

APPLICATION FOR CERTIFICATION

On Behalf of

LG Electronics Inc.

Wireless Adapter Card

Model No. : CU1511

FCC ID : BEJ9QK-CU1511

Brand : LG

Prepared for : LG Electronics Inc.  
19-1, Cheongho-ri, Jinwi-myeon,  
Pyeongtaek-si, Gyeonggi-do,  
451-713 Korea

Prepared by : AUDIX Technology Corporation  
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**TEST REPORT CERTIFICATION**

Applicant : LG Electronics Inc.  
 Manufacturer #1 : LG Electronics Inc.  
 Manufacturer #2 : LG Electronics (Huizhou) Inc. Huitai Factory  
 Manufacturer #3 : Shen Zhen Kwang Sung Electronics H.K Co., Ltd.  
 Manufacturer #4 : PT. LG Electronics Indonesia  
 EUT Description : Wireless Adapter Card  
 FCC ID : BEJ9QK-CU1511  
 (A) Model No. : CU1511  
 (B) Serial No. : N/A  
 (C) Brand : LG  
 (D) Power Supply : DC 5V  
 (E) Test Voltage : AC 120V/60Hz  
 (through interface board)

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C, July. 2008  
 AND ANSI C63.4/2003  
 (FCC CFR 47 Part 15C, §15.207 and §15.209 and §15.247)

The device described above was tested by AUDIX Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart B limits.

The measurement results are contained in this test report and AUDIX Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX Technology Corporation.

Date of Test : Dec. 01 ~ 02, 2009

Date of Report : Dec. 03, 2009

Producer : Tina Huang  
 (Tina Huang/Administrator)

Review : Henning Chang  
 (Henning Chang/Supervisor)

Signatory : Leon Liu  
 (Leon Liu/Deputy General Manager)

# 1. GENERAL INFORMATION

## 1.1. Description of Device (EUT)

|                                |   |                                                                                                                                                                                     |
|--------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                    | : | Wireless Adapter Card                                                                                                                                                               |
| Model Number                   | : | CU1511                                                                                                                                                                              |
| Serial Number                  | : | N/A                                                                                                                                                                                 |
| Brand                          | : | LG                                                                                                                                                                                  |
| FCC ID                         | : | BEJ9QK-CU1511                                                                                                                                                                       |
| Applicant                      | : | LG Electronics Inc.<br>19-1, Cheongho-ri, Jinwi-myeon,<br>Pyeongtaek-si, Gyeonggi-do,<br>451-713 Korea                                                                              |
| Manufacturer #1                | : | LG Electronics Inc.<br>19-1, Cheongho-ri, Jinwi-myeon,<br>Pyeongtaek-si, Gyeonggi-do,<br>451-713 Korea                                                                              |
| Manufacturer #2                | : | LG Electronics (Huizhou) Inc. Huitai Factory<br>No.1 Xingda Road, Huitai Industrial Park of<br>Zhongkai Development Zone, Huizhou City,<br>Guangdong, China.                        |
| Manufacturer #3                | : | Shen Zhen Kwang Sung Electronics H.K Co.,<br>Ltd.<br>Shi Tou Shan Industrial Zone, Zhuan Chang<br>Village, Chiyan Town, Baoan District,<br>Shenzhen City, Guangdong Province, China |
| Manufacturer #4                | : | PT. LG Electronics Indonesia<br>Blok G MM 2100 Industrial Town,<br>Gandamekar, Cikarang Barat, Bekasi 17520,<br>Indonesia.                                                          |
| Radio Technology               | : | DSSS Modulation                                                                                                                                                                     |
| Fundamental Frequency<br>Range | : | 5730MHz ~ 5820MHz                                                                                                                                                                   |

|                           |   |                                                                      |
|---------------------------|---|----------------------------------------------------------------------|
| Tested Frequency          | : | 5730MHz (Channel 02)<br>5775MHz (Channel 20)<br>5820MHz (Channel 38) |
| Frequency Channel         | : | 37 channels                                                          |
| Antenna                   | : | Gain: 0.97dBi                                                        |
| Date of Receipt of Sample | : | Nov. 22, 2009                                                        |
| Date of Test              | : | Dec. 01 ~ 02, 2009                                                   |

## 1.2. Tested Information

This EUT has two types interface, one is used 12 pin and the other is used 22 pin. After evaluating, the EUT with 12 pin is the worst case and test for all test items.

## 1.3. Tested Supporting System Details

### 1.3.1. INTERFACE CARD

|               |   |                                  |
|---------------|---|----------------------------------|
| Model Number  | : | N/A                              |
| Serial Number | : | N/A                              |
| Manufacturer  | : | N/A                              |
| Data Cable    | : | Non-Shielded, Undetachable, 0.2m |

### 1.3.2. SWITCHING POWER SUPPLY

|               |   |                                                           |
|---------------|---|-----------------------------------------------------------|
| Model Number  | : | FM080010-US                                               |
| Serial Number | : | N/A                                                       |
| Manufacturer  | : | N/a                                                       |
| Power Cord    | : | Non-Shielded, Undetachable, 1.8m<br>Bonded a ferrite core |

### 1.3.3. POWER SOCKET

|            |   |                                |
|------------|---|--------------------------------|
| Power Cord | : | Non-Shielded, Detachable, 1.8m |
|------------|---|--------------------------------|

## 1.4. Description of Test Facility

|                                     |   |                                                                                                                                                                                                                                                                                                      |
|-------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name of Firm                        | : | <b>AUDIX Technology Corporation</b><br><b>EMC Department</b><br>No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,<br>Taipei Hsien, Taiwan                                                                                                                                                                      |
| Test Location & Facility<br>(C2/AC) | : | <b>No. 2 Shielded Room</b><br>No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,<br>Taipei Hsien, Taiwan.<br><br><b>Semi-Anechoic Chamber</b><br>No. 53-11, Tin-Fu Tsun, Lin-Kou Hsiang,<br>Taipei Hsien, Taiwan.<br><br>May 15, 2006 File on<br>Federal Communication Commission<br>Registration Number: 90993 |
| NVLAP Lab. Code                     | : | 200077-0                                                                                                                                                                                                                                                                                             |
| TAF Accreditation No                | : | 1724                                                                                                                                                                                                                                                                                                 |

## 1.5. Measurement Uncertainty

| Test Item                        | Frequency Range | Uncertainty (dB), (V/m) |
|----------------------------------|-----------------|-------------------------|
| Conduction Test                  | 150kHz~30MHz    | ±1.73dB                 |
| Radiation Test<br>(Distance: 3m) | 30MHz~300MHz    | ± 2.91dB                |
|                                  | 300MHz~1000MHz  | ± 2.74dB                |
|                                  | Above 1GHz      | ± 5.02dB                |

Remark : Uncertainty =  $k_{uc}(y)$

| Test Item                 | Uncertainty |
|---------------------------|-------------|
| 6dB Bandwidth             | ± 0.05kHz   |
| Time Of Occupancy         | ± 0.03sec   |
| Emission Limitations      | ± 0.13dB    |
| Maximum peak output power | ± 0.33dBm   |
| Band edges                | ± 0.13dB    |
| Power spectral density    | ± 0.13dB    |

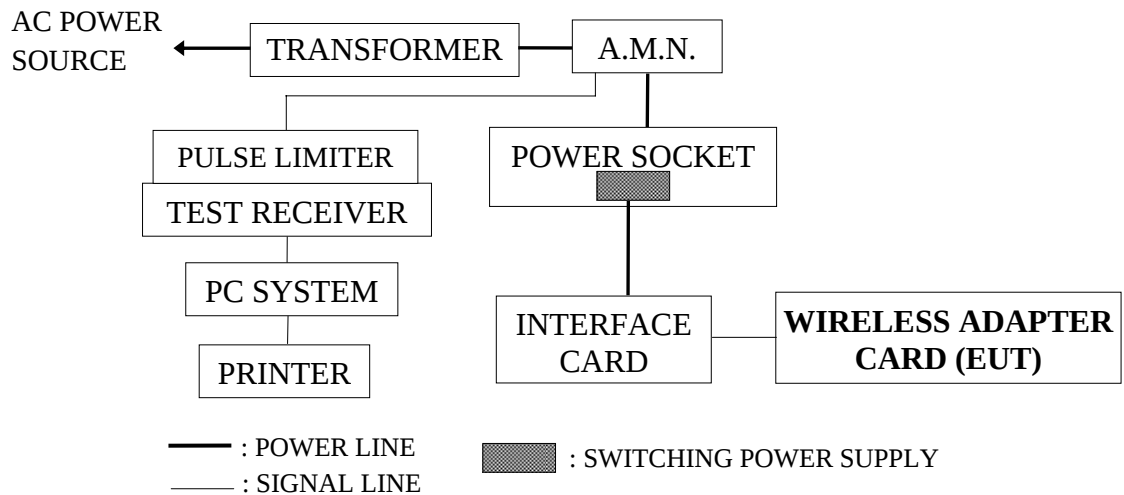
## 2. CONDUCTED EMISSION MEASUREMENT

### 2.1. Test Equipment

The following test equipment were used during the conducted measurement:  
(No. 2 Shielded Room)

| Item | Type          | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|---------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Test Receiver | R&S          | ESCS30    | 100265     | Aug. 28, 09' | Aug. 27, 10' |
| 2.   | A.M.N.        | R & S        | ESH2-Z5   | 890485/023 | Jan. 14, 09' | Jan. 13, 10' |
| 3.   | Pulse Limiter | R&S          | ESH3-Z2   | 001        | Feb. 20, 09' | Feb. 19, 10' |

### 2.2. Block Diagram of Test Setup



### 2.3. Powerline Conducted Emission Limit

| Frequency       | Maximum RF Line Voltage |                    |
|-----------------|-------------------------|--------------------|
|                 | Quasi-Peak Level        | Average Level      |
| 150kHz ~ 500kHz | 66 ~ 56 dB $\mu$ V      | 56 ~ 46 dB $\mu$ V |
| 500kHz ~ 5MHz   | 56 dB $\mu$ V           | 46 dB $\mu$ V      |
| 5MHz ~ 30MHz    | 60 dB $\mu$ V           | 50 dB $\mu$ V      |

Remark1.: If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary.

2.: The lower limit applies at the band edges.

## 2.4. Operating Condition of EUT

- 2.4.1. Set up the EUT (Wireless Adapter Card) and simulator as shown on 2.2.
- 2.4.2. To turn on the power of all equipments.
- 2.4.3. The EUT was set to continuously transmit signals at 5775MHz during testing.

## 2.5. Test Procedure

The EUT (via interface board) was put on table which was above the ground by 80cm and interface board's switching power supply connected to the AC mains through an Artificial Mains Network (A.M.N.). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provided a 50 ohm coupling impedance for the measuring equipment. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions simulators of the interface cables should be manipulated according to FCC ANSI C63.4-2003 during conducted measurement.

The bandwidth of the R&S Test Receiver ESCS30 was set at 9kHz.

The frequency range from 150kHz to 30MHz was checked.

All the final readings from Test Receiver were measured with the Quasi-Peak detector and Average detector. (Remark: If the Average limit is met when using a Quasi-Peak detector, the Average detector is unnecessary)

## 2.6. Conducted Emission Measurement Results

### **PASSED.**

(All the emissions not reported below are too low against the prescribed limits.)

EUT (via interface board) was performed during this section testing and all the test results are attached in next pages.

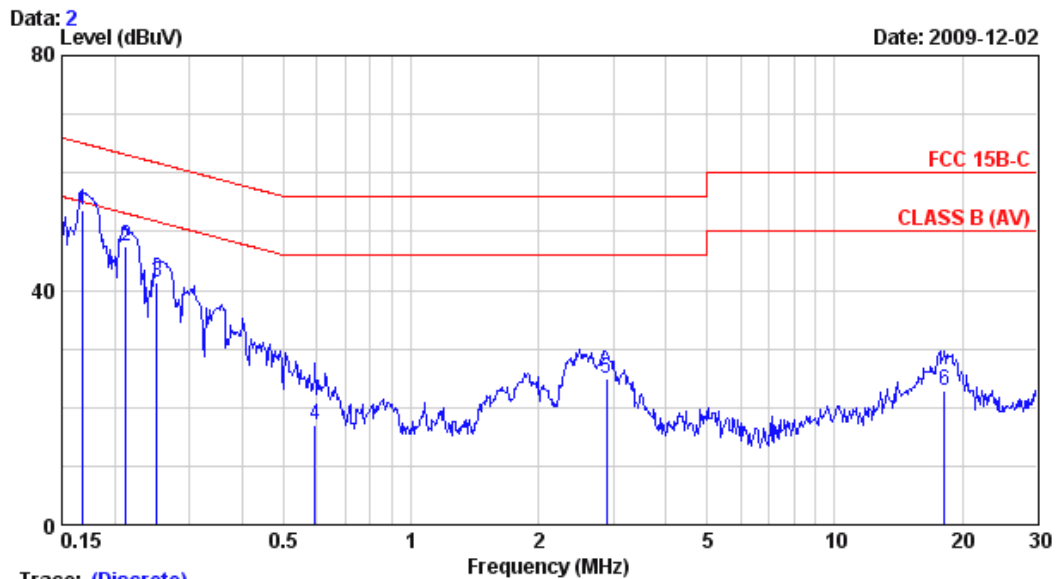
EUT : Wireless Adapter Card      M/N : CU1511

Test Date : Dec. 02, 2009      Temperature : 25°C      Humidity : 65%

Reference Test Data No.: Neutral: # 2 ; Line: # 1



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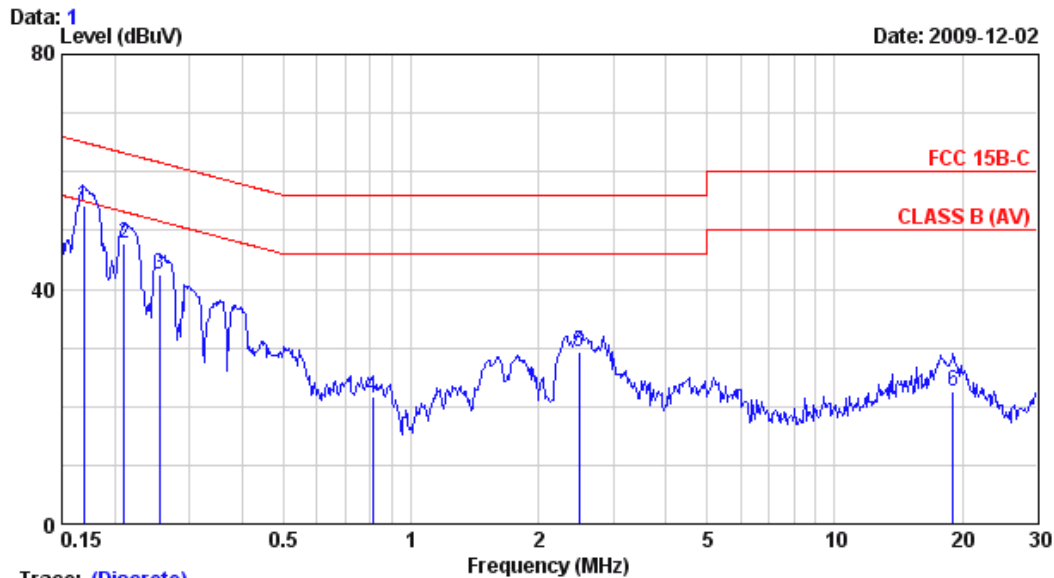
Site : No.2 Shielded room Data : 2  
 Condition : ESH2-Z5 Phase : NEUTRAL  
 Limit : FCC 15B-C  
 Env. / Ins. : 25°C,65% / ESCS 30 (265) Engineer: Albert\_Liang  
 EUT : Wireless Adapter Card M/N:CU1511  
 Power Rating : 110Vac/60Hz  
 Test Mode : OPERATING

|   |        | LISN   | Cable |         | Emission |        |        |        |
|---|--------|--------|-------|---------|----------|--------|--------|--------|
|   | Freq.  | Factor | Loss  | Reading | Level    | Limits | Margin | Remark |
|   | (MHz)  | (dB)   | (dB)  | (dBuV)  | (dBuV)   | (dBuV) | (dB)   |        |
| 1 | 0.168  | 0.10   | 0.25  | 53.21   | 53.56    | 65.05  | 11.49  | QP     |
| 2 | 0.213  | 0.10   | 0.27  | 47.24   | 47.61    | 63.11  | 15.50  | QP     |
| 3 | 0.251  | 0.10   | 0.28  | 41.05   | 41.43    | 61.71  | 20.28  | QP     |
| 4 | 0.594  | 0.14   | 0.35  | 16.64   | 17.14    | 56.00  | 38.86  | QP     |
| 5 | 2.888  | 0.20   | 0.40  | 24.19   | 24.79    | 56.00  | 31.21  | QP     |
| 6 | 18.140 | 0.47   | 0.70  | 21.55   | 22.72    | 60.00  | 37.28  | QP     |

Remarks: 1.Emission Level= LISN Factor + Cable Loss + Reading.  
 2.If the average limit is met when using a quasi-peak detector  
 ,the EUT shall be deemed to meet both limits and measurement  
 with average detector is unnecessary.



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Trace: (Discrete)

|              |                                     |           |                |
|--------------|-------------------------------------|-----------|----------------|
| Site         | : No.2 Shielded room                | Data      | : 1            |
| Condition    | : ESH2-Z5                           | Phase     | : LINE         |
| Limit        | : FCC 15B-C                         |           |                |
| Env. / Ins.  | : 25°C, 65% / ESCS 30 (265)         | Engineer: | : Albert_Liang |
| EUT          | : Wireless Adapter Card M/N: CU1511 |           |                |
| Power Rating | : 110Vac/60Hz                       |           |                |
| Test Mode    | : OPERATING                         |           |                |

|       |        | LISN   | Cable |         | Emission |        |        |        |
|-------|--------|--------|-------|---------|----------|--------|--------|--------|
| Freq. |        | Factor | Loss  | Reading | Level    | Limits | Margin | Remark |
| (MHz) |        | (dB)   | (dB)  | (dBuV)  | (dBuV)   | (dBuV) | (dB)   |        |
| 1     | 0.169  | 0.10   | 0.25  | 53.81   | 54.16    | 65.00  | 10.84  | QP     |
| 2     | 0.210  | 0.10   | 0.26  | 47.40   | 47.76    | 63.21  | 15.44  | QP     |
| 3     | 0.255  | 0.10   | 0.28  | 42.00   | 42.38    | 61.58  | 19.20  | QP     |
| 4     | 0.813  | 0.18   | 0.38  | 21.07   | 21.63    | 56.00  | 34.37  | QP     |
| 5     | 2.490  | 0.20   | 0.40  | 28.66   | 29.26    | 56.00  | 26.74  | QP     |
| 6     | 19.020 | 0.65   | 0.70  | 21.10   | 22.45    | 60.00  | 37.55  | QP     |

Remarks: 1. Emission Level= LISN Factor + Cable Loss + Reading.  
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

### 3. RADIATED EMISSION MEASUREMENT

#### 3.1. Test Equipment

The following test equipment was used during the radiated emission measurement:

##### 3.1.1. For Frequency Range 30MHz~1000MHz (at Semi-Anechoic Chamber)

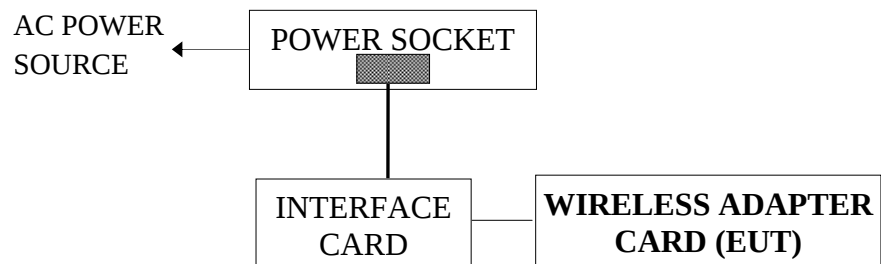
| Item | Type                 | Manufacturer | Model No.   | Serial No. | Last Cal.    | Next Cal.    |
|------|----------------------|--------------|-------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer    | HP           | 8564EC      | 3946A00249 | Oct. 27, 09' | Oct. 26, 10' |
| 2.   | Test Receiver        | R&S          | ESCS30      | 100265     | Aug. 28, 09' | Aug. 27, 10' |
| 3.   | Pre-Amplifier        | HP           | 8447D       | 2944A06305 | Feb. 04, 09' | Feb. 03, 10' |
| 4.   | Biconical Antenna    | CHASE        | VBA6106A    | 1264       | Mar. 20, 09' | Mar. 19, 10' |
| 5.   | Log Periodic Antenna | Schwarzbeck  | UHALP9108-A | 0810       | Mar. 20, 09' | Mar. 19, 10' |

##### 3.1.2. For Frequency Above 1GHz (at Semi-Anechoic Chamber)

| Item | Type              | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | HP           | 8564EC    | 3946A00249 | Oct. 27, 09' | Oct. 26, 10' |
| 2.   | Pre-Amplifier     | HP           | 8449B     | 3008A00529 | Dec. 31, 08' | Dec. 30, 09' |
| 3.   | Horn Antenna      | EMCO         | 3115      | 9112-3775  | May 15, 09'  | May 14, 10'  |
| 4.   | Horn Antenna      | EMCO         | 3116      | 2653       | Oct. 02, 09' | Oct. 01, 10' |

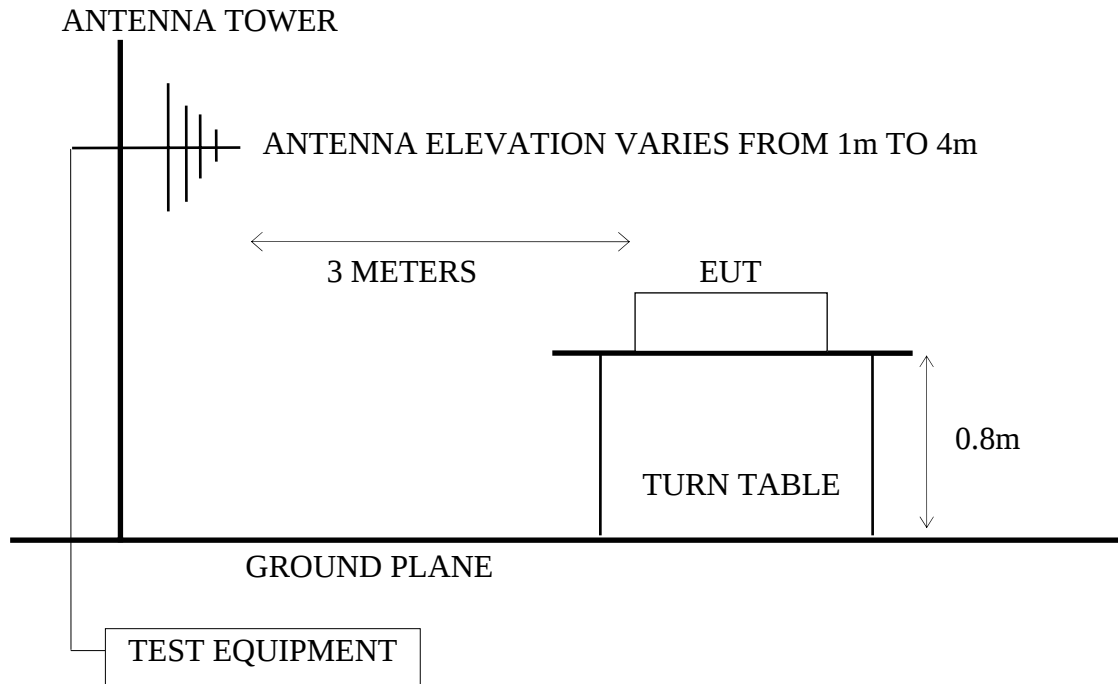
#### 3.2. Test Setup

##### 3.2.1. Block Diagram of connection between EUT and simulators

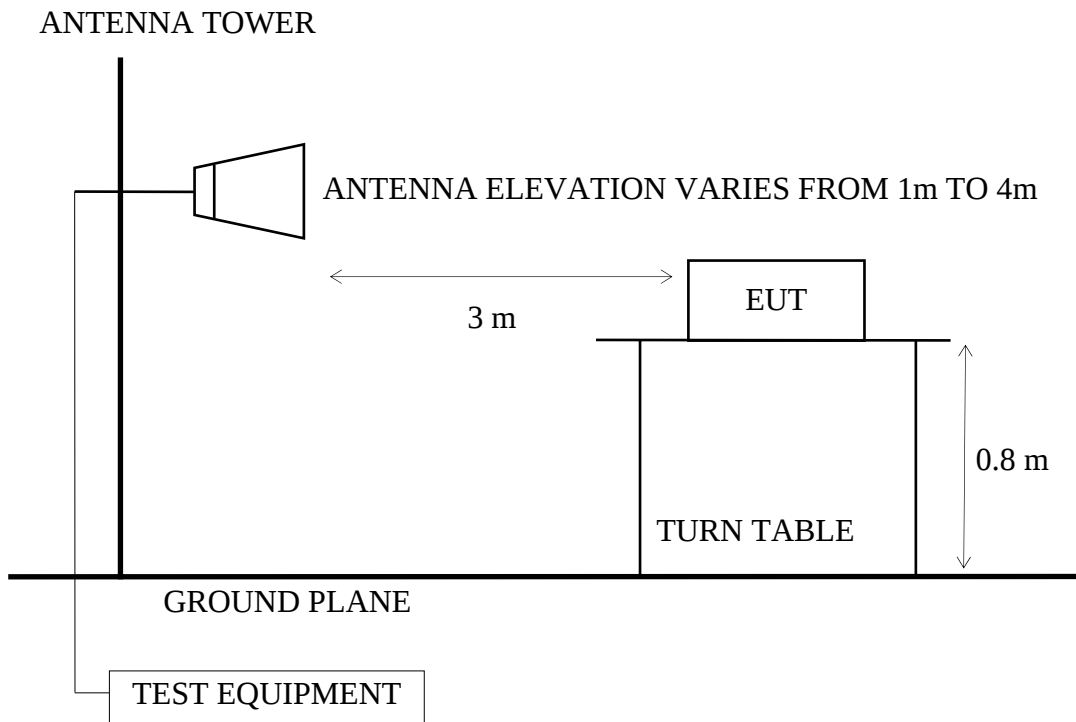


 : SWITCHING POWER SUPPLY

## 3.2.2. Semi-Anechoic Chamber (3m) Setup Diagram for 30-1000MHz



## 3.2.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz



### 3.3. Radiated Emission Limits (§15.209)

| FREQUENCY<br>MHz | DISTANCE<br>Meters | FIELD STRENGTHS LIMITS                                                          |                          |
|------------------|--------------------|---------------------------------------------------------------------------------|--------------------------|
|                  |                    | $\mu\text{V/m}$                                                                 | $\text{dB}\mu\text{V/m}$ |
| 30 ~ 88          | 3                  | 100                                                                             | 40.0                     |
| 88 ~ 216         | 3                  | 150                                                                             | 43.5                     |
| 216 ~ 960        | 3                  | 200                                                                             | 46.0                     |
| Above 960        | 3                  | 500                                                                             | 54.0                     |
| Above 1000       | 3                  | 74.0 $\text{dB}\mu\text{V/m}$ (Peak)<br>54.0 $\text{dB}\mu\text{V/m}$ (Average) |                          |

- Remark :
- (1) Emission level ( $\text{dB}\mu\text{V/m}$ ) = 20 log Emission level ( $\mu\text{V/m}$ )
  - (2) The tighter limit applies at the edge between two frequency bands.
  - (3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
  - (4) The limits in this table are based on CFR 47 Part 15.205(a)(b) and Part 15.209 (a).
  - (5) The over 1GHz limit, FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.205(b) & Part 15.209(e) and Part 15.207(c).

