

# FCC Test Report

## FCC ID: QISB315S-519B

This report concerns (check one): Original Grant Class I Change Class II Change

**Project No.** : 1606C182A  
**Equipment** : LTE CPE  
**Model Name** : B315s-519  
**Applicant** : Huawei Technologies Co.,Ltd.  
**Address** : Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen 518129 P.R.C

**Date of Receipt** : Jun. 14, 2016  
Dec. 28, 2016  
**Date of Test** : Jun. 14, 2016 ~ Jun. 20, 2016  
Dec. 28, 2016 ~ Jan. 04, 2017  
**Issued Date** : Jan. 05, 2017  
**Tested by** : BTL Inc.

**Testing Engineer** : Terry Chen  
(Terry Chen)

**Technical Manager** : James Chiu  
(James Chiu)

**Authorized Signatory** : Steven Lu  
(Steven Lu)

# B T L I N C .

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### **Declaration**

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**BTL's** laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

### **Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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### REPORT ISSUED HISTORY

| Issued No.           | Description   | Issued Date   |
|----------------------|---|---------------|
| BTL-FCCE-1-1606C182  | Original report.  | Jun. 21, 2016 |
| BTL-FCCE-1-1606C182A | Compared with previous report (BTL-FCCE-1-1606C182), two external antenna is added, the radiated emission have been re-evaluated and recorded in the test report, the rest are kept the same. | Jan. 05, 2017 |

## 1. CERTIFICATION

Equipment : LTE CPE  
Brand Name : HUAWEI  
Model Name : B315s-519  
Applicant : Huawei Technologies Co.,Ltd.  
Manufacturer : Huawei Technologies Co.,Ltd.  
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd.,  
Bantian, Longgang District, Shenzhen 518129 P.R.C  
Factory : Huawei Technologies Co.,Ltd.  
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd.,  
Bantian, Longgang District, Shenzhen 518129 P.R.C  
Date of Test : Jun. 14, 2016 ~ Jun. 20, 2016  
Dec. 28, 2016 ~ Jan. 04, 2017  
Test Sample : Engineering Sample  
Standard(s) : FCC Part 15, Subpart B  
ANSI C63.4-2014

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCE-1-1606C182A) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| EMC Emission                             |                               |         |          |          |
|--|-------------------------------|---------|----------|----------|
| Standard(s)                              | Test Item                     | Limit   | Judgment | Remark   |
| FCC Part15, Subpart B<br>ANSI C63.4-2014 | Conducted Emission            | Class B | PASS     |          |
|  | Radiated emission Below 1 GHz | Class B | PASS     |          |
|  | Radiated emission Above 1 GHz | Class B | PASS     | NOTE (2) |

**NOTE:**

- (1) " N/A" denotes test is not applicable to this device.
- (2) The EUT's max operating frequency exceeds 108 MHz, so the test will be performed.

## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

## 2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{\text{CISPR}}$  requirement.

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately **95%**.

### A. Conducted Measurement :

| Test Site | Method | Measurement Frequency Range | U,(dB) |
|-----------|--------|-----------------------------|--------|
| DG-C02    | CISPR  | 150 kHz ~ 30MHz             | 2.32   |

### B. Radiated Measurement :

| Test Site       | Method | Measurement Frequency Range | Ant. H / V | U,(dB) |
|-----------------|--------|-----------------------------|------------|--------|
| DG-CB03<br>(3m) | CISPR  | 9KHz ~ 30MHz                | V          | 3.79   |
|                 |        | 9KHz ~ 30MHz                | H          | 3.57   |
|                 |        | 30MHz ~ 200MHz              | V          | 3.82   |
|                 |        | 30MHz ~ 200MHz              | H          | 3.78   |
|                 |        | 200MHz ~ 1,000MHz           | V          | 4.10   |
|                 |        | 200MHz ~ 1,000MHz           | H          | 4.06   |

| Test Site       | Method | Measurement Frequency Range | Ant. H / V | U,(dB) |
|-----------------|--------|-----------------------------|------------|--------|
| DG-CB03<br>(3m) | CISPR  | 1GHz ~ 18GHz                | V          | 3.12   |
|                 |        | 1GHz ~ 18GHz                | H          | 3.68   |
|                 |        | 18GHz ~ 40GHz               | V          | 4.15   |
|                 |        | 18GHz ~ 40GHz               | H          | 4.14   |

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

|                  |  |
|------------------|--|
| Equipment        | LTE CPE  |
| Brand Name       | HUAWEI   |
| Model Name       | B315s-519  |
| Model Difference | NA   |
| Power Source     | DC voltage supplied from AC Adapter.<br>Brand / Model: HUAWEI / HW-120100U01<br>#1 S/N: G75002G4800038<br>#2 S/N: U75002G4C00684<br>#3 S/N: U75002G4501553 |
| Power Rating     | I/P: 100-240~ 50/60Hz, 0.5A<br>O/P: 12V --- 1A   |
| Frequency        | LTE B2/4/5/13/17, WCDMA B2/5, GSM850/1900, WIFI 2.4G<br>11b/g/n  |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

#### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

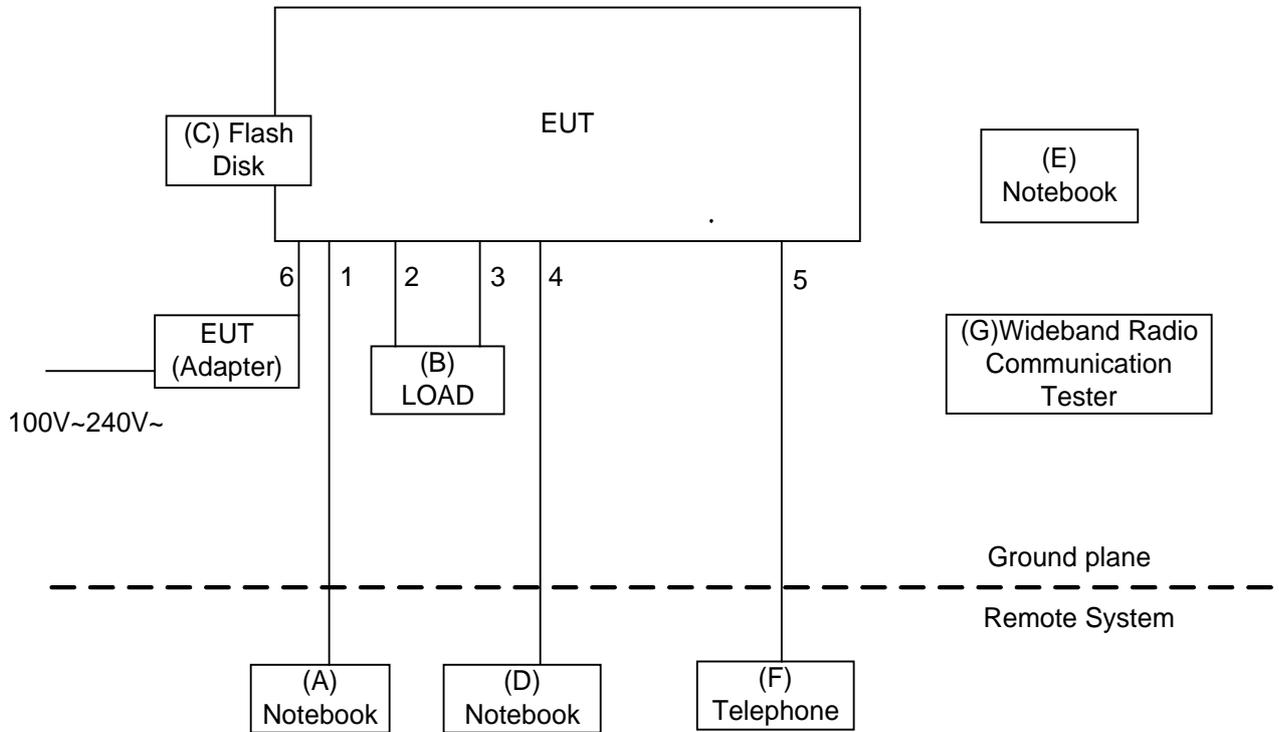
| Pretest Mode | Description |
|--------------|-------------|
| Mode 1       | FULL SYSTEM |

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

| For Conducted Test |             |
|--------------------|-------------|
| Final Test Mode    | Description |
| Mode 1             | FULL SYSTEM |

| For Radiated Test |             |
|-------------------|-------------|
| Final Test Mode   | Description |
| Mode 1            | FULL SYSTEM |

**3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**



### 3.4 DESCRIPTION OF SUPPORT UNITS

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

| Item | Equipment                           | Mfr/Brand | Model/Type No. | FCC ID | Series No. |
|------|-------------------------------------|-----------|----------------|--------|------------|
| A    | Notebook                            | DELL      | latitude E5510 | DOC    | N/A        |
| B    | LOAD                                | N/A       | N/A            | N/A    | N/A        |
| C    | USB flash disk                      | Kingston  | N/A            | DOC    | N/A        |
| D    | Notebook                            | Lenovo    | E445           | DOC    | MP-05Y56S  |
| E    | Notebook                            | Lenovo    | E445           | DOC    | MP-05Y3X6  |
| F    | Telephone                           | TCL       | HCD868TSD      | VER    | N/A        |
| G    | Wideband Radio Communication Tester | RS        | CMW500         | N/A    | 122125     |

| Item | Shielded Type | Ferrite Core | Length | Note       |
|------|---------------|--------------|--------|------------|
| 1    | NO            | NO           | 15m    | RJ45 Cable |
| 2    | NO            | NO           | 1.8m   | RJ45 Cable |
| 3    | NO            | NO           | 1.8m   | RJ45 Cable |
| 4    | NO            | NO           | 15m    | RJ45 Cable |
| 5    | NO            | NO           | 15m    | RJ11 Cable |
| 6    | NO            | NO           | 1.5m   | DC Cable   |

Note:

- (1) For detachable type I/O cable should be specified the length in m in 『Length』 column.

## 4. EMC EMISSION TEST

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 POWER LINE CONDUCTED EMISSION (FREQUENCY RANGE 150KHZ-30MHZ)

| FREQUENCY (MHz) | Class A (dBuV) |         | Class B (dBuV) |           |
|-----------------|----------------|---------|----------------|-----------|
|                 | Quasi-peak     | Average | Quasi-peak     | Average   |
| 0.15 -0.5       | 79.00          | 66.00   | 66 - 56 *      | 56 - 46 * |
| 0.50 -5.0       | 73.00          | 60.00   | 56.00          | 46.00     |
| 5.0 -30.0       | 73.00          | 60.00   | 60.00          | 50.00     |

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:  
 Measurement Value = Reading Level + Correct Factor  
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)  
 Margin Level = Measurement Value – Limit Value

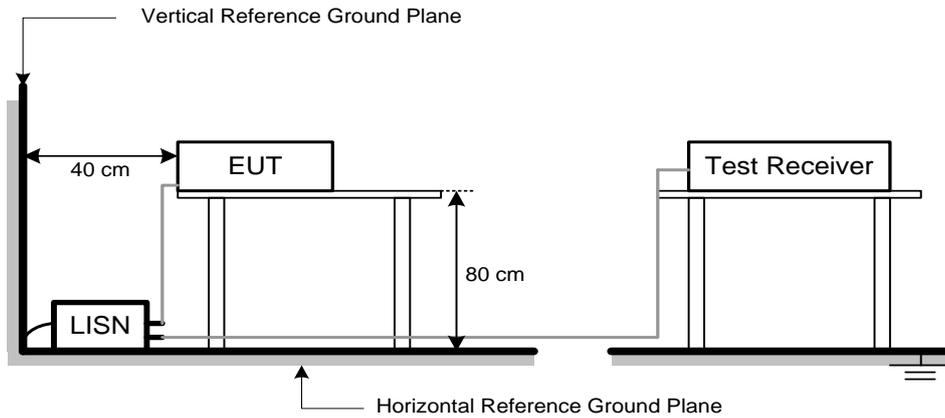
#### 4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

**4.1.4 TEST SETUP**



**4.1.5 EUT OPERATING CONDITIONS**

The EUT exercise program used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use.  
 Temperature: 24°C Relative Humidity: 60%

**4.1.6 TEST RESULTS**

Please refer to the Attachment A.

## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Below 1 GHz

Measurement Method and Applied Limits:

**ANSI C63.4:**

| Frequency (MHz) | Class A (at 10m)      |                         | Class B (at 3m)       |                         |
|-----------------|-----------------------|-------------------------|-----------------------|-------------------------|
|                 | (uV/m) Field strength | (dBuV/m) Field strength | (uV/m) Field strength | (dBuV/m) Field strength |
| 30 - 88         | 90                    | 39                      | 100                   | 40                      |
| 88 - 216        | 150                   | 43.5                    | 150                   | 43.5                    |
| 216 - 960       | 210                   | 46.4                    | 200                   | 46                      |
| Above 960       | 300                   | 49.5                    | 500                   | 54                      |

**CISPR 22 or CAN/CSA-CISPR 22-10:**

| Frequency (MHz) | Class A (at 10m) |  | Class B (at 10m) |  |
|-----------------|------------------|--|------------------|--|
|                 | dBuV/m           |  | dBuV/m           |  |
| 30 - 230        | 40               |  | 30               |  |
| 230 - 1000      | 47               |  | 37               |  |

Above 1 GHz

Measurement Method and Applied Limits:

**ANSI C63.4:**

| Frequency (MHz) | Class A          |         |                   |         | Class B          |         |
|-----------------|------------------|---------|-------------------|---------|------------------|---------|
|                 | (dBuV/m) (at 3m) |         | (dBuV/m) (at 10m) |         | (dBuV/m) (at 3m) |         |
|                 | Peak             | Average | Peak              | Average | Peak             | Average |
| Above 1000      | 80               | 60      | 69.5              | 49.5    | 74               | 54      |

### FREQUENCY RANGE OF RADIATED MEASUREMENT (FOR UNINTENTIONAL RADIATORS)

| Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz) | Range (MHz)   |
|---|---|
| Below 1.705   | 30  |
| 1.705 - 108   | 1000  |
| 108 - 500   | 2000  |
| 500 - 1000  | 5000  |
| Above 1000  | 5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower |

NOTE:

- (1) The limit for radiated test was performed according to as following:  
FCC Part 15, Subpart B.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).  
3m Emission level = 10m Emission level + 20log(10m/3m).
- (4) The test result calculated as following:  
Measurement Value = Reading Level + Correct Factor  
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)  
Margin Level = Measurement Value - Limit Value

