

# TEST REPORT

## CERTIFICATE OF CONFORMITY

**Standard:** ICES-003:2020 Issue 7, Class B

ICES-Gen:2018 Issue 1+A1:2021

ANSI C63.4-2014 amended as per ANSI C63.4a-2017

**Report No.:** CIBEJM-WTW-P22030263A

**Model No.:** FD9380-HNWL

**Series Model:** FD9380-H

**Received Date:** Jan. 24, 2019

**Test Date:** Jan. 30 to 31, 2019

**Issued Date:** Sep. 12, 2022

**Applicant:** VIVOTEK INC.

**Address:** 6F, No.192, Lien-Cheng Rd., Chung-Ho, New Taipei City, 235, Taiwan, R.O.C.

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Approved by:** Jim Hsiang, **Date:** Sep. 12, 2022  
Jim Hsiang / Associate Technical Manager

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Prepared by : Celia Chen / Supervisor



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## Release Control Record

| Issue No.             | Description       | Date Issued   |
|-----------------------|-------------------|---------------|
| CIBEJM-WTW-P22030263A | Original release. | Sep. 12, 2022 |

## 1 Certificate

**Product:** Network Camera

**Brand:** VIVOTEK

**Test Model:** FD9380-HNWL

**Variant Model:** FD9380-H

**Sample Status:** Engineering sample

**Applicant:** VIVOTEK INC.

**Test Date:** Jan. 30 to 31, 2019

**Standard:** ICES-003:2020 Issue 7, Class B  
ICES-Gen:2018 Issue 1+A1:2021  
ANSI C63.4-2014 amended as per ANSI C63.4a-2017

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

## 2 Summary of Test Results

The test items that the EUT need to perform in accordance with its interfaces, evaluated functions, are as follows:

| Standard | Test Item                            | Result | Remark   |
|----------|--------------------------------------|--------|--|
| ICES-003 | Conducted Emissions from Power Ports | Pass   | Minimum passing Class B margin is -5.77 dB at 24.41797 MHz |
| ICES-003 | Radiated Emissions up to 1 GHz       | Pass   | Minimum passing Class B margin is -3.07 dB at 168.00 MHz   |
| ICES-003 | Radiated Emissions above 1 GHz       | Pass   | Minimum passing Class B margin is -14.76 dB at 1250.13 MHz |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

### 2.1 Measurement Uncertainty

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

| Measurement                          | Specification     | Expanded Uncertainty (k=2) (±) | Maximum allowable uncertainty (±) |
|--------------------------------------|-------------------|--------------------------------|-----------------------------------|
| Conducted Emissions from Power Ports | 150 kHz ~ 30 MHz  | 2.79 dB                        | 3.4 dB ( $U_{\text{CISPR}}$ )     |
| Radiated Emissions up to 1 GHz       | 30 MHz ~ 1000 MHz | 3.97 dB                        | 6.3 dB ( $U_{\text{CISPR}}$ )     |
|                                      | 1 GHz ~ 6 GHz     | 4.77 dB                        | 5.2 dB ( $U_{\text{CISPR}}$ )     |
|                                      | 6 GHz ~ 18 GHz    | 5.48 dB                        | 5.5 dB ( $U_{\text{CISPR}}$ )     |

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

### 2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

### 3 General Information

#### 3.1 Description of EUT

|                     |   |
|---------------------|---|
| Product             | Network Camera  |
| Brand               | VIVOTEK   |
| Model No.           | FD9380-HNWL   |
| Series Model        | FD9380-H  |
| Model Difference    | Refer to below note                                       |
| Sample Status       | Engineering sample  |
| Operating Software  | N/A   |
| Power Supply Rating | DC 12V or PoE   |
| Accessory Device    | N/A   |
| Data Cable Supplied | Shielded Y cable (LAN + DC) with one ferrite core. (0.3m) |

Note:

1. It has been confirmed the original test report (Report no.: FD190124D02 R1) issued per ICES-003 Issue 6 is still valid for complying with ICES-003 Issue 7. Due to the radiated emission limit (30 MHz to 1 GHz) in ICES-003 Issue 7 is changed and relaxation than version ICES-003 Issue 6. Therefore, there is no additional test has to be performed. All test data were copied from the original test report (Report No.: FD190124D02 R1). And all data were verified to meet the requirement.
2. The EUT is a Network Camera, and it has several models, which are identical with each other, except for following difference:

| Model       | Power supply rating |
|-------------|---------------------|
| FD9380-HNWL | DC 12V or PoE       |
| FD9380-H    | PoE only            |

During the test, the **Model: FD9380-HNWL** was selected as the representative one and therefore only its test data was recorded in this report.

