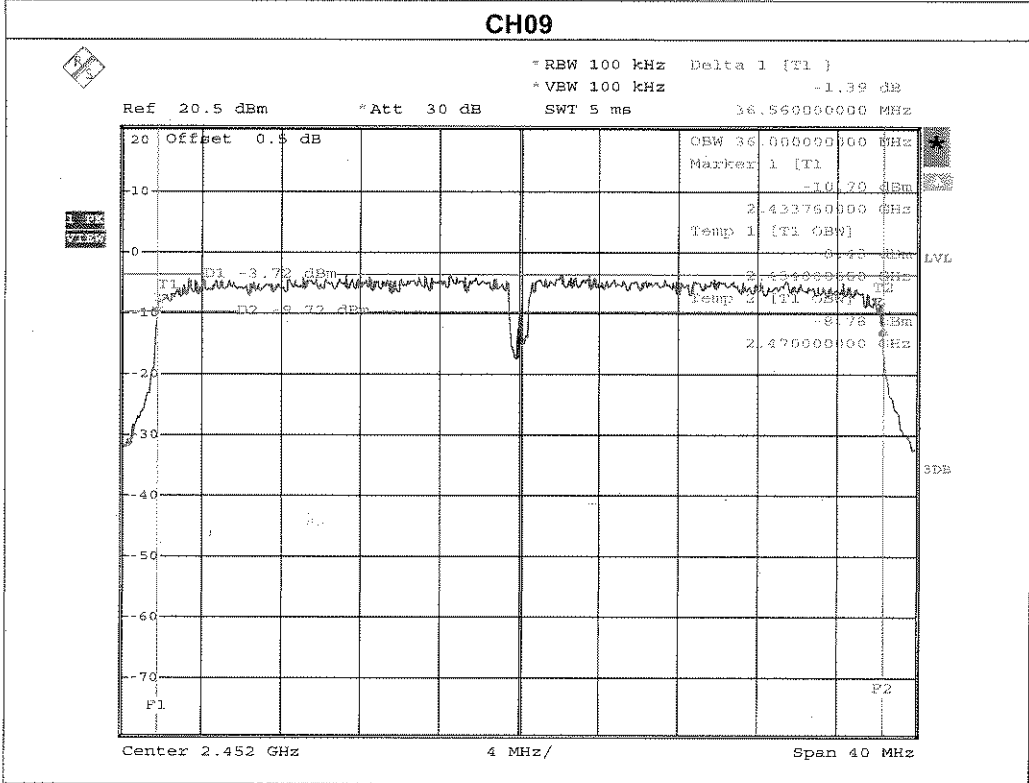
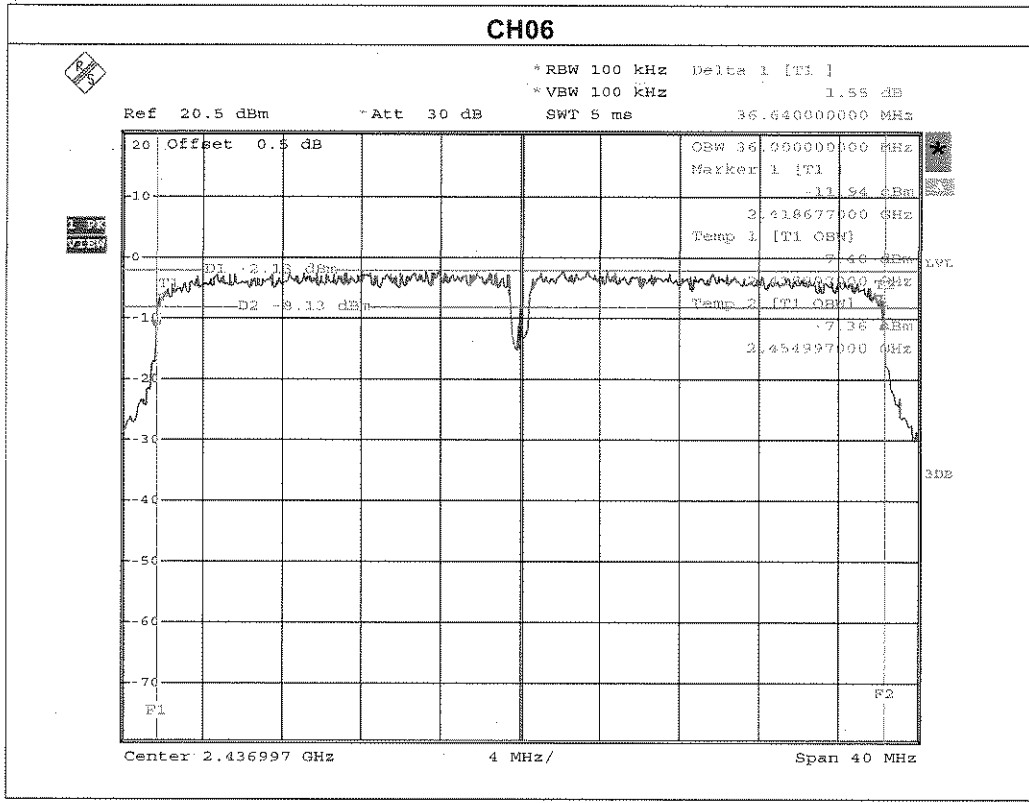




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M/CH03, CH06, CH09 | | |

| Test Channel | Frequency (MHz) | Bandwidth (MHz) | LIMIT (MHz) |
|--------------|-----------------|-----------------|-------------|
| CH03 | 2422 | 36.56 | >=500KHz |
| CH06 | 2437 | 36.64 | >=500KHz |
| CH09 | 2452 | 36.56 | >=500KHz |





6. PEAK OUTPUT POWER TEST**6.1 APPLIED PROCEDURES / LIMIT**

| FCC Part15, Subpart C | | | |
|-----------------------|-----------------|-----------------------|--------|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Peak Output Power | 1 watt or 30dBm | 2400-2483.5 | PASS |

6.1.1 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|--------------------|--------------|----------|------------|------------------|
| 1 | Power Meter | Anritsu | ML2487A | 6K00004714 | Feb. 12, 2009 |
| 2 | Power Meter Sensor | Anritsu | MA2491A | 34138 | Feb. 12, 2009 |

Remark: " N/A" denotes No Model No. , Serial No. or No Calibration specified.

6.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP**6.1.5 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.6 TEST RESULTS

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11b/CH01, CH06, CH11 | | |

| Test Channel | Frequency (MHz) | Peak Output Power (dBm) | LIMIT (dBm) | LIMIT (W) |
|--------------|-----------------|-------------------------|-------------|-----------|
| CH01 | 2412 | 17.60 | 30 | 1 |
| CH06 | 2437 | 17.56 | 30 | 1 |
| CH11 | 2462 | 17.40 | 30 | 1 |

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11g/CH01, CH06, CH11 | | |

| Test Channel | Frequency (MHz) | Peak Output Power (dBm) | LIMIT (dBm) | LIMIT (W) |
|--------------|-----------------|-------------------------|-------------|-----------|
| CH01 | 2412 | 20.81 | 30 | 1 |
| CH06 | 2437 | 20.94 | 30 | 1 |
| CH11 | 2462 | 21.70 | 30 | 1 |

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/20M/CH01, CH06, CH11 | | |

| Test Channel | Frequency (MHz) | Peak Output Power (dBm) | LIMIT (dBm) | LIMIT (W) |
|--------------|--------------------|----------------------------|----------------|--------------|
| CH01 | 2412 | 20.01 | 30 | 1 |
| CH06 | 2437 | 21.01 | 30 | 1 |
| CH11 | 2462 | 21.41 | 30 | 1 |

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M/CH03, CH06, CH09 | | |

| Test Channel | Frequency (MHz) | Peak Output Power (dBm) | LIMIT (dBm) | LIMIT (W) |
|--------------|--------------------|----------------------------|----------------|--------------|
| CH03 | 2422 | 20.54 | 30 | 1 |
| CH06 | 2437 | 20.94 | 30 | 1 |
| CH09 | 2452 | 21.30 | 30 | 1 |

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

| FCC Part15, Subpart C | | | |
|-------------------------------------|--|-----------------------|--------|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Antenna conducted Spurious Emission | 20dB less than the peak value of fundamental frequency | 30-25000 | PASS |

7.1.1 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|--------------|----------|------------|------------------|
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Sep. 09, 2009 |

Remark: " N/A" denotes No Model No. , Serial No. or No Calibration specified.

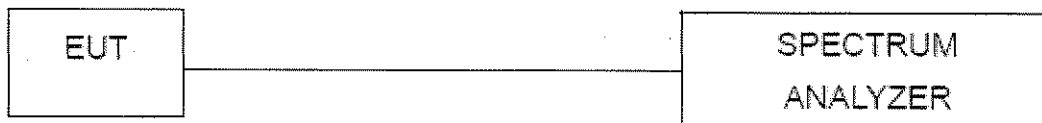
7.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = Auto.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