#### 4.2.2 TEST PROCEDURE

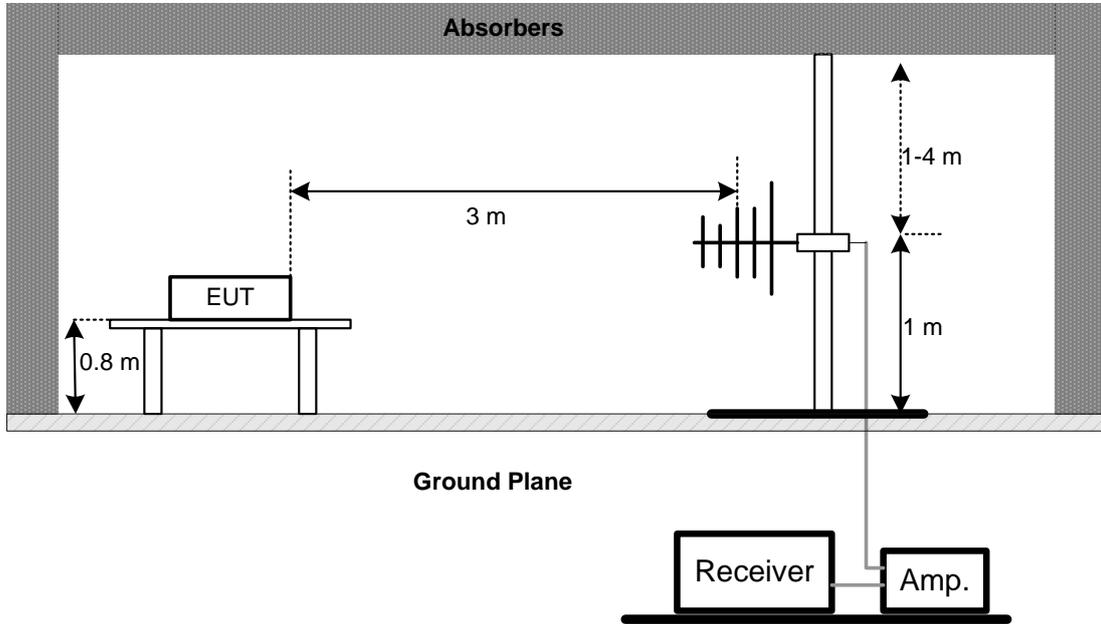
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m, the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

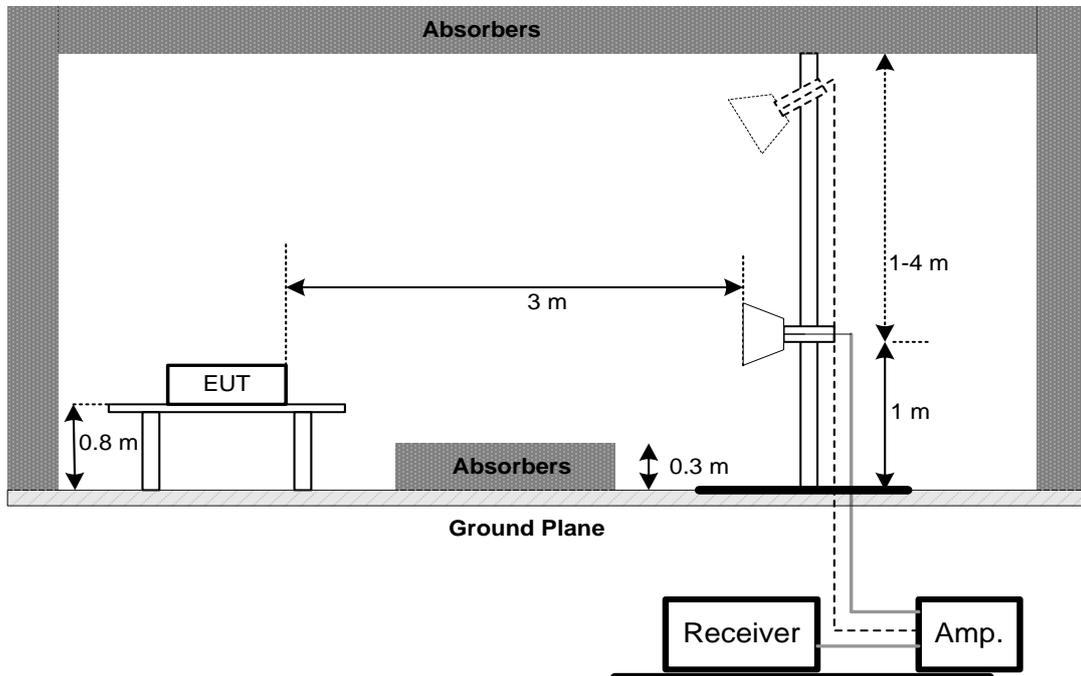
No deviation

**4.2.4 TEST SETUP**

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency 1 GHz-18GHz



#### **4.2.5 EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### **4.2.6 TEST RESULTS (30 TO 1000 MHz)**

Please refer to the Attachment B.

Temperature: 24°C    Relative Humidity: 52%

#### **4.2.7 TEST RESULTS (Above 1000 MHz)**

Please refer to the Attachment C.

Temperature: 24°C    Relative Humidity: 52%

## 5. MEASUREMENT INSTRUMENTS LIST

| Conducted Emission |                      |              |                       |            |                  |
|--------------------|----------------------|--------------|-----------------------|------------|------------------|
| Item               | Kind of Equipment    | Manufacturer | Type No.              | Serial No. | Calibrated until |
| 1                  | LISN                 | EMCO         | 3816/2                | 0052765    | Mar. 27, 2017    |
| 2                  | LISN                 | R&S          | ENV216                | 101447     | Mar. 27, 2017    |
| 3                  | Test Cable           | emci         | RG223(9KHz-30 MHz)    | C_17       | Mar. 10, 2017    |
| 4                  | EMI Test Receiver    | R&S          | ESCI                  | 100382     | Mar. 27, 2017    |
| 5                  | 50Ω Terminator       | SHX          | TF2-3G-A              | 08122901   | Mar. 27, 2017    |
| 6                  | Measurement Software | Farad        | EZ-EMC Ver.NB-03A1-01 | N/A        | N/A              |

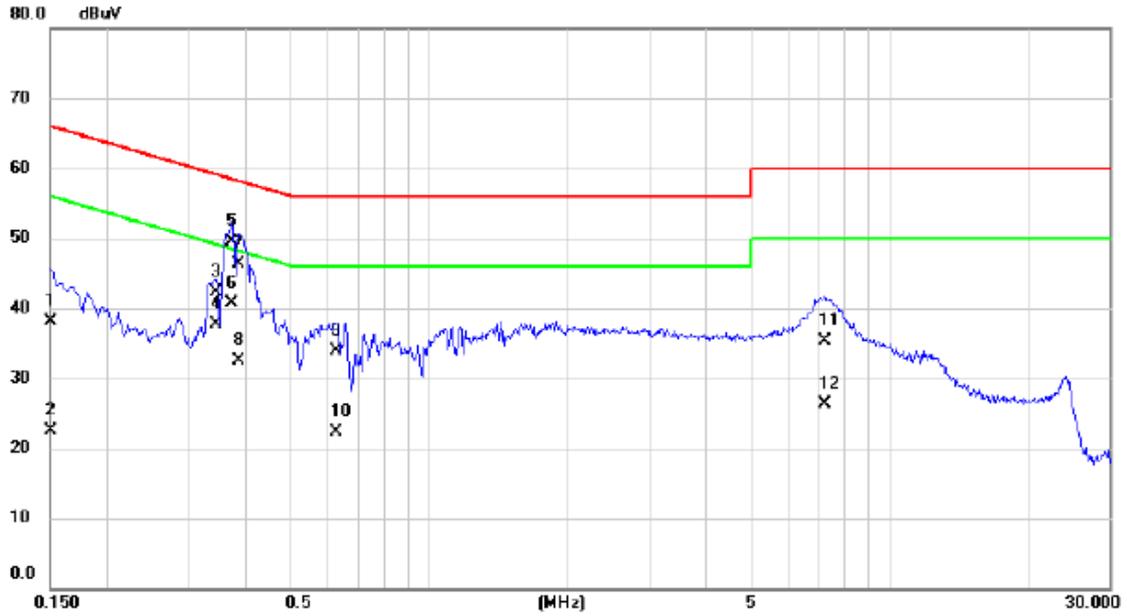
| Radiated Emission |                                     |                |                            |               |                  |
|-------------------|-------------------------------------|----------------|----------------------------|---------------|------------------|
| Item              | Kind of Equipment                   | Manufacturer   | Type No.                   | Serial No.    | Calibrated until |
| 1                 | Antenna                             | Schwarzbeck    | VULB9160                   | 9160-3232     | Mar. 27, 2017    |
| 2                 | Amplifier                           | HP             | 8447D                      | 2944A09673    | Oct. 20, 2017    |
| 3                 | Receiver                            | Agilent        | N9038A                     | MY52130039    | Sep. 04, 2017    |
| 4                 | Cable                               | emci           | LMR-400(30MHz-1GHz)(8m+5m) | N/A           | Jun. 27, 2017    |
| 5                 | Controller                          | CT             | SC100                      | N/A           | N/A              |
| 6                 | Controller                          | MF             | MF-7802                    | MF780208416   | N/A              |
| 7                 | Measurement Software                | Farad          | EZ-EMC Ver.NB-03A1-01      | N/A           | N/A              |
| 8                 | Double Ridged Guide Antenna         | ETS            | 3115                       | 75789         | Mar. 27, 2017    |
| 9                 | Broad-Band Horn Antenna             | Schwarzbeck    | BBHA 9170                  | 9170319       | Apr. 23, 2017    |
| 10                | Amplifier                           | Agilent        | 8449B                      | 3008A02274    | Mar. 10, 2017    |
| 11                | Microwave Preamplifier With Adaptor | EMC INSTRUMENT | EMC2654045                 | 980039 & HA01 | Mar. 27, 2017    |
| 12                | Antenna                             | EM             | EM-6876-1                  | 230           | Jul. 08, 2017    |
| 13                | Cable                               | emci           | EMC104-SM-SM-12000(12m)    | N/A           | Jul. 06, 2017    |

Remark: "N/A" denotes no model name, serial no. or calibration specified.  
All calibration period of equipment list is one year.

## ATTACHMENT A - CONDUCTED EMISSION

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

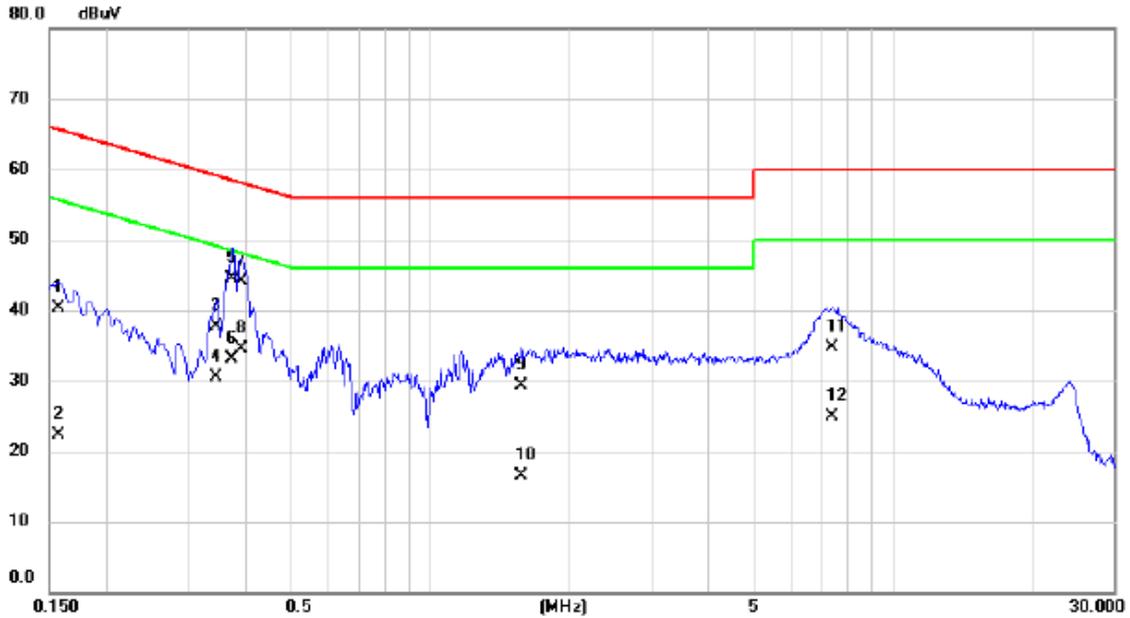
### Line



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|--------------|----------|---------|
| 1   |     | 0.1500       | 28.50                    | 9.64                    | 38.14                    | 66.00         | -27.86       | QP       |         |
| 2   |     | 0.1500       | 12.80                    | 9.64                    | 22.44                    | 56.00         | -33.56       | AVG      |         |
| 3   |     | 0.3435       | 32.30                    | 9.93                    | 42.23                    | 59.12         | -16.89       | QP       |         |
| 4   |     | 0.3435       | 27.80                    | 9.93                    | 37.73                    | 49.12         | -11.39       | AVG      |         |
| 5   |     | 0.3727       | 39.70                    | 9.90                    | 49.60                    | 58.44         | -8.84        | QP       |         |
| 6   | *   | 0.3727       | 30.80                    | 9.90                    | 40.70                    | 48.44         | -7.74        | AVG      |         |
| 7   |     | 0.3840       | 36.40                    | 9.89                    | 46.29                    | 58.19         | -11.90       | QP       |         |
| 8   |     | 0.3840       | 22.60                    | 9.89                    | 32.49                    | 48.19         | -15.70       | AVG      |         |
| 9   |     | 0.6292       | 23.80                    | 10.04                   | 33.84                    | 56.00         | -22.16       | QP       |         |
| 10  |     | 0.6292       | 12.20                    | 10.04                   | 22.24                    | 46.00         | -23.76       | AVG      |         |
| 11  |     | 7.2488       | 25.10                    | 10.21                   | 35.31                    | 60.00         | -24.69       | QP       |         |
| 12  |     | 7.2488       | 16.00                    | 10.21                   | 26.21                    | 50.00         | -23.79       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