#### 3.2 Features of EUT

The tests reported herein were performed according to the method specified by VIVOTEK INC., for detailed feature description, please refer to the manufacturer's specifications or user's manual.

### 3.3 Operating Modes of EUT and Determination of Worst Case Operating Mode

1. EUT has been pre-tested under following test modes, and test **mode 2** was the worst case.

| Mode | Test Condition |
|------|----------------|
| 1    | Adapter Mode   |
| 2    | PoE Mode       |

2. Test modes are presented in the report as below.

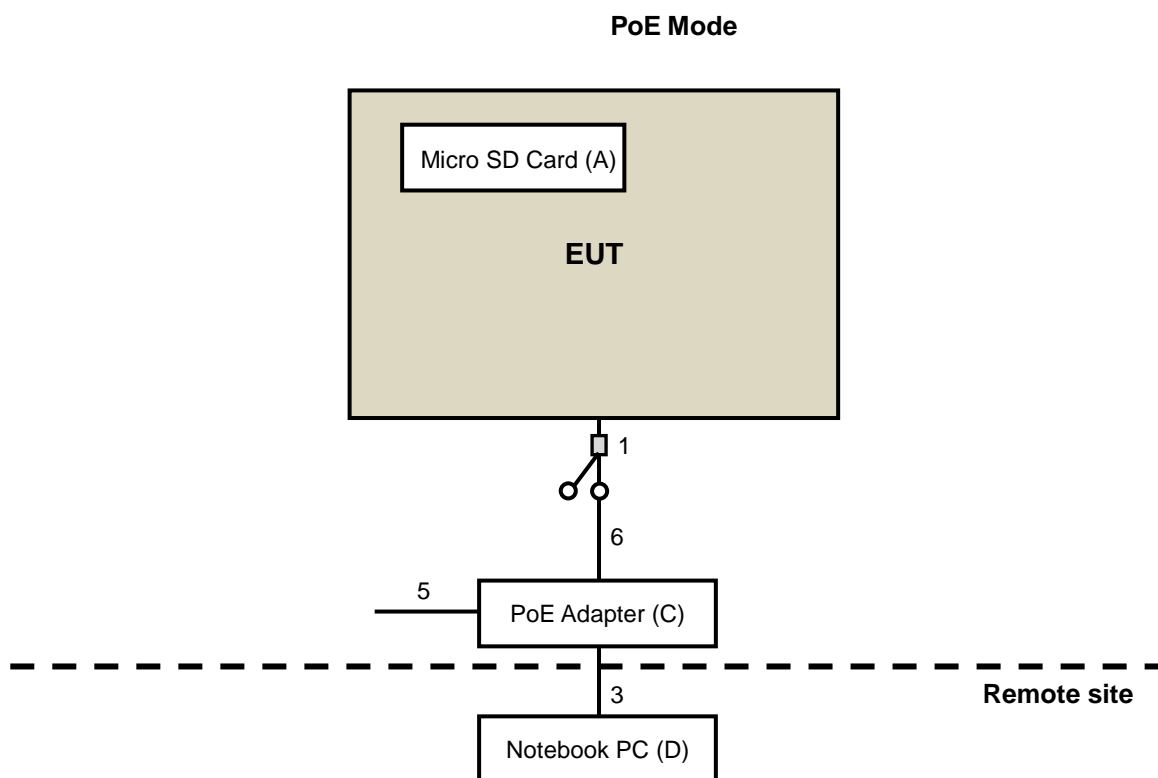
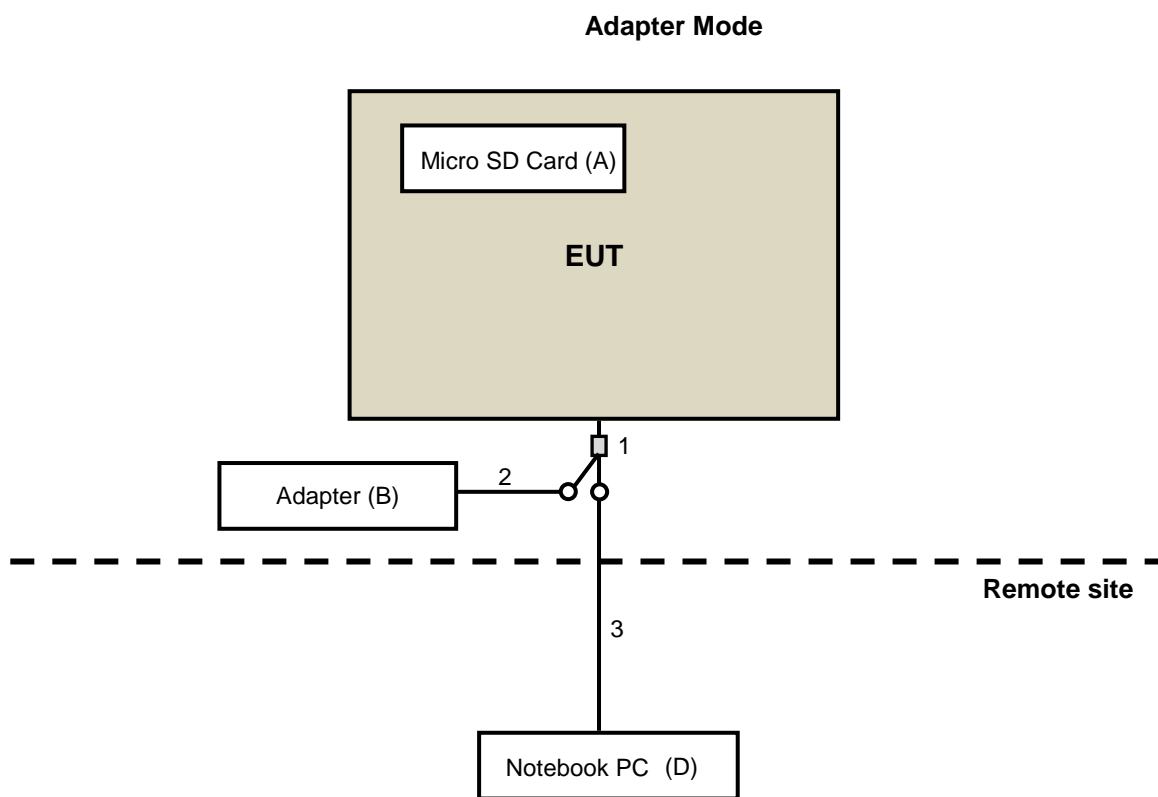
| Mode                           | Test Condition | Input Power |
|--------------------------------|----------------|-------------|
| <b>Conducted emission test</b> |                |             |
| 1                              | Adapter Mode   | 12Vdc       |
| 2                              | PoE Mode       | 55Vdc       |
| <b>Radiated emission test</b>  |                |             |
| 1                              | Adapter Mode   | 12Vdc       |
| 2                              | PoE Mode       | 55Vdc       |

### 3.4 Test Program Used and Operation Descriptions

- a. Connected the EUT with Adapter or PoE adapter.
- b. Turned on the power of all equipment.
- c. EUT captured video / audio signal to notebook (kept in a remote area) via an UTP LAN cable, then it displayed messages on its screen simultaneously. **<For Adapter Mode >**
- d. EUT captured video / audio signal to notebook (kept in a remote area) via PoE adapter with an UTP LAN cable, then it displayed messages on its screen simultaneously. **<For PoE Mode>**
- e. EUT Save images to Micro SD card.
- f. Steps c-e were repeated.