7.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

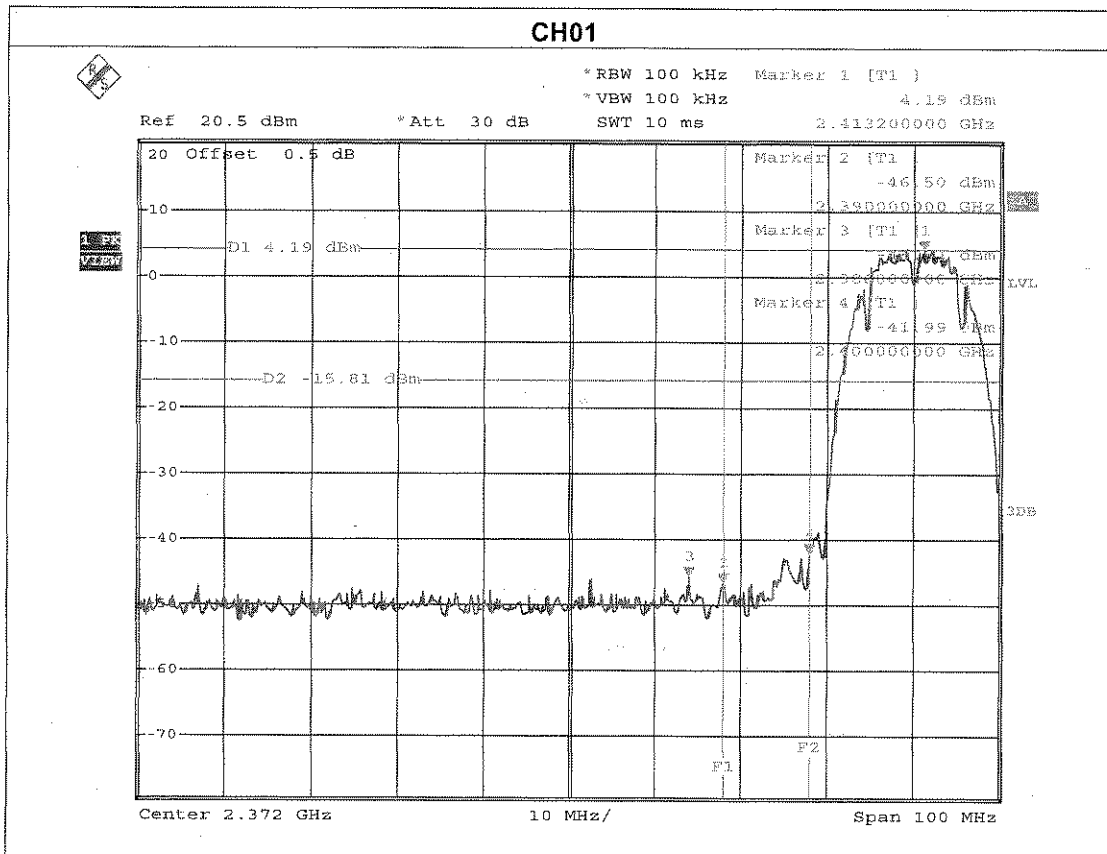
7.1.6 TEST RESULTS

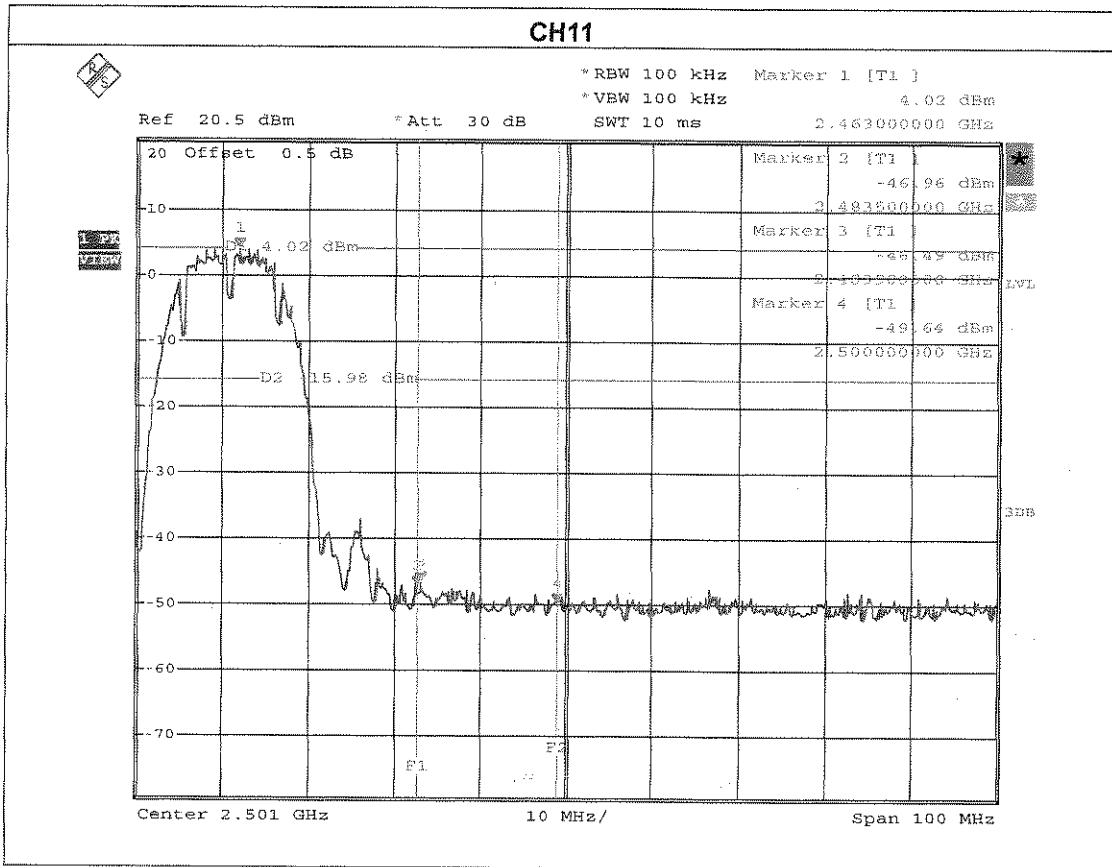
| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11b/CH01, CH11 | | |

| | | | |
|---|------------|--|------------|
| Channel of Worst Data: CH1,CH11 | | | |
| The max. radio frequency power in any 100kHz bandwidth outside the frequency band | | The max. radio frequency power in any 100 kHz bandwidth within the frequency band. | |
| FREQUENCY(MHz) | POWER(dBm) | FREQUENCY(MHz) | POWER(dBm) |
| 2386.0 | -45.54 | 2483.9 | -46.49 |

Result

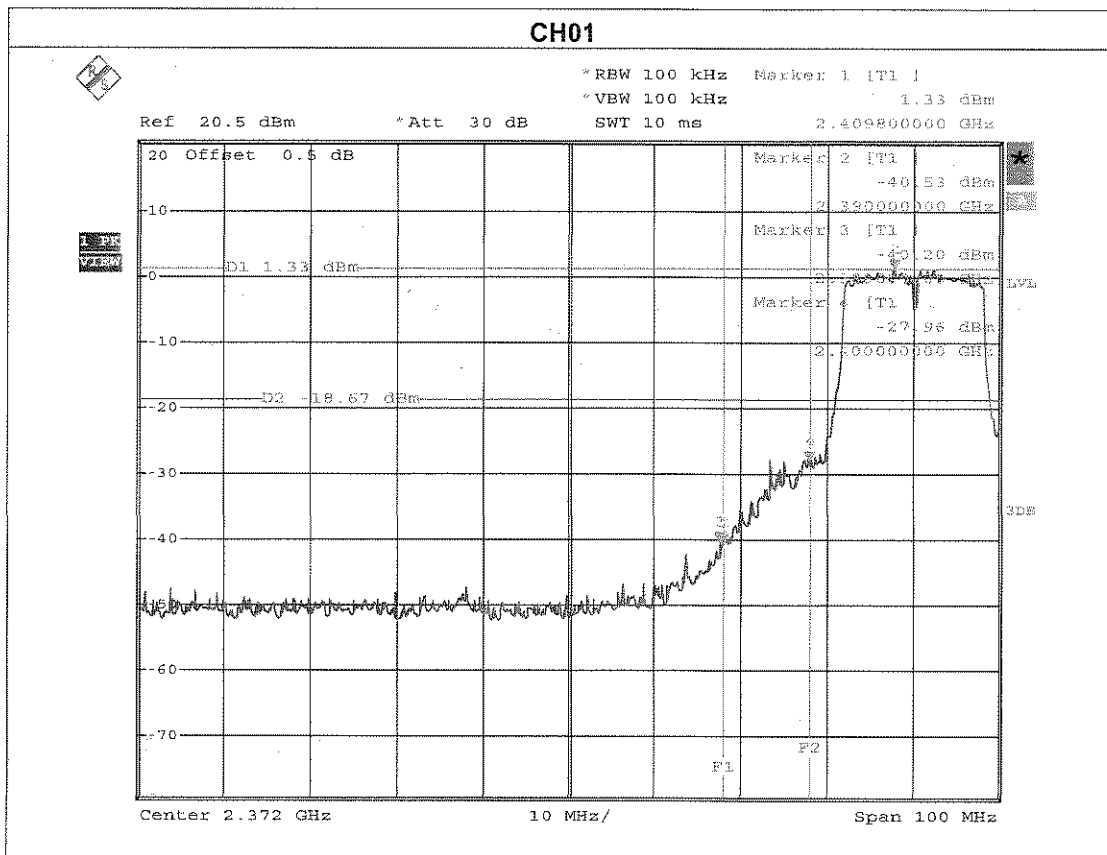
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