### 3.4. Operating Condition of EUT

- 3.4.1. Set up the EUT (Wireless Adapter Card) as shown on 3.2.
- 3.4.2. To turn on the power of all equipment.
- 3.4.3. Transmit Mode: The EUT was set to continuously transmit signals at 5730MHz 、5775MHz and 5820MHz during testing.
- 3.4.4. Receive Mode: The EUT was set to continuously receive signals at 5775MHz during testing.

### 3.5. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set 3 meters away from the receiving antenna which was mounted on an antenna tower. The antenna moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log-periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC ANSI C63.4-2003 regulation.

The bandwidth of the R&S Test Receiver ESCS30 was set at 120kHz. (For 30MHz to 1000MHz)

The resolution bandwidth and video bandwidth of test spectrum analyzer is 1MHz for peak detection (PK) at frequency above 1GHz.

The resolution bandwidth of test spectrum analyzer is 1MHz and the video bandwidth is 10Hz for average detection (AV) at frequency above 1GHz.

The frequency range from 30MHz to 40GHz (Up to 10<sup>th</sup> harmonics from fundamental frequency) was checked.

The frequency range from 30MHz to 40GHz (Up to 10<sup>th</sup> harmonics from fundamental frequency) was checked. 30MHz to 1000MHz was measured with Qusai-Peak detector. Above 1GHz was measured with peak and average detector. For average reading in frequency from 12G to 40GHz, we checked it in 1 meter distance and with a shorter cable 2 meter instead of original's. There is no signal exist.

### 3.6. Test Results

#### **PASSED.**

(All emissions not reported below are too low against the prescribed limits.)

EUT : Wireless Adapter Card      M/N : CU1511

Test Date : Dec. 01, 2009    Temperature : 26°C    Humidity : 51%

#### **For Frequency Range 30MHz~1000MHz:**

The EUT with following test modes was performed during this section testing and all the test results are listed in section 3.6.1.

| No. | Channel | Frequency | Test Mode | Reference Test Data |          |
|-----|---------|-----------|-----------|---------------------|----------|
|     |         |           |           | Horizontal          | Vertical |
| 1.  | 02      | 5730MHz   | Transmit  | # 12                | # 11     |
| 2.  | 20      | 5775MHz   |           | # 11                | # 12     |
| 3.  | 38      | 5820MHz   |           | # 12                | # 11     |
| 4.  | 20      | 5775MHz   | Receive   | # 9                 | # 10     |

\* Above all final readings were measured with Quasi-Peak detector.

**For Frequency above 1GHz:**

The EUT with following test modes was performed during this section testing and all the test results are listed in section 3.6.2.

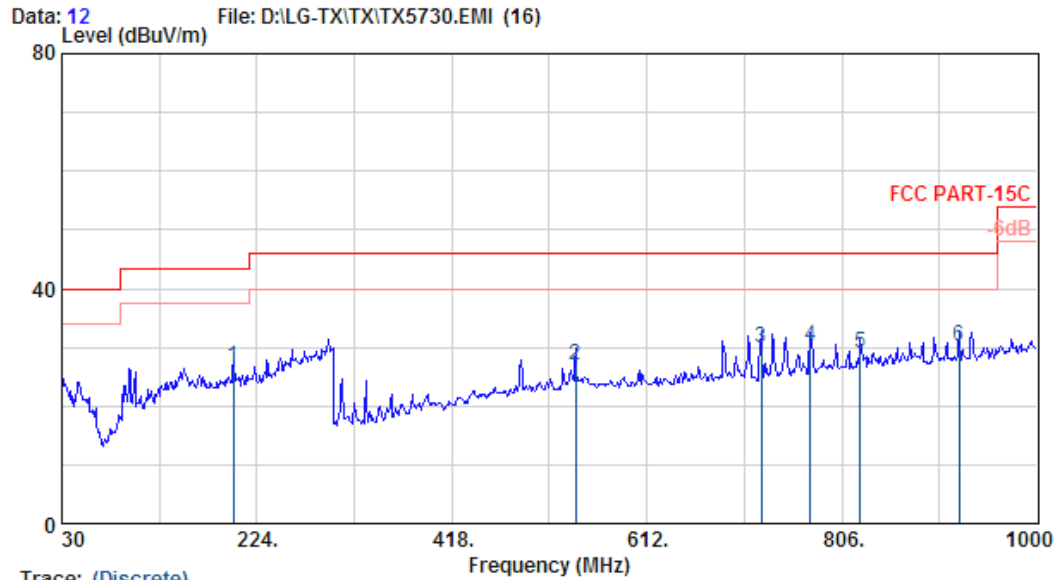
| No. | Channel | Frequency | Test Mode | Reference Test Data      |                          |
|-----|---------|-----------|-----------|--------------------------|--------------------------|
|     |         |           |           | Horizontal               | Vertical                 |
| 1.  | 02      | 5730MHz   | Transmit  | # 2, 3, 5, 8<br># 13, 16 | # 1, 4, 6, 7<br># 14, 15 |
| 2.  | 20      | 5775MHz   |           | # 1, 4, 5, 7<br># 14, 16 | # 2, 3, 6, 8<br># 13, 15 |
| 3.  | 38      | 5820MHz   |           | # 2, 3, 5, 8<br># 13, 16 | # 1, 4, 6, 7<br># 14, 15 |
| 4.  | 20      | 5775MHz   | Receive   | # 1, 4, 5                | # 2, 3, 6                |

\* Above all final readings were measured with Peak detector and Average detector.

## 3.6.1. Frequency Range 30-1000MHz



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Trace: (Discrete)

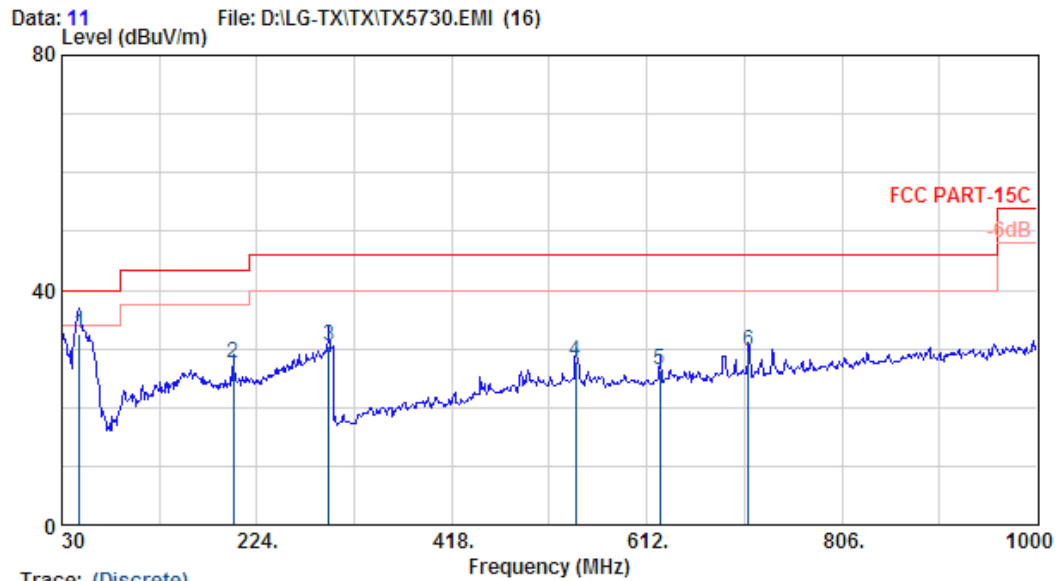
Site no. : @AC Chamber Data no. : 12  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5730MHz

|   | Freq.   | Ant.   | Cable |         | Emission |          |        |        |
|---|---------|--------|-------|---------|----------|----------|--------|--------|
|   | (MHz)   | Factor | Loss  | Reading | Level    | Limits   | Margin | Remark |
|   |         | (dB/m) | (dB)  | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1 | 200.720 | 22.08  | 3.00  | 1.51    | 26.59    | 43.50    | 16.91  |        |
| 2 | 541.190 | 19.25  | 7.01  | 0.65    | 26.91    | 46.00    | 19.09  |        |
| 3 | 725.490 | 22.07  | 6.60  | 1.31    | 29.98    | 46.00    | 16.02  |        |
| 4 | 774.960 | 24.26  | 6.80  | -1.02   | 30.04    | 46.00    | 15.96  |        |
| 5 | 824.430 | 24.16  | 7.00  | -2.11   | 29.05    | 46.00    | 16.95  |        |
| 6 | 922.400 | 24.52  | 7.40  | -1.67   | 30.25    | 46.00    | 15.75  |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Trace: (Discrete)

Site no. : @AC Chamber Data no. : 11  
Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
Limit : FCC PART-15C  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : TX5730MHz

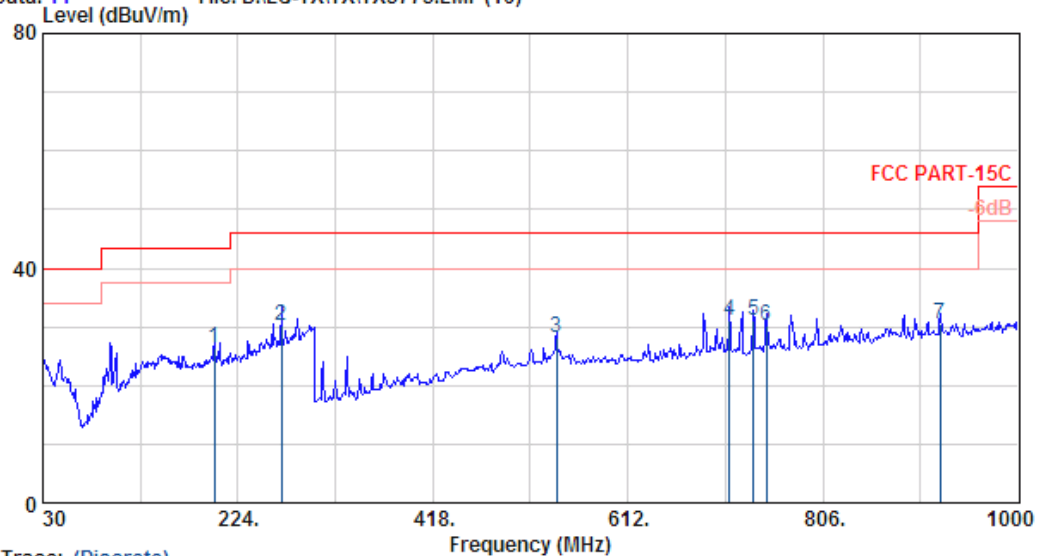
|       |         | Ant.  | Cable   |          | Emission |        |        |  |
|-------|---------|-------|---------|----------|----------|--------|--------|--|
| Freq. | Factor  | Loss  | Reading | Level    | Limits   | Margin | Remark |  |
| (MHz) | (dB/m)  | (dB)  | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)   |        |  |
| 1     | 47.460  | 17.87 | 1.40    | 13.28    | 32.55    | 40.00  | 7.45   |  |
| 2     | 200.720 | 22.08 | 3.00    | 2.35     | 27.43    | 43.50  | 16.07  |  |
| 3     | 295.780 | 26.48 | 4.00    | -0.12    | 30.36    | 46.00  | 15.64  |  |
| 4     | 541.190 | 19.25 | 7.01    | 1.49     | 27.75    | 46.00  | 18.25  |  |
| 5     | 624.610 | 21.31 | 6.20    | -1.19    | 26.32    | 46.00  | 19.68  |  |
| 6     | 712.880 | 23.30 | 6.53    | -0.36    | 29.47    | 46.00  | 16.53  |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 11 File: D:\LG-TX\TX\TX5775.EMI (16)



Trace: (Discrete)

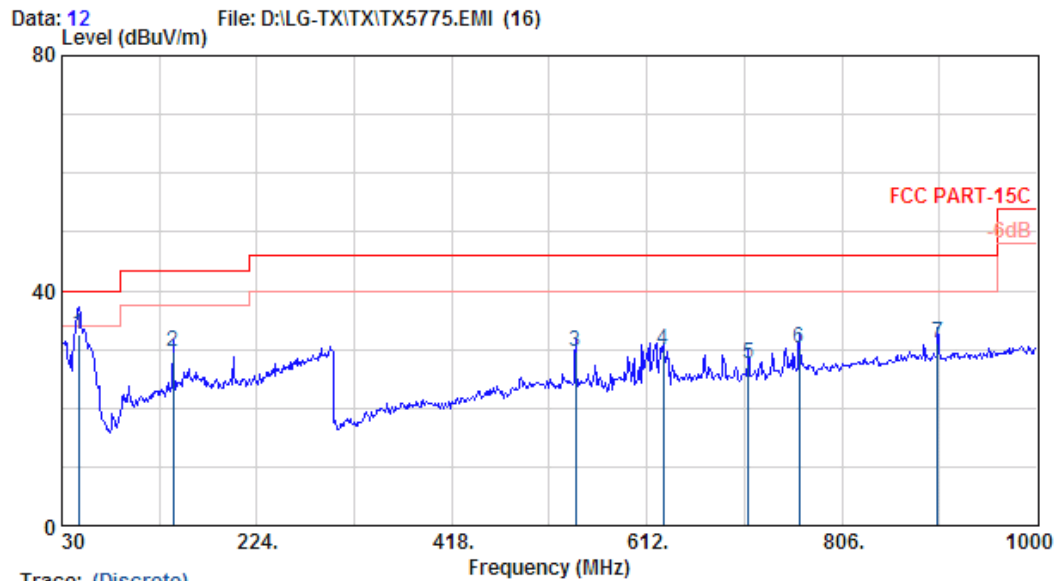
Site no. : @AC Chamber Data no. : 11  
Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
Limit : FCC PART-15C  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireles Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : TX5775MHz

|       |         | Ant.  | Cable   |          | Emission |        |        |  |
|-------|---------|-------|---------|----------|----------|--------|--------|--|
| Freq. | Factor  | Loss  | Reading | Level    | Limits   | Margin | Remark |  |
| (MHz) | (dB/m)  | (dB)  | (dBμV)  | (dBμV/m) | (dBμV/m) | (dB)   |        |  |
| 1     | 200.720 | 22.08 | 3.00    | 1.28     | 26.36    | 43.50  | 17.14  |  |
| 2     | 267.650 | 24.79 | 3.70    | 1.70     | 30.19    | 46.00  | 15.81  |  |
| 3     | 541.190 | 19.25 | 7.01    | 1.74     | 28.00    | 46.00  | 18.00  |  |
| 4     | 712.880 | 23.30 | 6.53    | 1.26     | 31.09    | 46.00  | 14.91  |  |
| 5     | 737.130 | 22.23 | 6.60    | 2.28     | 31.12    | 46.00  | 14.88  |  |
| 6     | 749.740 | 23.25 | 6.70    | 0.13     | 30.08    | 46.00  | 15.92  |  |
| 7     | 922.400 | 24.52 | 7.40    | -1.57    | 30.35    | 46.00  | 15.65  |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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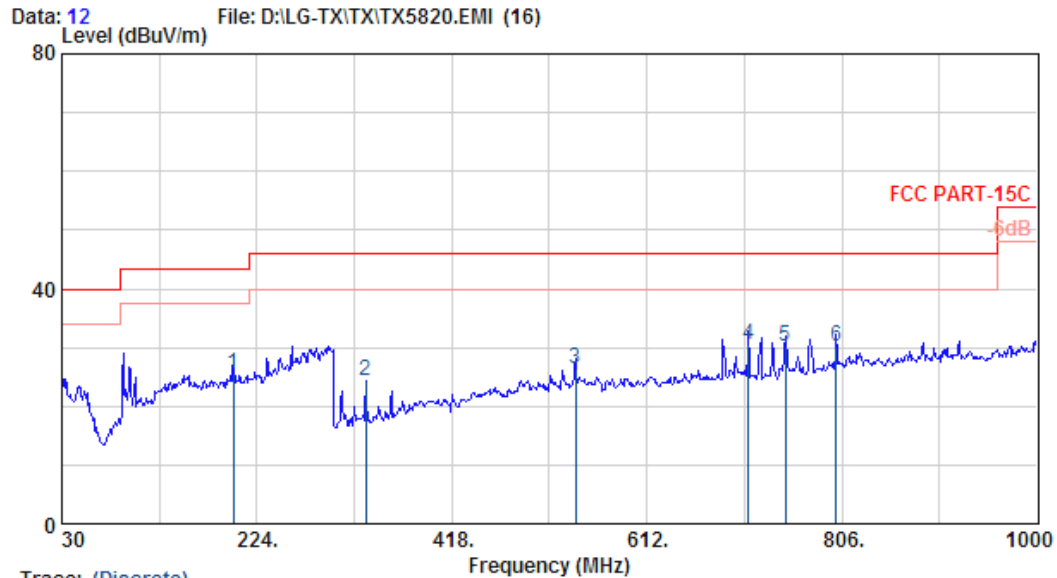
Site no. : @AC Chamber Data no. : 12  
Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
Limit : FCC PART-15C  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : TX5775MHz

|       |         | Ant.  | Cable   |          | Emission |        |        |  |
|-------|---------|-------|---------|----------|----------|--------|--------|--|
| Freq. | Factor  | Loss  | Reading | Level    | Limits   | Margin | Remark |  |
| (MHz) | (dB/m)  | (dB)  | (dBμV)  | (dBμV/m) | (dBμV/m) | (dB)   |        |  |
| 1     | 46.490  | 18.23 | 1.40    | 12.85    | 32.48    | 40.00  | 7.52   |  |
| 2     | 140.580 | 20.22 | 2.50    | 6.75     | 29.47    | 43.50  | 14.03  |  |
| 3     | 541.190 | 19.25 | 7.01    | 3.20     | 29.46    | 46.00  | 16.54  |  |
| 4     | 628.490 | 21.06 | 6.31    | 2.50     | 29.87    | 46.00  | 16.13  |  |
| 5     | 712.880 | 23.30 | 6.53    | -2.19    | 27.64    | 46.00  | 18.36  |  |
| 6     | 763.320 | 23.75 | 6.74    | -0.44    | 30.06    | 46.00  | 15.94  |  |
| 7     | 901.060 | 24.95 | 7.40    | -1.17    | 31.18    | 46.00  | 14.82  |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Trace: (Discrete)

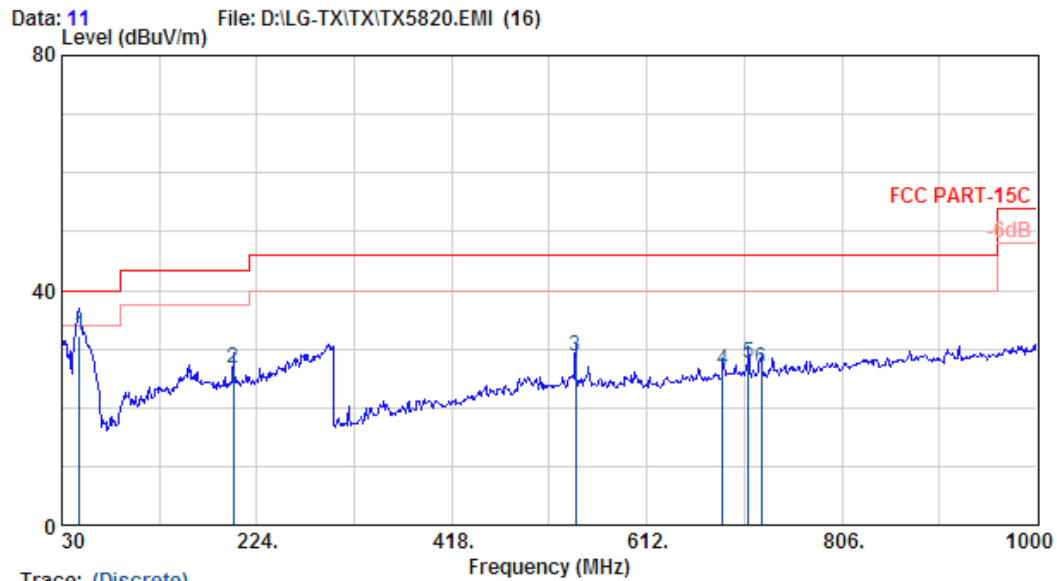
Site no. : @AC Chamber Data no. : 12  
 Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5820MHz

|       |         | Ant.  | Cable   |          | Emission |        |        |
|-------|---------|-------|---------|----------|----------|--------|--------|
| Freq. | Factor  | Loss  | Reading | Level    | Limits   | Margin | Remark |
| (MHz) | (dB/m)  | (dB)  | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)   |        |
| 1     | 200.720 | 22.08 | 3.00    | 0.39     | 25.47    | 43.50  | 18.03  |
| 2     | 332.640 | 15.21 | 4.20    | 4.89     | 24.30    | 46.00  | 21.70  |
| 3     | 541.190 | 19.25 | 7.01    | -0.01    | 26.25    | 46.00  | 19.75  |
| 4     | 712.880 | 23.30 | 6.53    | 0.53     | 30.36    | 46.00  | 15.64  |
| 5     | 749.740 | 23.25 | 6.70    | 0.19     | 30.14    | 46.00  | 15.86  |
| 6     | 800.180 | 24.14 | 6.90    | -0.79    | 30.25    | 46.00  | 15.75  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Trace: (Discrete)