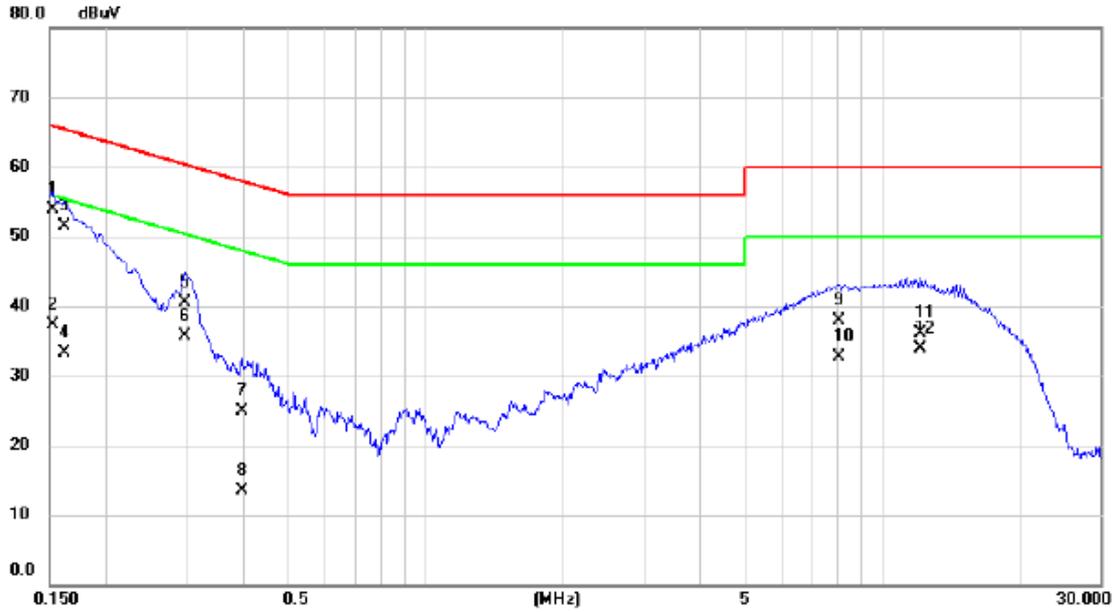
### Neutral



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|--------------|----------|---------|
| 1   |     | 0.1568       | 30.70                    | 9.54                    | 40.24                    | 65.63         | -25.39       | QP       |         |
| 2   |     | 0.1568       | 12.80                    | 9.54                    | 22.34                    | 55.63         | -33.29       | AVG      |         |
| 3   |     | 0.3435       | 28.00                    | 9.74                    | 37.74                    | 59.12         | -21.38       | QP       |         |
| 4   |     | 0.3435       | 20.80                    | 9.74                    | 30.54                    | 49.12         | -18.58       | AVG      |         |
| 5   |     | 0.3727       | 34.80                    | 9.75                    | 44.55                    | 58.44         | -13.89       | QP       |         |
| 6   |     | 0.3727       | 23.40                    | 9.75                    | 33.15                    | 48.44         | -15.29       | AVG      |         |
| 7   |     | 0.3907       | 34.40                    | 9.76                    | 44.16                    | 58.05         | -13.89       | QP       |         |
| 8   | *   | 0.3907       | 24.70                    | 9.76                    | 34.46                    | 48.05         | -13.59       | AVG      |         |
| 9   |     | 1.5743       | 19.20                    | 10.05                   | 29.25                    | 56.00         | -26.75       | QP       |         |
| 10  |     | 1.5743       | 6.50                     | 10.05                   | 16.55                    | 46.00         | -29.45       | AVG      |         |
| 11  |     | 7.3658       | 24.40                    | 10.29                   | 34.69                    | 60.00         | -25.31       | QP       |         |
| 12  |     | 7.3658       | 14.70                    | 10.29                   | 24.99                    | 50.00         | -25.01       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

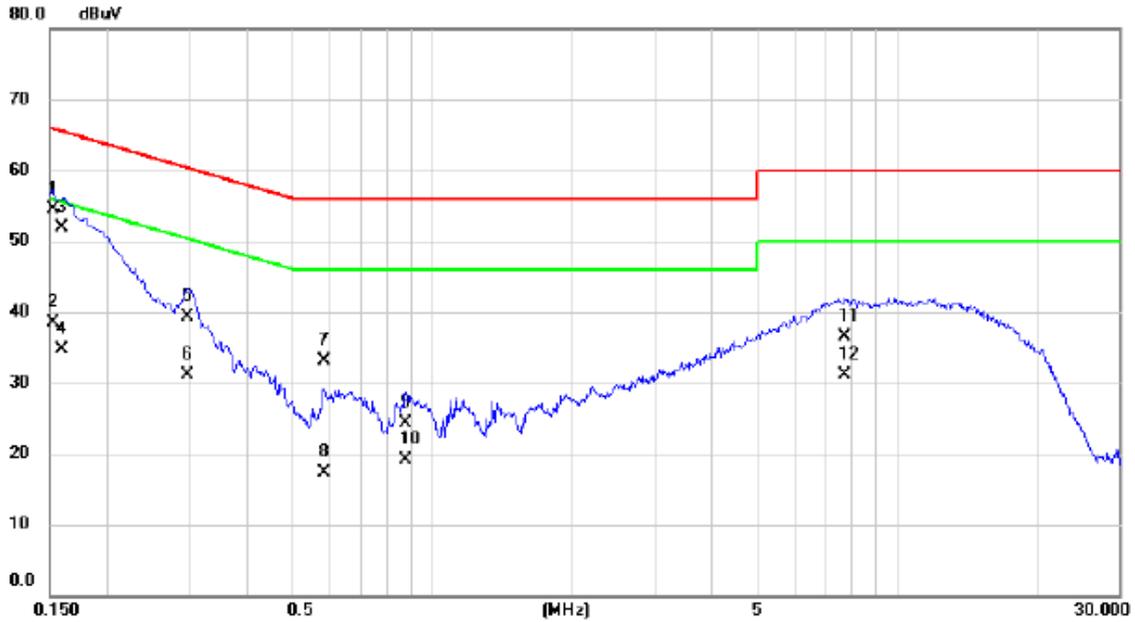
### Line



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|--------------|----------|---------|
| 1   | *   | 0.1522       | 44.30                    | 9.64                    | 53.94                    | 65.88         | -11.94       | QP       |         |
| 2   |     | 0.1522       | 27.70                    | 9.64                    | 37.34                    | 55.88         | -18.54       | AVG      |         |
| 3   |     | 0.1613       | 41.80                    | 9.65                    | 51.45                    | 65.40         | -13.95       | QP       |         |
| 4   |     | 0.1613       | 23.70                    | 9.65                    | 33.35                    | 55.40         | -22.05       | AVG      |         |
| 5   |     | 0.2962       | 30.70                    | 9.81                    | 40.51                    | 60.35         | -19.84       | QP       |         |
| 6   |     | 0.2962       | 25.90                    | 9.81                    | 35.71                    | 50.35         | -14.64       | AVG      |         |
| 7   |     | 0.3952       | 15.00                    | 9.87                    | 24.87                    | 57.95         | -33.08       | QP       |         |
| 8   |     | 0.3952       | 3.70                     | 9.87                    | 13.57                    | 47.95         | -34.38       | AVG      |         |
| 9   |     | 8.0408       | 27.60                    | 10.29                   | 37.89                    | 60.00         | -22.11       | QP       |         |
| 10  |     | 8.0408       | 22.50                    | 10.29                   | 32.79                    | 50.00         | -17.21       | AVG      |         |
| 11  |     | 12.1290      | 25.60                    | 10.55                   | 36.15                    | 60.00         | -23.85       | QP       |         |
| 12  |     | 12.1290      | 23.30                    | 10.55                   | 33.85                    | 50.00         | -16.15       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

### Neutral

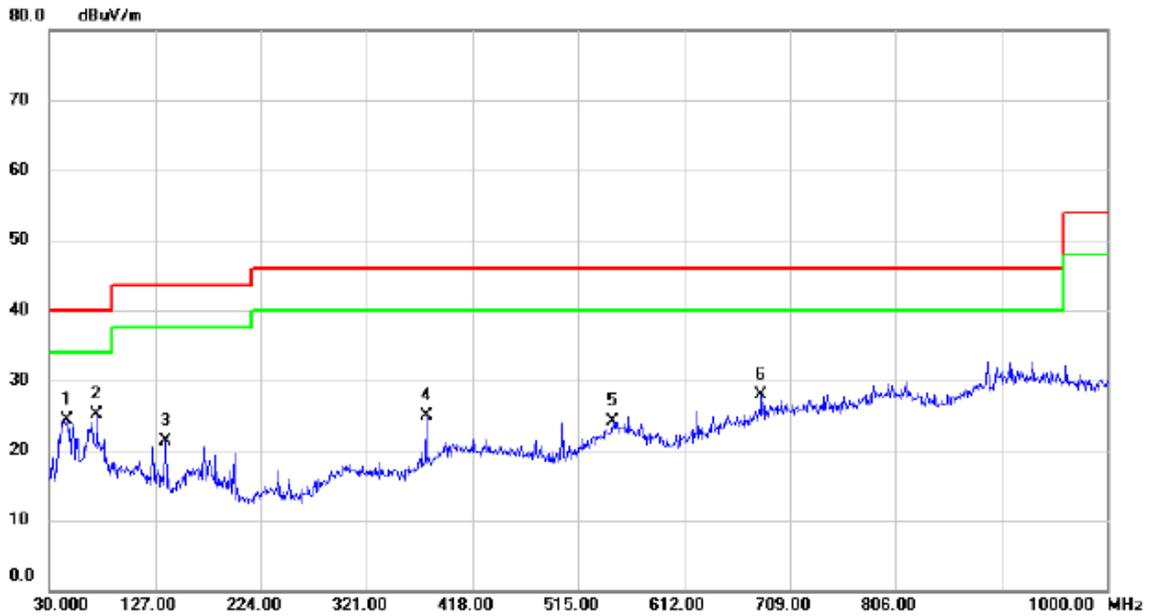


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|--------------|----------|---------|
| 1   | *   | 0.1522       | 44.90                    | 9.54                    | 54.44                    | 65.88         | -11.44       | QP       |         |
| 2   |     | 0.1522       | 28.90                    | 9.54                    | 38.44                    | 55.88         | -17.44       | AVG      |         |
| 3   |     | 0.1590       | 42.30                    | 9.55                    | 51.85                    | 65.52         | -13.67       | QP       |         |
| 4   |     | 0.1590       | 25.10                    | 9.55                    | 34.65                    | 55.52         | -20.87       | AVG      |         |
| 5   |     | 0.2962       | 29.60                    | 9.71                    | 39.31                    | 60.35         | -21.04       | QP       |         |
| 6   |     | 0.2962       | 21.40                    | 9.71                    | 31.11                    | 50.35         | -19.24       | AVG      |         |
| 7   |     | 0.5842       | 23.20                    | 9.83                    | 33.03                    | 56.00         | -22.97       | QP       |         |
| 8   |     | 0.5842       | 7.40                     | 9.83                    | 17.23                    | 46.00         | -28.77       | AVG      |         |
| 9   |     | 0.8722       | 14.40                    | 9.89                    | 24.29                    | 56.00         | -31.71       | QP       |         |
| 10  |     | 0.8722       | 9.20                     | 9.89                    | 19.09                    | 46.00         | -26.91       | AVG      |         |
| 11  |     | 7.7258       | 26.20                    | 10.29                   | 36.49                    | 60.00         | -23.51       | QP       |         |
| 12  |     | 7.7258       | 20.90                    | 10.29                   | 31.19                    | 50.00         | -18.81       | AVG      |         |

**ATTACHMENT B - RADIATED EMISSION (30MHZ TO 1000MHZ)**

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

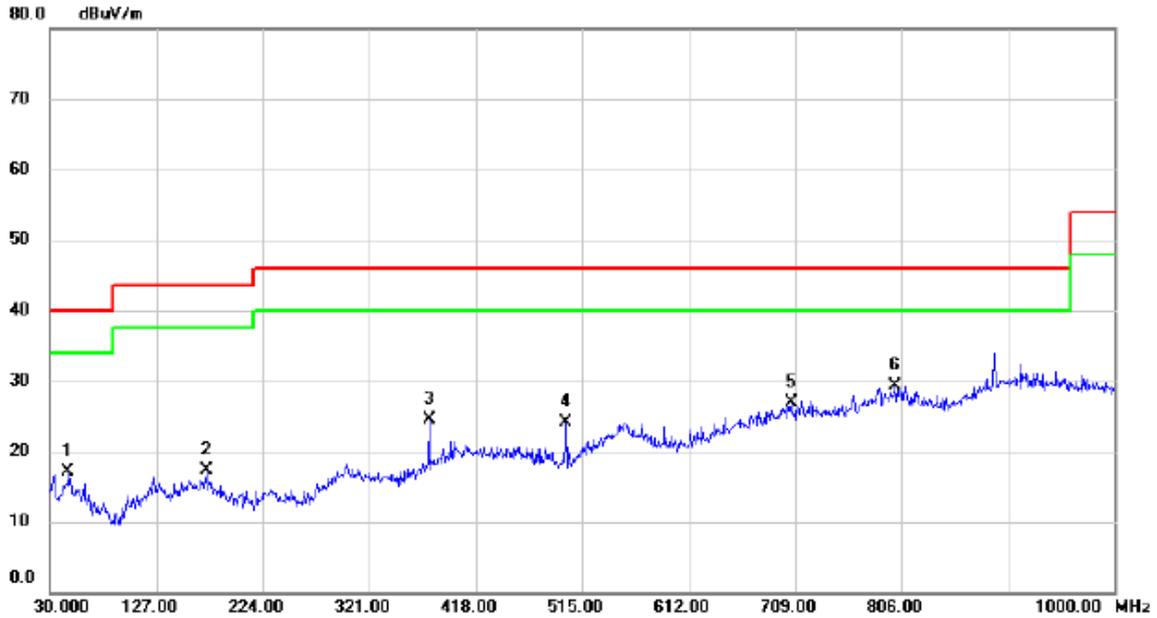
### Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 45.5200      | 36.87                    | -12.56                  | 24.31                      | 40.00           | -15.69       | QP       |         |
| 2   | *   | 73.6500      | 41.65                    | -16.50                  | 25.15                      | 40.00           | -14.85       | QP       |         |
| 3   |     | 136.7000     | 34.68                    | -13.30                  | 21.38                      | 43.50           | -22.12       | QP       |         |
| 4   |     | 375.3200     | 34.77                    | -9.92                   | 24.85                      | 46.00           | -21.15       | QP       |         |
| 5   |     | 547.0100     | 29.72                    | -5.58                   | 24.14                      | 46.00           | -21.86       | QP       |         |
| 6   |     | 682.8100     | 31.61                    | -3.71                   | 27.90                      | 46.00           | -18.10       | QP       |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