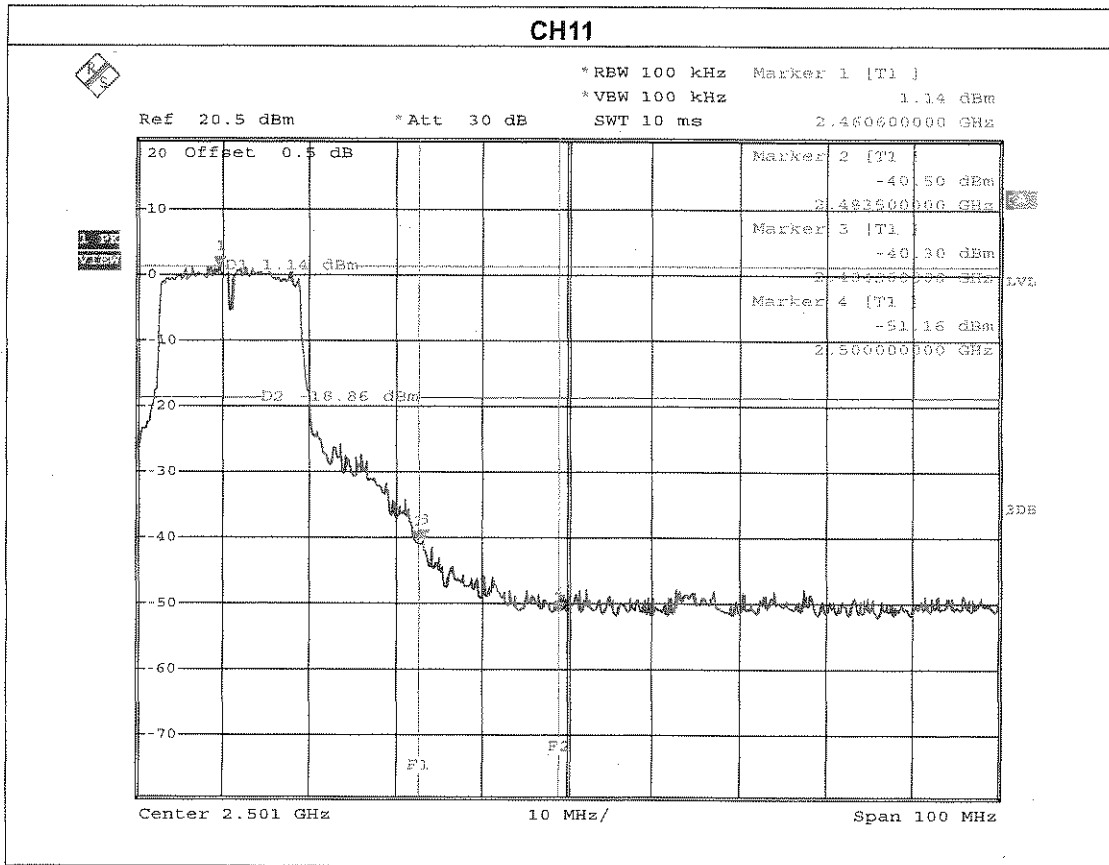




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11g/CH01, CH11 | | |

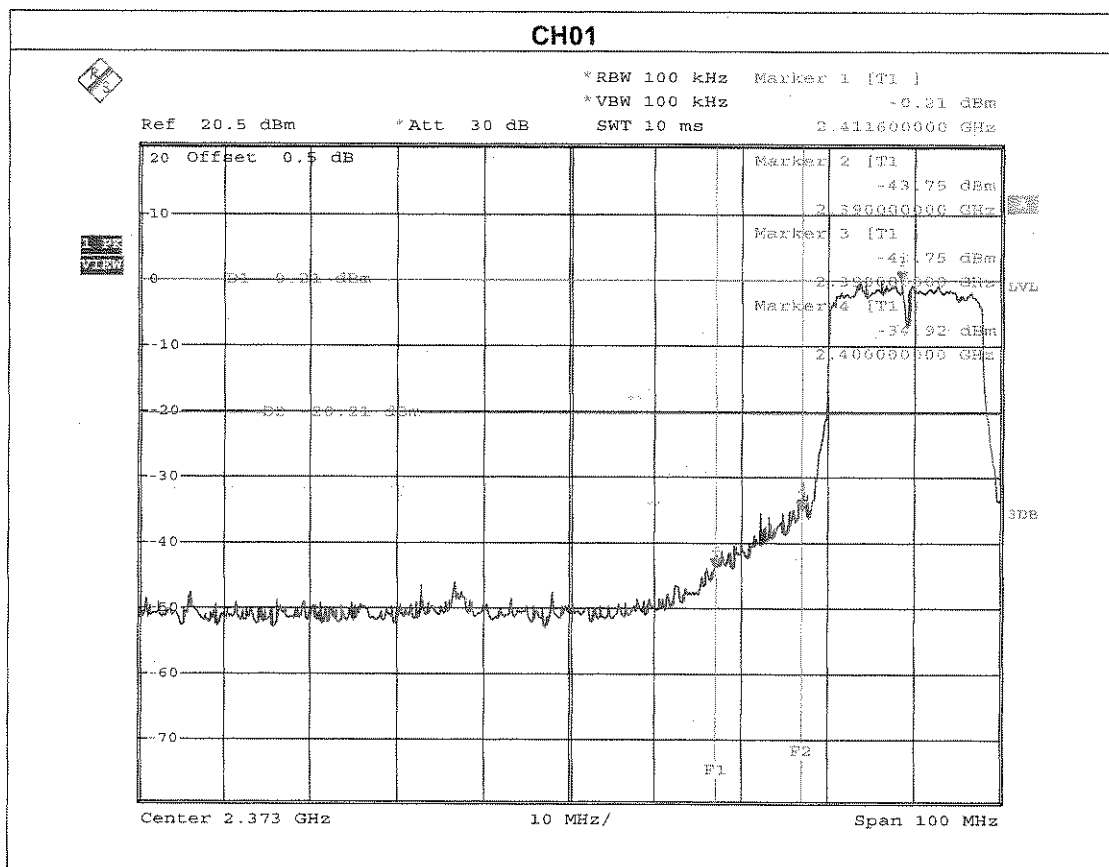
| | | | |
|---|------------|--|------------|
| Channel of Worst Data: CH1,CH11 | | | |
| The max. radio frequency power in any 100kHz bandwidth outside the frequency band | | The max. radio frequency power in any 100 kHz bandwidth within the frequency band. | |
| FREQUENCY(MHz) | POWER(dBm) | FREQUENCY(MHz) | POWER(dBm) |
| 2389.6 | -40.20 | 2484.2 | -40.30 |
| Result | | | |
| In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. | | | |