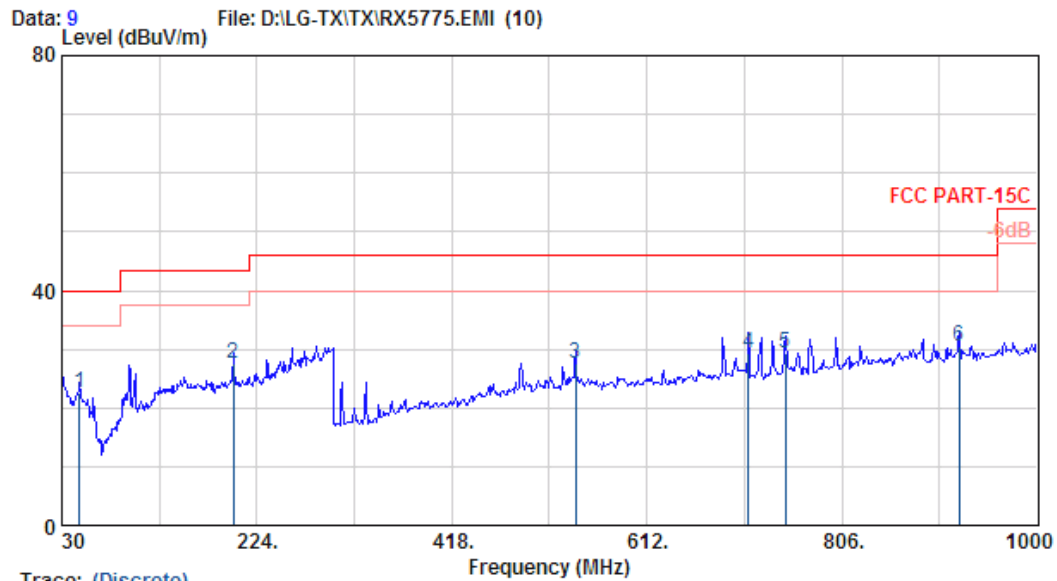
Site no. : @AC Chamber Data no. : 11  
Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
Limit : FCC PART-15C  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : TX5820MHz

| Freq.<br>(MHz) | Ant. Cable       |              | Reading<br>(dBμV) | Emission          |       | Limits<br>(dBμV/m) | Margin<br>(dB) | Remark |
|----------------|------------------|--------------|-------------------|-------------------|-------|--------------------|----------------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) |                   | Level<br>(dBμV/m) |       |                    |                |        |
| 1              | 47.460           | 17.87        | 1.40              | 13.08             | 32.35 | 40.00              | 7.65           |        |
| 2              | 200.720          | 22.08        | 3.00              | 1.67              | 26.75 | 43.50              | 16.75          |        |
| 3              | 541.190          | 19.25        | 7.01              | 2.34              | 28.60 | 46.00              | 17.40          |        |
| 4              | 687.660          | 23.26        | 6.50              | -3.43             | 26.33 | 46.00              | 19.67          |        |
| 5              | 712.880          | 23.30        | 6.53              | -2.41             | 27.42 | 46.00              | 18.58          |        |
| 6              | 725.490          | 22.07        | 6.60              | -1.94             | 26.73 | 46.00              | 19.27          |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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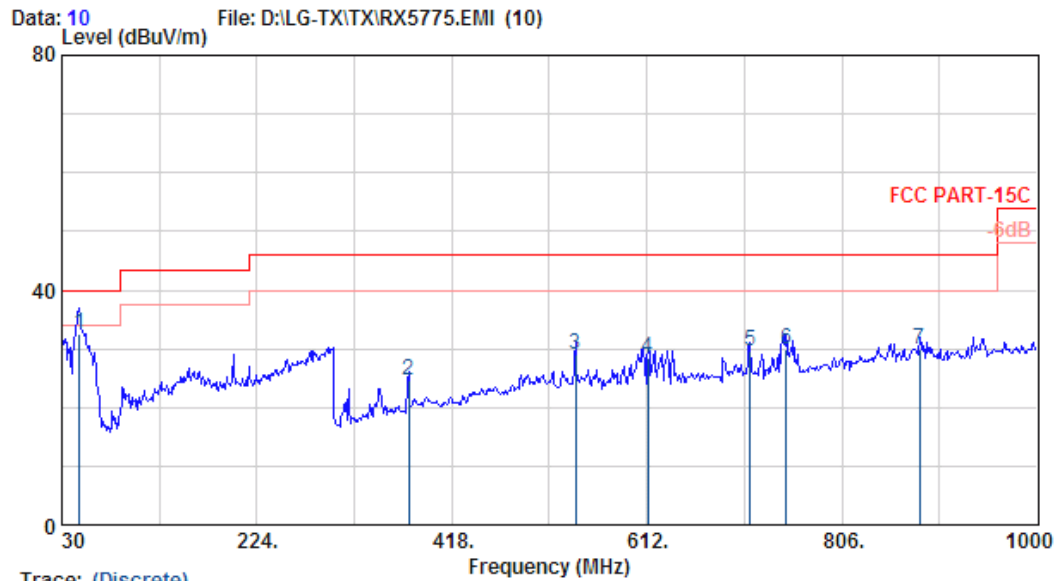
Site no. : @AC Chamber Data no. : 9  
Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : HORIZONTAL  
Limit : FCC PART-15C  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : RX5775MHz

|       |         | Ant.  | Cable   |          | Emission |        |        |  |
|-------|---------|-------|---------|----------|----------|--------|--------|--|
| Freq. | Factor  | Loss  | Reading | Level    | Limits   | Margin | Remark |  |
| (MHz) | (dB/m)  | (dB)  | (dBμV)  | (dBμV/m) | (dBμV/m) | (dB)   |        |  |
| 1     | 47.460  | 17.87 | 1.40    | 3.32     | 22.59    | 40.00  | 17.41  |  |
| 2     | 200.720 | 22.08 | 3.00    | 2.50     | 27.58    | 43.50  | 15.92  |  |
| 3     | 541.190 | 19.25 | 7.01    | 1.17     | 27.43    | 46.00  | 18.57  |  |
| 4     | 712.880 | 23.30 | 6.53    | -0.44    | 29.39    | 46.00  | 16.61  |  |
| 5     | 749.740 | 23.25 | 6.70    | -0.58    | 29.37    | 46.00  | 16.63  |  |
| 6     | 922.400 | 24.52 | 7.40    | -1.53    | 30.38    | 46.00  | 15.62  |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Site no. : @AC Chamber Data no. : 10  
Dis. / Ant. : 3m VBA6106A/UHALP9108A Ant. pol. : VERTICAL  
Limit : FCC PART-15C  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : RX5775MHz

|       |         | Ant.  | Cable   |          | Emission |        |        |  |
|-------|---------|-------|---------|----------|----------|--------|--------|--|
| Freq. | Factor  | Loss  | Reading | Level    | Limits   | Margin | Remark |  |
| (MHz) | (dB/m)  | (dB)  | (dBμV)  | (dBμV/m) | (dBμV/m) | (dB)   |        |  |
| 1     | 47.460  | 17.87 | 1.40    | 13.31    | 32.57    | 40.00  | 7.43   |  |
| 2     | 375.320 | 17.15 | 4.60    | 2.74     | 24.49    | 46.00  | 21.51  |  |
| 3     | 541.190 | 19.25 | 7.01    | 2.79     | 29.05    | 46.00  | 16.95  |  |
| 4     | 612.970 | 21.36 | 6.30    | 0.76     | 28.42    | 46.00  | 17.58  |  |
| 5     | 714.820 | 22.95 | 6.60    | 0.03     | 29.58    | 46.00  | 16.42  |  |
| 6     | 750.710 | 23.35 | 6.70    | -0.03    | 30.02    | 46.00  | 15.98  |  |
| 7     | 883.600 | 25.27 | 7.30    | -2.75    | 29.82    | 46.00  | 16.18  |  |

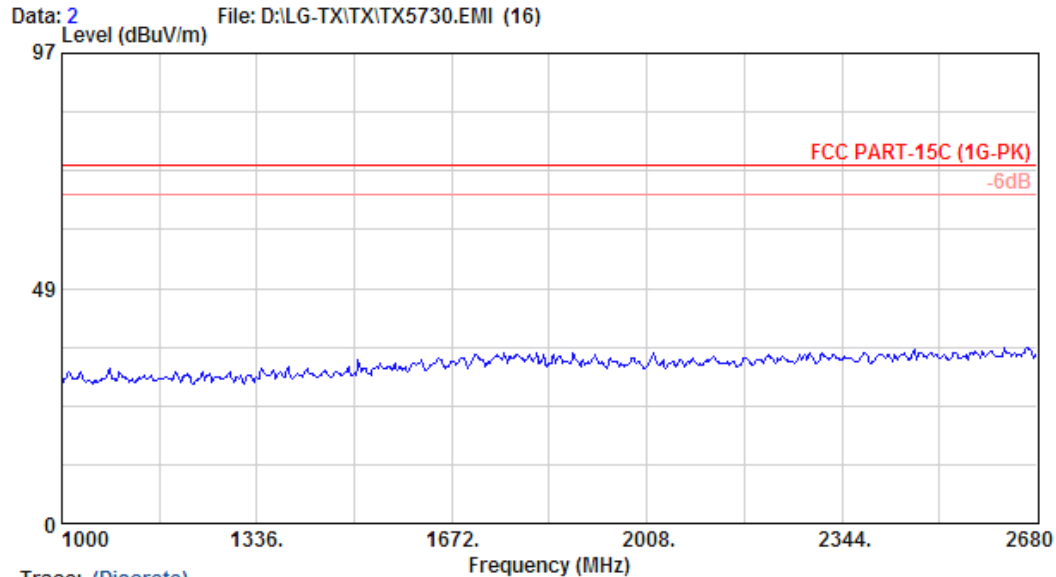
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.

## 3.6.2. Above 1GHz Frequency Range Measurement Results

Test Mode: Transmit Mode, Frequency: 5730MHz (CH02)

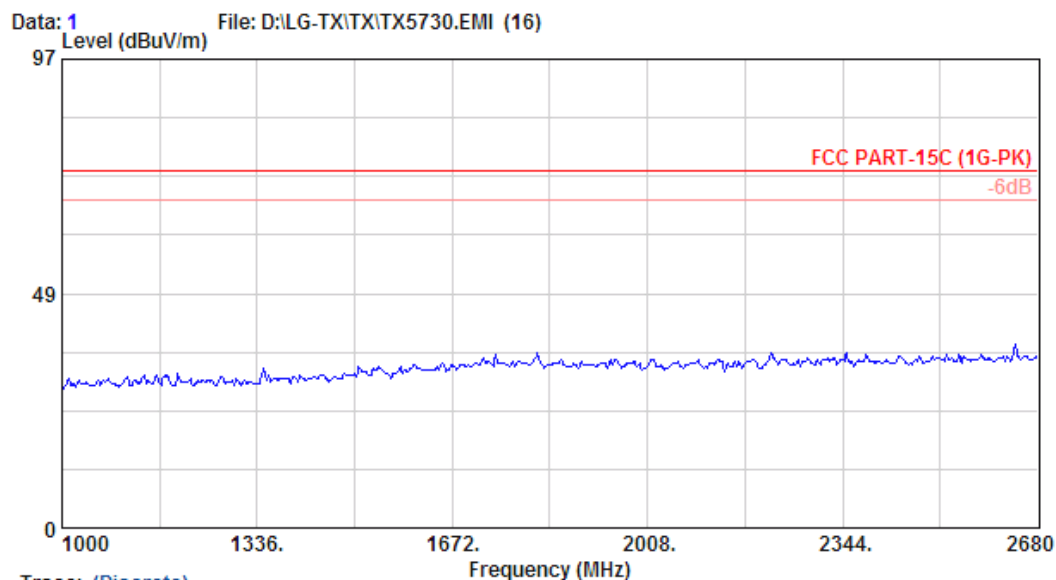


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Trace: (Discrete)

|                                       |                        |
|---------------------------------------|------------------------|
| Site no. : @AC Chamber                | Data no. : 2           |
| Dis. / Ant. : 3m 3115(3775)           | Ant. pol. : HORIZONTAL |
| Limit : FCC PART-15C (1G-PK)          |                        |
| Env. / Ins. : 8564EC 26°C/51%         | Engineer : Jarwei Wang |
| EUT : Wireles Adaptor Card M/N:CU1511 |                        |
| Power Rating : 120Vac/60Hz            |                        |
| Test Mode : TX5730MHz                 |                        |



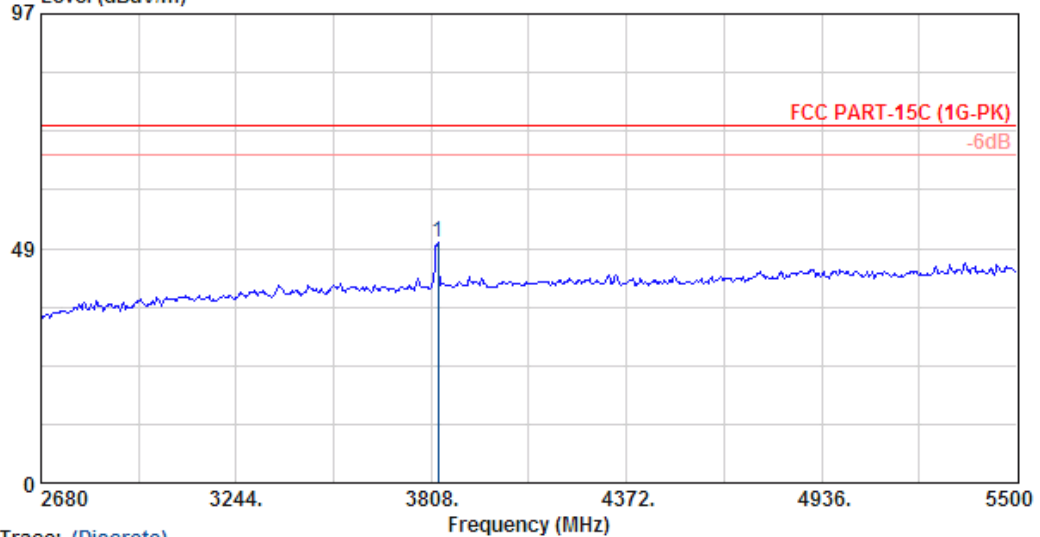
Trace: (Discrete)

|                                       |                        |
|---------------------------------------|------------------------|
| Site no. : @AC Chamber                | Data no. : 1           |
| Dis. / Ant. : 3m 3115(3775)           | Ant. pol. : VERTICAL   |
| Limit : FCC PART-15C (1G-PK)          |                        |
| Env. / Ins. : 8564EC 26°C/51%         | Engineer : Jarwei Wang |
| EUT : Wireles Adaptor Card M/N:CU1511 |                        |
| Power Rating : 120Vac/60Hz            |                        |
| Test Mode : TX5730MHz                 |                        |



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 Email:ttmc@ttmc.com.tw

Data: 3 File: D:\LG-TX\TX\TX5730.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 3  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5730MHz

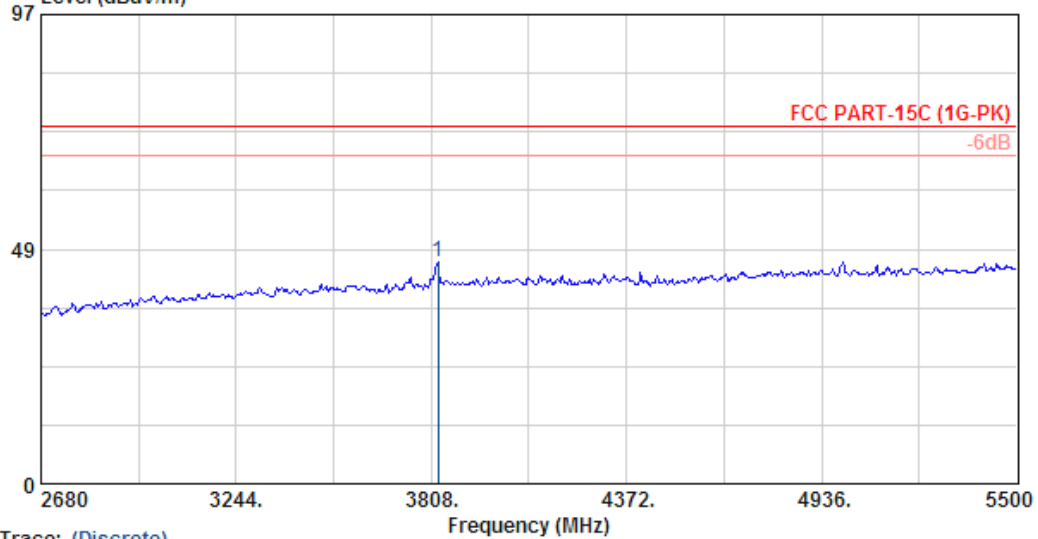
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |        |
| 1 3827.740     | 31.89            | 8.29         | 9.41              | 49.58             | 74.00  | 24.42  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 4 File: D:\LG-TX\TX\TX5730.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 4  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5730MHz

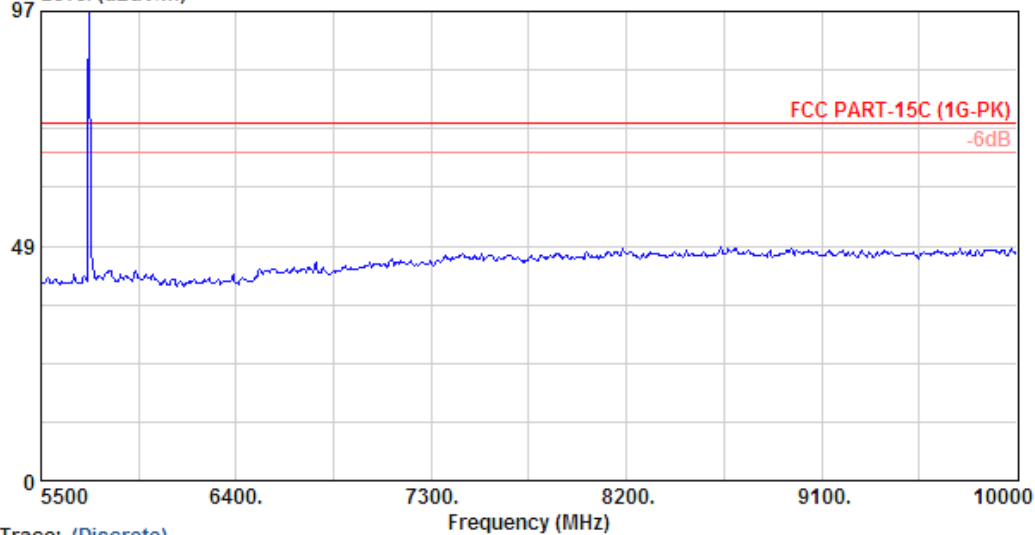
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission          |  | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|----------------|--------------------------|-----------------------|-------------------|-------------------|--|--------------------|----------------|--------|
|                |                          |                       |                   | Level<br>(dBuV/m) |  |                    |                |        |
| 1 3827.740     | 31.89                    | 8.29                  | 5.54              | 45.71             |  | 74.00              | 28.29          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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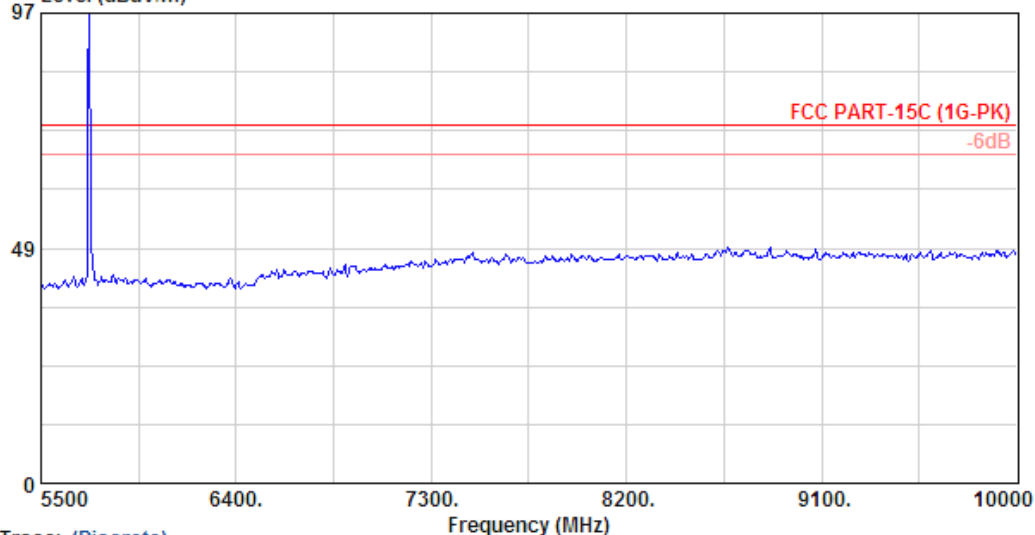
Data: 5 File: D:\LG-TX\TX\TX5730.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

|              |                                   |           |               |
|--------------|-----------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                     | Data no.  | : 5           |
| Dis. / Ant.  | : 3m 3115(3775)                   | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)            |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                 | Engineer  | : Jarwei Wang |
| EUT          | : Wireles Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                     |           |               |
| Test Mode    | : TX5730MHz                       |           |               |

Data: 6 File: D:\LG-TX\TX\TX5730.EMI (16)  
 Level (dBuV/m)



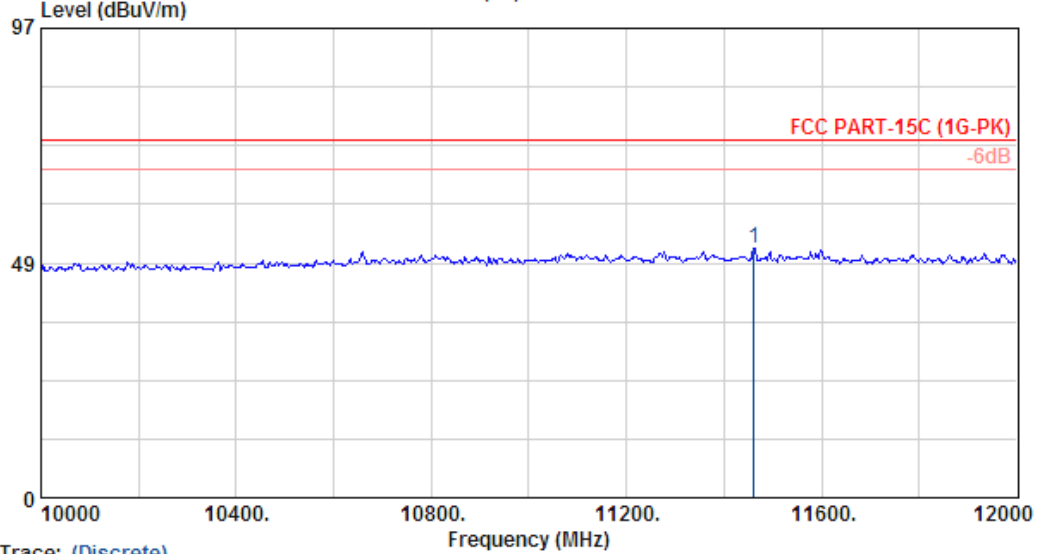
Trace: (Discrete)

|              |                                   |           |               |
|--------------|-----------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                     | Data no.  | : 6           |
| Dis. / Ant.  | : 3m 3115(3775)                   | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-PK)            |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                 | Engineer  | : Jarwei Wang |
| EUT          | : Wireles Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                     |           |               |
| Test Mode    | : TX5730MHz                       |           |               |



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Data: 8 File: D:\LG-TX\TX\TX5730.EMI (16)



Trace: (Discrete)

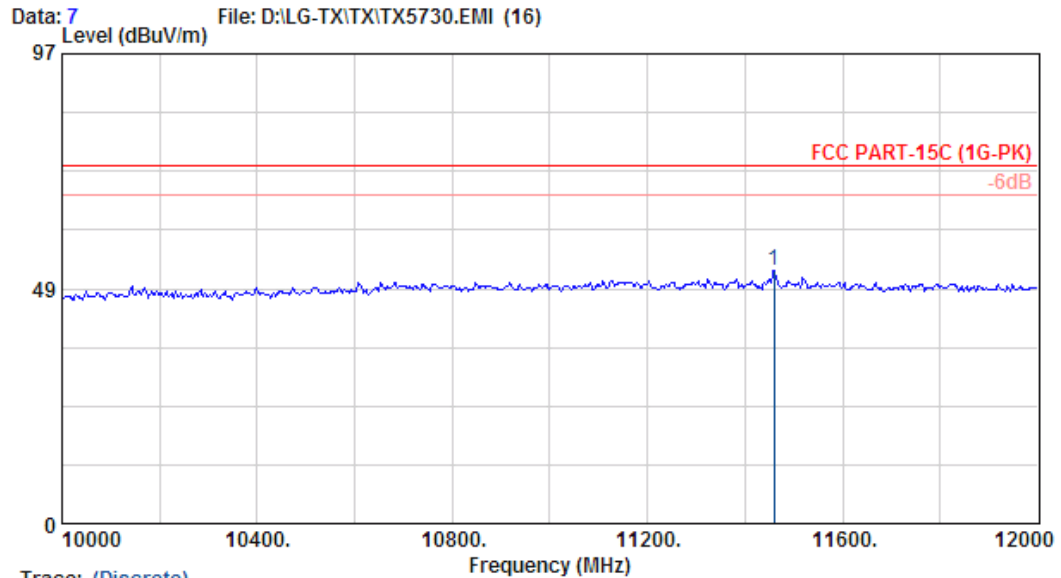
|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 8           |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5730MHz                        |           |               |

| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |        |
| 1 11462.000    | 38.66            | 2.26         | 10.67             | 51.58             | 74.00  | 22.42  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 7           |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5730MHz                        |           |               |