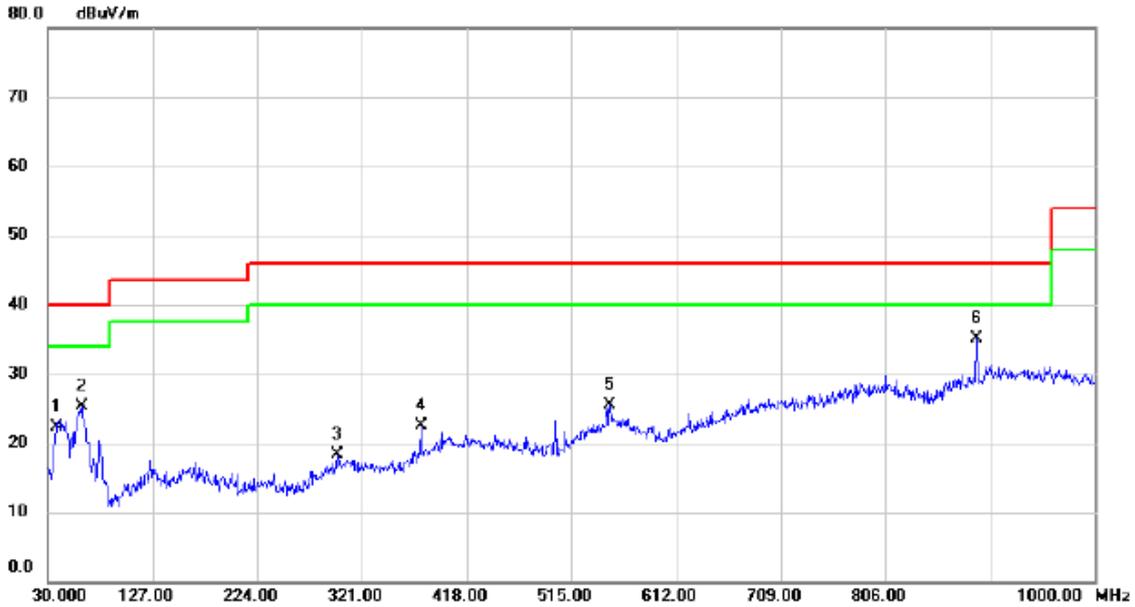
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 46.4900      | 29.63                    | -12.56                  | 17.07                      | 40.00           | -22.93       | QP       |         |
| 2   |     | 172.5900     | 29.76                    | -12.46                  | 17.30                      | 43.50           | -26.20       | QP       |         |
| 3   |     | 375.3200     | 34.43                    | -9.92                   | 24.51                      | 46.00           | -21.49       | QP       |         |
| 4   |     | 500.4500     | 34.35                    | -10.34                  | 24.01                      | 46.00           | -21.99       | QP       |         |
| 5   |     | 705.1200     | 29.93                    | -3.00                   | 26.93                      | 46.00           | -19.07       | QP       |         |
| 6   | *   | 800.1800     | 30.09                    | -0.75                   | 29.34                      | 46.00           | -16.66       | QP       |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

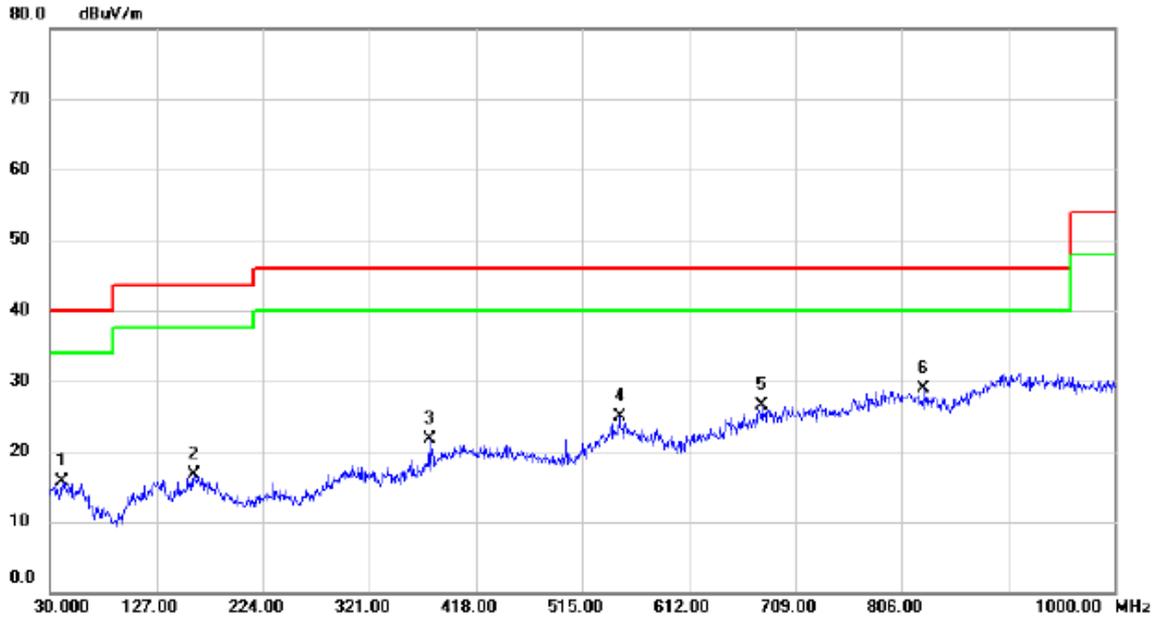
### Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 37.7600      | 36.31                    | -14.04                  | 22.27                      | 40.00           | -17.73       | QP       |         |
| 2   |     | 61.0400      | 39.22                    | -13.97                  | 25.25                      | 40.00           | -14.75       | QP       |         |
| 3   |     | 297.7200     | 29.01                    | -10.70                  | 18.31                      | 46.00           | -27.69       | QP       |         |
| 4   |     | 375.3200     | 32.44                    | -9.92                   | 22.52                      | 46.00           | -23.48       | QP       |         |
| 5   |     | 550.8900     | 30.84                    | -5.33                   | 25.51                      | 46.00           | -20.49       | QP       |         |
| 6   | *   | 890.3900     | 34.29                    | 0.82                    | 35.11                      | 46.00           | -10.89       | QP       |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC120V/60Hz                       |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

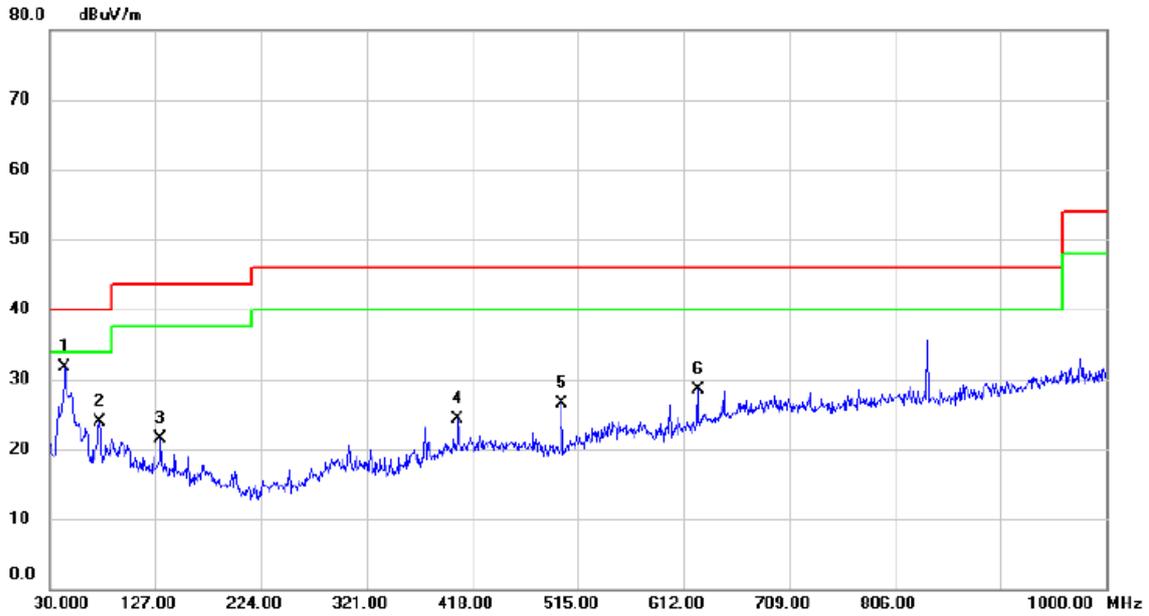
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 40.6700      | 29.49                    | -13.72                  | 15.77                      | 40.00           | -24.23       | QP       |         |
| 2   |     | 160.9500     | 28.82                    | -12.21                  | 16.61                      | 43.50           | -26.89       | QP       |         |
| 3   |     | 375.3200     | 31.66                    | -9.92                   | 21.74                      | 46.00           | -24.26       | QP       |         |
| 4   |     | 548.9500     | 30.27                    | -5.37                   | 24.90                      | 46.00           | -21.10       | QP       |         |
| 5   |     | 678.9300     | 30.40                    | -3.86                   | 26.54                      | 46.00           | -19.46       | QP       |         |
| 6   | *   | 826.3700     | 30.50                    | -1.56                   | 28.94                      | 46.00           | -17.06       | QP       |         |

|               |  |
|---------------|--|
| Test Voltage: | AC120V/60Hz  |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The bigger antenna |

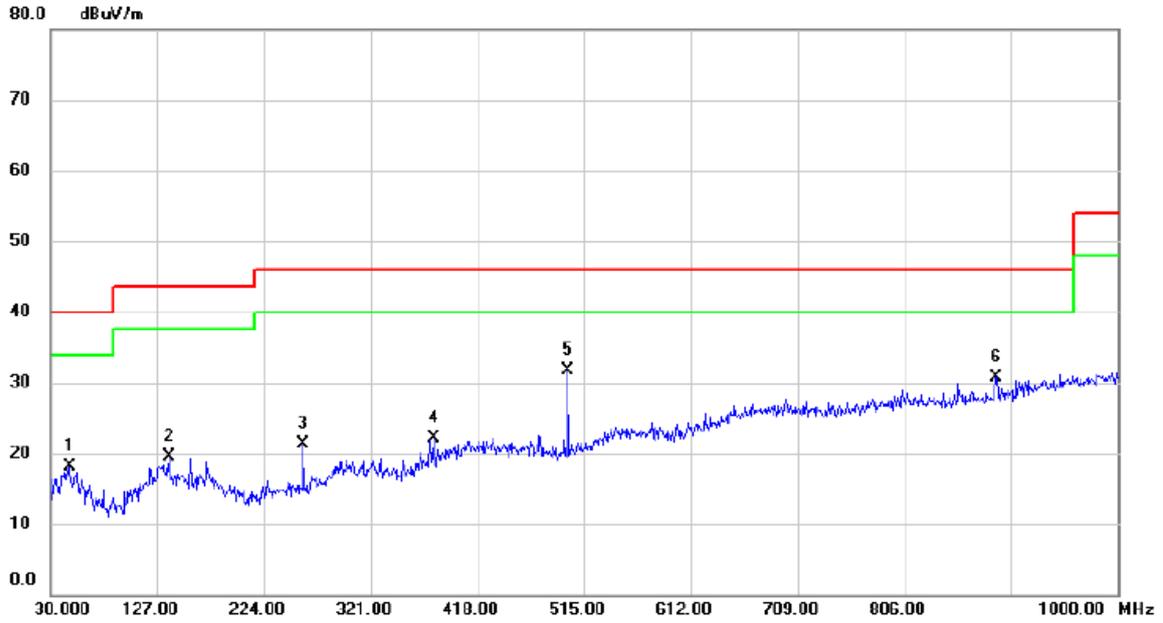
### Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 43.5800      | 43.54                    | -11.77                  | 31.77                      | 40.00           | -8.23        | QP       |         |
| 2   |     | 75.5900      | 40.15                    | -16.25                  | 23.90                      | 40.00           | -16.10       | QP       |         |
| 3   |     | 131.8500     | 32.77                    | -11.28                  | 21.49                      | 43.50           | -22.01       | QP       |         |
| 4   |     | 404.9050     | 31.43                    | -7.19                   | 24.24                      | 46.00           | -21.76       | QP       |         |
| 5   |     | 499.9650     | 34.07                    | -7.65                   | 26.42                      | 46.00           | -19.58       | QP       |         |
| 6   |     | 625.0950     | 31.69                    | -3.24                   | 28.45                      | 46.00           | -17.55       | QP       |         |

|               |  |
|---------------|--|
| Test Voltage: | AC120V/60Hz  |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The bigger antenna |

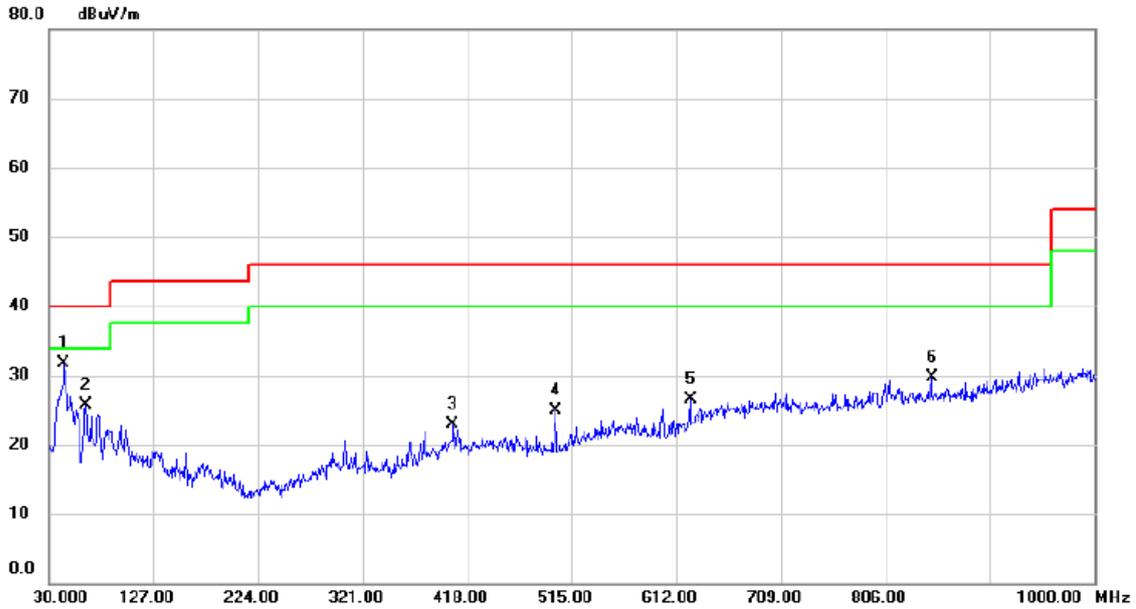
### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 46.9750      | 30.28                    | -12.26                  | 18.02                      | 40.00           | -21.98       | QP       |         |
| 2   |     | 137.6700     | 31.13                    | -11.70                  | 19.43                      | 43.50           | -24.07       | QP       |         |
| 3   |     | 259.8900     | 34.16                    | -12.90                  | 21.26                      | 46.00           | -24.74       | QP       |         |
| 4   |     | 378.2300     | 30.88                    | -8.75                   | 22.13                      | 46.00           | -23.87       | QP       |         |
| 5   | *   | 499.9650     | 39.40                    | -7.65                   | 31.75                      | 46.00           | -14.25       | QP       |         |
| 6   |     | 889.9050     | 29.31                    | 1.46                    | 30.77                      | 46.00           | -15.23       | QP       |         |

|               |   |
|---------------|---|
| Test Voltage: | AC120V/60Hz   |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The smaller antenna |