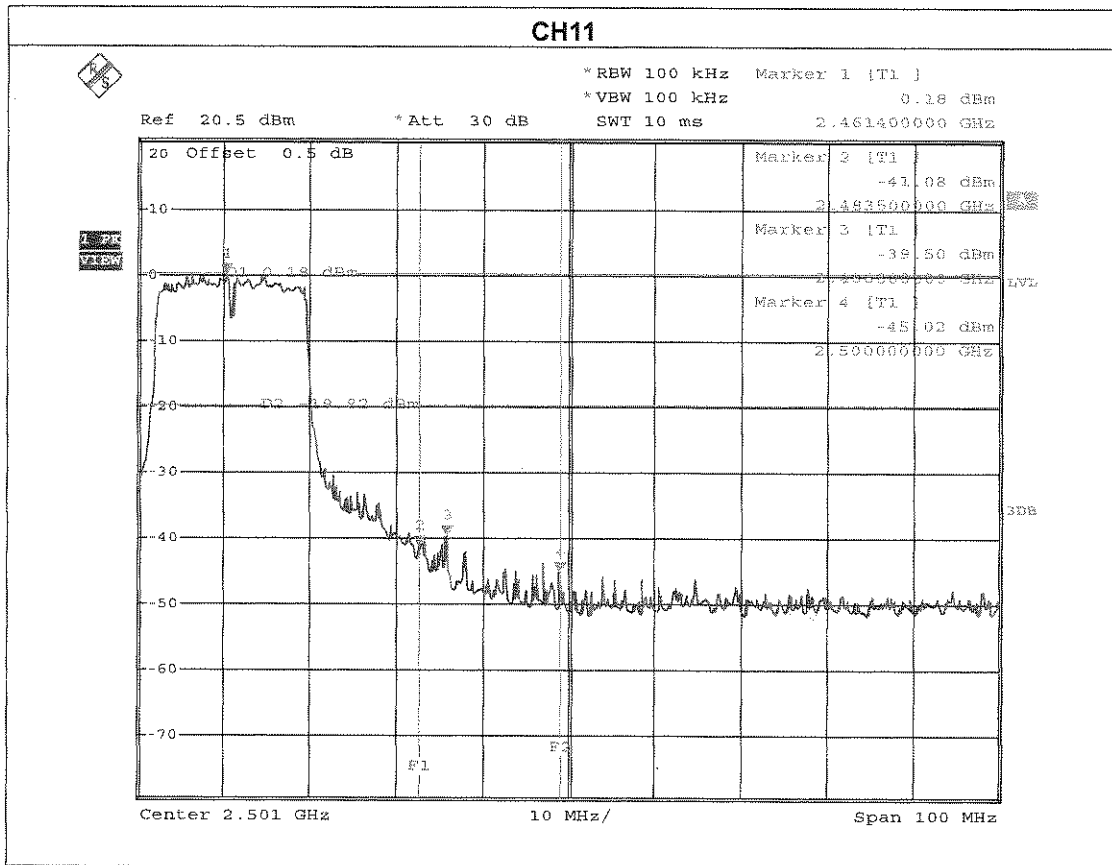




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/20M/CH01, CH11 | | |

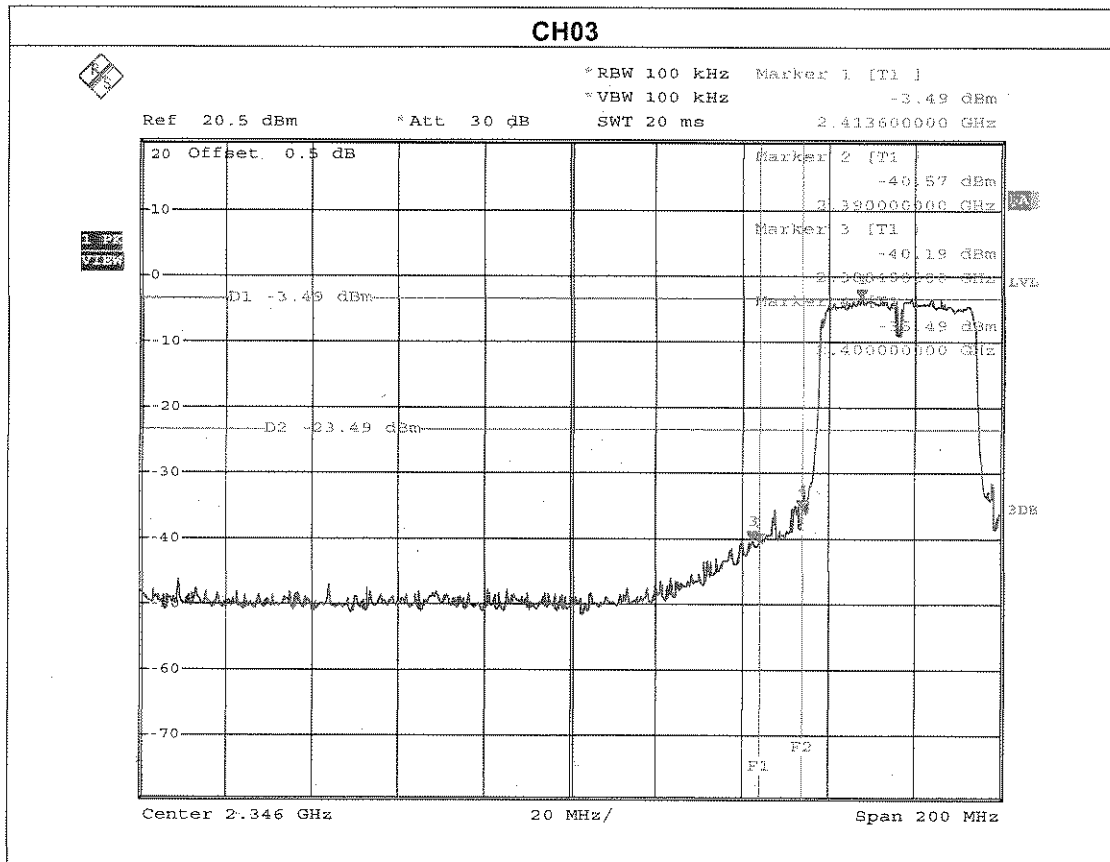
| | | | |
|---|------------|--|------------|
| Channel of Worst Data: CH1,CH11 | | | |
| The max. radio frequency power in any 100kHz bandwidth outside the frequency band | | The max. radio frequency power in any 100 kHz bandwidth within the frequency band. | |
| FREQUENCY(MHz) | POWER(dBm) | FREQUENCY(MHz) | POWER(dBm) |
| 2390.0 | -43.75 | 2486.8 | -39.50 |
| Result | | | |
| In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. | | | |

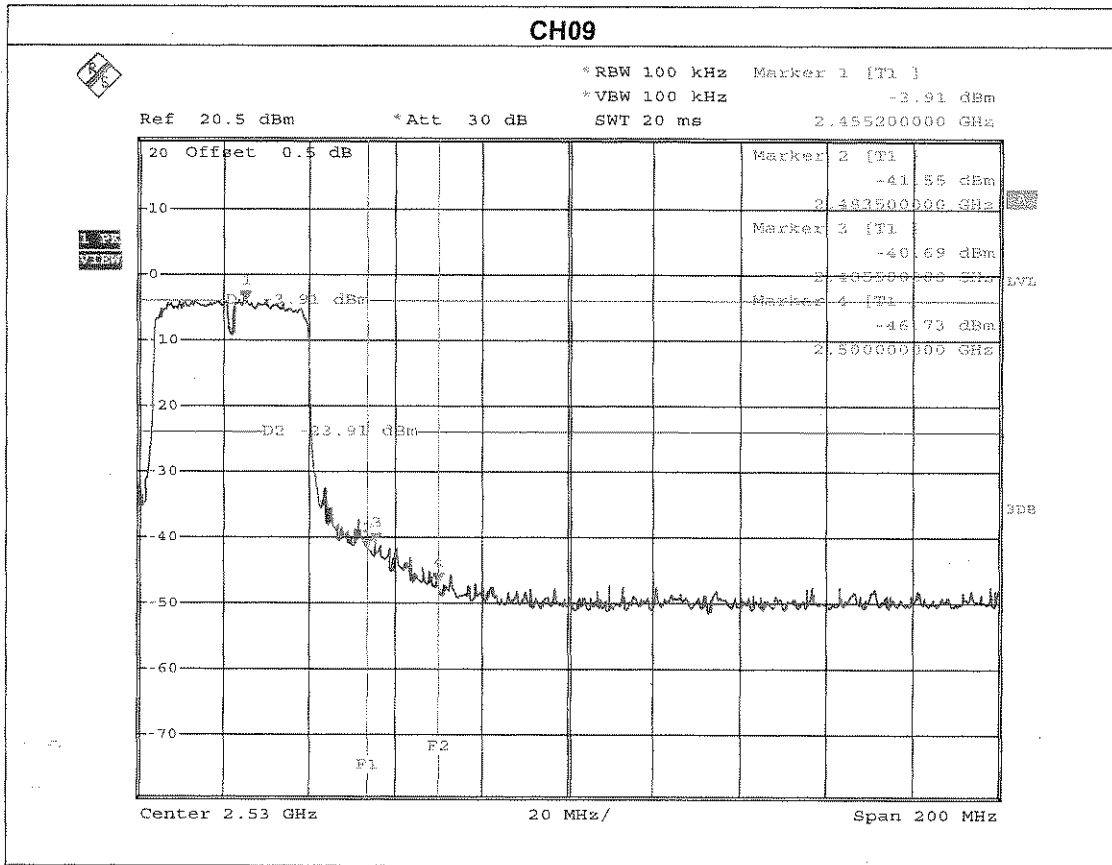




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M/CH03, CH09 | | |

| Channel of Worst Data: CH03,CH09 | | | |
|---|------------|--|------------|
| The max. radio frequency power in any 100kHz bandwidth outside the frequency band | | The max. radio frequency power in any 100 kHz bandwidth within the frequency band. | |
| FREQUENCY(MHz) | POWER(dBm) | FREQUENCY(MHz) | POWER(dBm) |
| 2388.4 | -40.19 | 2485.5 | -40.69 |
| Result | | | |
| In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power. | | | |





8. POWER SPECTRAL DENSITY TEST**8.1 APPLIED PROCEDURES / LIMIT**

| FCC Part15, Subpart C | | | |
|------------------------|------------------------|-----------------------|--------|
| Test Item | Limit | Frequency Range (MHz) | Result |
| Power Spectral Density | 8 dBm (in any 3KHz) | 2400-2483.5 | PASS |

8.1.1 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|--------------|----------|------------|------------------|
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Sep. 09, 2009 |

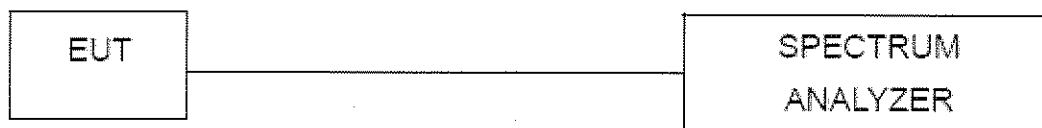
Remark: " N/A" denotes No Model No. , Serial No. or No Calibration specified.

8.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW=3KHz, VBW=30KHz, Sweep time = 500s.

8.1.3 DEVIATION FROM STANDARD

No deviation.

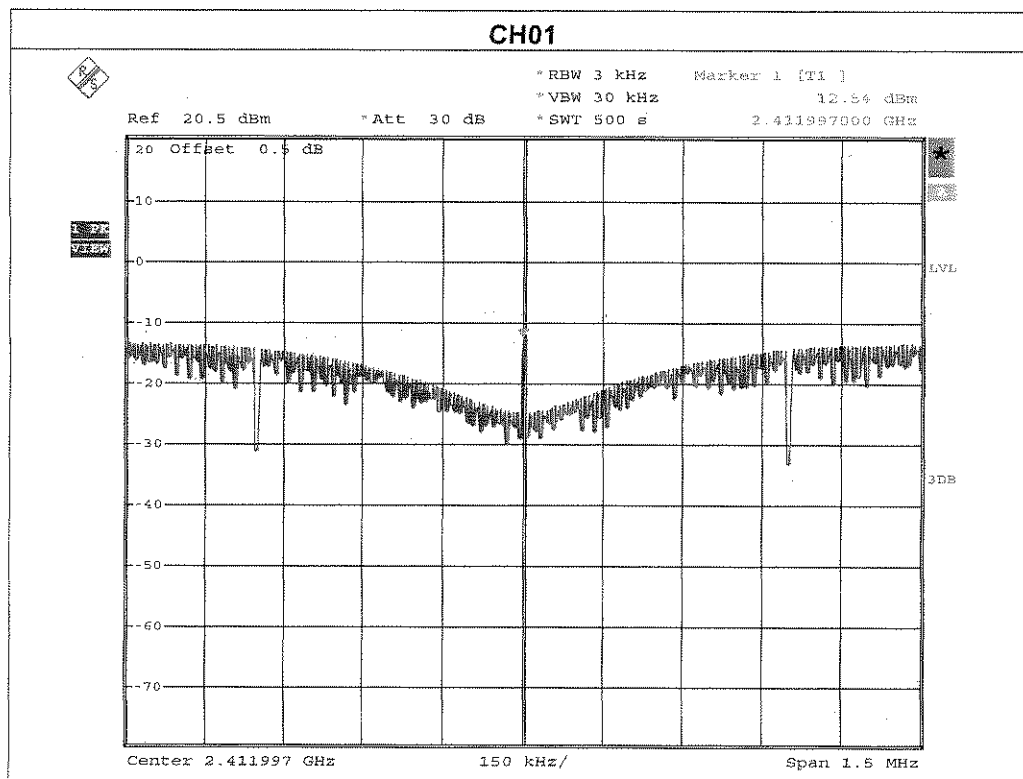
8.1.4 TEST SETUP**8.1.5 EUT OPERATION CONDITIONS**