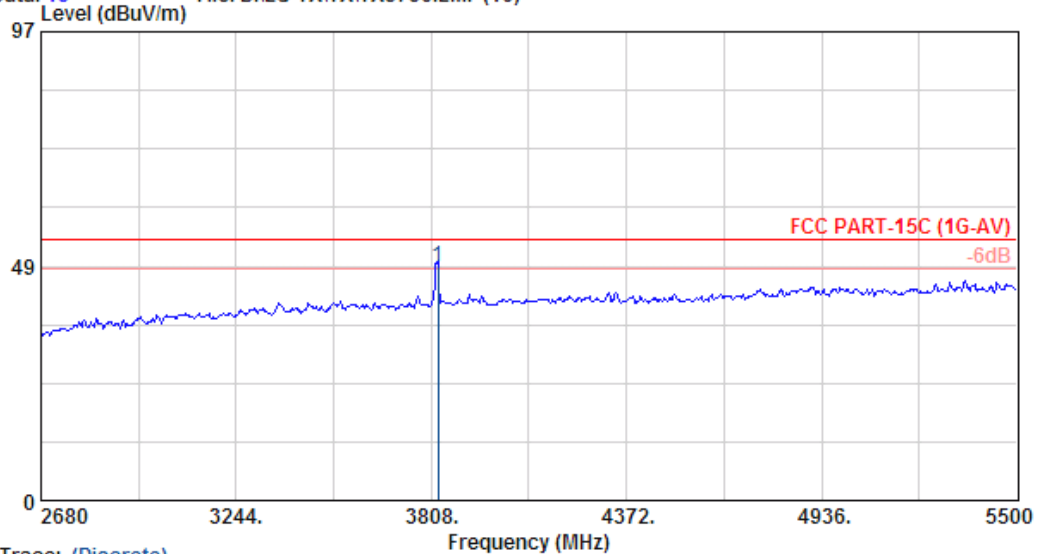
| Freq.<br>(MHz) | Ant. Factor<br>(dB/m) | Cable Loss<br>(dB) | Reading<br>(dBuV) | Emission |  | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|----------------|-----------------------|--------------------|-------------------|----------|--|--------------------|----------------|--------|
|                |                       |                    |                   | Level    |  |                    |                |        |
|                |                       |                    |                   | (dBuV/m) |  |                    |                |        |
| 1 11460.000    | 38.66                 | 2.26               | 11.49             | 52.41    |  | 74.00              | 21.59          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 13 File: D:\LG-TX\TX\TX5730.EMI (16)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 13  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5730MHz

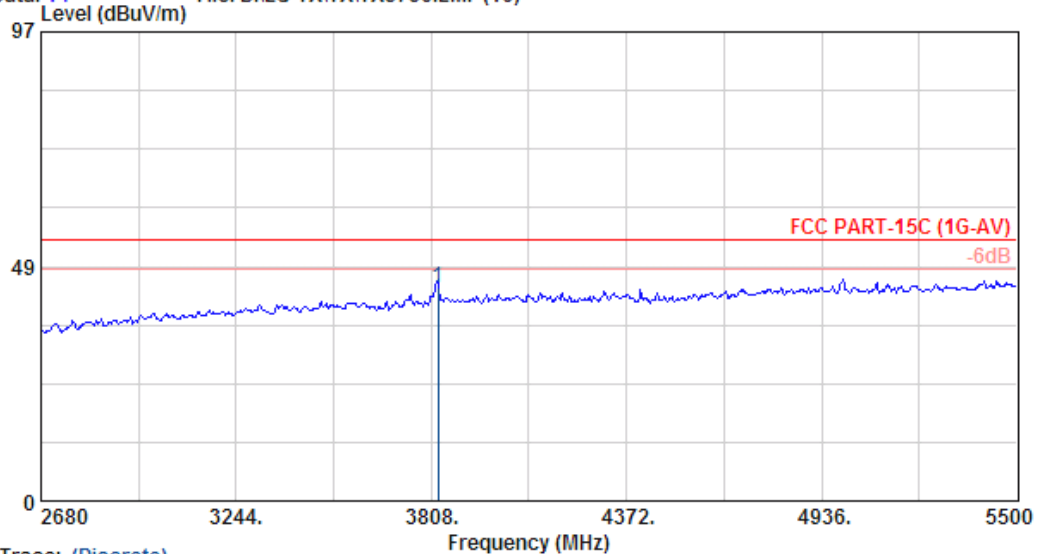
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission          |  | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark  |
|----------------|--------------------------|-----------------------|-------------------|-------------------|--|--------------------|----------------|---------|
|                |                          |                       |                   | Level<br>(dBuV/m) |  |                    |                |         |
| 1 3827.740     | 31.89                    | 8.29                  | 8.28              | 48.45             |  | 54.00              | 5.55           | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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Data: 14 File: D:\LG-TX\TX\TX5730.EMI (16)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 14  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5730MHz

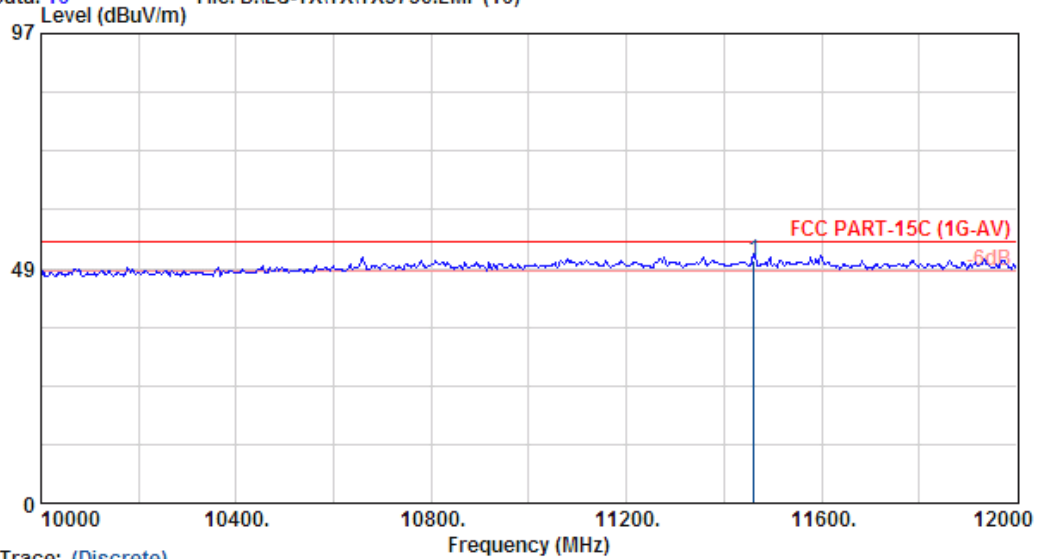
|            |        | Ant. | Cable   |          | Emission |        |         |  |
|------------|--------|------|---------|----------|----------|--------|---------|--|
| Freq.      | Factor | Loss | Reading | Level    | Limits   | Margin | Remark  |  |
| (MHz)      | (dB/m) | (dB) | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)   |         |  |
| 1 3827.740 | 31.89  | 8.29 | 3.80    | 43.98    | 54.00    | 10.02  | Average |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 16 File: D:\LG-TX\TX\TX5730.EMI (16)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 16  
Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
Limit : FCC PART-15C (1G-AV)  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : TX5730MHz

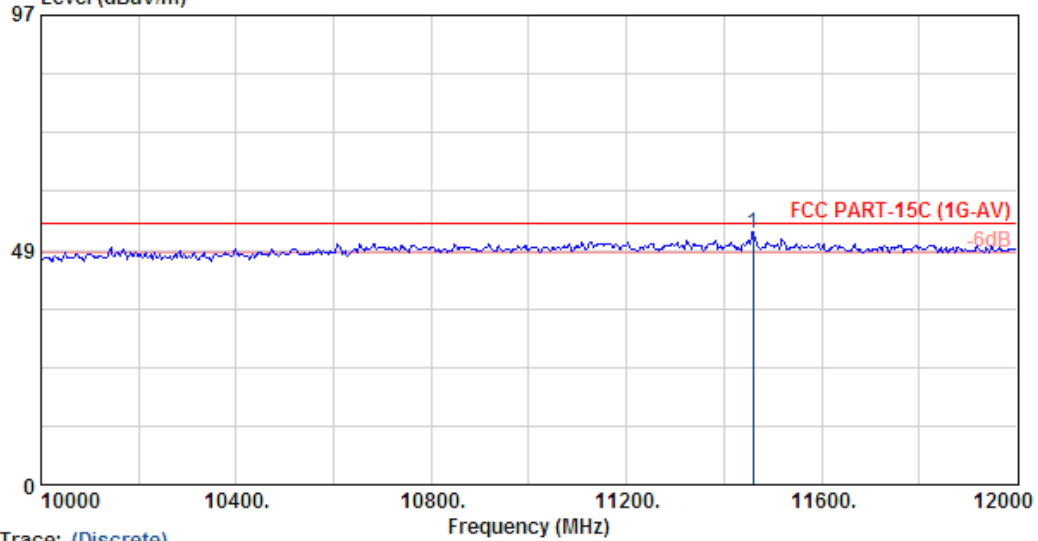
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark  |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|---------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBμV) | Level<br>(dBμV/m) |        |        |         |
| 1 11462.000    | 38.66            | 2.26         | 9.33              | 50.25             | 54.00  | 3.75   | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 15 File: D:\LG-TX\TX\TX5730.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 15  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5730MHz

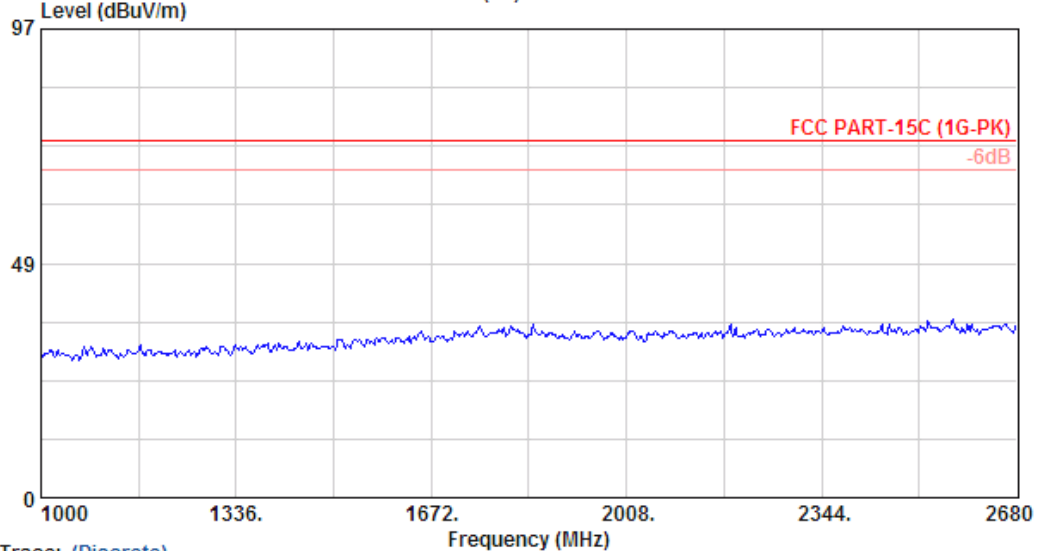
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark  |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|---------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |         |
| 1 11460.000    | 38.66            | 2.26         | 10.94             | 51.85             | 54.00  | 2.15   | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

**Test Mode: Transmit Mode, Frequency: 5775MHz (CH20)**

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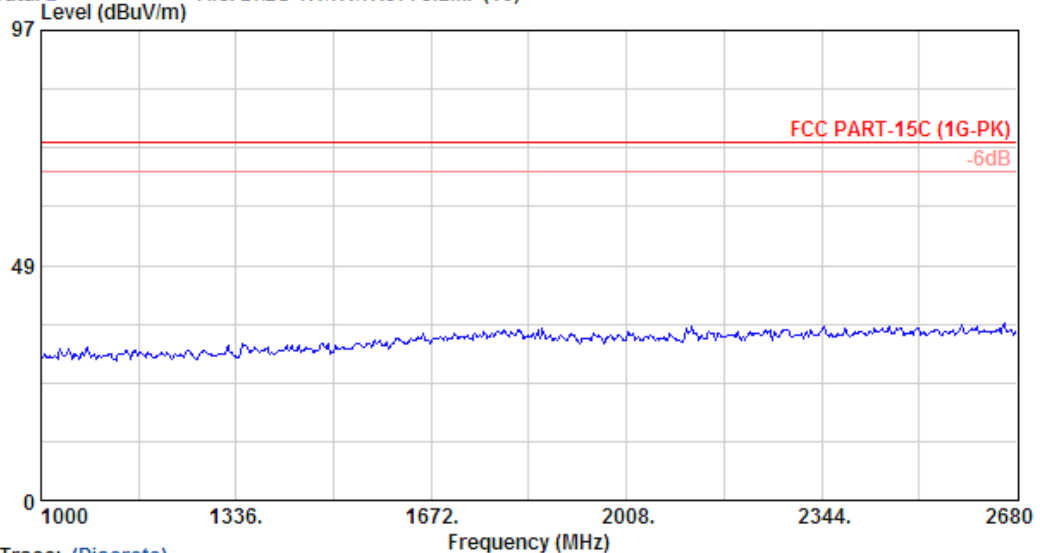
Data: 1 File: D:\LG-TX\TX\TX5775.EMI (16)



Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 1           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5775MHz                        |           |               |

Data: 2 File: D:\LG-TX\TX\TX5775.EMI (16)



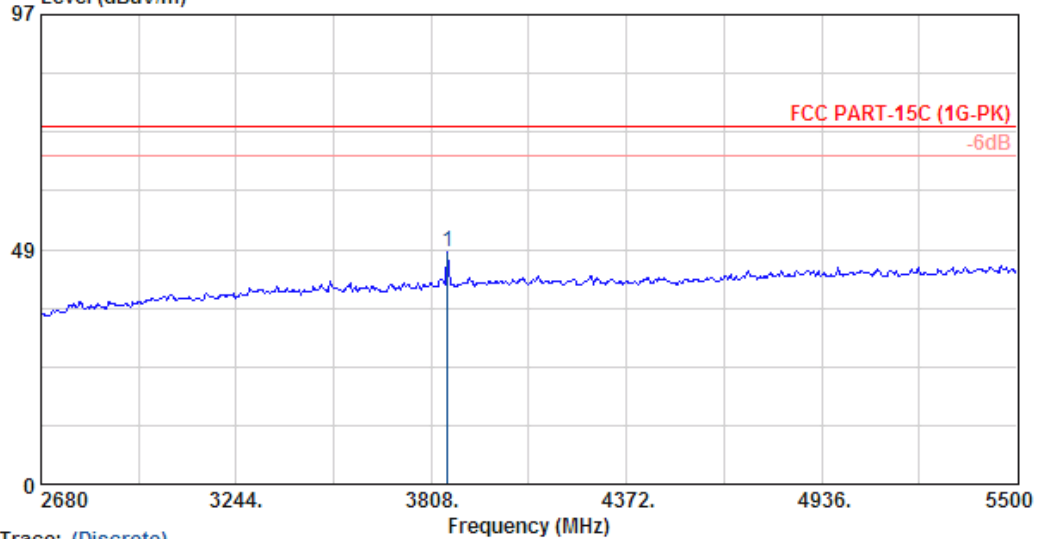
Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 2           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5775MHz                        |           |               |



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Data: 4 File: D:\LG-TX\TX\TX5775.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 4  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5775MHz

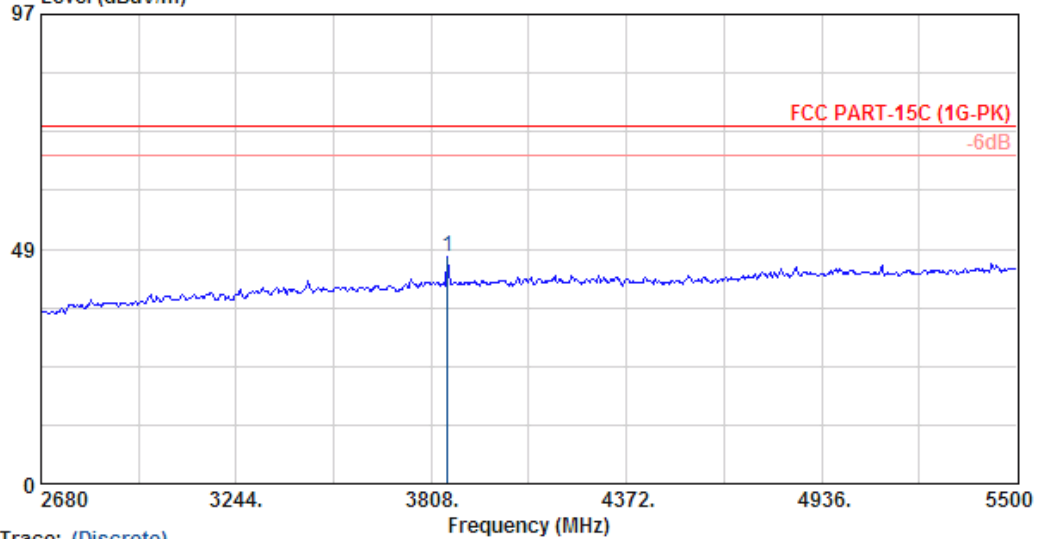
|            |        | Ant. | Cable   |          | Emission |        |        |  |
|------------|--------|------|---------|----------|----------|--------|--------|--|
| Freq.      | Factor | Loss | Reading | Level    | Limits   | Margin | Remark |  |
| (MHz)      | (dB/m) | (dB) | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)   |        |  |
| 1 3855.940 | 31.97  | 8.33 | 7.79    | 48.09    | 74.00    | 25.91  | Peak   |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 3 File: D:\LG-TX\TX\TX5775.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

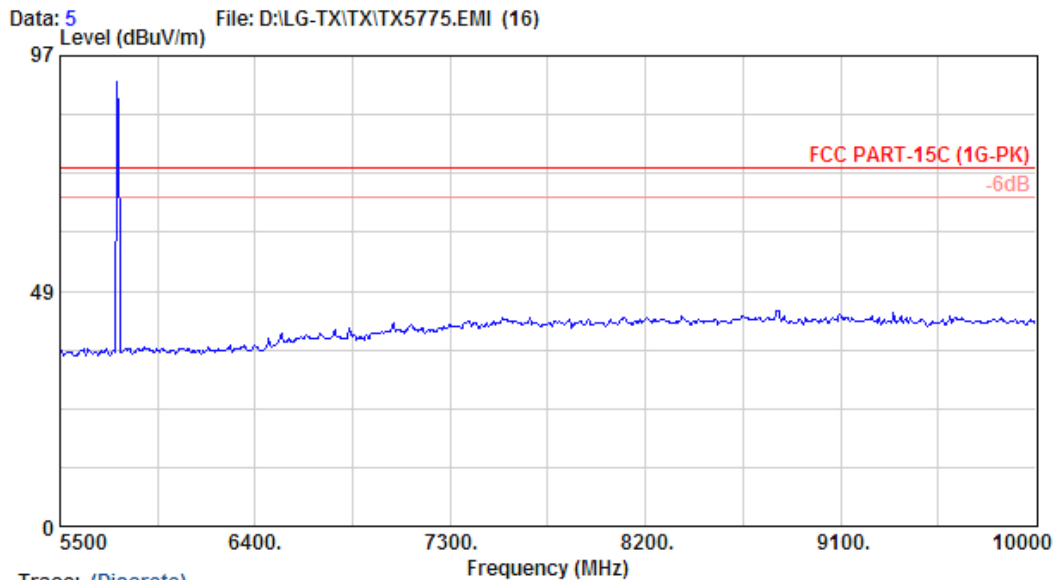
Site no. : @AC Chamber Data no. : 3  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5775MHz

| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission          |                   | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|----------------|--------------------------|-----------------------|-------------------|-------------------|-------------------|--------------------|----------------|--------|
|                |                          |                       |                   | Level<br>(dBuV/m) | Level<br>(dBuV/m) |                    |                |        |
| 1 3855.940     | 31.97                    | 8.33                  | 6.51              | 46.81             | 74.00             | 27.19              | Peak           |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.

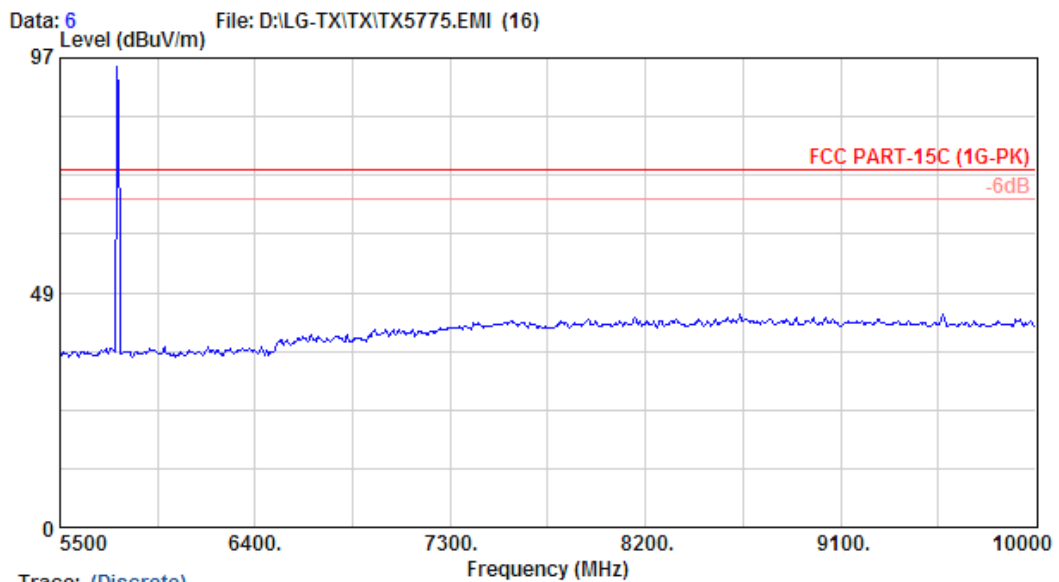


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Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 5           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5775MHz                        |           |               |



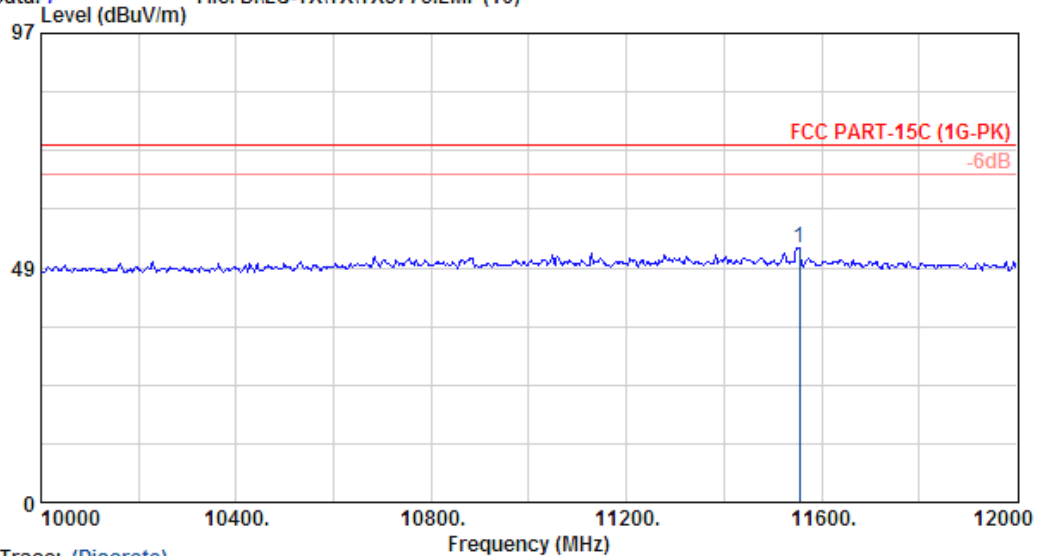
Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 6           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5775MHz                        |           |               |



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Data: 7 File: D:\LG-TX\TX\TX5775.EMI (16)



Trace: (Discrete)

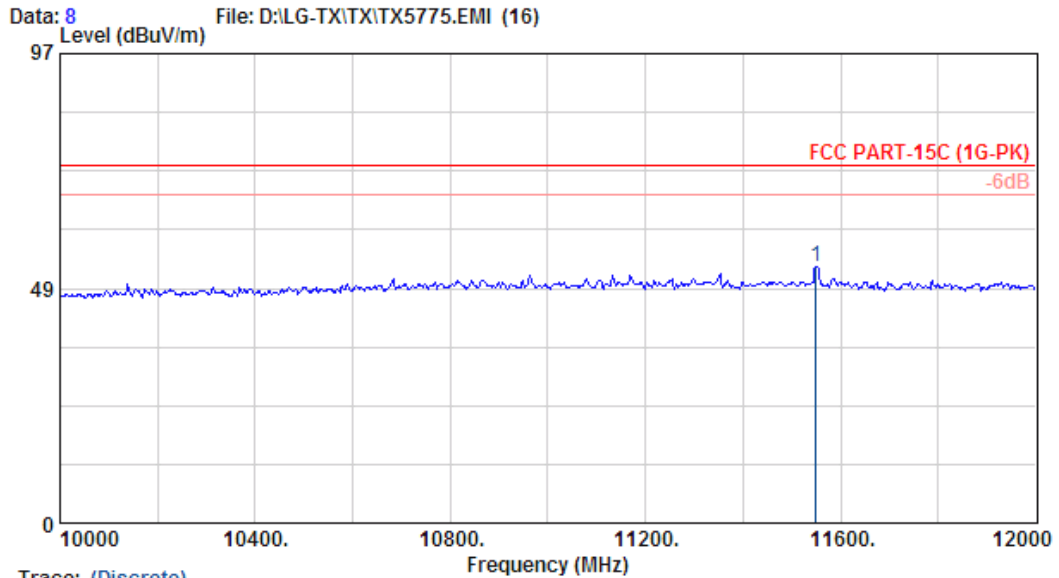
Site no. : @AC Chamber Data no. : 7  
Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
Limit : FCC PART-15C (1G-PK)  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : TX5775MHz

| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |        |
| 1 11554.000    | 38.70            | 2.26         | 11.72             | 52.68             | 74.00  | 21.32  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Trace: (Discrete)