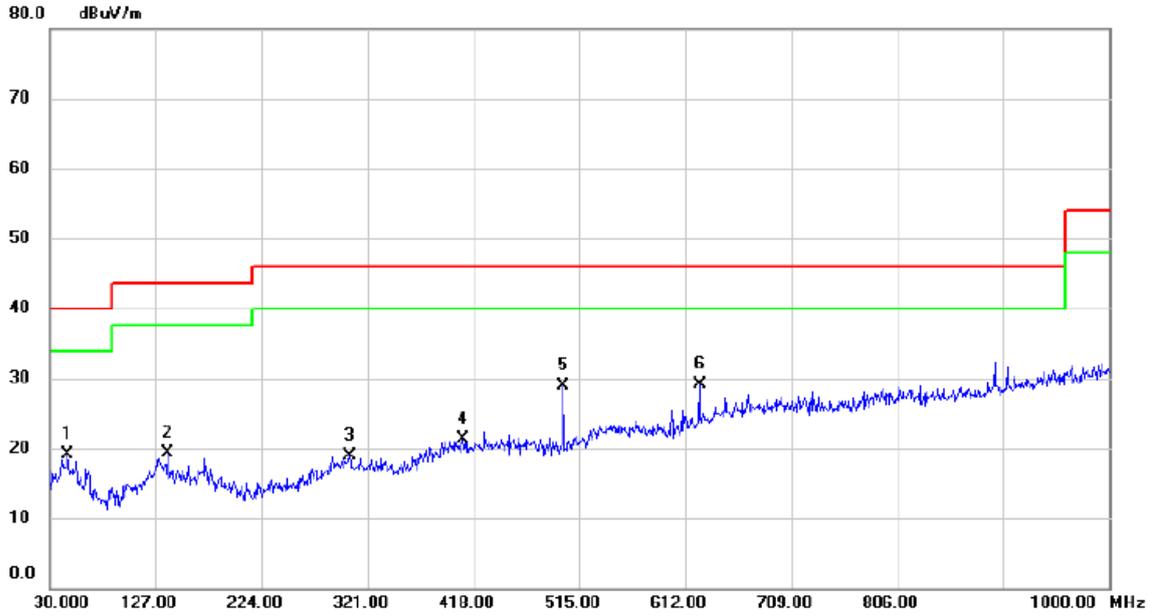
### Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   | *   | 44.0650      | 43.48                    | -11.70                  | 31.78                      | 40.00           | -8.22        | QP       |         |
| 2   |     | 63.9500      | 39.53                    | -13.85                  | 25.68                      | 40.00           | -14.32       | QP       |         |
| 3   |     | 404.9050     | 30.04                    | -7.19                   | 22.85                      | 46.00           | -23.15       | QP       |         |
| 4   |     | 499.9650     | 32.61                    | -7.65                   | 24.96                      | 46.00           | -21.04       | QP       |         |
| 5   |     | 625.0950     | 29.69                    | -3.24                   | 26.45                      | 46.00           | -19.55       | QP       |         |
| 6   |     | 848.6800     | 29.16                    | 0.60                    | 29.76                      | 46.00           | -16.24       | QP       |         |

|               |   |
|---------------|---|
| Test Voltage: | AC120V/60Hz   |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The smaller antenna |

### Horizontal

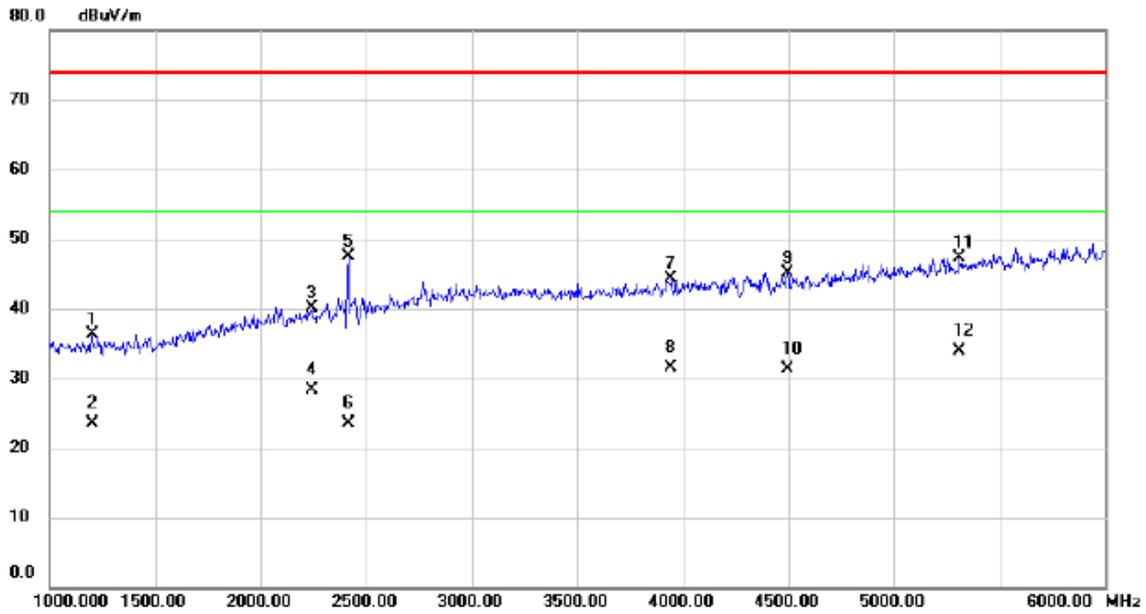


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 46.4900      | 31.18                    | -12.17                  | 19.01                      | 40.00           | -20.99       | QP       |         |
| 2   |     | 137.6700     | 31.04                    | -11.70                  | 19.34                      | 43.50           | -24.16       | QP       |         |
| 3   |     | 304.9950     | 28.92                    | -10.02                  | 18.90                      | 46.00           | -27.10       | QP       |         |
| 4   |     | 408.7850     | 28.42                    | -7.18                   | 21.24                      | 46.00           | -24.76       | QP       |         |
| 5   |     | 499.9650     | 36.46                    | -7.65                   | 28.81                      | 46.00           | -17.19       | QP       |         |
| 6   | *   | 625.0950     | 32.32                    | -3.24                   | 29.08                      | 46.00           | -16.92       | QP       |         |

**ATTACHMENT C - RADIATED EMISSION (ABOVE 1000MHZ)**

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

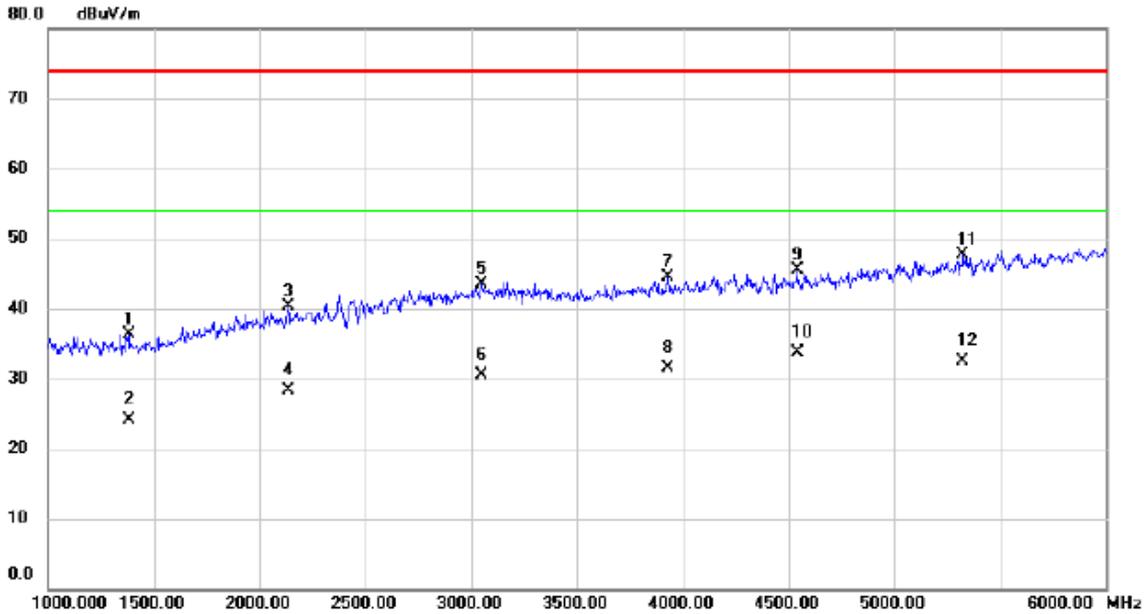
**Polarization: Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 1200.000     | 43.93                    | -7.67                   | 36.26                      | 74.00           | -37.74       | peak     |         |
| 2   |     | 1200.000     | 31.17                    | -7.67                   | 23.50                      | 54.00           | -30.50       | AVG      |         |
| 3   |     | 2240.000     | 42.34                    | -2.17                   | 40.17                      | 74.00           | -33.83       | peak     |         |
| 4   |     | 2240.000     | 30.57                    | -2.17                   | 28.40                      | 54.00           | -25.60       | AVG      |         |
| 5   |     | 2415.000     | 49.06                    | -1.53                   | 47.53                      | 74.00           | -26.47       | peak     |         |
| 6   |     | 2415.000     | 25.03                    | -1.53                   | 23.50                      | 54.00           | -30.50       | AVG      |         |
| 7   |     | 3945.000     | 41.67                    | 2.62                    | 44.29                      | 74.00           | -29.71       | peak     |         |
| 8   |     | 3945.000     | 28.98                    | 2.62                    | 31.60                      | 54.00           | -22.40       | AVG      |         |
| 9   |     | 4495.000     | 41.78                    | 3.42                    | 45.20                      | 74.00           | -28.80       | peak     |         |
| 10  |     | 4495.000     | 27.98                    | 3.42                    | 31.40                      | 54.00           | -22.60       | AVG      |         |
| 11  |     | 5310.000     | 41.00                    | 6.39                    | 47.39                      | 74.00           | -26.61       | peak     |         |
| 12  | *   | 5310.000     | 27.51                    | 6.39                    | 33.90                      | 54.00           | -20.10       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

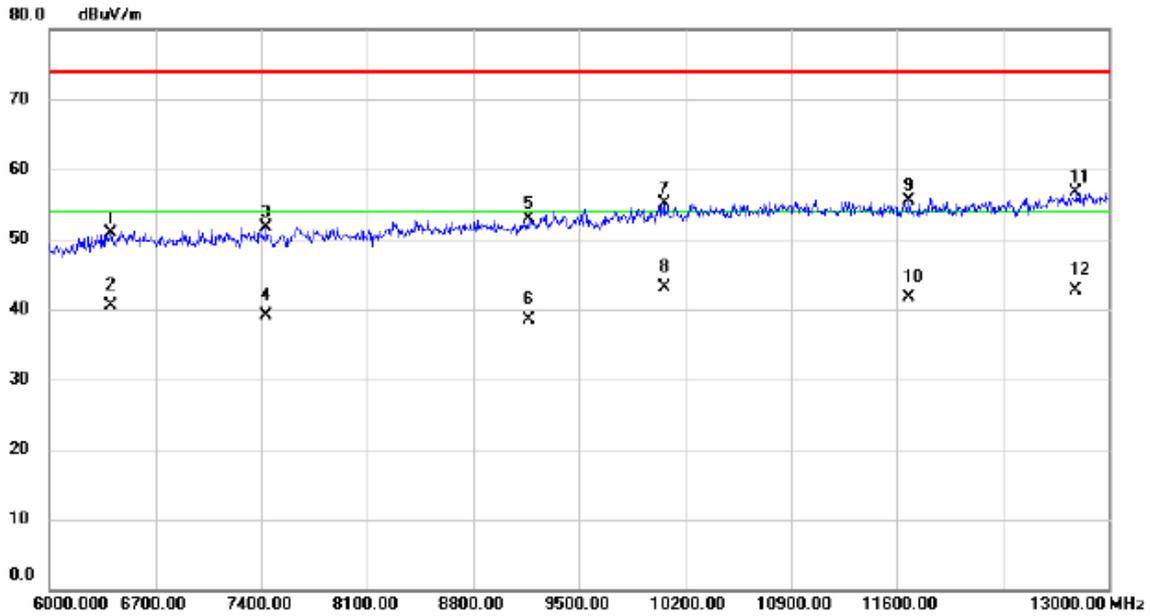
**Polarization: Horizontal**



| No. Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measurement dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|---------|-----------|--------------------|-------------------|--------------------|--------------|-----------|----------|---------|
| 1       | 1380.000  | 43.45              | -7.19             | 36.26              | 74.00        | -37.74    | peak     |         |
| 2       | 1380.000  | 31.29              | -7.19             | 24.10              | 54.00        | -29.90    | AVG      |         |
| 3       | 2135.000  | 42.79              | -2.55             | 40.24              | 74.00        | -33.76    | peak     |         |
| 4       | 2135.000  | 30.95              | -2.55             | 28.40              | 54.00        | -25.60    | AVG      |         |
| 5       | 3050.000  | 42.21              | 1.21              | 43.42              | 74.00        | -30.58    | peak     |         |
| 6       | 3050.000  | 29.39              | 1.21              | 30.60              | 54.00        | -23.40    | AVG      |         |
| 7       | 3930.000  | 41.98              | 2.57              | 44.55              | 74.00        | -29.45    | peak     |         |
| 8       | 3930.000  | 28.93              | 2.57              | 31.50              | 54.00        | -22.50    | AVG      |         |
| 9       | 4540.000  | 41.84              | 3.59              | 45.43              | 74.00        | -28.57    | peak     |         |
| 10 *    | 4540.000  | 30.11              | 3.59              | 33.70              | 54.00        | -20.30    | AVG      |         |
| 11      | 5325.000  | 41.22              | 6.44              | 47.66              | 74.00        | -26.34    | peak     |         |
| 12      | 5325.000  | 26.06              | 6.44              | 32.50              | 54.00        | -21.50    | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