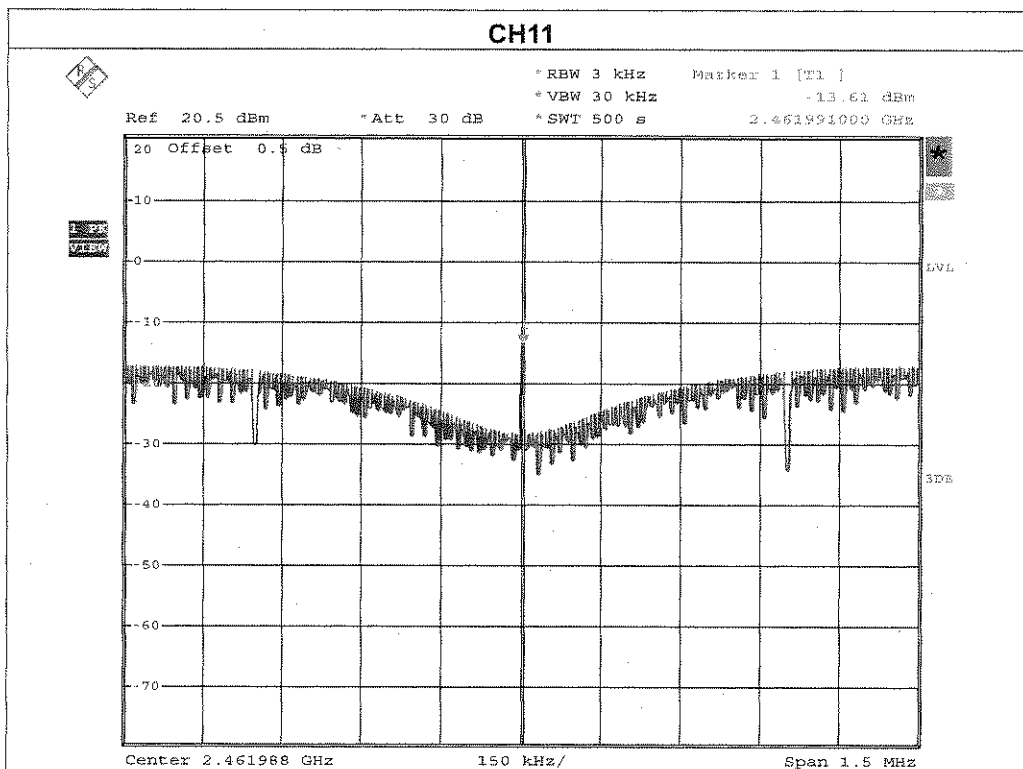
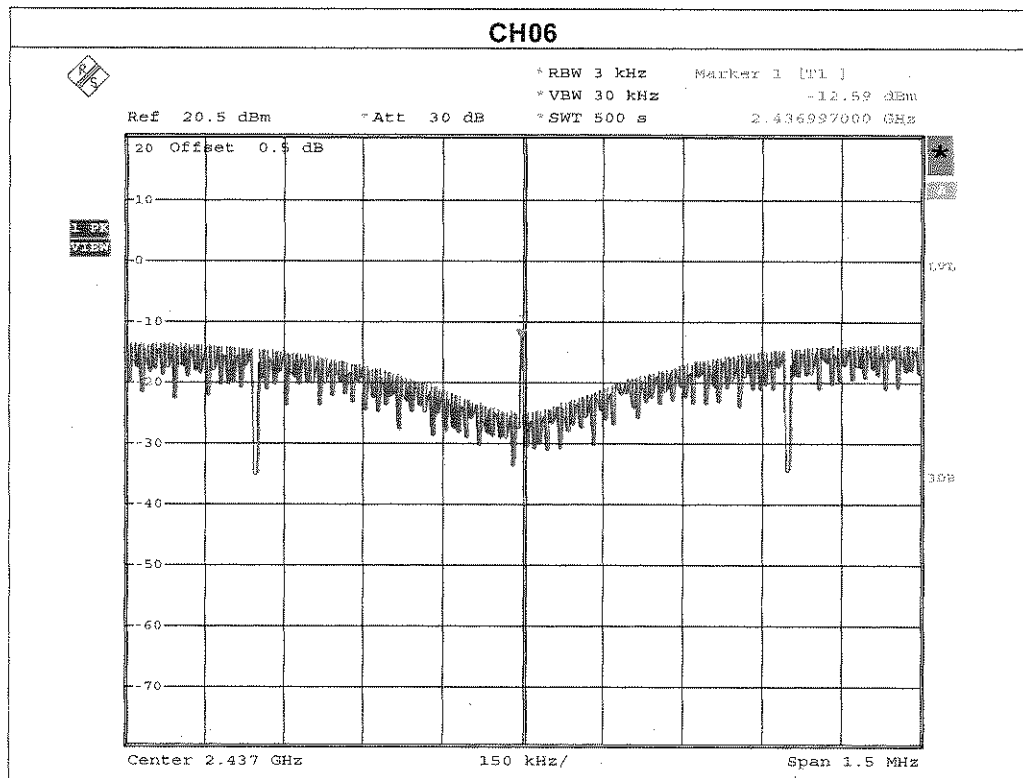
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.6 TEST RESULTS

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11b/CH01, CH06, CH11 | | |

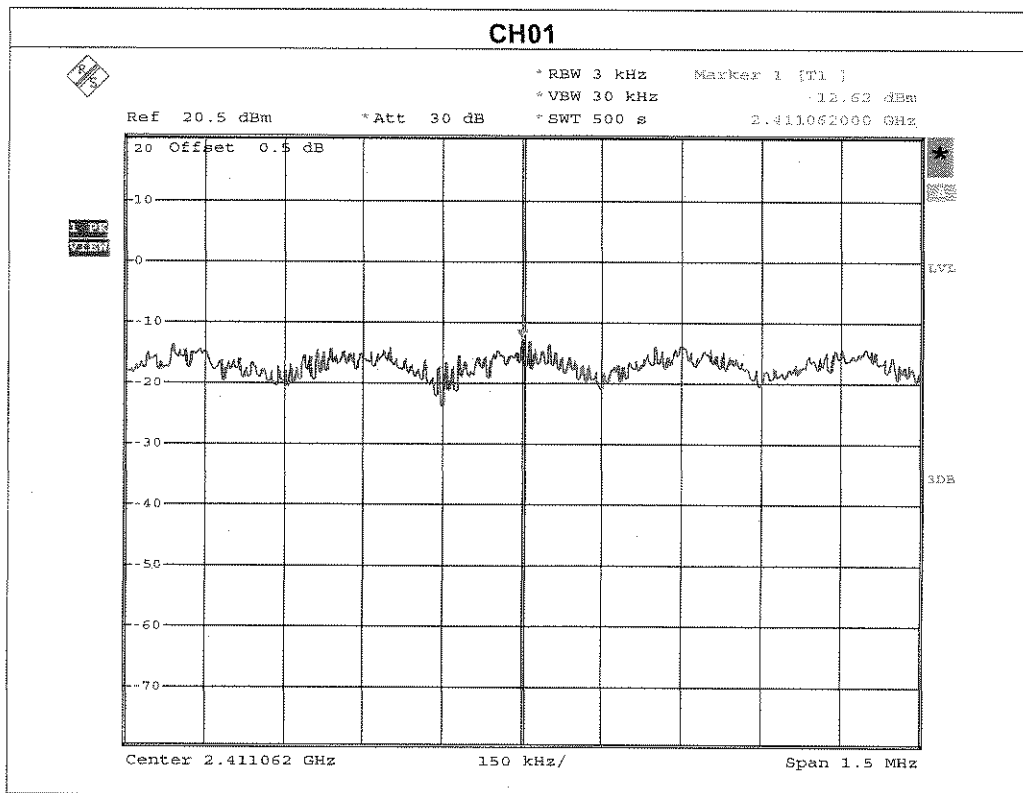
| Test Channel | Frequency (MHz) | Power Density (dBm) | LIMIT (dBm) |
|--------------|-----------------|---------------------|-------------|
| CH01 | 2412 | -12.54 | 8 |
| CH06 | 2437 | -12.59 | 8 |
| CH11 | 2462 | -13.61 | 8 |