Site no. : @AC Chamber Data no. : 8  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5775MHz

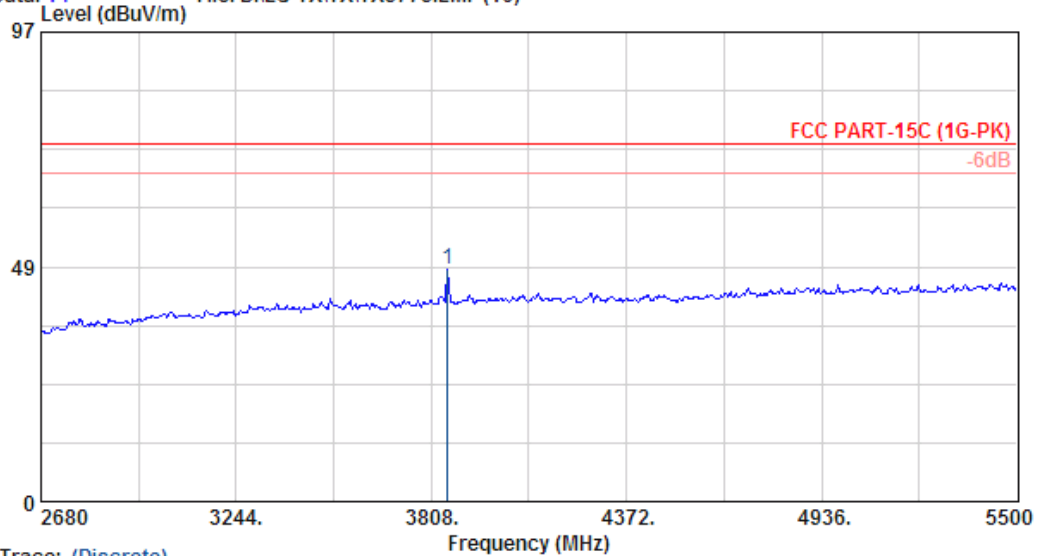
| Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission          |  | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|----------------|--------------------------|-----------------------|-------------------|-------------------|--|--------------------|----------------|--------|
|                |                          |                       |                   | Level<br>(dBuV/m) |  |                    |                |        |
| 1 11550.000    | 38.70                    | 2.26                  | 12.00             | 52.96             |  | 74.00              | 21.04          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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Data: 14 File: D:\LG-TX\TX\TX5775.EMI (16)



Trace: (Discrete)

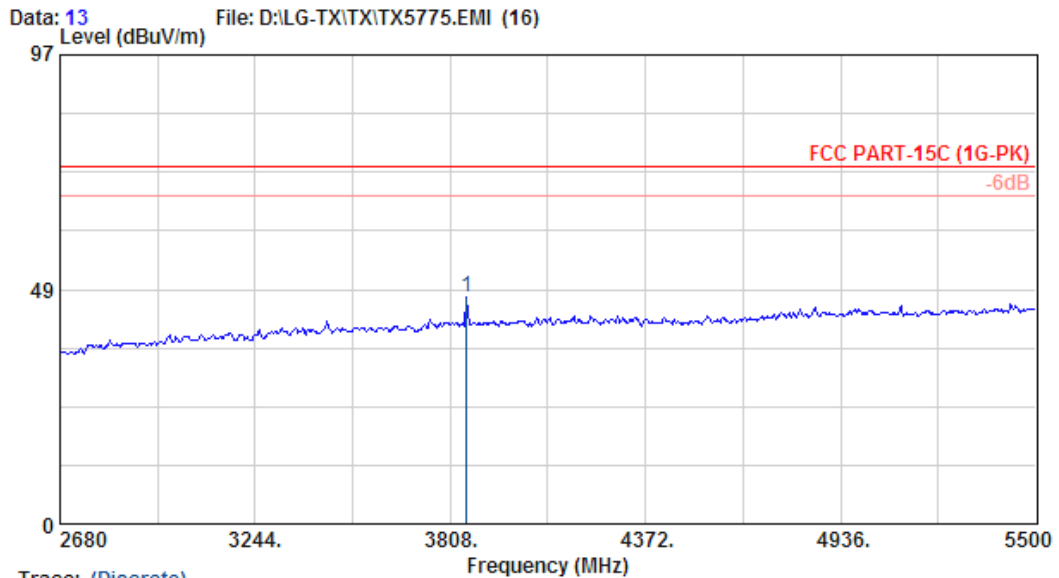
Site no. : @AC Chamber Data no. : 14  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5775MHz

|            |        | Ant. | Cable   |          | Emission |        |        |  |
|------------|--------|------|---------|----------|----------|--------|--------|--|
| Freq.      | Factor | Loss | Reading | Level    | Limits   | Margin | Remark |  |
| (MHz)      | (dB/m) | (dB) | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)   |        |  |
| 1 3855.940 | 31.97  | 8.33 | 7.79    | 48.09    | 74.00    | 25.91  | Peak   |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Site no. : @AC Chamber Data no. : 13  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5775MHz

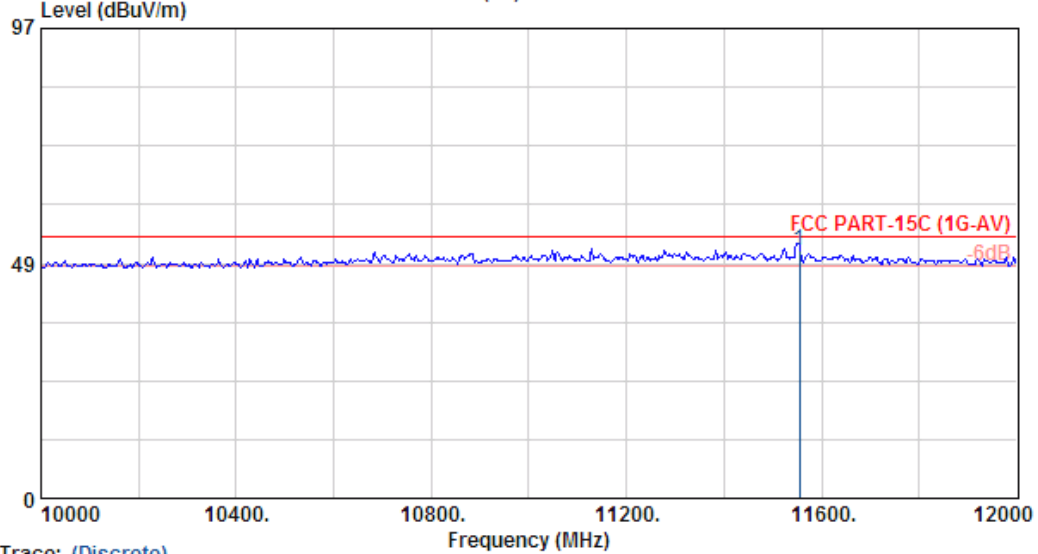
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |        |
| 1 3855.940     | 31.97            | 8.33         | 6.51              | 46.81             | 74.00  | 27.19  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 16 File: D:\LG-TX\TX\TX5775.EMI (16)



Trace: (Discrete)

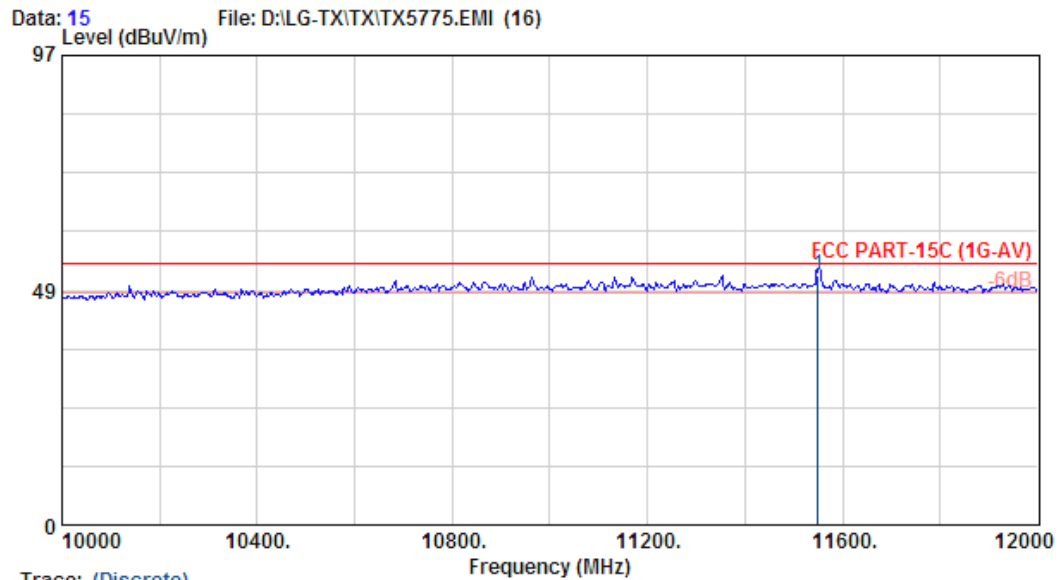
Site no. : @AC Chamber Data no. : 16  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5775MHz

| Freq.<br>(MHz) | Ant. Cable |      | Emission |          | Limits   | Margin | Remark  |
|----------------|------------|------|----------|----------|----------|--------|---------|
|                | Factor     | Loss | Reading  | Level    |          |        |         |
|                | (dB/m)     | (dB) | (dBμV)   | (dBμV/m) | (dBμV/m) | (dB)   |         |
| 1 11554.000    | 38.70      | 2.26 | 10.28    | 51.25    | 54.00    | 2.75   | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Site no. : @AC Chamber Data no. : 15  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-AV)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5775MHz

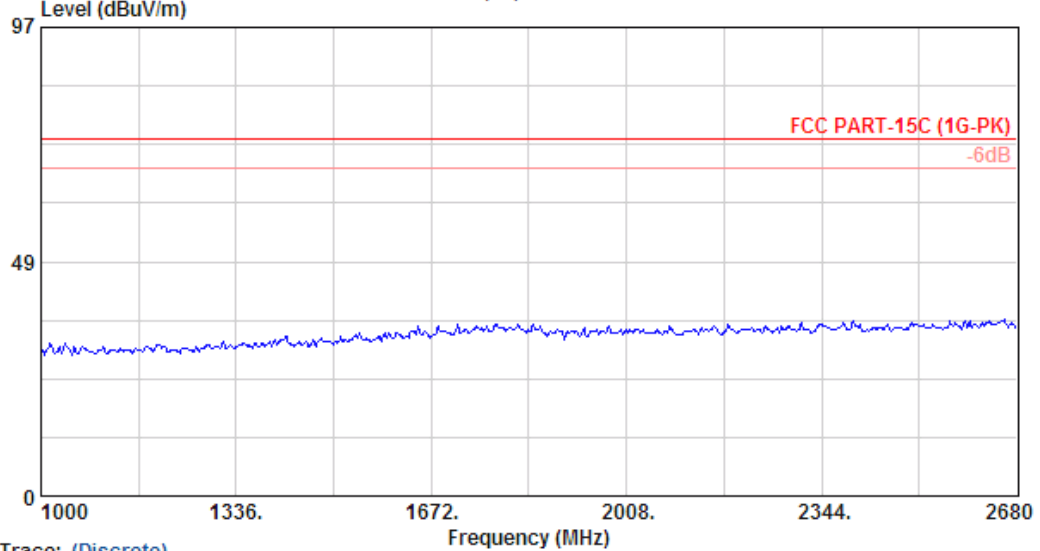
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark  |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|---------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |         |
| 1 11550.000    | 38.70            | 2.26         | 10.48             | 51.44             | 54.00  | 2.56   | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

**Test Mode: Transmit Mode, Frequency: 5820MHz (CH38)**

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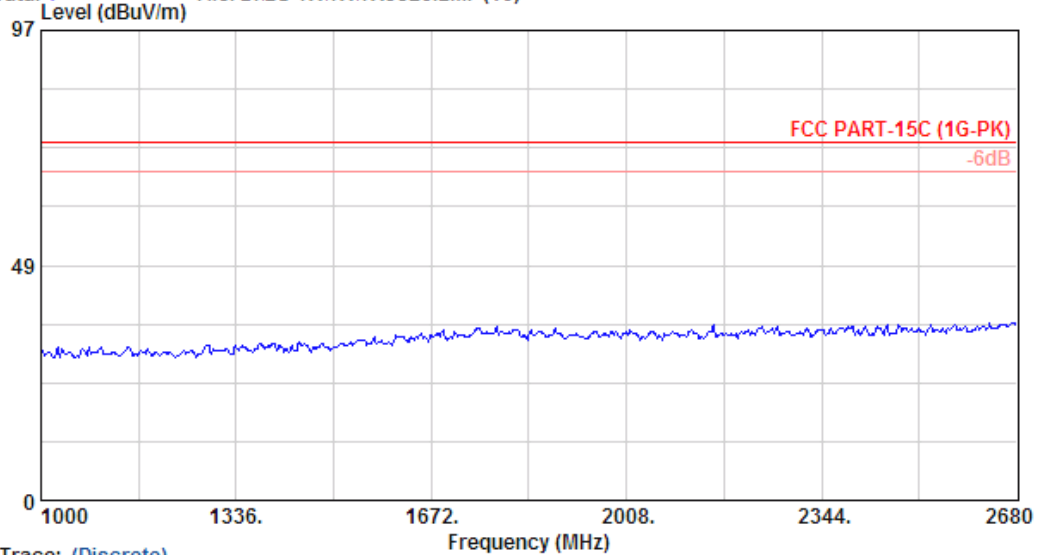
Data: 2 File: D:\LG-TX\TX\TX5820.EMI (16)



Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 2           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5820MHz                        |           |               |

Data: 1 File: D:\LG-TX\TX\TX5820.EMI (16)



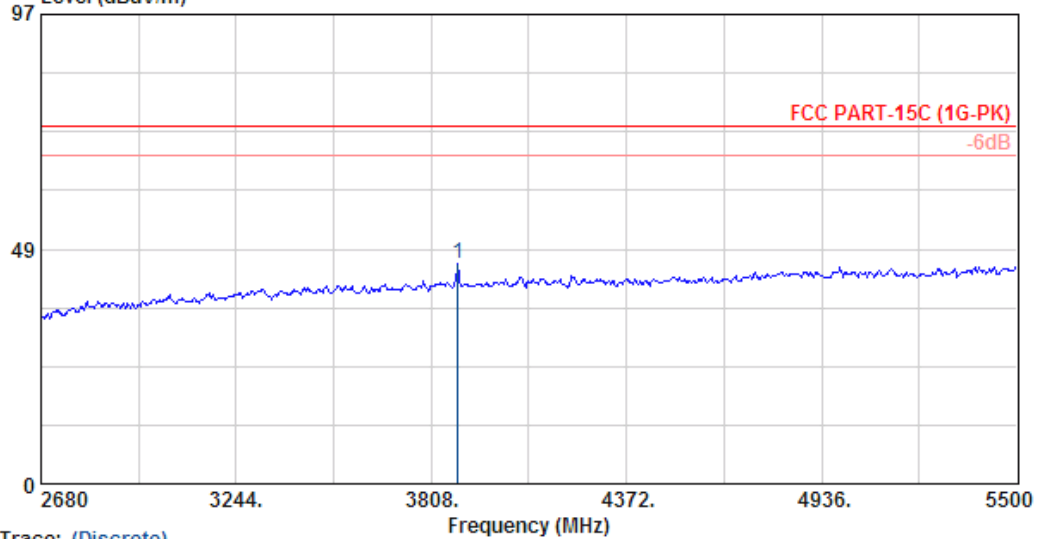
Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 1           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5820MHz                        |           |               |



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Data: 3 File: D:\LG-TX\TX\TX5820.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 3  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : HORIZONTAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5820MHz

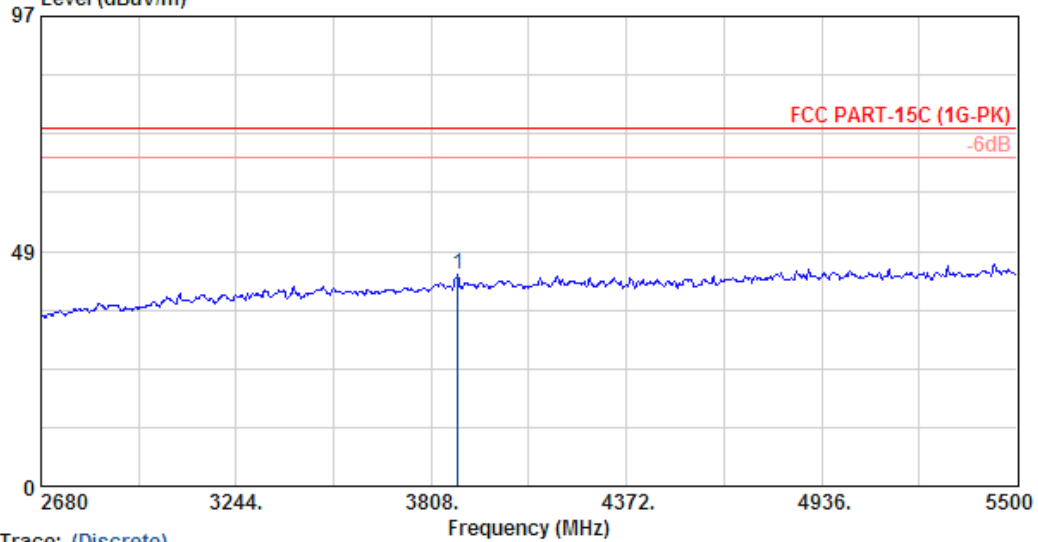
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|----------------|------------------|--------------|-------------------|-------------------|--------------------|----------------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |                    |                |        |
| 1 3884.140     | 32.05            | 8.35         | 5.13              | 45.54             | 74.00              | 28.46          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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Data: 4 File: D:\LG-TX\TX\TX5820.EMI (16)  
 Level (dBuV/m)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 4  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5820MHz

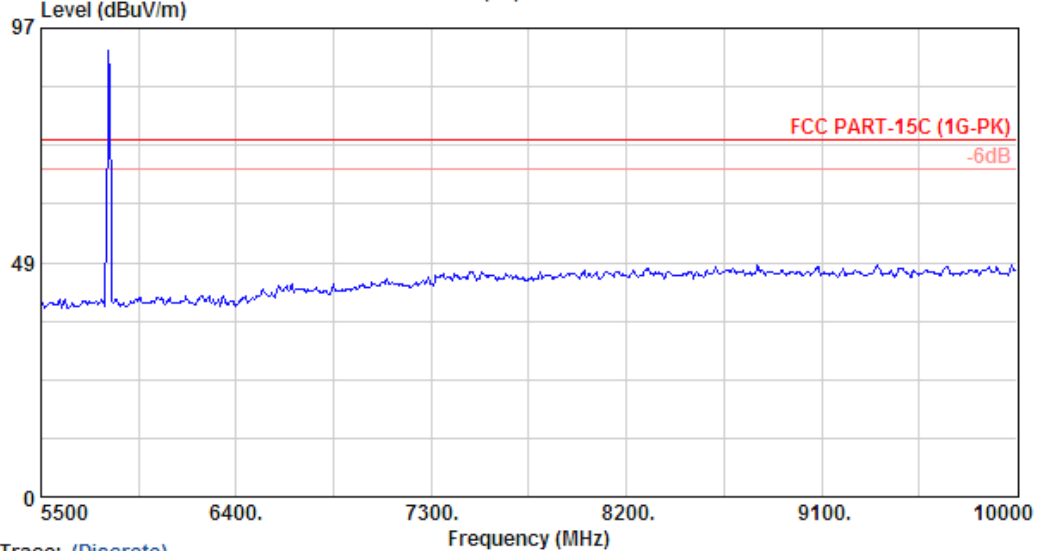
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
|   |                |                          |                       |                   |                               |                    |                |        |
| 1 | 3884.140       | 32.05                    | 8.35                  | 3.32              | 43.73                         | 74.00              | 30.27          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official  
 limit are not reported.



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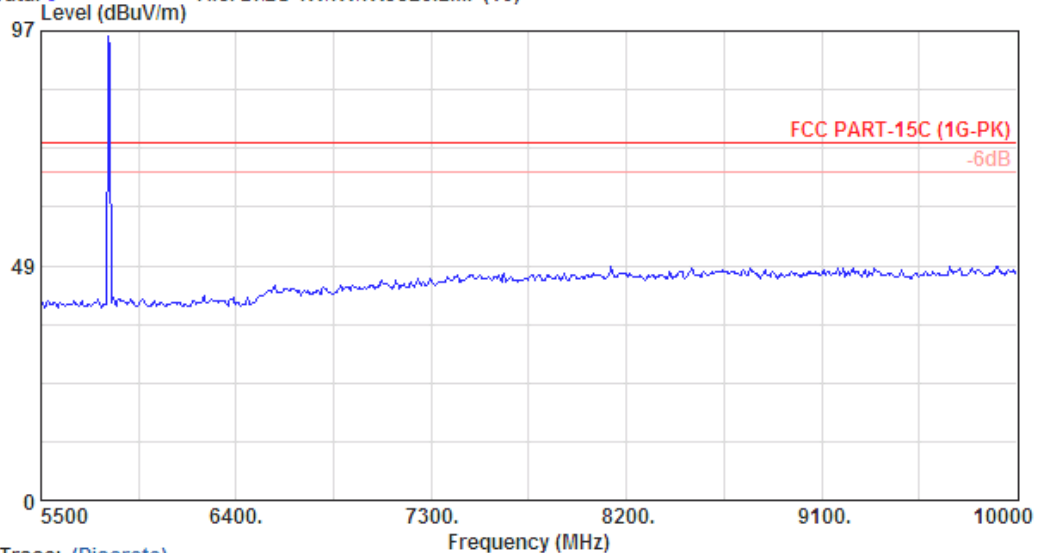
Data: 5 File: D:\LG-TX\TX\TX5820.EMI (16)



Trace: (Discrete)

|                                        |                        |
|----------------------------------------|------------------------|
| Site no. : @AC Chamber                 | Data no. : 5           |
| Dis. / Ant. : 3m 3115(3775)            | Ant. pol. : HORIZONTAL |
| Limit : FCC PART-15C (1G-PK)           |                        |
| Env. / Ins. : 8564EC 26°C/51%          | Engineer : Jarwei Wang |
| EUT : Wireless Adaptor Card M/N:CU1511 |                        |
| Power Rating : 120Vac/60Hz             |                        |
| Test Mode : TX5820MHz                  |                        |

Data: 6 File: D:\LG-TX\TX\TX5820.EMI (16)

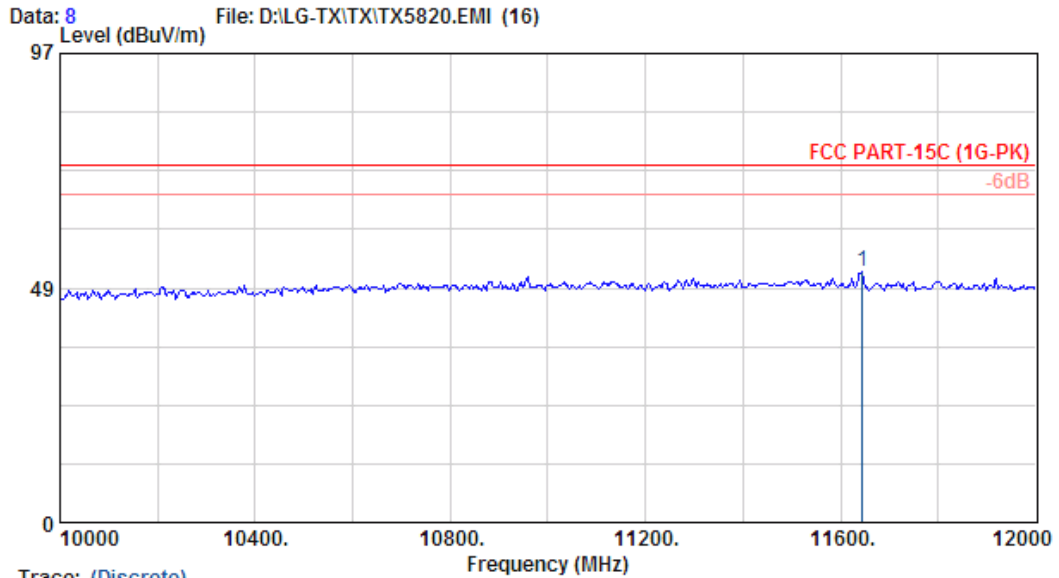


Trace: (Discrete)

|                                        |                        |
|----------------------------------------|------------------------|
| Site no. : @AC Chamber                 | Data no. : 6           |
| Dis. / Ant. : 3m 3115(3775)            | Ant. pol. : VERTICAL   |
| Limit : FCC PART-15C (1G-PK)           |                        |
| Env. / Ins. : 8564EC 26°C/51%          | Engineer : Jarwei Wang |
| EUT : Wireless Adaptor Card M/N:CU1511 |                        |
| Power Rating : 120Vac/60Hz             |                        |
| Test Mode : TX5820MHz                  |                        |