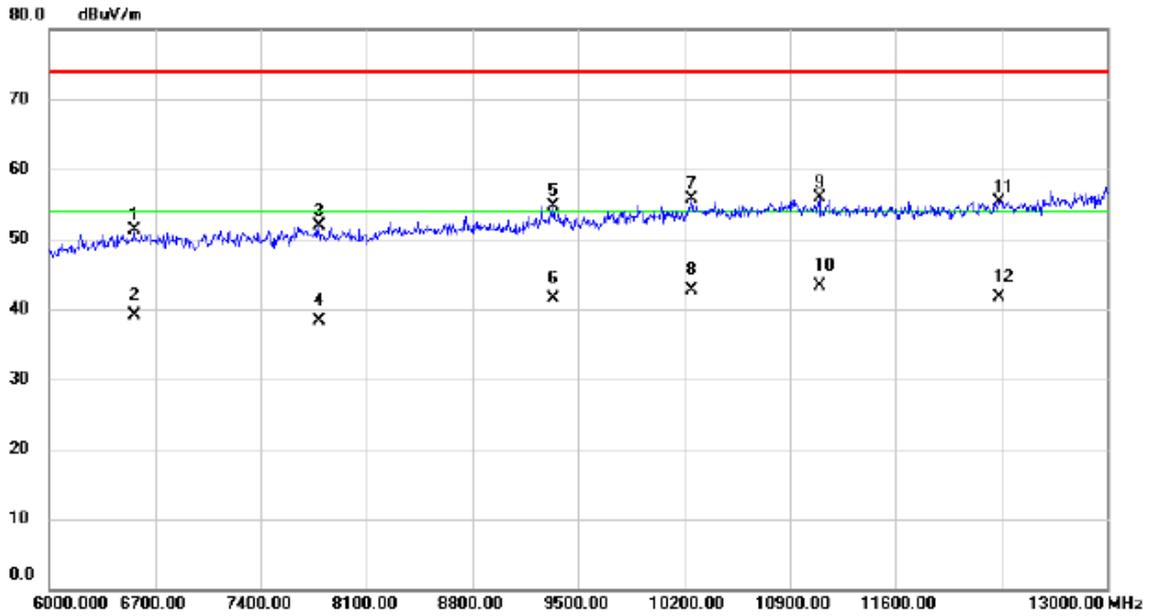
**Polarization: Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 6406.000     | 40.83                    | 10.08                   | 50.91                      | 74.00           | -23.09       | peak     |         |
| 2   |     | 6406.000     | 30.52                    | 10.08                   | 40.60                      | 54.00           | -13.40       | AVG      |         |
| 3   |     | 7435.000     | 40.76                    | 10.97                   | 51.73                      | 74.00           | -22.27       | peak     |         |
| 4   |     | 7435.000     | 28.13                    | 10.97                   | 39.10                      | 54.00           | -14.90       | AVG      |         |
| 5   |     | 9171.000     | 40.65                    | 12.32                   | 52.97                      | 74.00           | -21.03       | peak     |         |
| 6   |     | 9171.000     | 26.18                    | 12.32                   | 38.50                      | 54.00           | -15.50       | AVG      |         |
| 7   |     | 10060.000    | 41.57                    | 13.59                   | 55.16                      | 74.00           | -18.84       | peak     |         |
| 8   | *   | 10060.000    | 29.61                    | 13.59                   | 43.20                      | 54.00           | -10.80       | AVG      |         |
| 9   |     | 11677.000    | 41.11                    | 14.45                   | 55.56                      | 74.00           | -18.44       | peak     |         |
| 10  |     | 11677.000    | 27.35                    | 14.45                   | 41.80                      | 54.00           | -12.20       | AVG      |         |
| 11  |     | 12783.000    | 40.87                    | 15.93                   | 56.80                      | 74.00           | -17.20       | peak     |         |
| 12  |     | 12783.000    | 26.77                    | 15.93                   | 42.70                      | 54.00           | -11.30       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM – S/N: U75002G4C00684 |

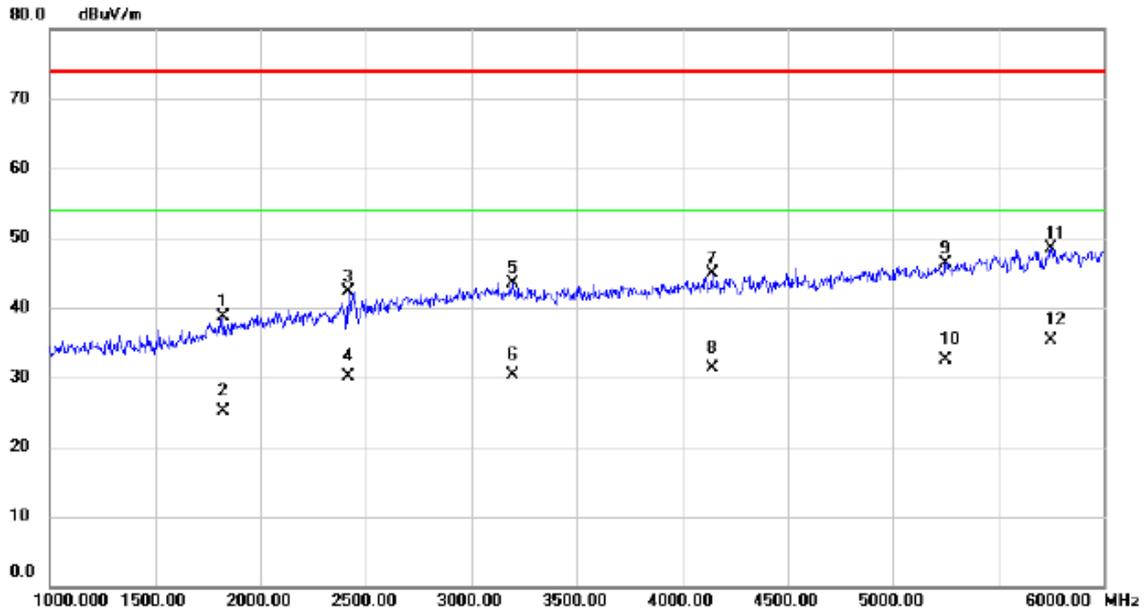
**Polarization: Horizontal**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 6560.000     | 40.94                    | 10.43                   | 51.37                      | 74.00           | -22.63       | peak     |         |
| 2   |     | 6560.000     | 28.77                    | 10.43                   | 39.20                      | 54.00           | -14.80       | AVG      |         |
| 3   |     | 7785.000     | 40.96                    | 11.01                   | 51.97                      | 74.00           | -22.03       | peak     |         |
| 4   |     | 7785.000     | 27.39                    | 11.01                   | 38.40                      | 54.00           | -15.60       | AVG      |         |
| 5   |     | 9339.000     | 42.21                    | 12.50                   | 54.71                      | 74.00           | -19.29       | peak     |         |
| 6   |     | 9339.000     | 29.10                    | 12.50                   | 41.60                      | 54.00           | -12.40       | AVG      |         |
| 7   |     | 10249.000    | 41.83                    | 13.85                   | 55.68                      | 74.00           | -18.32       | peak     |         |
| 8   |     | 10249.000    | 28.95                    | 13.85                   | 42.80                      | 54.00           | -11.20       | AVG      |         |
| 9   |     | 11096.000    | 41.03                    | 14.78                   | 55.81                      | 74.00           | -18.19       | peak     |         |
| 10  | *   | 11096.000    | 28.62                    | 14.78                   | 43.40                      | 54.00           | -10.60       | AVG      |         |
| 11  |     | 12286.000    | 40.50                    | 14.83                   | 55.33                      | 74.00           | -18.67       | peak     |         |
| 12  |     | 12286.000    | 26.97                    | 14.83                   | 41.80                      | 54.00           | -12.20       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

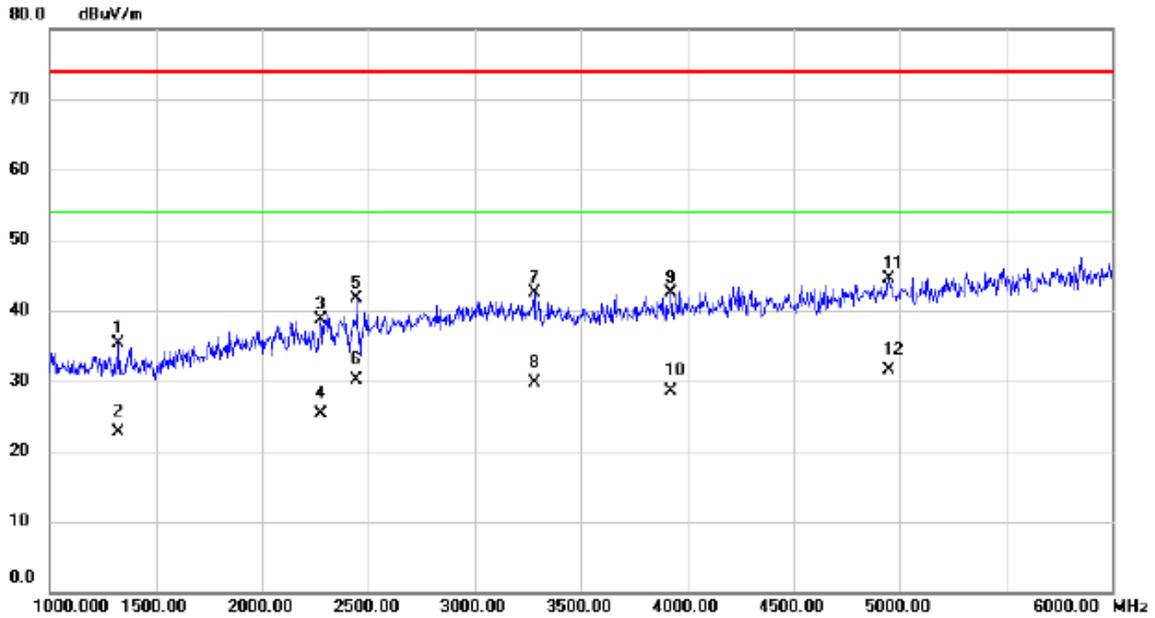
**Polarization: Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 1825.000     | 43.05                    | -4.39                   | 38.66                      | 74.00           | -35.34       | peak     |         |
| 2   |     | 1825.000     | 29.52                    | -4.39                   | 25.13                      | 54.00           | -28.87       | AVG      |         |
| 3   |     | 2415.000     | 43.92                    | -1.53                   | 42.39                      | 74.00           | -31.61       | peak     |         |
| 4   |     | 2415.000     | 31.55                    | -1.53                   | 30.02                      | 54.00           | -23.98       | AVG      |         |
| 5   |     | 3195.000     | 42.38                    | 1.18                    | 43.56                      | 74.00           | -30.44       | peak     |         |
| 6   |     | 3195.000     | 29.06                    | 1.18                    | 30.24                      | 54.00           | -23.76       | AVG      |         |
| 7   |     | 4140.000     | 41.98                    | 2.98                    | 44.96                      | 74.00           | -29.04       | peak     |         |
| 8   |     | 4140.000     | 28.24                    | 2.98                    | 31.22                      | 54.00           | -22.78       | AVG      |         |
| 9   |     | 5250.000     | 40.17                    | 6.19                    | 46.36                      | 74.00           | -27.64       | peak     |         |
| 10  |     | 5250.000     | 26.38                    | 6.19                    | 32.57                      | 54.00           | -21.43       | AVG      |         |
| 11  |     | 5750.000     | 40.82                    | 7.76                    | 48.58                      | 74.00           | -25.42       | peak     |         |
| 12  | *   | 5750.000     | 27.50                    | 7.76                    | 35.26                      | 54.00           | -18.74       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

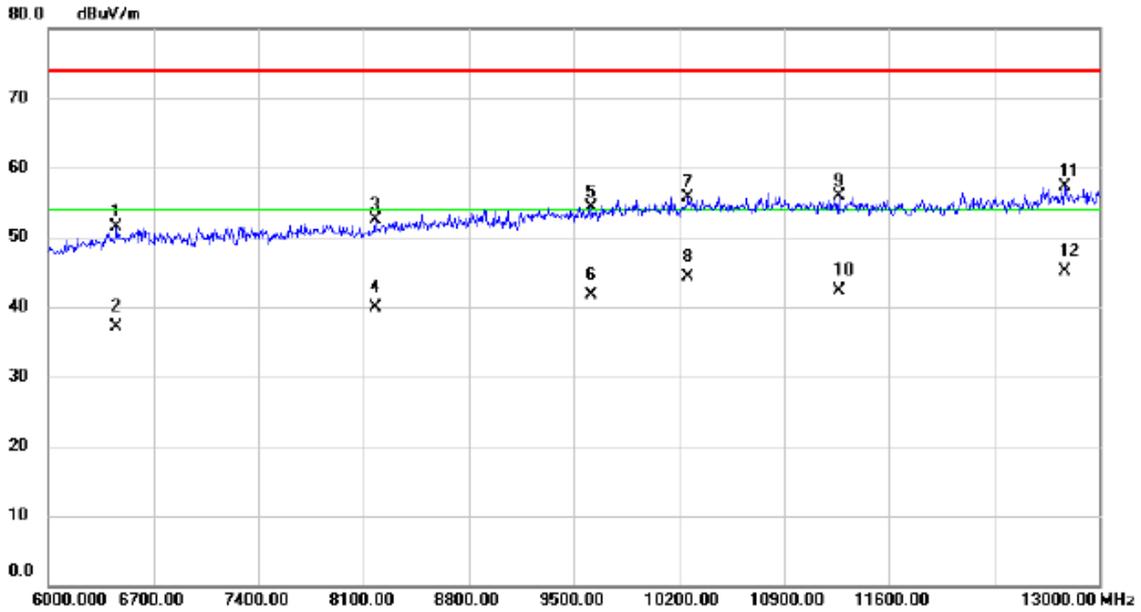
**Polarization: Horizontal**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 1325.000     | 42.67                    | -7.34                   | 35.33                      | 74.00           | -38.67       | peak     |         |
| 2   |     | 1325.000     | 30.04                    | -7.34                   | 22.70                      | 54.00           | -31.30       | AVG      |         |
| 3   |     | 2275.000     | 40.66                    | -2.04                   | 38.62                      | 74.00           | -35.38       | peak     |         |
| 4   |     | 2275.000     | 27.44                    | -2.04                   | 25.40                      | 54.00           | -28.60       | AVG      |         |
| 5   |     | 2445.000     | 43.16                    | -1.42                   | 41.74                      | 74.00           | -32.26       | peak     |         |
| 6   |     | 2445.000     | 31.52                    | -1.42                   | 30.10                      | 54.00           | -23.90       | AVG      |         |
| 7   |     | 3280.000     | 41.32                    | 1.17                    | 42.49                      | 74.00           | -31.51       | peak     |         |
| 8   |     | 3280.000     | 28.53                    | 1.17                    | 29.70                      | 54.00           | -24.30       | AVG      |         |
| 9   |     | 3925.000     | 39.92                    | 2.56                    | 42.48                      | 74.00           | -31.52       | peak     |         |
| 10  |     | 3925.000     | 25.94                    | 2.56                    | 28.50                      | 54.00           | -25.50       | AVG      |         |
| 11  |     | 4950.000     | 39.39                    | 5.19                    | 44.58                      | 74.00           | -29.42       | peak     |         |
| 12  | *   | 4950.000     | 26.41                    | 5.19                    | 31.60                      | 54.00           | -22.40       | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