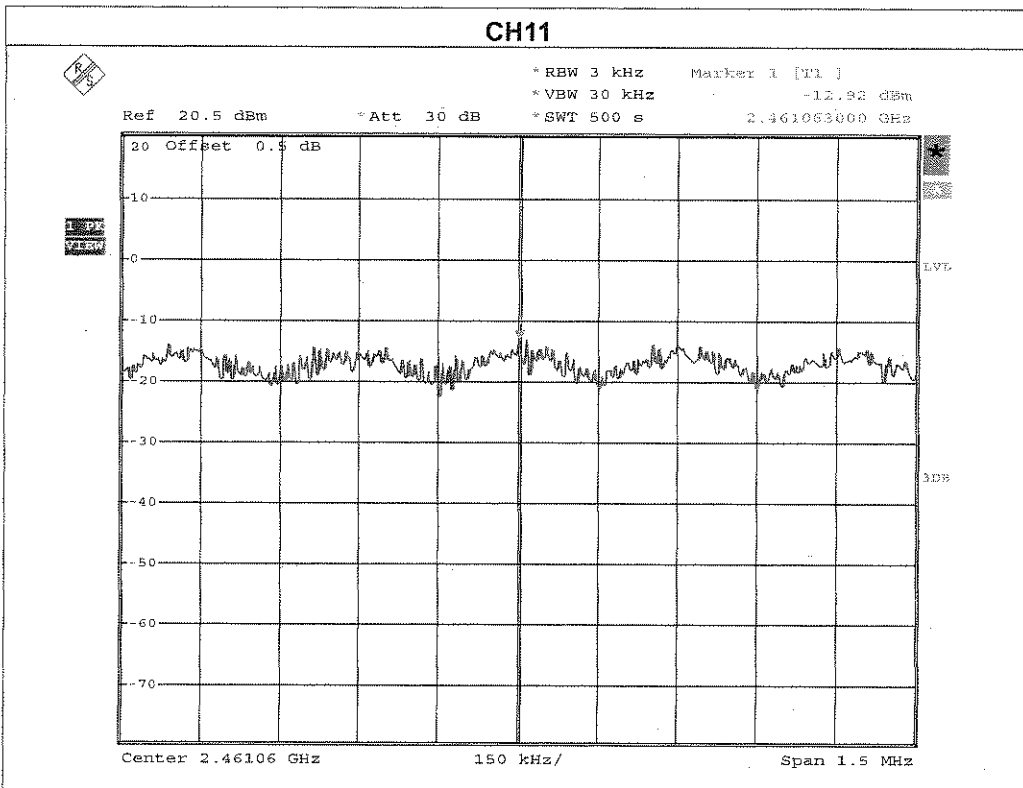
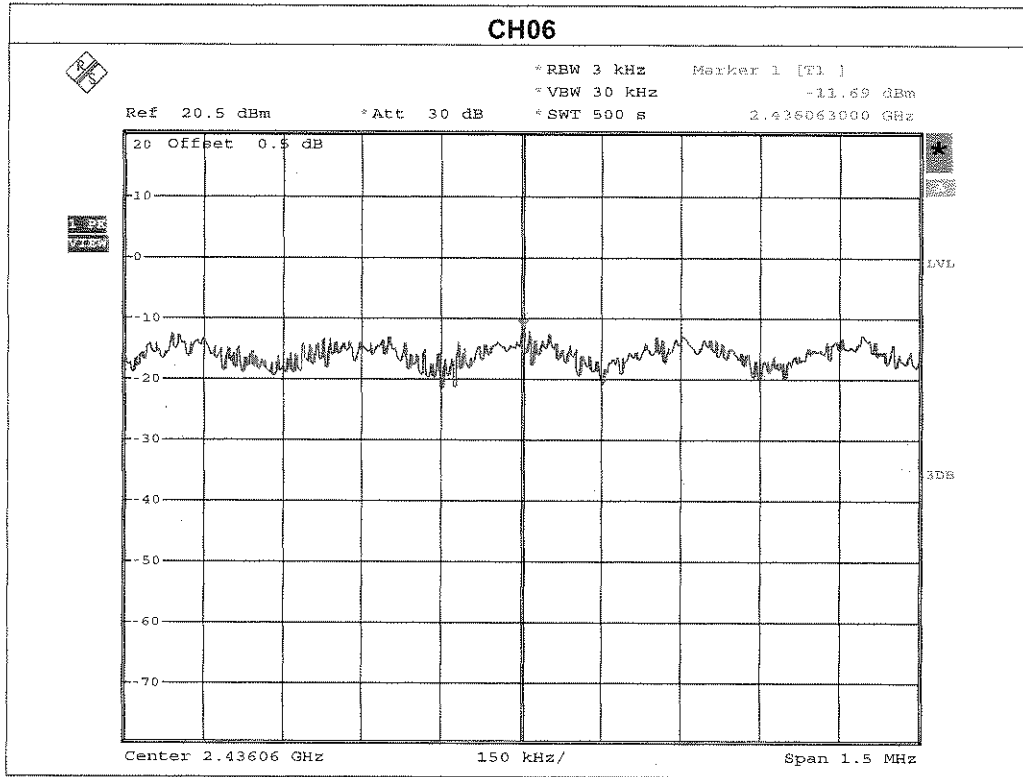




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11g/CH01, CH06, CH11 | | |

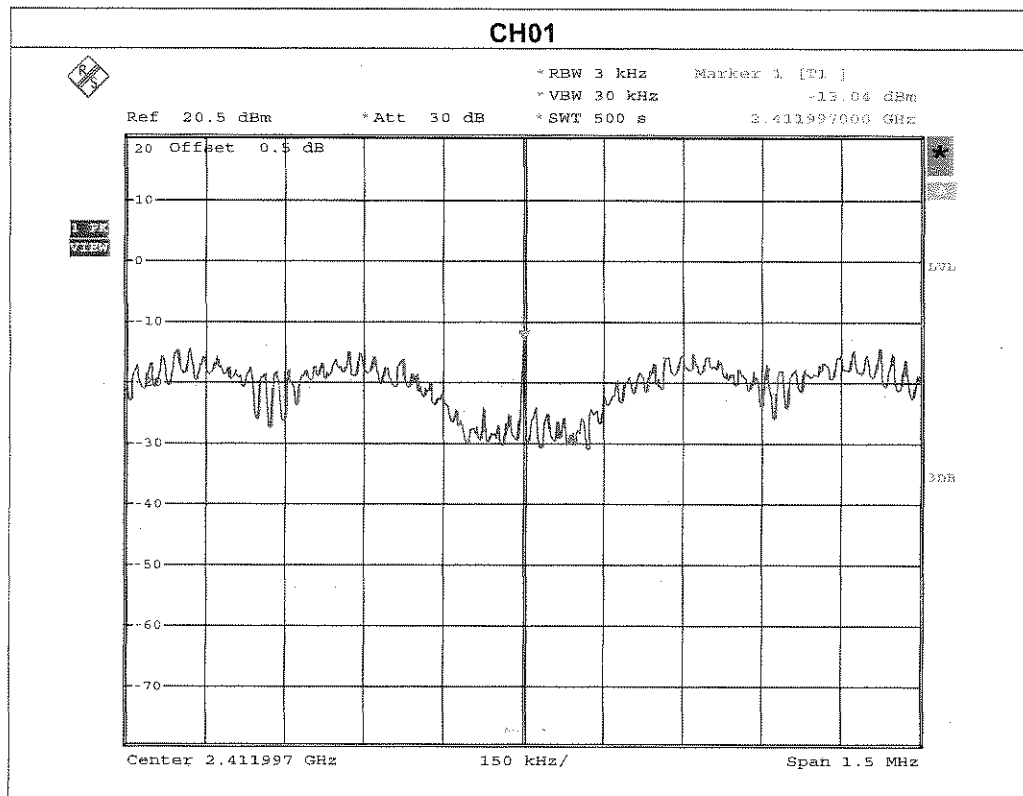
| Test Channel | Frequency (MHz) | Power Density (dBm) | LIMIT (dBm) |
|--------------|-----------------|---------------------|-------------|
| CH01 | 2412 | -12.62 | 8 |
| CH06 | 2437 | -11.69 | 8 |
| CH11 | 2462 | -12.92 | 8 |

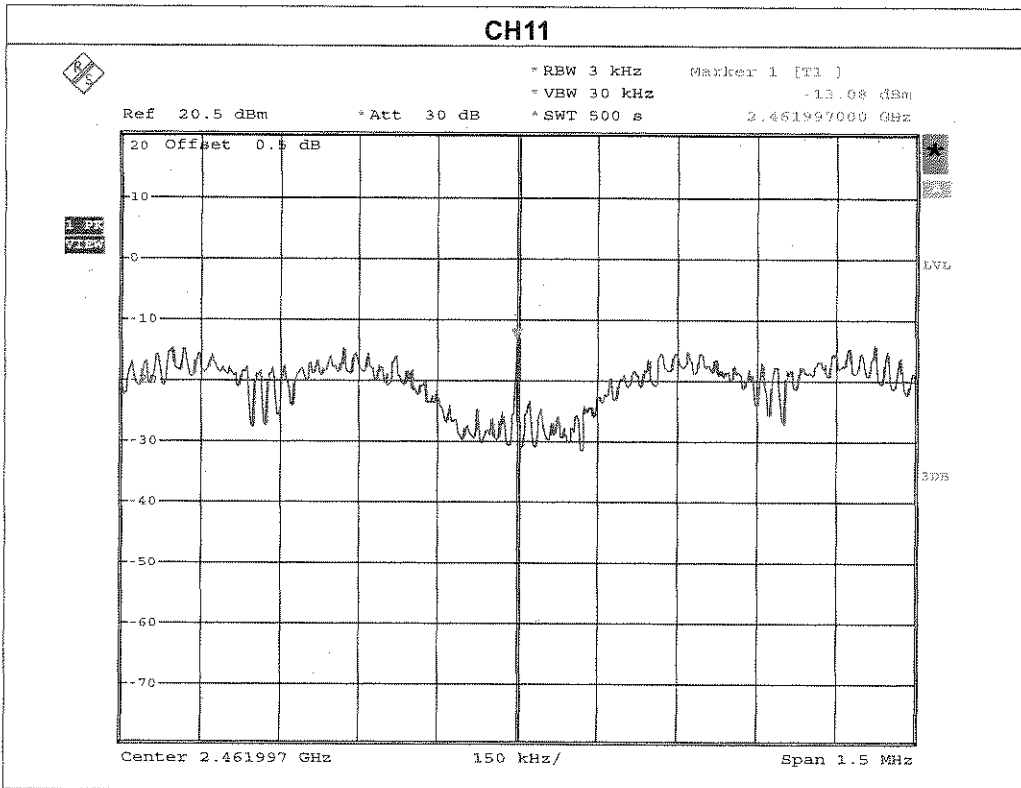
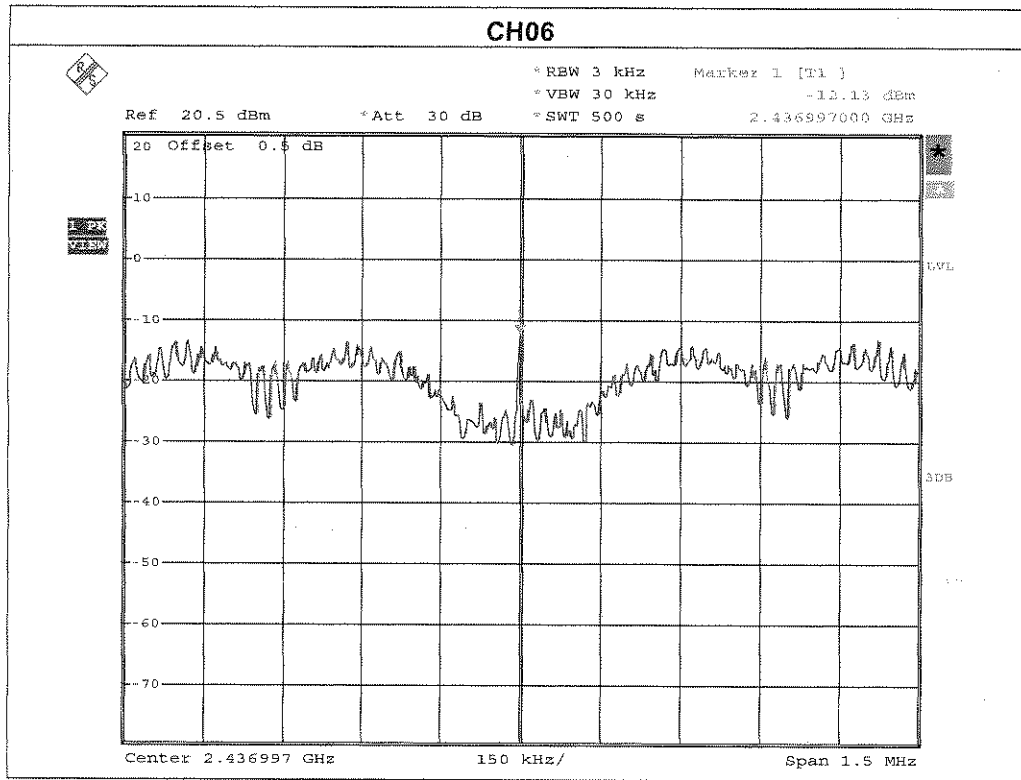