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Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 8           |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5820MHz                        |           |               |

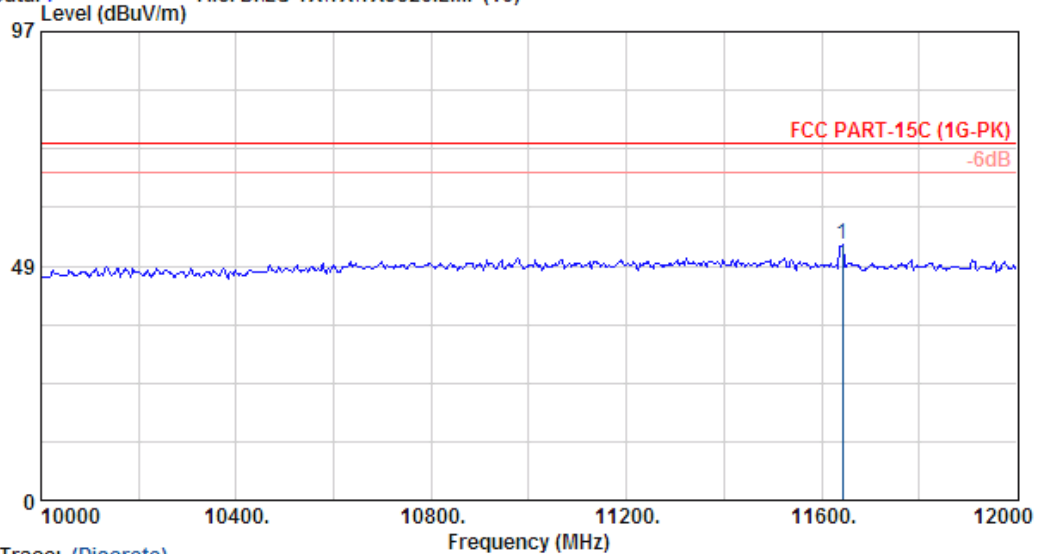
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|--------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |        |
| 1 11644.000    | 38.70            | 2.27         | 10.75             | 51.72             | 74.00  | 22.28  | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 7 File: D:\LG-TX\TX\TX5820.EMI (16)



Trace: (Discrete)

Site no. : @AC Chamber Data no. : 7  
 Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
 Limit : FCC PART-15C (1G-PK)  
 Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
 EUT : Wireless Adaptor Card M/N:CU1511  
 Power Rating : 120Vac/60Hz  
 Test Mode : TX5820MHz

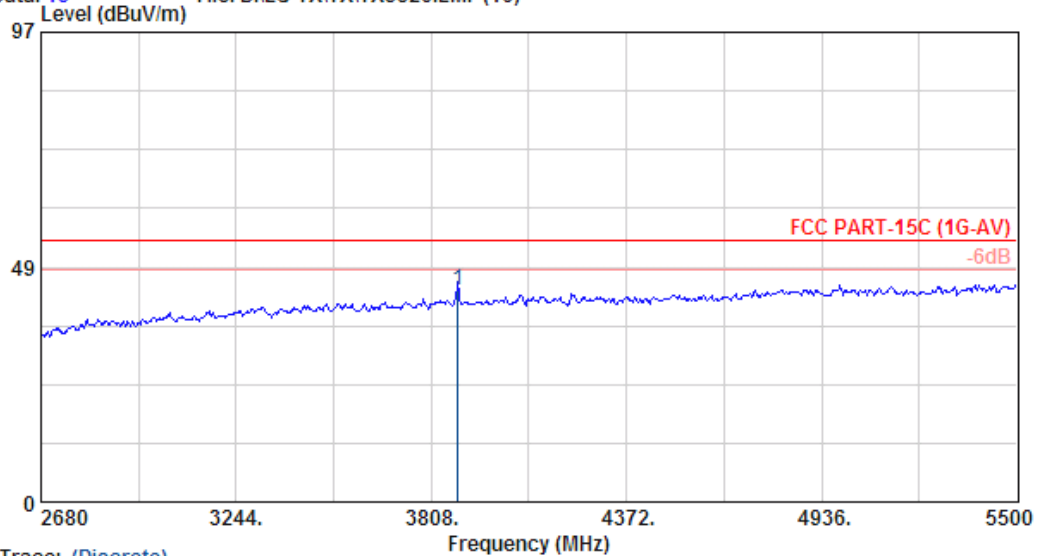
| Freq.<br>(MHz) | Ant. Factor<br>(dB/m) | Cable Loss<br>(dB) | Reading<br>(dBuV) | Emission |  | Limits<br>(dBuV/m) | Margin<br>(dB) | Remark |
|----------------|-----------------------|--------------------|-------------------|----------|--|--------------------|----------------|--------|
|                |                       |                    |                   | Level    |  |                    |                |        |
| 1 11642.000    | 38.70                 | 2.27               | 11.88             | 52.85    |  | 74.00              | 21.15          | Peak   |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 13 File: D:\LG-TX\TX\TX5820.EMI (16)



Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 13          |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-AV)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5820MHz                        |           |               |

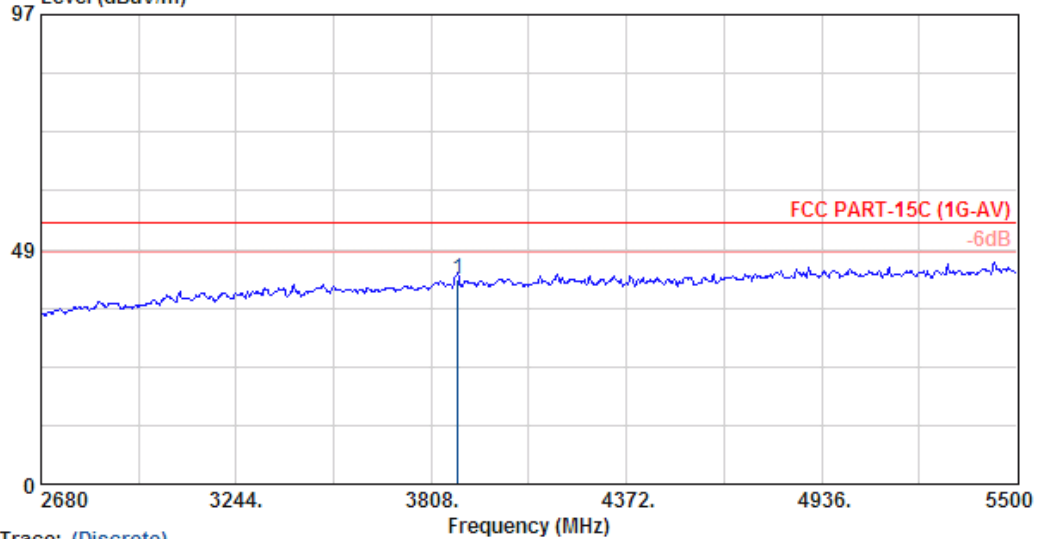
| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark  |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|---------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |         |
| 1 3884.140     | 32.05            | 8.35         | 3.28              | 43.69             | 54.00  | 10.31  | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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Data: 14 File: D:\LG-TX\TX\TX5820.EMI (16)  
Level (dBuV/m)



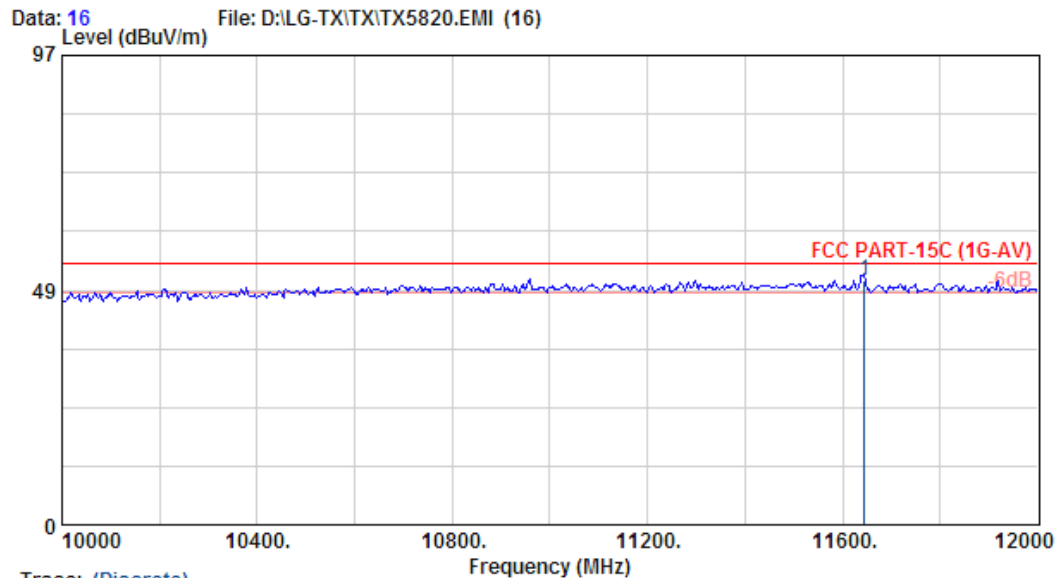
Site no. : @AC Chamber Data no. : 14  
Dis. / Ant. : 3m 3115(3775) Ant. pol. : VERTICAL  
Limit : FCC PART-15C (1G-AV)  
Env. / Ins. : 8564EC 26°C/51% Engineer : Jarwei Wang  
EUT : Wireless Adaptor Card M/N:CU1511  
Power Rating : 120Vac/60Hz  
Test Mode : TX5820MHz

| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark  |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|---------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |         |
| 1 3884.140     | 32.05            | 8.35         | 1.95              | 42.36             | 54.00  | 11.64  | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
2. The emission levels that are 20dB below the official limit are not reported.



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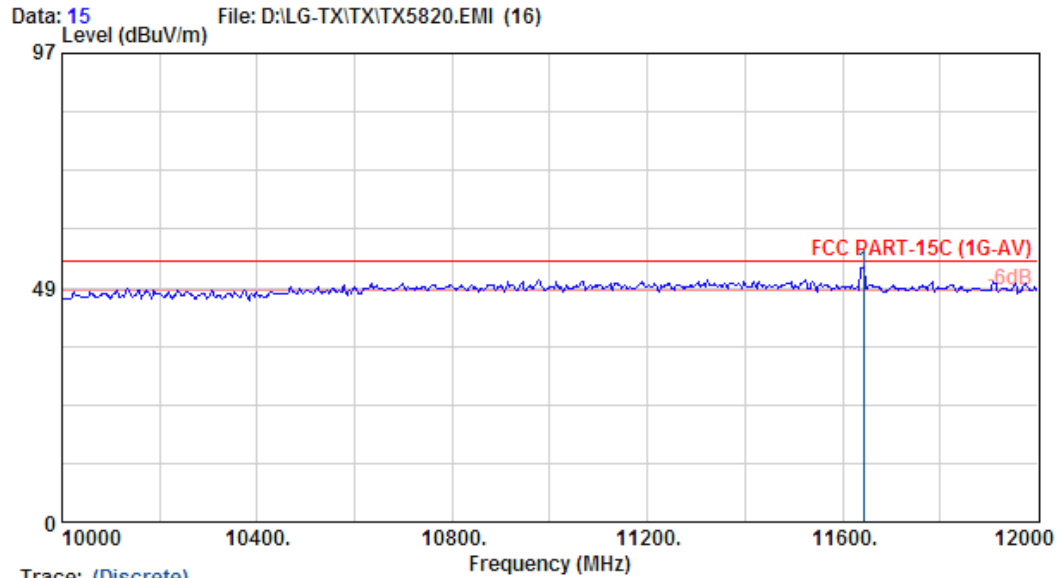
|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 16          |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-AV)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5820MHz                        |           |               |

| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark  |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|---------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBuV) | Level<br>(dBuV/m) |        |        |         |
| 1 11644.000    | 38.70            | 2.27         | 9.51              | 50.48             | 54.00  | 3.52   | Average |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.



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Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 15          |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-AV)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : TX5820MHz                        |           |               |

| Freq.<br>(MHz) | Ant. Cable       |              | Emission          |                   | Limits | Margin | Remark  |
|----------------|------------------|--------------|-------------------|-------------------|--------|--------|---------|
|                | Factor<br>(dB/m) | Loss<br>(dB) | Reading<br>(dBμV) | Level<br>(dBμV/m) |        |        |         |
| 1 11642.000    | 38.70            | 2.27         | 10.98             | 51.94             | 54.00  | 2.06   | Average |

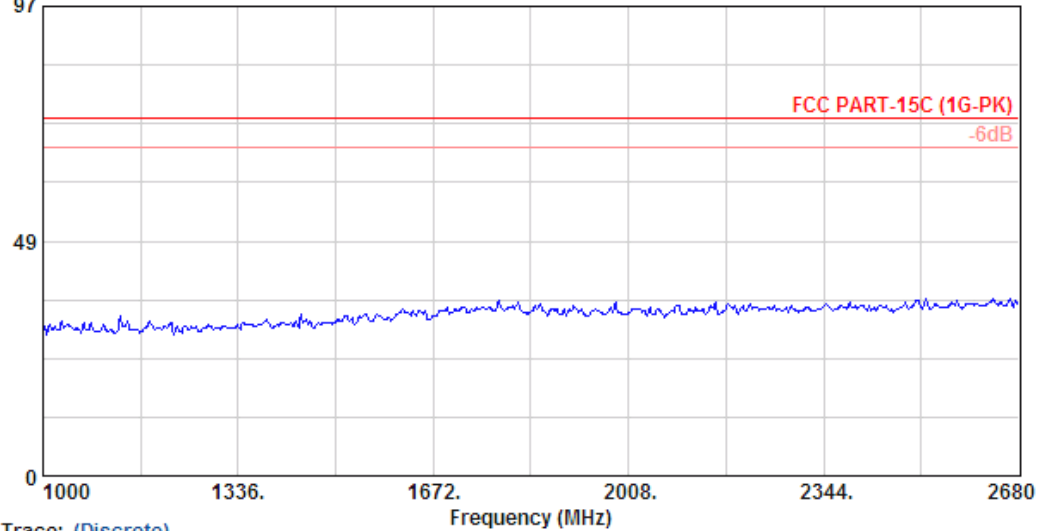
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.  
 2. The emission levels that are 20dB below the official limit are not reported.

**Test Mode: Receive Mode, Frequency: 5775MHz (CH20)**

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Data: 1 File: D:\LG-TX\TX\RX5775.EMI (10)

Level (dBuV/m)

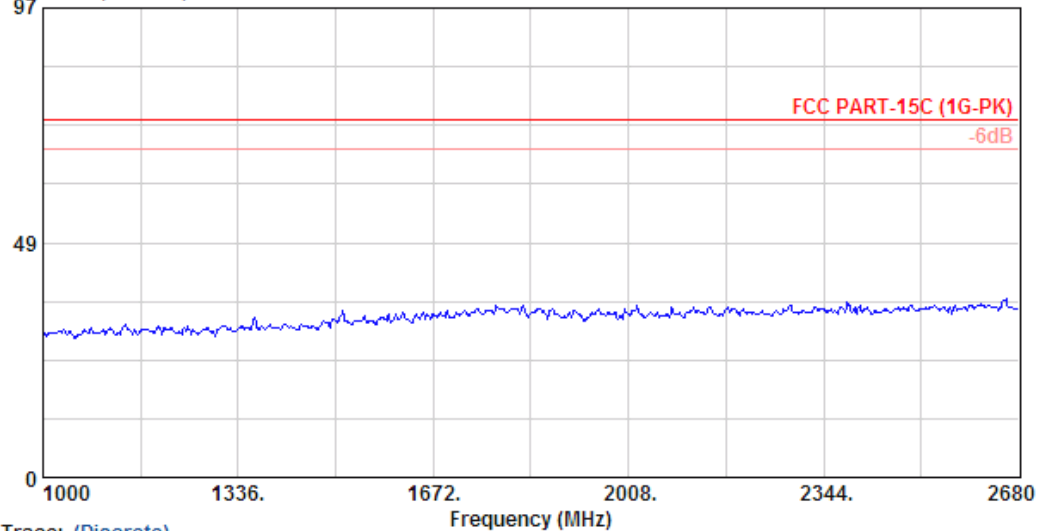


Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 1           |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : RX5775MHz                        |           |               |

Data: 2 File: D:\LG-TX\TX\RX5775.EMI (10)

Level (dBuV/m)



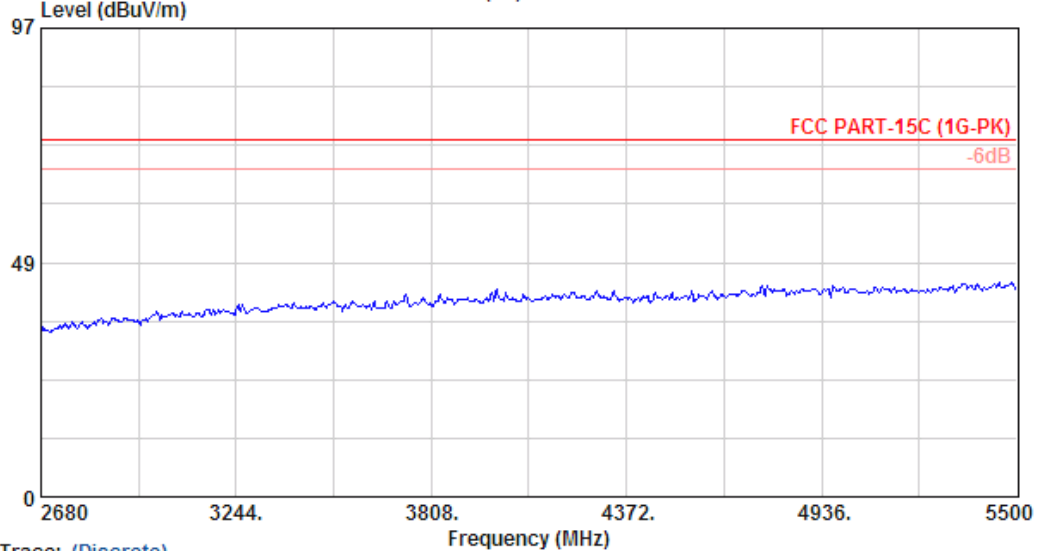
Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 2           |
| Dis. / Ant.  | : 3m 3115(3775)                    | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : RX5775MHz                        |           |               |



AUDIX TECHNOLOGY Corp. EMC Laboratory  
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Email:ttmc@ttmc.com.tw

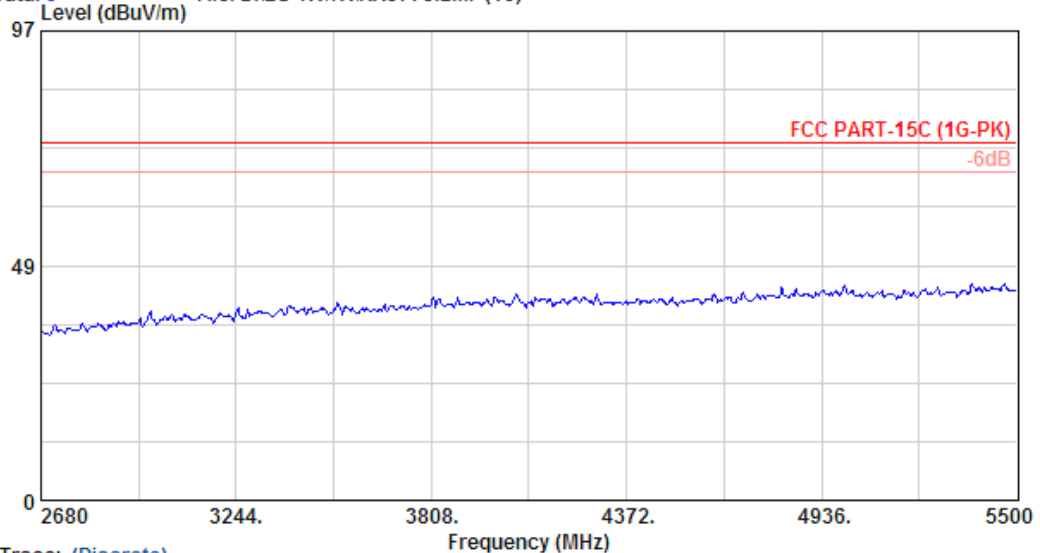
Data: 4 File: D:\LG-TX\TX\RX5775.EMI (10)



Trace: (Discrete)

|                                       |                        |
|---------------------------------------|------------------------|
| Site no. : @AC Chamber                | Data no. : 4           |
| Dis. / Ant. : 3m 3115(3775)           | Ant. pol. : HORIZONTAL |
| Limit : FCC PART-15C (1G-PK)          |                        |
| Env. / Ins. : 8564EC 26°C/51%         | Engineer : Jarwei Wang |
| EUT : Wireles Adaptor Card M/N:CU1511 |                        |
| Power Rating : 120Vac/60Hz            |                        |
| Test Mode : RX5775MHz                 |                        |

Data: 3 File: D:\LG-TX\TX\RX5775.EMI (10)



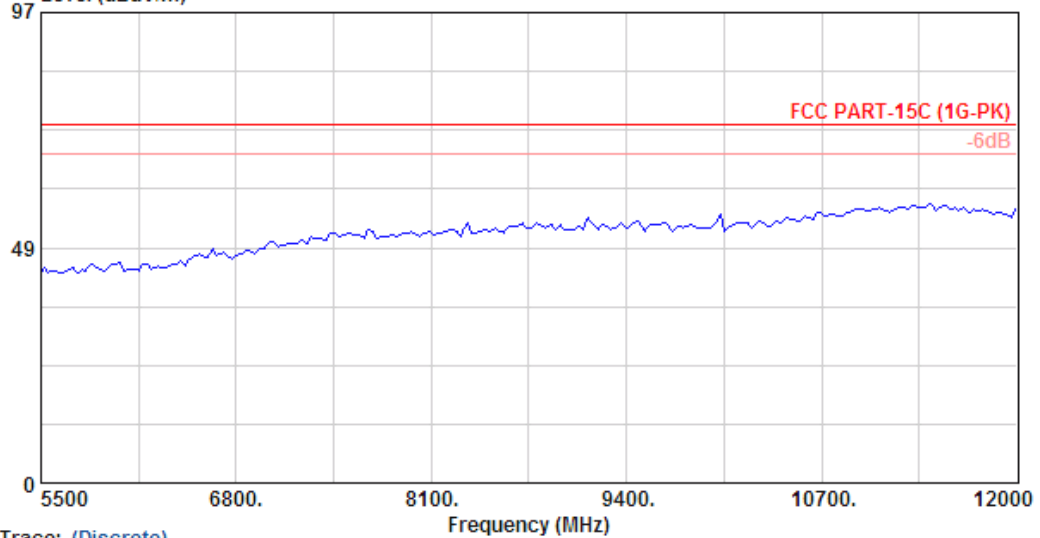
Trace: (Discrete)

|                                       |                        |
|---------------------------------------|------------------------|
| Site no. : @AC Chamber                | Data no. : 3           |
| Dis. / Ant. : 3m 3115(3775)           | Ant. pol. : VERTICAL   |
| Limit : FCC PART-15C (1G-PK)          |                        |
| Env. / Ins. : 8564EC 26°C/51%         | Engineer : Jarwei Wang |
| EUT : Wireles Adaptor Card M/N:CU1511 |                        |
| Power Rating : 120Vac/60Hz            |                        |
| Test Mode : RX5775MHz                 |                        |



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Email:ttmc@ttmc.com.tw

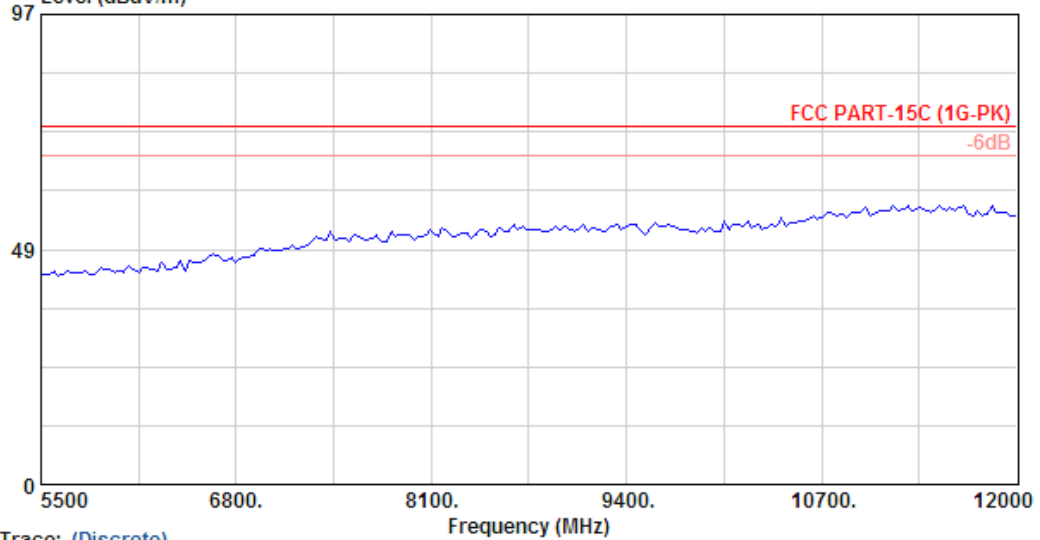
Data: 5 File: D:\LG-TX\TX\RX5775.EMI (10)  
Level (dBuV/m)



Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 5           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : HORIZONTAL  |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : RX5775MHz                        |           |               |

Data: 6 File: D:\LG-TX\TX\RX5775.EMI (10)  
Level (dBuV/m)



Trace: (Discrete)

|              |                                    |           |               |
|--------------|------------------------------------|-----------|---------------|
| Site no.     | : @AC Chamber                      | Data no.  | : 6           |
| Dis. / Ant.  | : 3m 3115 (3775)                   | Ant. pol. | : VERTICAL    |
| Limit        | : FCC PART-15C (1G-PK)             |           |               |
| Env. / Ins.  | : 8564EC 26°C/51%                  | Engineer  | : Jarwei Wang |
| EUT          | : Wireless Adaptor Card M/N:CU1511 |           |               |
| Power Rating | : 120Vac/60Hz                      |           |               |
| Test Mode    | : RX5775MHz                        |           |               |

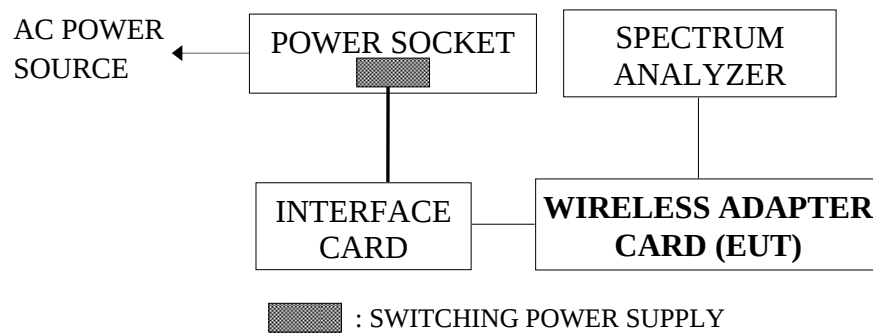
## 4. 6dB BANDWIDTH MEASUREMENT

### 4.1. Test Equipment

The following test equipment was used during the Emission Bandwidth measurement:

| Item | Type              | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300366 | Jul. 23, 09' | Jul. 22, 10' |

### 4.2. Block Diagram of Test Setup



### 4.3. Specification Limits (§15.247(a)(2))

The minimum 6dB bandwidth shall be at least 500kHz.