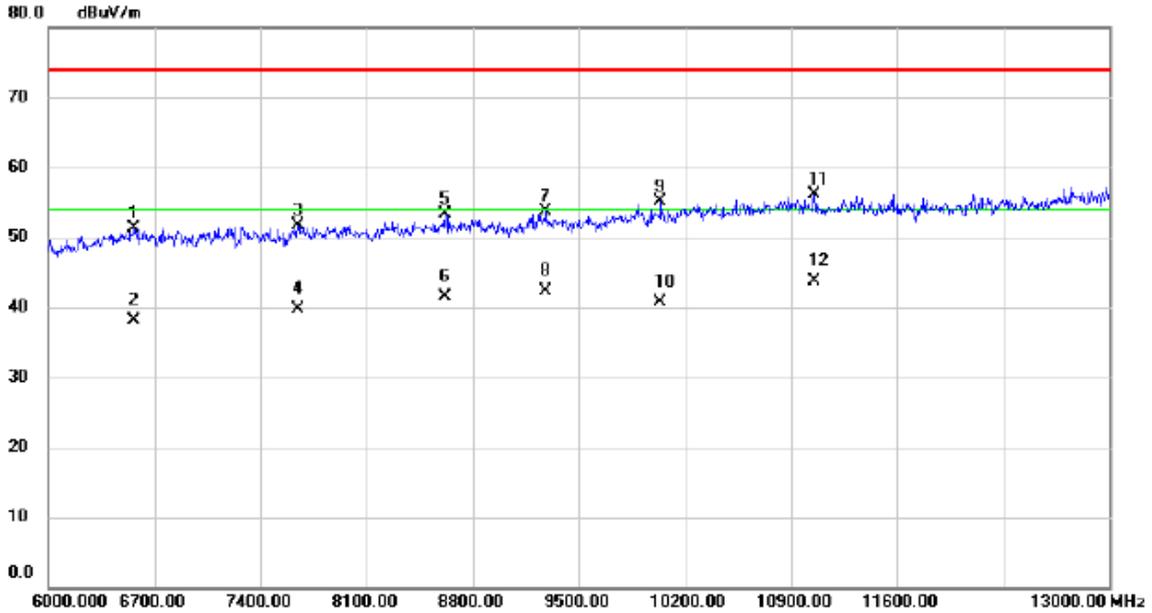
**Polarization: Vertical**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 6455.000     | 41.30                    | 10.28                   | 51.58                      | 74.00           | -22.42       | peak     |         |
| 2   |     | 6455.000     | 26.92                    | 10.28                   | 37.20                      | 54.00           | -16.80       | AVG      |         |
| 3   |     | 8177.000     | 41.19                    | 11.31                   | 52.50                      | 74.00           | -21.50       | peak     |         |
| 4   |     | 8177.000     | 28.59                    | 11.31                   | 39.90                      | 54.00           | -14.10       | AVG      |         |
| 5   |     | 9619.000     | 41.46                    | 12.87                   | 54.33                      | 74.00           | -19.67       | peak     |         |
| 6   |     | 9619.000     | 28.93                    | 12.87                   | 41.80                      | 54.00           | -12.20       | AVG      |         |
| 7   |     | 10263.000    | 41.79                    | 13.87                   | 55.66                      | 74.00           | -18.34       | peak     |         |
| 8   |     | 10263.000    | 30.43                    | 13.87                   | 44.30                      | 54.00           | -9.70        | AVG      |         |
| 9   |     | 11264.000    | 41.27                    | 14.66                   | 55.93                      | 74.00           | -18.07       | peak     |         |
| 10  |     | 11264.000    | 27.74                    | 14.66                   | 42.40                      | 54.00           | -11.60       | AVG      |         |
| 11  |     | 12769.000    | 41.33                    | 15.89                   | 57.22                      | 74.00           | -16.78       | peak     |         |
| 12  | *   | 12769.000    | 29.21                    | 15.89                   | 45.10                      | 54.00           | -8.90        | AVG      |         |

|               |                                   |
|---------------|-----------------------------------|
| Test Voltage: | AC 120V/60Hz                      |
| Test Mode:    | FULL SYSTEM - S/N: G75002C4800038 |

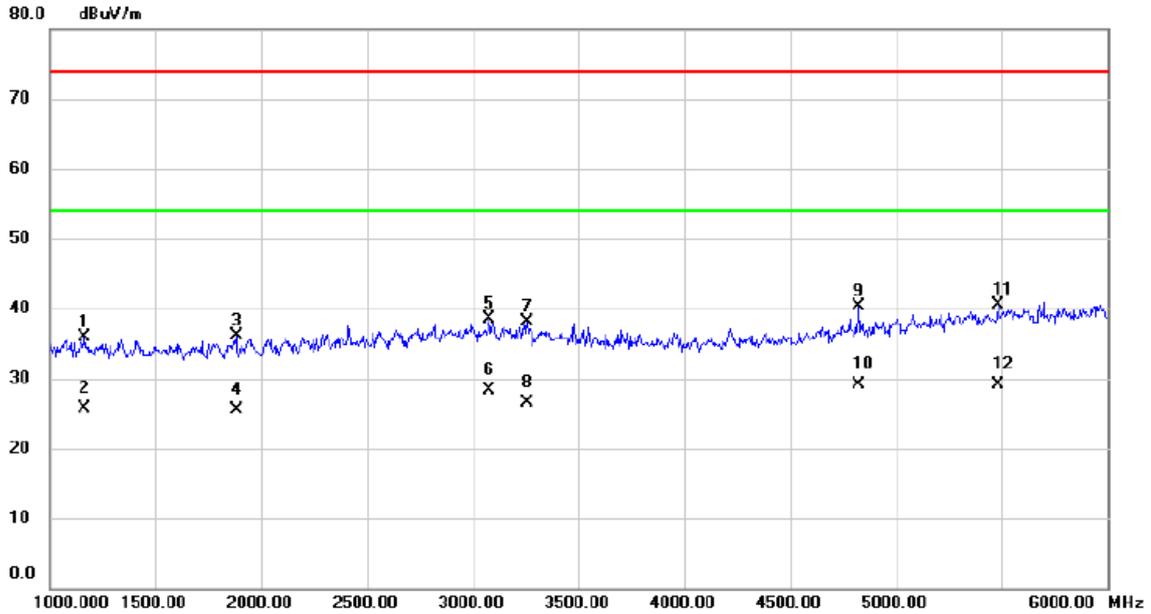
**Polarization: Horizontal**



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 6567.000     | 40.84                    | 10.44                   | 51.28                      | 74.00           | -22.72       | peak     |         |
| 2   |     | 6567.000     | 27.76                    | 10.44                   | 38.20                      | 54.00           | -15.80       | AVG      |         |
| 3   |     | 7645.000     | 40.69                    | 11.04                   | 51.73                      | 74.00           | -22.27       | peak     |         |
| 4   |     | 7645.000     | 28.76                    | 11.04                   | 39.80                      | 54.00           | -14.20       | AVG      |         |
| 5   |     | 8618.000     | 41.26                    | 12.01                   | 53.27                      | 74.00           | -20.73       | peak     |         |
| 6   |     | 8618.000     | 29.59                    | 12.01                   | 41.60                      | 54.00           | -12.40       | AVG      |         |
| 7   |     | 9283.000     | 41.26                    | 12.44                   | 53.70                      | 74.00           | -20.30       | peak     |         |
| 8   |     | 9283.000     | 29.96                    | 12.44                   | 42.40                      | 54.00           | -11.60       | AVG      |         |
| 9   |     | 10039.00     | 41.50                    | 13.56                   | 55.06                      | 74.00           | -18.94       | peak     |         |
| 10  |     | 10039.00     | 27.24                    | 13.56                   | 40.80                      | 54.00           | -13.20       | AVG      |         |
| 11  |     | 11054.00     | 41.30                    | 14.82                   | 56.12                      | 74.00           | -17.88       | peak     |         |
| 12  | *   | 11054.00     | 28.88                    | 14.82                   | 43.70                      | 54.00           | -10.30       | AVG      |         |

|               |  |
|---------------|--|
| Test Voltage: | AC120V/60Hz  |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The bigger antenna |

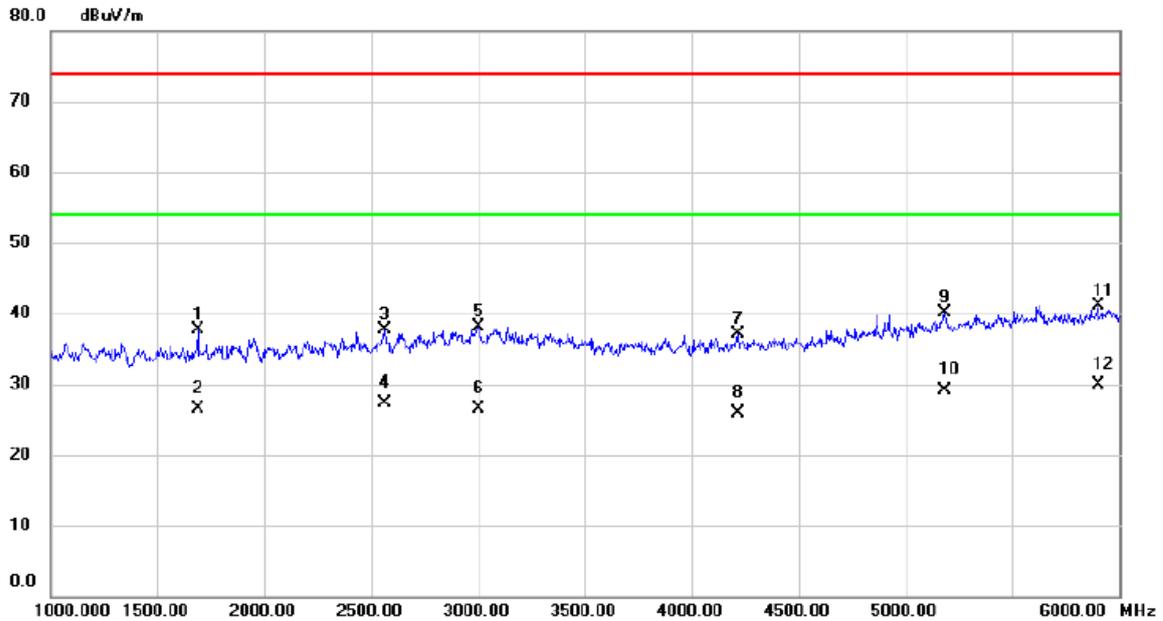
### Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 1165.000     | 42.08                    | -6.15                   | 35.93                      | 74.00           | -38.07       | peak     |         |
| 2   |     | 1165.000     | 31.85                    | -6.15                   | 25.70                      | 54.00           | -28.30       | AVG      |         |
| 3   |     | 1880.000     | 39.18                    | -3.14                   | 36.04                      | 74.00           | -37.96       | peak     |         |
| 4   |     | 1880.000     | 28.61                    | -3.14                   | 25.47                      | 54.00           | -28.53       | AVG      |         |
| 5   |     | 3077.500     | 36.17                    | 2.38                    | 38.55                      | 74.00           | -35.45       | peak     |         |
| 6   |     | 3077.500     | 25.84                    | 2.38                    | 28.22                      | 54.00           | -25.78       | AVG      |         |
| 7   |     | 3257.500     | 35.81                    | 2.33                    | 38.14                      | 74.00           | -35.86       | peak     |         |
| 8   |     | 3257.500     | 24.15                    | 2.33                    | 26.48                      | 54.00           | -27.52       | AVG      |         |
| 9   |     | 4825.000     | 34.80                    | 5.46                    | 40.26                      | 74.00           | -33.74       | peak     |         |
| 10  |     | 4825.000     | 23.55                    | 5.46                    | 29.01                      | 54.00           | -24.99       | AVG      |         |
| 11  |     | 5480.000     | 32.50                    | 7.94                    | 40.44                      | 74.00           | -33.56       | peak     |         |
| 12  | *   | 5480.000     | 21.26                    | 7.94                    | 29.20                      | 54.00           | -24.80       | AVG      |         |

|               |  |
|---------------|--|
| Test Voltage: | AC120V/60Hz  |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The bigger antenna |

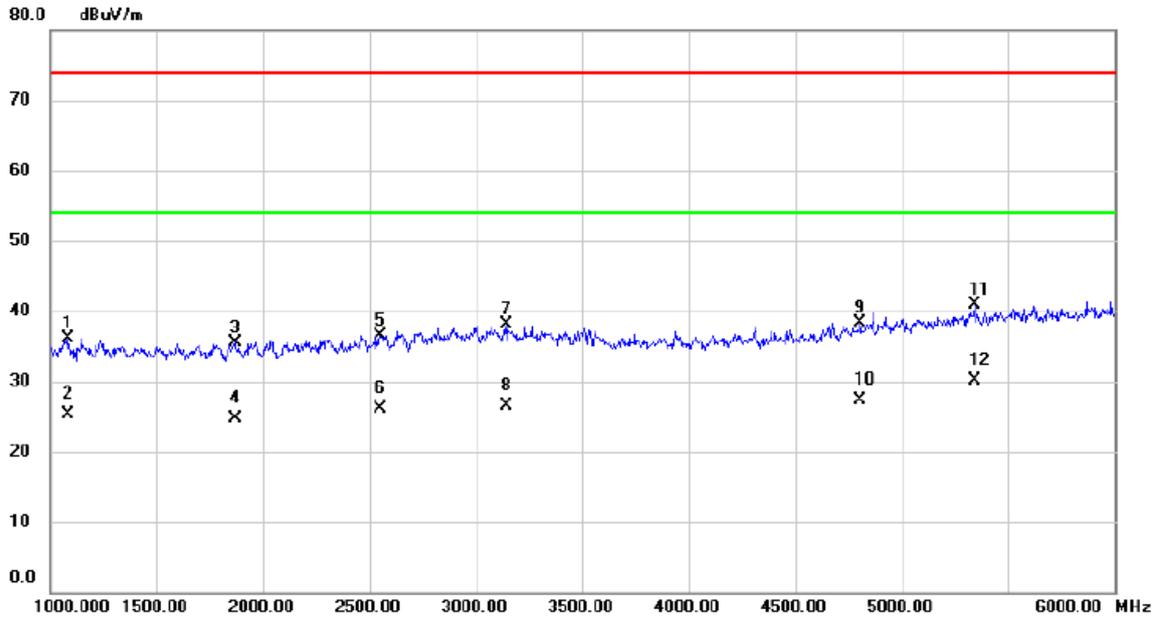
### Horizontal



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     |          |         |
| 1   |     | 1687.500 | 41.77         | -4.06          | 37.71       | 74.00  | -36.29 | peak     |         |
| 2   |     | 1687.500 | 30.51         | -4.06          | 26.45       | 54.00  | -27.55 | AVG      |         |
| 3   |     | 2560.000 | 37.34         | 0.43           | 37.77       | 74.00  | -36.23 | peak     |         |
| 4   |     | 2560.000 | 26.81         | 0.43           | 27.24       | 54.00  | -26.76 | AVG      |         |
| 5   |     | 3002.500 | 35.75         | 2.40           | 38.15       | 74.00  | -35.85 | peak     |         |
| 6   |     | 3002.500 | 24.15         | 2.40           | 26.55       | 54.00  | -27.45 | AVG      |         |
| 7   |     | 4215.000 | 33.90         | 3.22           | 37.12       | 74.00  | -36.88 | peak     |         |
| 8   |     | 4215.000 | 22.68         | 3.22           | 25.90       | 54.00  | -28.10 | AVG      |         |
| 9   |     | 5182.500 | 33.10         | 6.93           | 40.03       | 74.00  | -33.97 | peak     |         |
| 10  |     | 5182.500 | 22.13         | 6.93           | 29.06       | 54.00  | -24.94 | AVG      |         |
| 11  |     | 5900.000 | 32.67         | 8.37           | 41.04       | 74.00  | -32.96 | peak     |         |
| 12  | *   | 5900.000 | 21.47         | 8.37           | 29.84       | 54.00  | -24.16 | AVG      |         |

|               |   |
|---------------|---|
| Test Voltage: | AC120V/60Hz   |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The smaller antenna |