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/20M/CH01, CH06, CH11 | | |

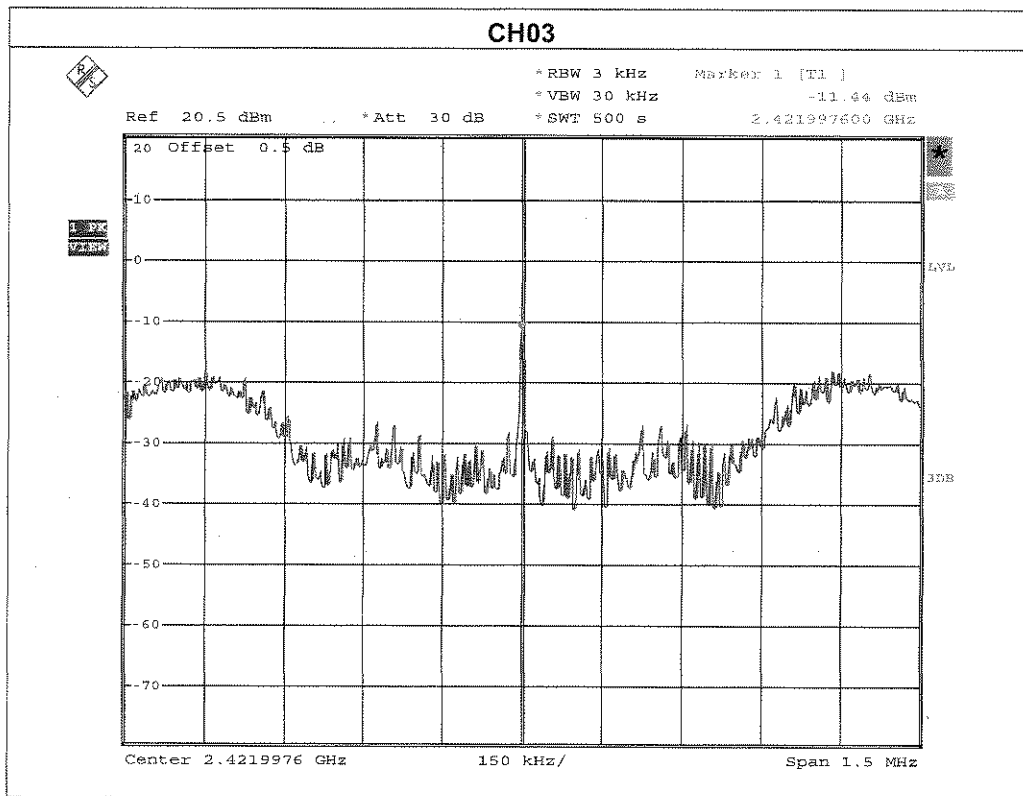
| Test Channel | Frequency (MHz) | Power Density (dBm) | LIMIT (dBm) |
|--------------|-----------------|---------------------|-------------|
| CH01 | 2412 | -13.04 | 8 |
| CH06 | 2437 | -12.13 | 8 |
| CH11 | 2462 | -13.08 | 8 |

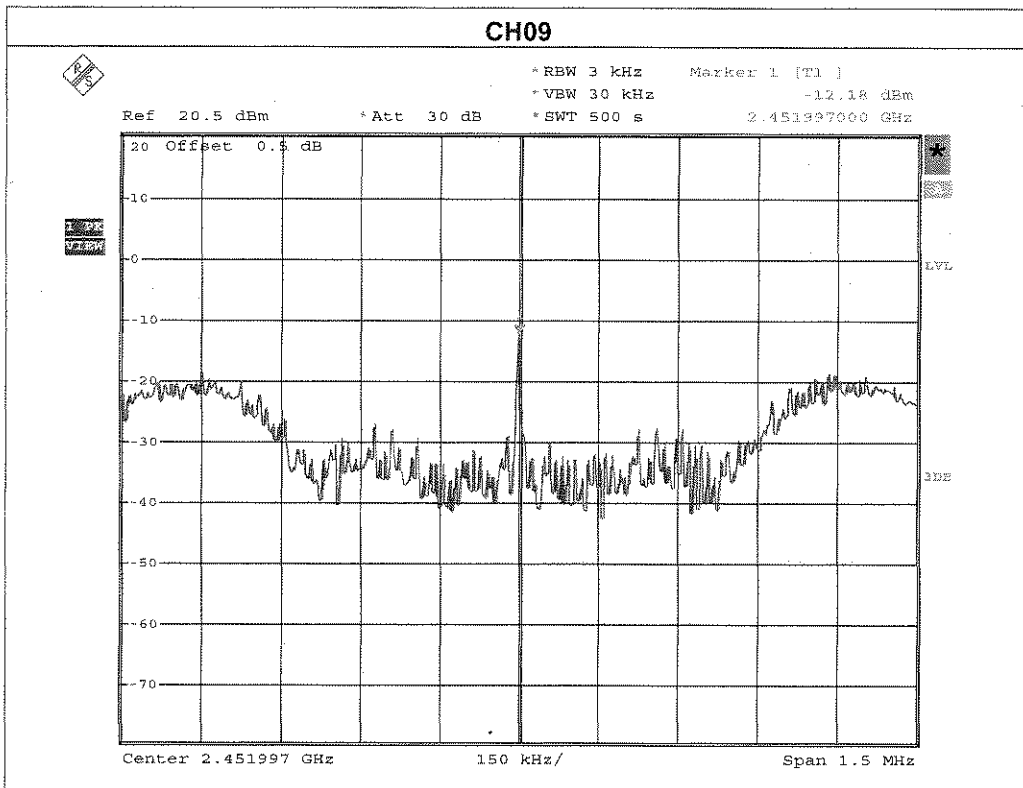
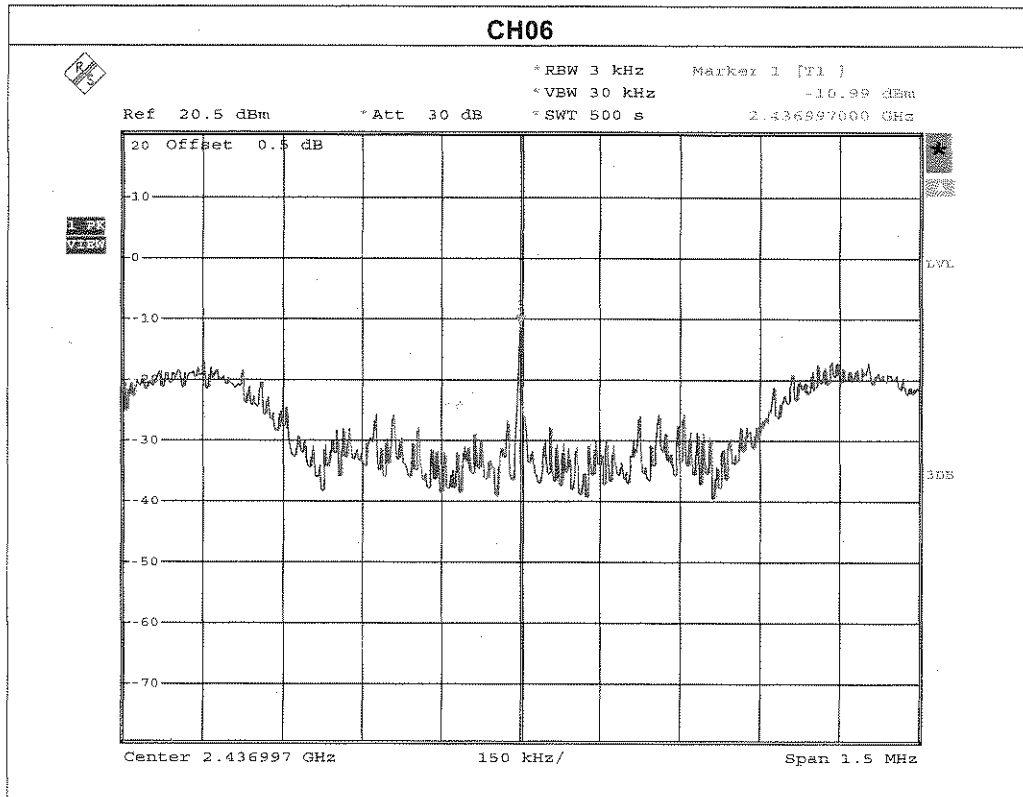




| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n/40M/CH03, CH06, CH09 | | |

| Test Channel | Frequency (MHz) | Power Density (dBm) | LIMIT (dBm) |
|--------------|-----------------|---------------------|-------------|
| CH03 | 2422 | -11.44 | 8 |
| CH06 | 2437 | -10.99 | 8 |
| CH09 | 2452 | -12.18 | 8 |





9. RF EXPOSURE TEST

9.1 APPLIED PROCEDURES / LIMIT

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

(A) Limits for Occupational / Controlled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm ²) | Averaging Time E ² , H ² or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|--|---|
| 0.3-3.0 | 614 | 1.63 | (100)* | 6 |
| 3.0-30 | 1842 / f | 4.89 / f | (900 / f)* | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | | | F/300 | 6 |
| 1500-100,000 | | | 5 | 6 |

(B) Limits for General Population / Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm ²) | Averaging Time E ² , H ² or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|--|---|
| 0.3-1.34 | 614 | 1.63 | (100)* | 30 |
| 1.34-30 | 824/f | 2.19/f | (180/f)* | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | | | F/1500 | 30 |
| 1500-100,000 | | | 1.0 | 30 |

Note: f = frequency in MHz ; *Plane-wave equivalent power density

9.1.1 MEASUREMENT INSTRUMENTS LIST

| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
|------|-------------------|--------------|----------|------------|------------------|
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Sep. 09, 2009 |

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.