### 4.4. Operating Condition of EUT

The EUT was set to continuously transmit signals at 5730MHz、5775MHz and 5820MHz during testing.

### 4.5. Test Procedure

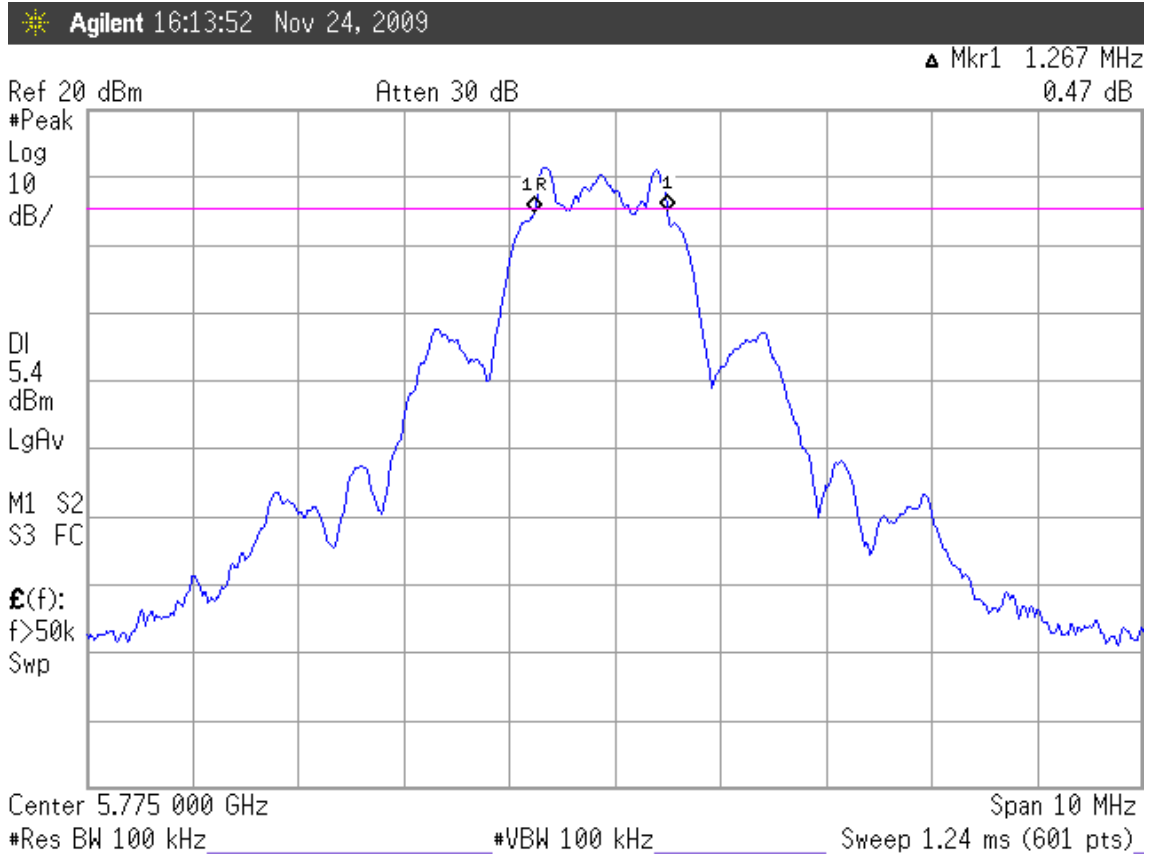
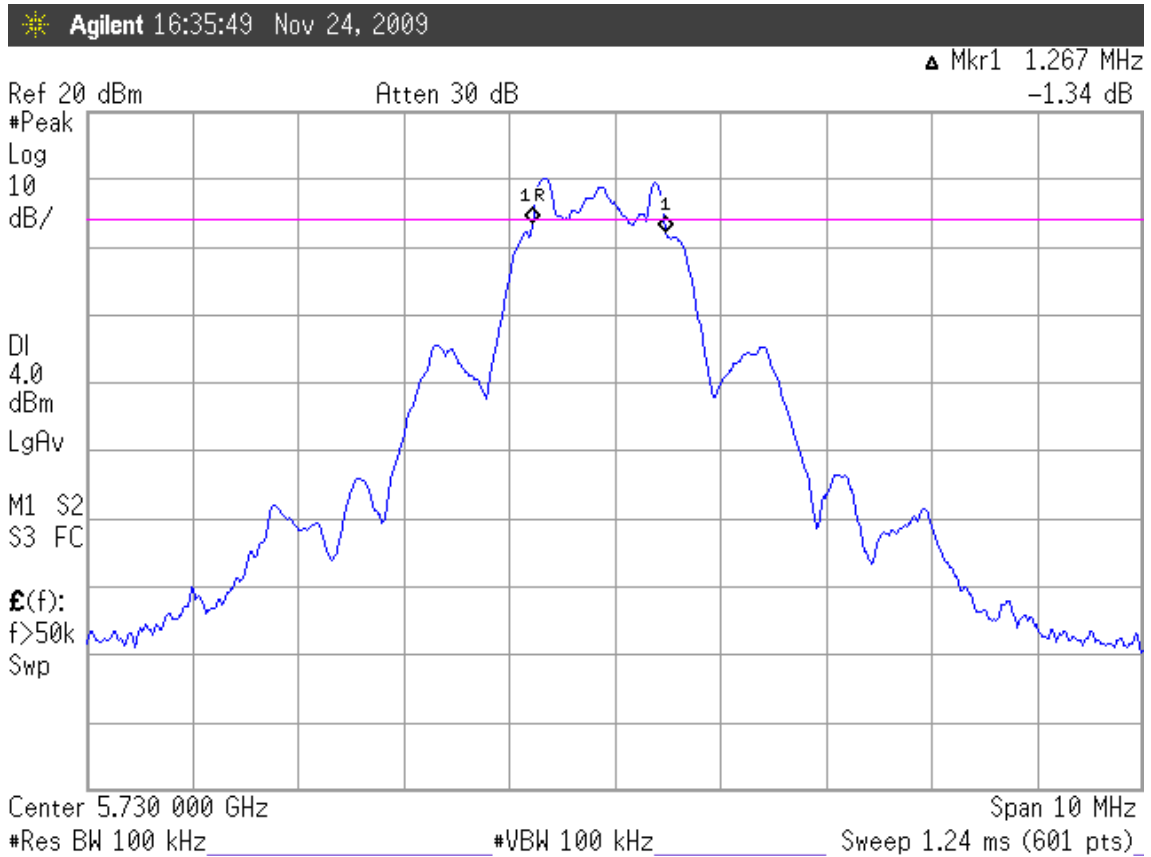
The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

#### 4.6. Test Results

**PASSED.** All the test results are attached in next pages.

(Test Date : Nov. 24, 2009    Temperature : 25°C    Humidity : 55 %)

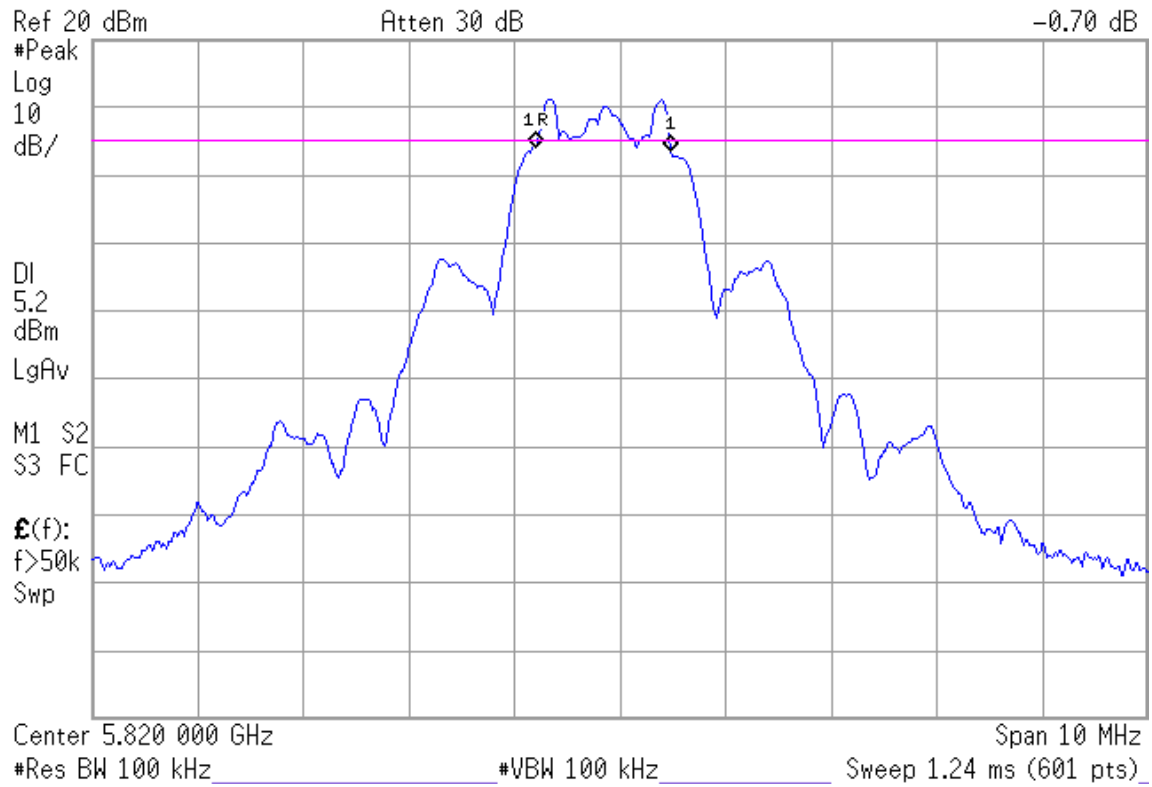
| Channel | Frequency | 6dB Bandwidth   |
|---------|-----------|-----------------|
| 02      | 5730MHz   | <b>1.267MHz</b> |
| 20      | 5775MHz   | <b>1.267MHz</b> |
| 38      | 5820MHz   | <b>1.283MHz</b> |

**Frequency: 5730MHz****Frequency: 5775MHz**

**Frequency: 5820MHz**

Agilent 16:45:26 Nov 24, 2009

▲ Mkr1 1.283 MHz  
-0.70 dB



## 5. TIME OF OCCUPANCY MEASUREMENT

### 5.1. Test Equipment

The following test equipment was used during the time of occupancy measurement:

| Item | Type              | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300366 | Jul. 23, 09' | Jul. 22, 10' |

### 5.2. Block Diagram of Test Setup

The same as section.4.2.

### 5.3. Specification Limits (§15.247(a)(1)(ii))

The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

### 5.4. Operating Condition of EUT

The EUT was set to continuously transmit signals at hopping on during testing.

### 5.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW.  $VBW \geq RBW$  ; Span=zero span.

Centered on a hopping channel sweep=as necessary to capture the entire dwell time per hopping channel ; Detector function=peak ; Trace=Max hold

### 5.6. Test Results

**PASSED.** All the test results are attached in next pages.

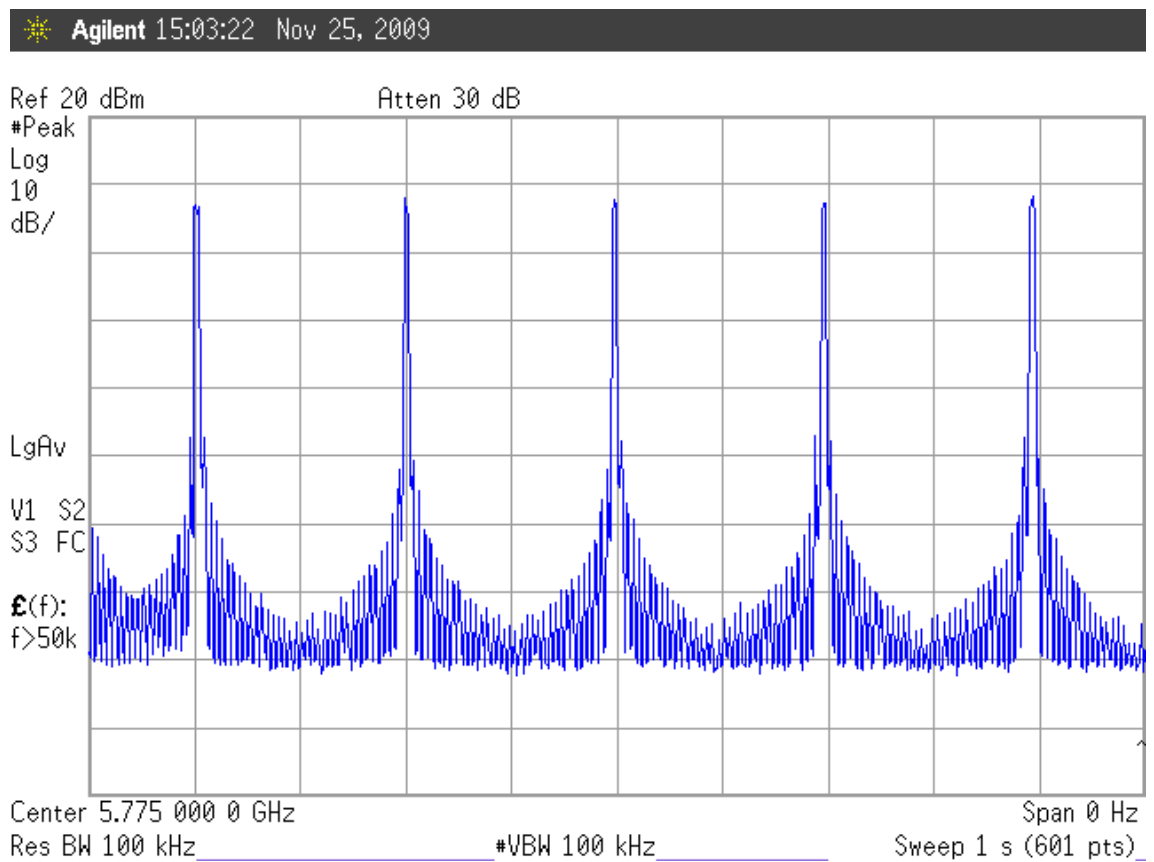
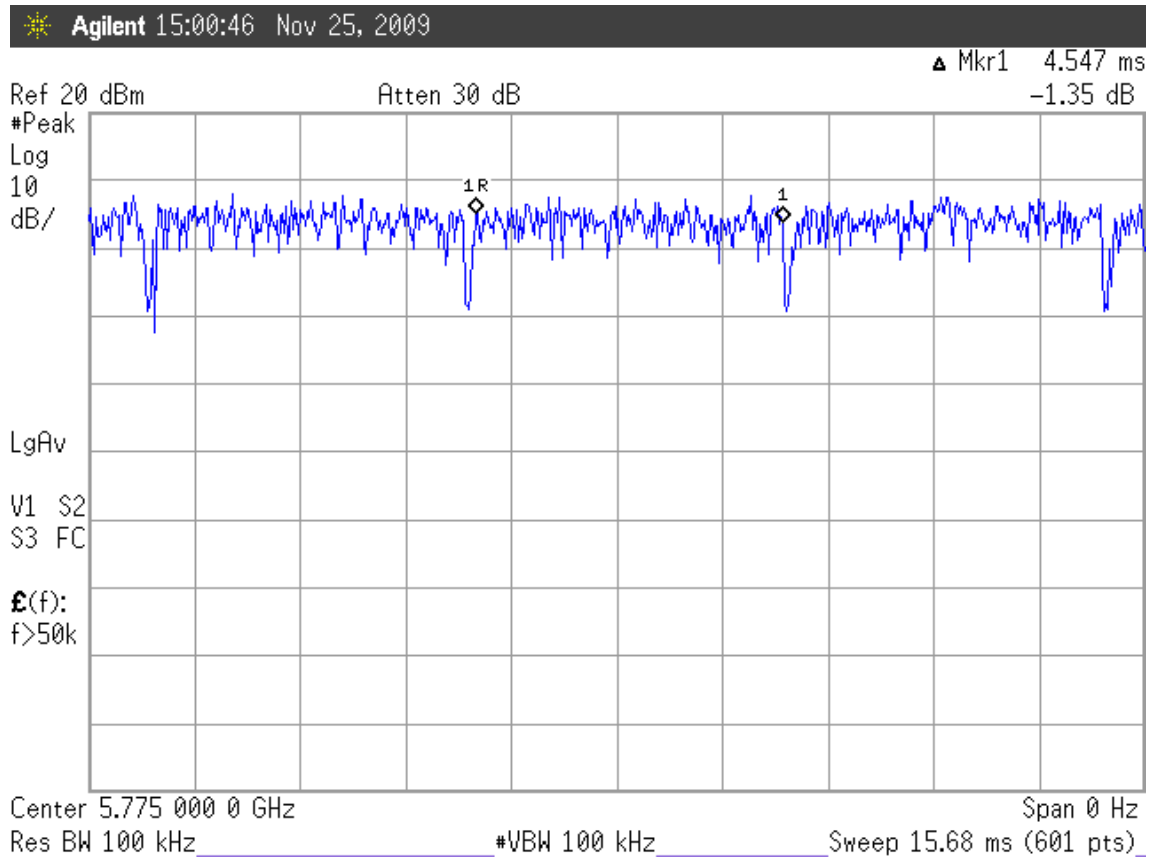
Test Date : Nov 25, 2009    Temperature : 25 °C    Humidity : 55 %

Duty cycle: 37 channels\*0.4 seconds = 14.8 seconds

#### **Test Frequency: 5775MHz**

For per second of 5 channels appearance, the longest time of occupancy for each of 14.8 seconds is:

10 channels\*14.8 seconds\* 4.547ms = 336.478ms (<400ms)



## 6. NUMBER OF HOPPING CHANNELS MEASUREMENT

### 6.1. Test Equipment

The following test equipment was used during the number of hopping channels measurement:

| Item | Type              | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300366 | Jul. 23, 09' | Jul. 22, 10' |

### 6.2. Block Diagram of Test Setup

The same as section.4.2.

### 6.3. Specification Limits

There is no limit for this test item

### 6.4. Operating Condition of EUT

The EUT was set to continuously transmit signals at hopping on during testing.

### 6.5. Test Procedure

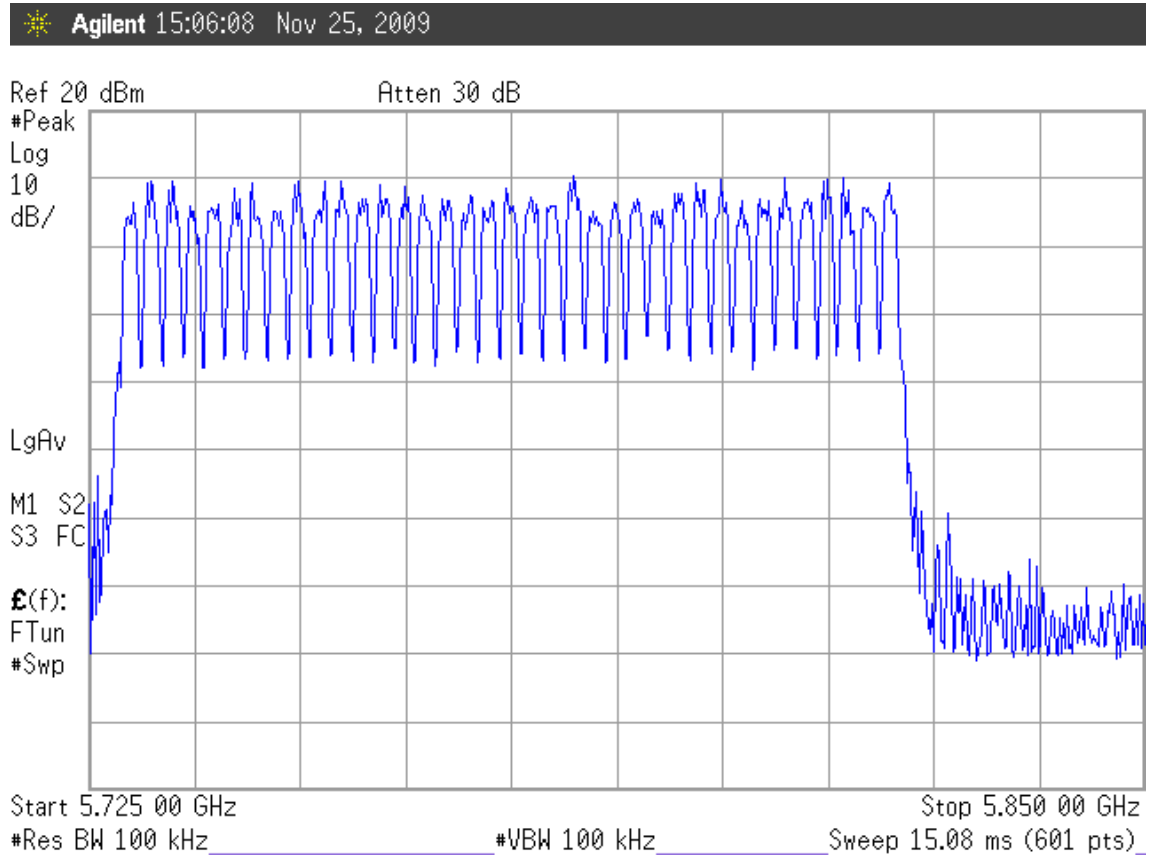
The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. Sweep=Auto ; Detector function=peak ; Trace=Max hold

### 6.6. Test Results

**PASSED.** All the test results are attached in next page.

Test Date : Nov 25, 2009    Temperature : 25 °C    Humidity : 55 %

The number hopping channel is 37.