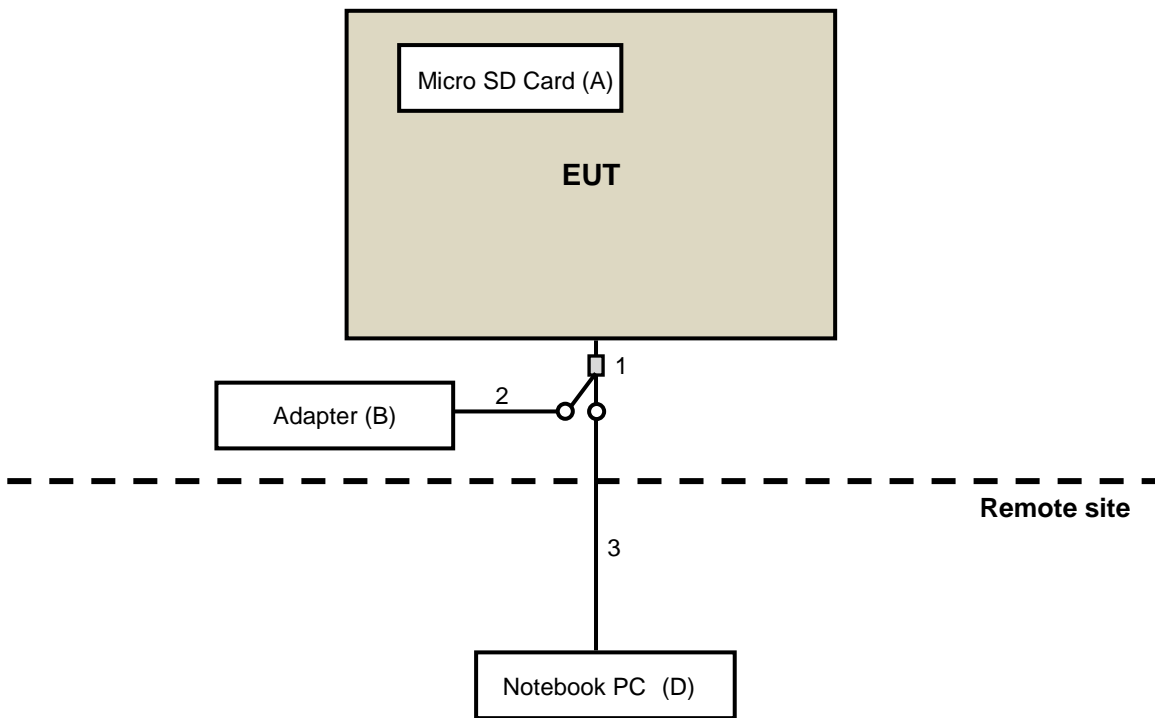
### 3.5 Connection Diagram of EUT and Peripheral Devices