9.1.2 MPE CALCULATION METHOD

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

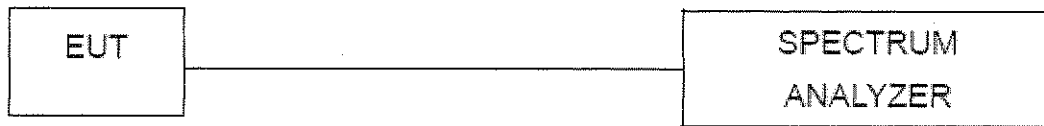
The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

9.1.3 DEVIATION FROM STANDARD

No deviation.

9.1.4 TEST SETUP**9.1.5 EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

9.1.6 TEST RESULTS

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11b | | |

| Frequency | Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|-----------|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2412 MHz | 3.95 | 2.4831 | 17.6000 | 57.5440 | 0.028441 | 1 | Complies |
| 2437 MHz | 3.95 | 2.4831 | 17.5600 | 57.0164 | 0.028181 | 1 | Complies |
| 2462 MHz | 3.95 | 2.4831 | 17.4000 | 54.9541 | 0.027161 | 1 | Complies |

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11g | | |

| Frequency | Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|-----------|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2412 MHz | 3.95 | 2.4831 | 20.8100 | 120.5036 | 0.059559 | 1 | Complies |
| 2437 MHz | 3.95 | 2.4831 | 20.9400 | 124.1652 | 0.061369 | 1 | Complies |
| 2462 MHz | 3.95 | 2.4831 | 21.7000 | 147.9108 | 0.073106 | 1 | Complies |

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n HT20 | | |

| Frequency | Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|-----------|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2412 MHz | 3.95 | 2.4831 | 20.0100 | 100.2305 | 0.049539 | 1 | Complies |
| 2437 MHz | 3.95 | 2.4831 | 21.0100 | 126.1828 | 0.062366 | 1 | Complies |
| 2462 MHz | 3.95 | 2.4831 | 21.4100 | 138.3566 | 0.068383 | 1 | Complies |

| | | | |
|---------------|---|---------------------|--------------|
| EUT : | IEEE 802.11n WLAN PCI-E Half-sized mini card | Model No. : | EM304 |
| Temperature : | 27 °C | Relative Humidity : | 55 % |
| Pressure : | 1004 hPa | Test Power : | AC 120V/60Hz |
| Test Mode : | 802.11n HT40 | | |

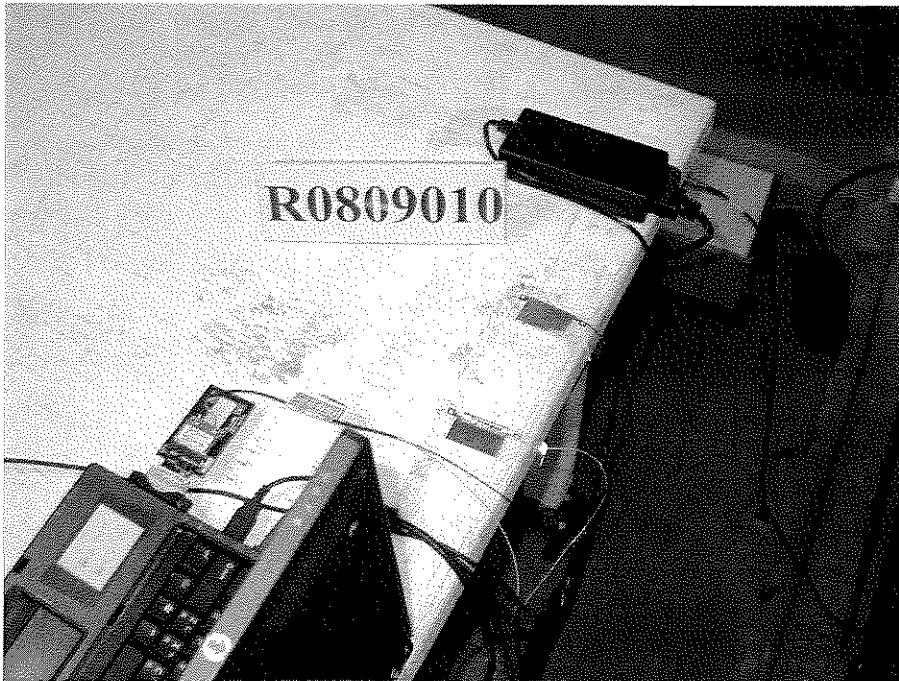
| Frequency | Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm ²) | Limit of Power Density (S) (mW/cm ²) | Test Result |
|-----------|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2422 MHz | 3.95 | 2.4831 | 20.5400 | 113.2400 | 0.055969 | 1 | Complies |
| 2437 MHz | 3.95 | 2.4831 | 20.9400 | 124.1652 | 0.061369 | 1 | Complies |
| 2452 MHz | 3.95 | 2.4831 | 21.3000 | 134.8963 | 0.066673 | 1 | Complies |

Remark :

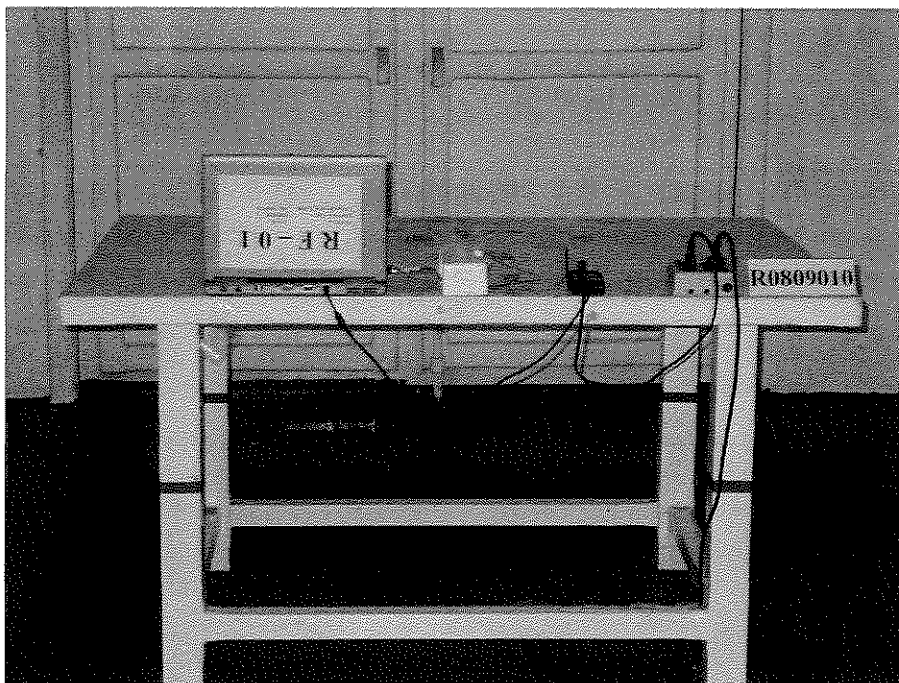
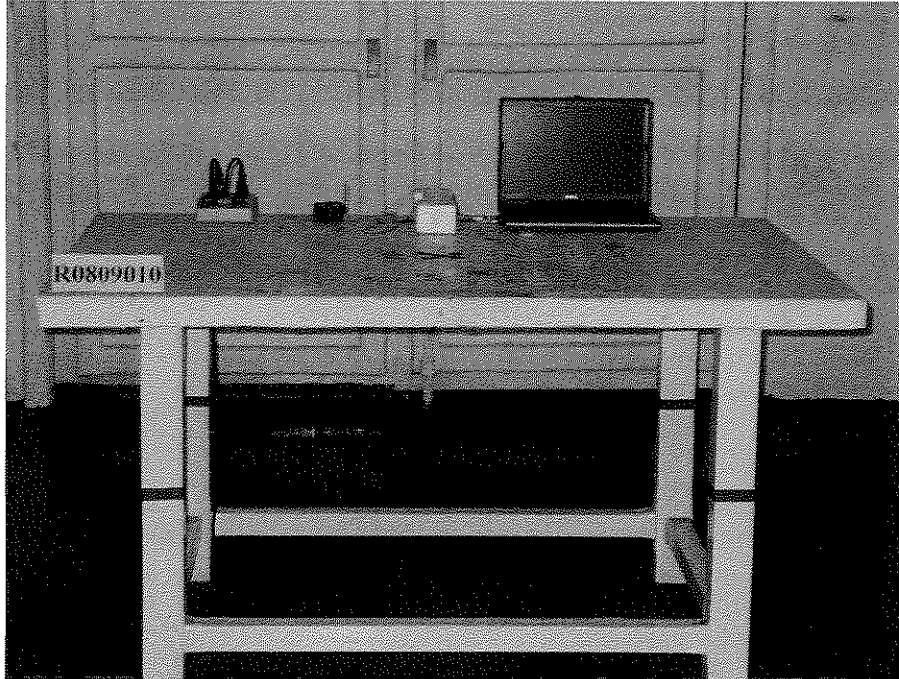
- (1) The MIMI test requirement, MPE shall measure by using the total sum power of each transmitter chain.

10. EUT TEST PHOTO

Conducted Measurement Photos



Radiated Measurement Photos



Radiated Measurement Photos