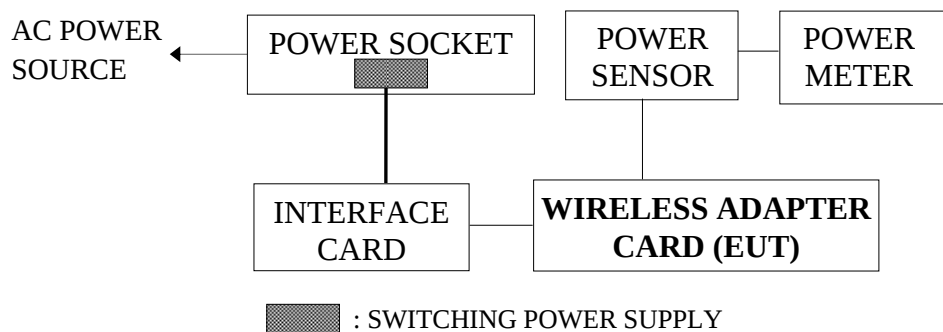
## 7. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

### 7.1. Test Equipment

The following test equipment was used during the maximum peak output power measurement:

| Item | Type         | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|--------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Power Meter  | Anritsu      | ML2487A   | 6K00005406 | Feb. 19, 09' | Feb. 18, 10' |
| 2.   | Power Sensor | Anritsu      | MA2491A   | 030873     | Feb. 19, 09' | Feb. 18, 10' |

### 7.2. Block Diagram of Test Setup



### 7.3. Specification Limits (§15.247(b)-(3))

The Limits of maximum Peak Output Power for digital modulation in 5725-5850MHz is : 1Watt. (30dBm)

### 7.4. Operating Condition of EUT

The EUT was set to continuously transmit signals at 5730MHz 、5775MHz and 5820MHz during testing.

### 7.5. Test Procedure

The transmitter output was connected to the power meter that was designed to detect peak value automatically.

## 7.6. Test Results

**PASSED.** All the test results are listed below.

(Test Date : Nov. 24, 2009    Temperature : 25°C    Humidity : 55 %)

| Channel | Frequency | Peak Output Power | Limit |
|---------|-----------|-------------------|-------|
| 02      | 5730MHz   | <b>11.58dBm</b>   | 30dBm |
| 20      | 5775MHz   | <b>11.92dBm</b>   | 30dBm |
| 38      | 5820MHz   | <b>12.82dBm</b>   | 30dBm |

## 8. EMISSION LIMITATIONS MEASUREMENT

### 8.1. Test Equipment

The following test equipment was used during the emission limitations test :

| Item | Type              | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300366 | Jul. 23, 09' | Jul. 22, 10' |

### 8.2. Block Diagram of Test Setup

The same as section.4.2.

### 8.3. Specification Limits (§15.247(c))

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)).(※ This test result attaching to §3.6.3)

### 8.4. Operating Condition of EUT

The EUT was set to continuously transmit signals at 5730MHz 、5775MHz and 5820MHz during testing.

### 8.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW.

## 8.6. Test Results

**PASSED.** The testing data was attached in the next pages.

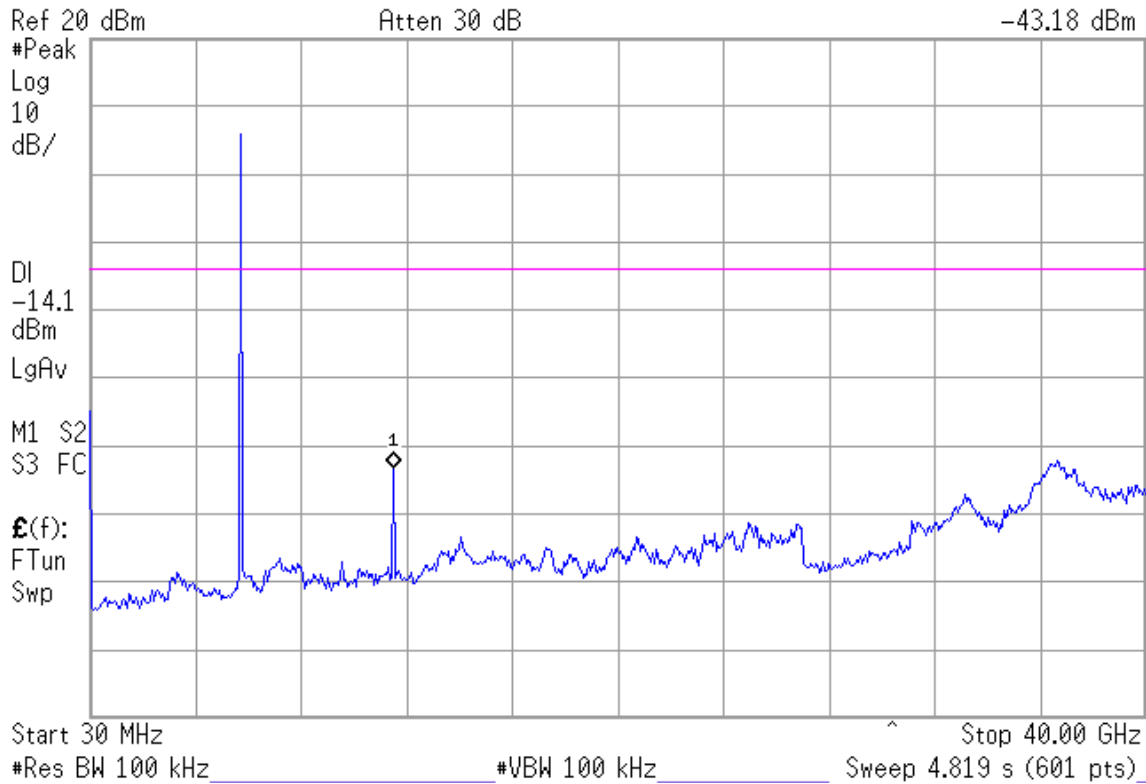
(Test Date : Nov. 24, 2009    Temperature : 25°C    Humidity : 55 %)

1. 5730MHz: During 30MHz~40GHz bandwidth. In the 11.49GHz, the -43.18dBm is max value that is lower than 20dB of primary channel.
2. 5775MHz: During 30MHz~40GHz bandwidth. In the 11.55GHz, the -42.48dBm is max value that is lower than 20dB of primary channel.
3. 5820MHz: During 30MHz~40GHz bandwidth. In the 11.62GHz, the -38.71dBm is max value that is lower than 20dB of primary channel.

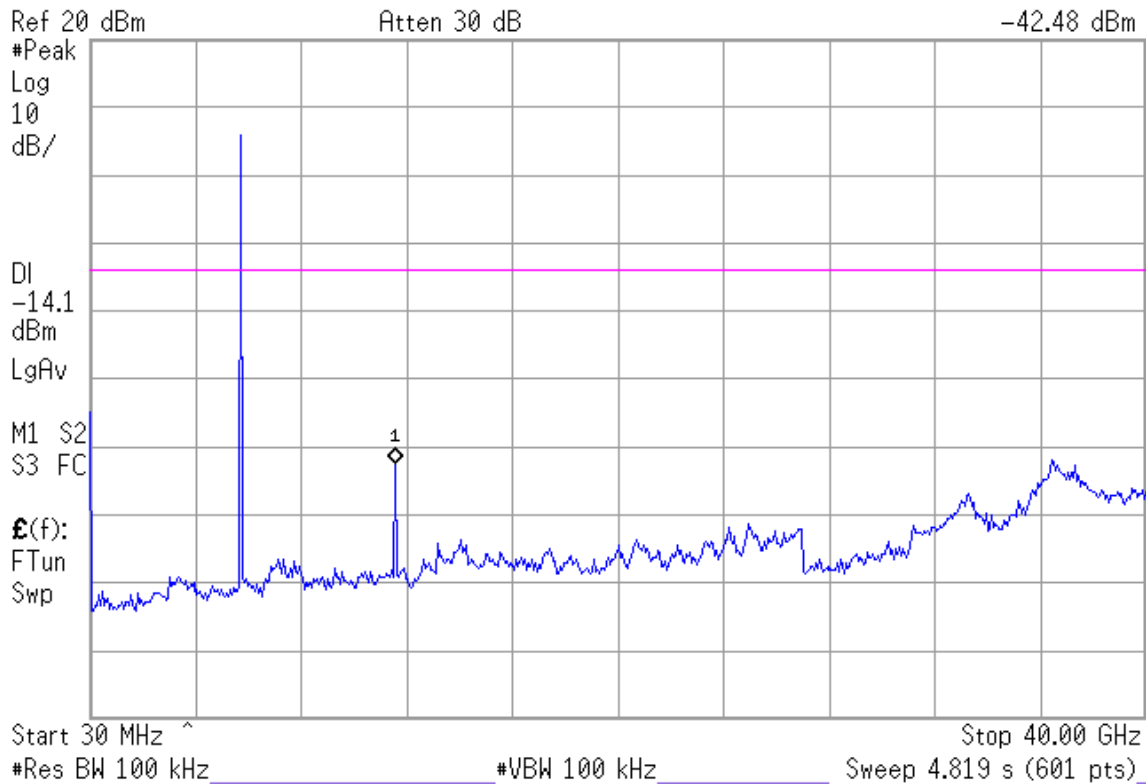
Note: The peak above the limit line is the carrier frequency.

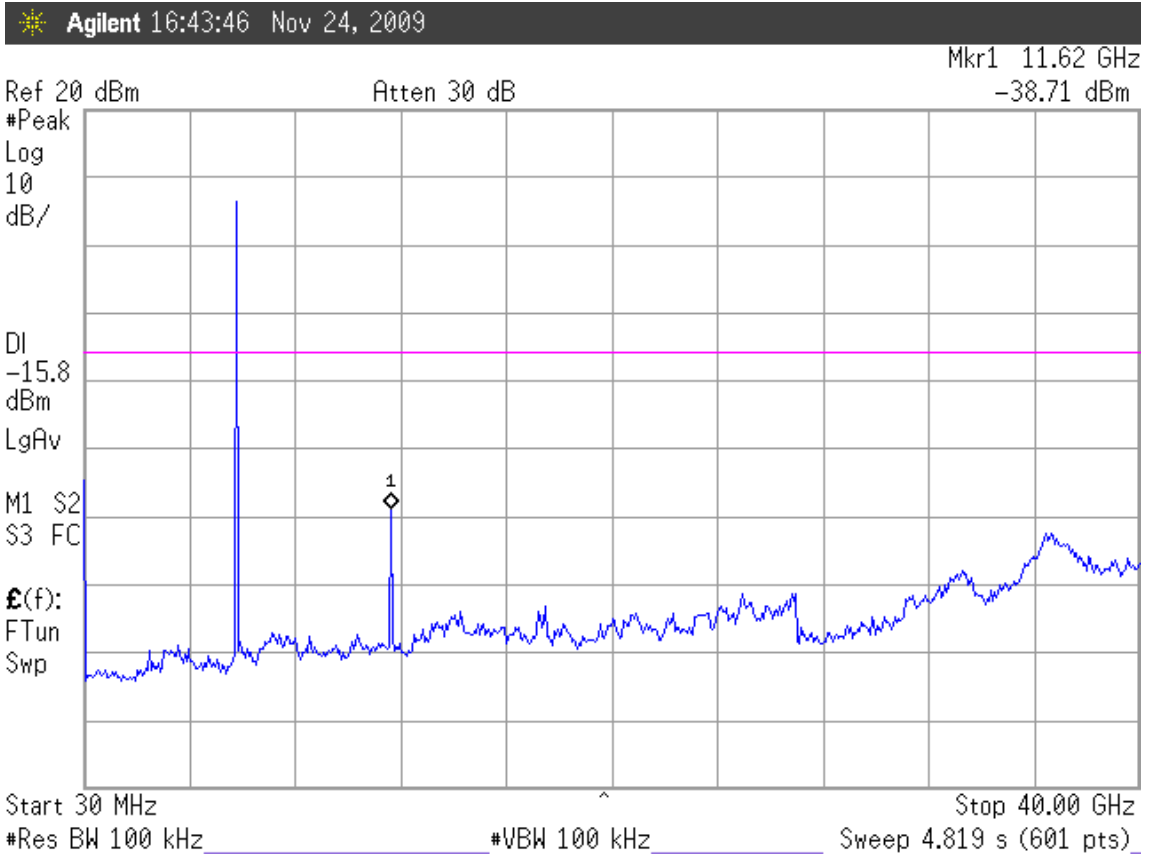
**Frequency: 5730MHz**

Agilent 16:40:35 Nov 24, 2009

Mkr1 11.49 GHz  
-43.18 dBm**Frequency: 5775MHz**

Agilent 16:28:24 Nov 24, 2009

Mkr1 11.55 GHz  
-42.48 dBm

**Frequency: 5820MHz**

## 9. BAND EDGES MEASUREMENT

### 9.1. Test Equipment

The following test equipment was used during the band edges measurement:

| Item | Type              | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300366 | Jul. 23, 09' | Jul. 22, 10' |

### 9.2. Block Diagram of Test Setup

The same as section.4.2.

### 9.3. Specification Limits (§15.247(c))

The highest level should be at least 20 dB below that in the 100kHz bandwidth.

### 9.4. Operating Condition of EUT

The EUT was set to continuously transmit signals at 5730MHz and 5820MHz during testing.

### 9.5. Test Procedure

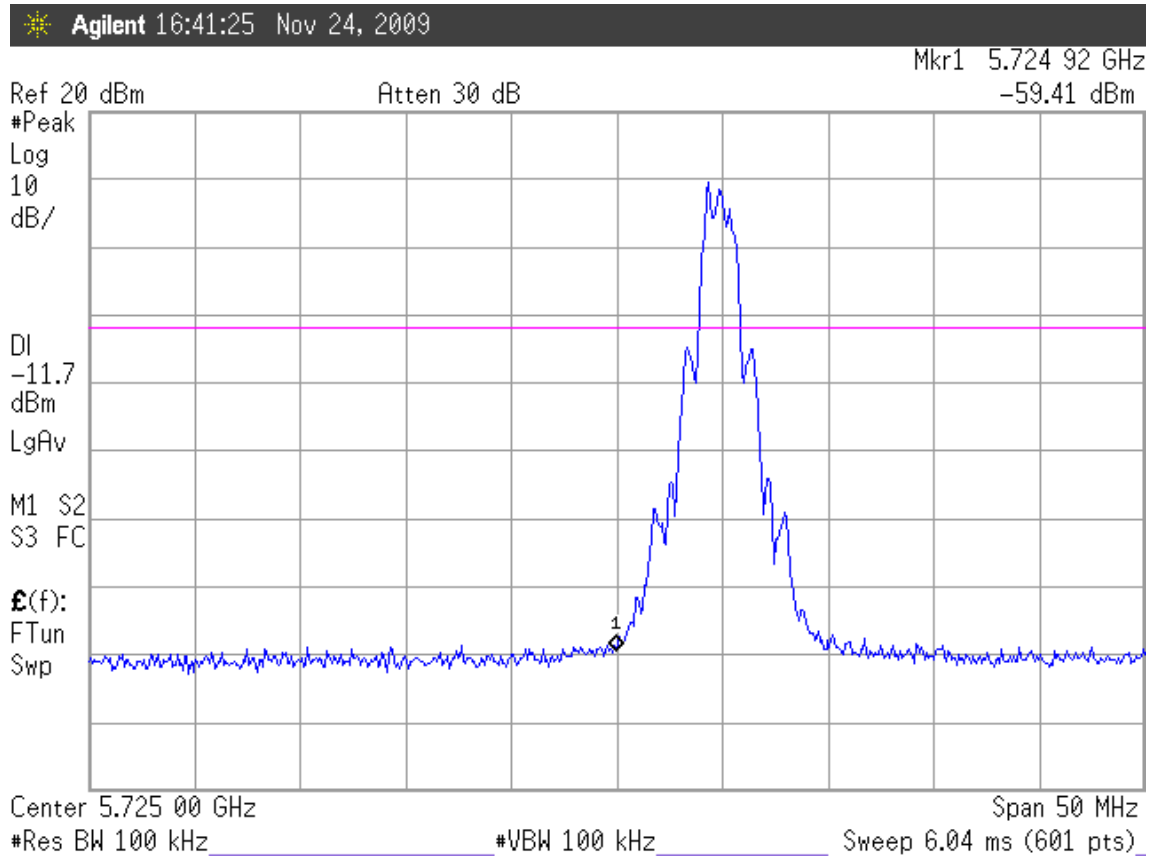
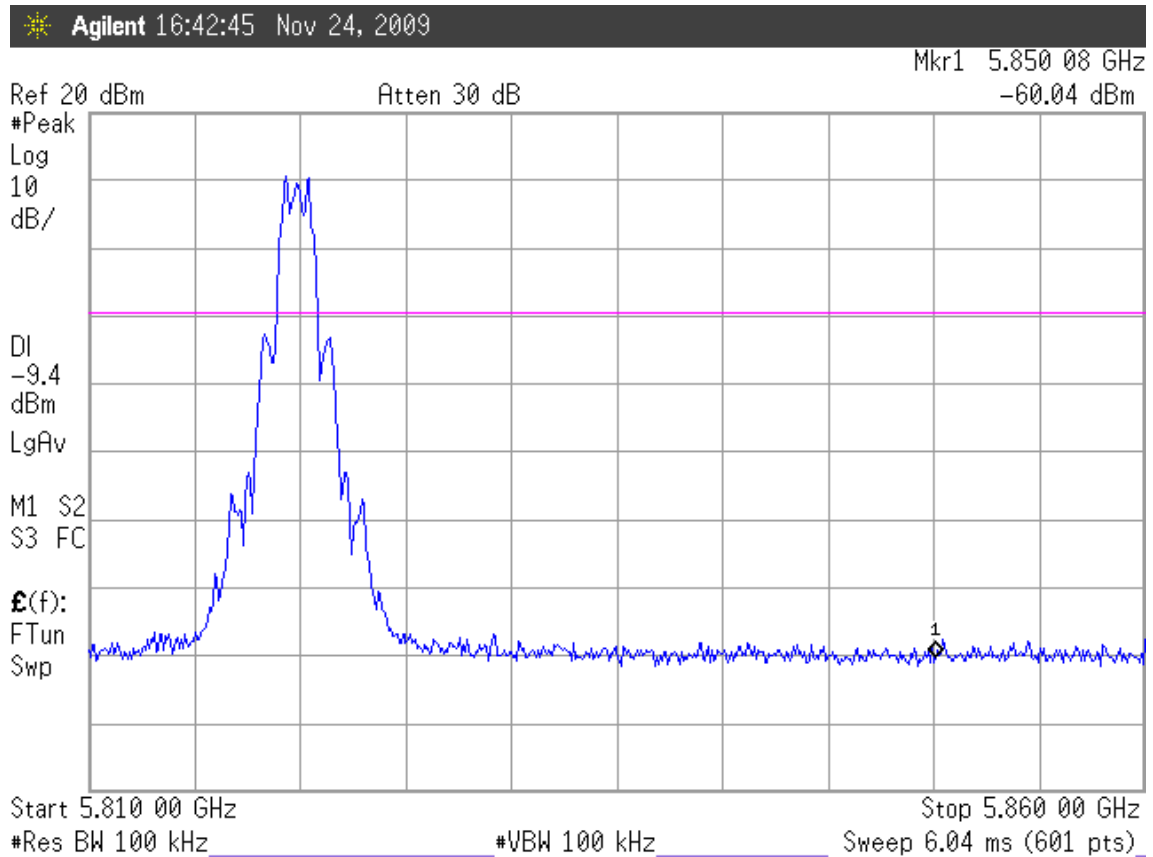
The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.

### 9.6. Test Results

**PASSED.** All the test results are attached in next pages.

(Test Date : Nov. 24, 2009    Temperature : 25°C    Humidity : 55 %)

1. Below Band edge: The highest emission level is -59.41dBm on 5.72492GHz °
2. Upper Band edge : The highest emission level is -60.04dBm on 5.85008GHz °

**Below Band edge****Upper Band edge**

## 10. POWER SPECTRAL DENSITY MEASUREMENT

### 10.1. Test Equipment

The following test equipment was used during the power spectral density measurement:

| Item | Type              | Manufacturer | Model No. | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|-----------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | E4446A    | US44300366 | Jul. 23, 09' | Jul. 22, 10' |

### 10.2. Block Diagram of Test Setup

The same as section.4.2.

### 10.3. Specification Limits (§15.247(d))

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

### 10.4. Operating Condition of EUT

The EUT was set to continuously transmit signals at 5730MHz、5775MHz and 5820MHz during testing.

### 10.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/300kHz.

### 10.6. Test Results

**PASSED.** All the test results are attached in next pages.

(Test Date : Nov. 24, 2009 Temperature : 25°C Humidity : 55 %)

| Channel | Frequency | Power Spectral Density | Limit |
|---------|-----------|------------------------|-------|
| 02      | 5730MHz   | -1.75Bm                | 8dBm  |
| 20      | 5775MHz   | -0.18dBm               | 8dBm  |
| 38      | 5820MHz   | -2.82dBm               | 8dBm  |

**Frequency: 5730MHz**

Agilent 16:39:16 Nov 24, 2009

Mkr1 5.729 322 3 GHz

-1.75 dBm

Ref 20 dBm

Atten 30 dB

#Peak

Log

10

dB/

LgAv

M1 S2

S3 FC

 $\mathcal{E}(f)$ :

f&gt;50k

Swp

Center 5.729 333 3 GHz

Span 300 kHz

#Res BW 3 kHz

#VBW 30 kHz

#Sweep 100 s (601 pts)

**Frequency: 5775MHz**

Agilent 16:16:18 Nov 24, 2009

Mkr1 5.774 322 4 GHz

-0.18 dBm

Ref 20 dBm

Atten 30 dB

#Peak

Log

10

dB/

LgAv

M1 S2

S3 FC

 $\mathcal{E}(f)$ :

f&gt;50k

Swp

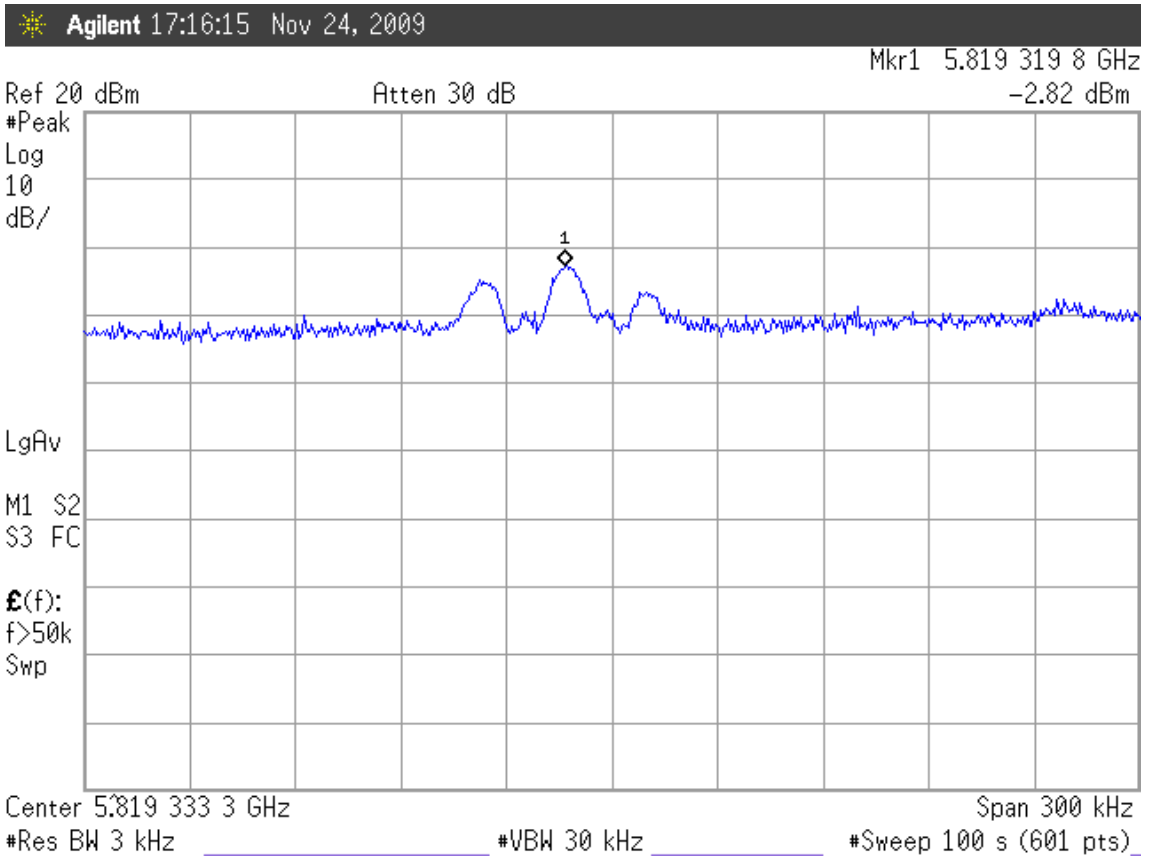
Center 5.774 350 0 GHz

Span 300 kHz

#Res BW 3 kHz

#VBW 30 kHz

#Sweep 100 s (601 pts)

**Frequency: 5820MHz**

## **11.DEVIATION TO TEST SPECIFICATIONS**

**【NONE】**