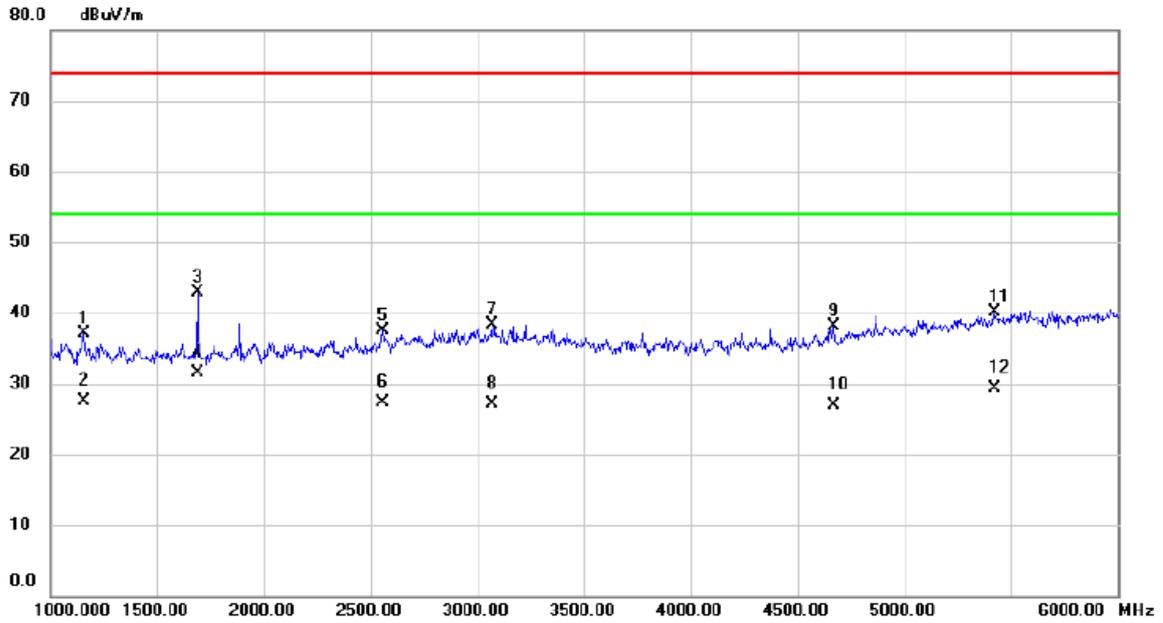
### Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 1082.500     | 42.58                    | -6.44                   | 36.14                      | 74.00           | -37.86       | peak     |         |
| 2   |     | 1082.500     | 31.84                    | -6.44                   | 25.40                      | 54.00           | -28.60       | AVG      |         |
| 3   |     | 1867.500     | 38.62                    | -3.20                   | 35.42                      | 74.00           | -38.58       | peak     |         |
| 4   |     | 1867.500     | 27.86                    | -3.20                   | 24.66                      | 54.00           | -29.34       | AVG      |         |
| 5   |     | 2552.500     | 36.11                    | 0.41                    | 36.52                      | 74.00           | -37.48       | peak     |         |
| 6   |     | 2552.500     | 25.64                    | 0.41                    | 26.05                      | 54.00           | -27.95       | AVG      |         |
| 7   |     | 3145.000     | 35.80                    | 2.36                    | 38.16                      | 74.00           | -35.84       | peak     |         |
| 8   |     | 3145.000     | 24.15                    | 2.36                    | 26.51                      | 54.00           | -27.49       | AVG      |         |
| 9   |     | 4802.500     | 32.89                    | 5.35                    | 38.24                      | 74.00           | -35.76       | peak     |         |
| 10  |     | 4802.500     | 21.94                    | 5.35                    | 27.29                      | 54.00           | -26.71       | AVG      |         |
| 11  |     | 5340.000     | 33.44                    | 7.47                    | 40.91                      | 74.00           | -33.09       | peak     |         |
| 12  | *   | 5340.000     | 22.63                    | 7.47                    | 30.10                      | 54.00           | -23.90       | AVG      |         |

|               |   |
|---------------|---|
| Test Voltage: | AC120V/60Hz   |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The smaller antenna |

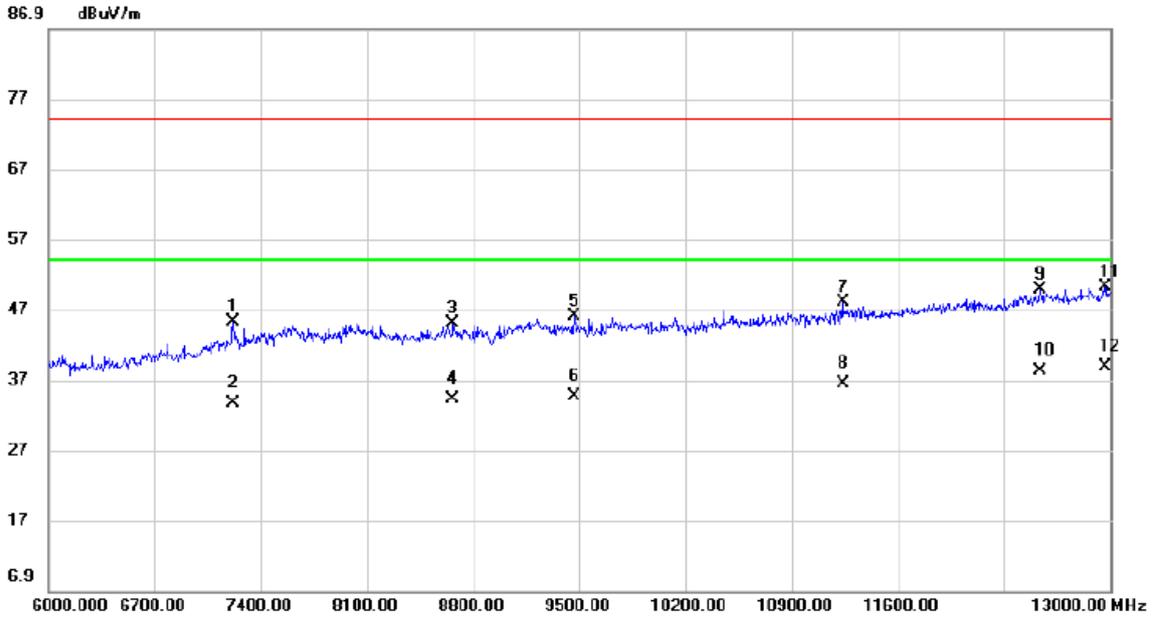
### Horizontal



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Margin | Detector | Comment |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------|---------|
|     |     | MHz      | dBuV          | dB             | dBuV/m      | dBuV/m | dB     |          |         |
| 1   |     | 1155.000 | 43.22         | -6.18          | 37.04       | 74.00  | -36.96 | peak     |         |
| 2   |     | 1155.000 | 33.59         | -6.18          | 27.41       | 54.00  | -26.59 | AVG      |         |
| 3   |     | 1687.500 | 46.89         | -4.06          | 42.83       | 74.00  | -31.17 | peak     |         |
| 4   | *   | 1687.500 | 35.57         | -4.06          | 31.51       | 54.00  | -22.49 | AVG      |         |
| 5   |     | 2555.000 | 37.10         | 0.41           | 37.51       | 74.00  | -36.49 | peak     |         |
| 6   |     | 2555.000 | 26.82         | 0.41           | 27.23       | 54.00  | -26.77 | AVG      |         |
| 7   |     | 3072.500 | 35.98         | 2.38           | 38.36       | 74.00  | -35.64 | peak     |         |
| 8   |     | 3072.500 | 24.81         | 2.38           | 27.19       | 54.00  | -26.81 | AVG      |         |
| 9   |     | 4672.500 | 33.30         | 4.72           | 38.02       | 74.00  | -35.98 | peak     |         |
| 10  |     | 4672.500 | 22.15         | 4.72           | 26.87       | 54.00  | -27.13 | AVG      |         |
| 11  |     | 5425.000 | 32.33         | 7.76           | 40.09       | 74.00  | -33.91 | peak     |         |
| 12  |     | 5425.000 | 21.57         | 7.76           | 29.33       | 54.00  | -24.67 | AVG      |         |

|               |   |
|---------------|---|
| Test Voltage: | AC120V/60Hz   |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The smaller antenna |

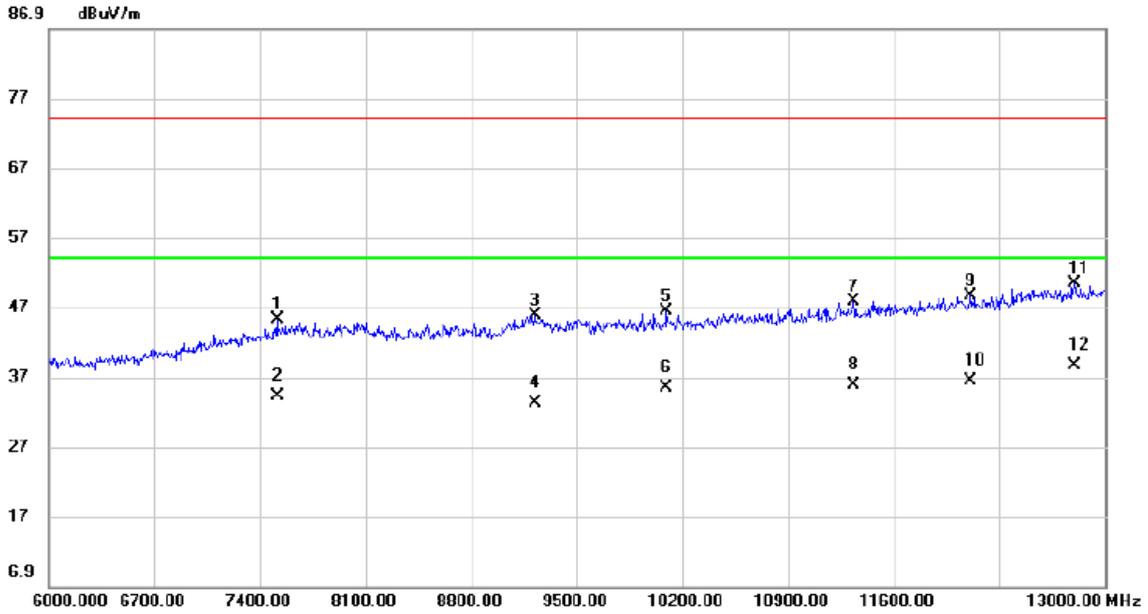
### Vertical



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 7218.000     | 35.40                    | 9.78                    | 45.18                      | 74.00           | -28.82       | peak     |         |
| 2   |     | 7218.000     | 23.76                    | 9.78                    | 33.54                      | 54.00           | -20.46       | AVG      |         |
| 3   |     | 8667.000     | 33.63                    | 11.42                   | 45.05                      | 74.00           | -28.95       | peak     |         |
| 4   |     | 8667.000     | 22.80                    | 11.42                   | 34.22                      | 54.00           | -19.78       | AVG      |         |
| 5   |     | 9465.000     | 33.31                    | 12.79                   | 46.10                      | 74.00           | -27.90       | peak     |         |
| 6   |     | 9465.000     | 21.78                    | 12.79                   | 34.57                      | 54.00           | -19.43       | AVG      |         |
| 7   |     | 11236.00     | 32.90                    | 15.15                   | 48.05                      | 74.00           | -25.95       | peak     |         |
| 8   |     | 11236.00     | 21.33                    | 15.15                   | 36.48                      | 54.00           | -17.52       | AVG      |         |
| 9   |     | 12538.00     | 33.94                    | 15.89                   | 49.83                      | 74.00           | -24.17       | peak     |         |
| 10  |     | 12538.00     | 22.34                    | 15.89                   | 38.23                      | 54.00           | -15.77       | AVG      |         |
| 11  |     | 12965.00     | 33.68                    | 16.56                   | 50.24                      | 74.00           | -23.76       | peak     |         |
| 12  | *   | 12965.00     | 22.18                    | 16.56                   | 38.74                      | 54.00           | -15.26       | AVG      |         |

|               |   |
|---------------|---|
| Test Voltage: | AC120V/60Hz   |
| Test Mode:    | FULL SYSTEM - S/N: U75002G4501553 - The smaller antenna |

### Horizontal



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1   |     | 7512.000     | 34.89                    | 10.35                   | 45.24                      | 74.00           | -28.76       | peak     |         |
| 2   |     | 7512.000     | 23.92                    | 10.35                   | 34.27                      | 54.00           | -19.73       | AVG      |         |
| 3   |     | 9220.000     | 33.37                    | 12.37                   | 45.74                      | 74.00           | -28.26       | peak     |         |
| 4   |     | 9220.000     | 20.89                    | 12.37                   | 33.26                      | 54.00           | -20.74       | AVG      |         |
| 5   |     | 10095.000    | 33.18                    | 13.21                   | 46.39                      | 74.00           | -27.61       | peak     |         |
| 6   |     | 10095.000    | 22.20                    | 13.21                   | 35.41                      | 54.00           | -18.59       | AVG      |         |
| 7   |     | 11334.000    | 32.45                    | 15.30                   | 47.75                      | 74.00           | -26.25       | peak     |         |
| 8   |     | 11334.000    | 20.48                    | 15.30                   | 35.78                      | 54.00           | -18.22       | AVG      |         |
| 9   |     | 12111.000    | 33.27                    | 15.33                   | 48.60                      | 74.00           | -25.40       | peak     |         |
| 10  |     | 12111.000    | 21.13                    | 15.33                   | 36.46                      | 54.00           | -17.54       | AVG      |         |
| 11  |     | 12797.000    | 34.08                    | 16.30                   | 50.38                      | 74.00           | -23.62       | peak     |         |
| 12  | *   | 12797.000    | 22.35                    | 16.30                   | 38.65                      | 54.00           | -15.35       | AVG      |         |