#### Conducted emission test

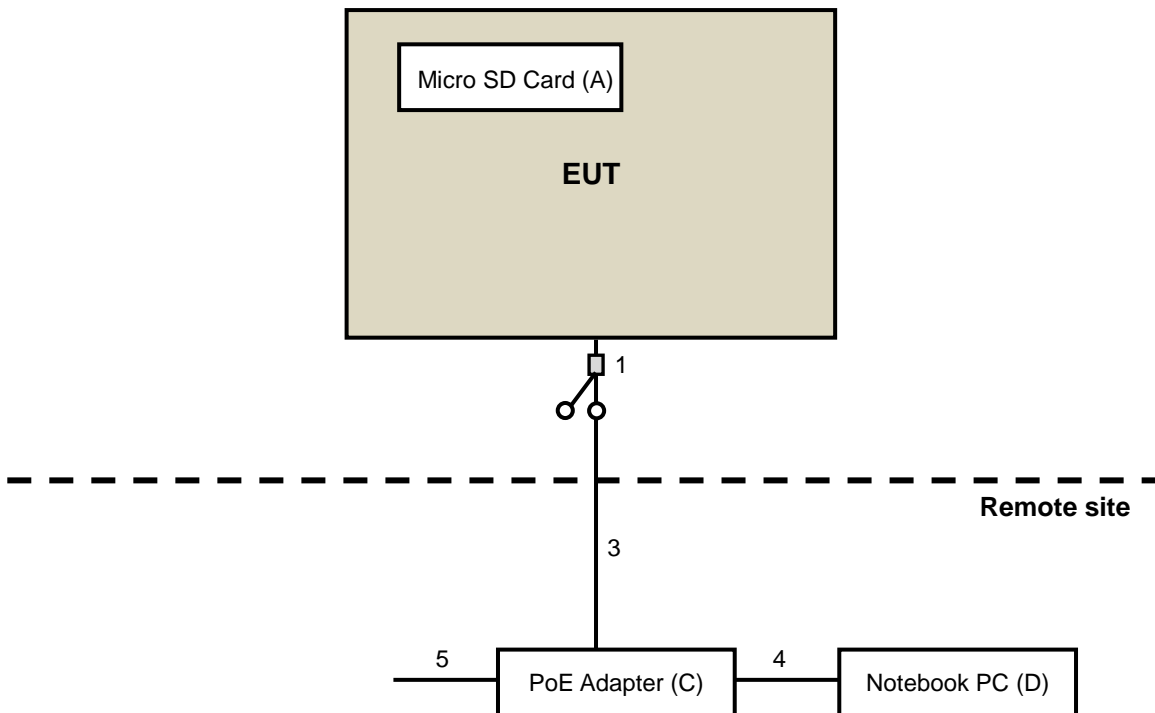


**Radiated emission test**

**Adapter Mode**



**PoE Mode**



### 3.6 Configuration of Peripheral Devices and Cable Connections

| ID | Product       | Brand     | Model No.       | Serial No.          | FCC ID           | Remarks               |
|----|---------------|-----------|-----------------|---------------------|------------------|-----------------------|
| A. | Micro SD Card | Transcend | 16GB            | N/A                 | N/A              | Provided by Lab       |
| B. | Adapter       | Atech OEM | ADS018K-X120150 | N/A                 | N/A              | Supplied by applicant |
| C. | PoE Adapter   | Microsemi | PD-9001GR       | N/A                 | N/A              | Supplied by applicant |
| D. | Notebook PC   | ASUS      | PU401L          | ECNXBC012528<br>528 | FCC DoC Approved | Provided by Lab       |

Note:

- All power cords of the above support units are non-shielded (1.8m).
- Items D acted as communication partners to transfer data.
- Rating of item B was listed as below:  
AC I/P: 100-240V, 50-60Hz, 0.5A  
DC O/P: 12V, 1.5A
- Rating of item C was listed as below:  
AC I/P: 100-240V, 50/60Hz, 0.67A  
DC O/P: 55V, 0.6A

| ID | Descriptions       | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks               |
|----|--------------------|------|------------|--------------------|--------------|-----------------------|
| 1. | Y cable (LAN + DC) | 1    | 0.3        | Y                  | 1            | Supplied by applicant |
| 2. | DC cable           | 1    | 1.5        | N                  | 0            | Supplied by applicant |
| 3. | LAN cable (Cat.5e) | 1    | 10         | N                  | 0            | Provided by Lab       |
| 4. | LAN cable (Cat.5e) | 1    | 1.0        | N                  | 0            | Provided by Lab       |
| 5. | AC power cord      | 1    | 1.8        | N                  | 0            | Supplied by applicant |
| 6. | LAN cable (Cat.5e) | 1    | 1.8        | N                  | 0            | Provided by Lab       |

Note: The core(s) is(are) originally attached to the cable(s).

## 4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

### 4.1 Conducted Emissions from Power Ports

| Description & Manufacturer                                    | Model No.     | Serial No.   | Cal. Date     | Cal. Due      |
|---|---------------|--------------|---------------|---------------|
| ROHDE & SCHWARZ<br>TEST RECEIVER                              | ESR3          | 102413       | Feb. 8, 2018  | Feb. 7, 2019  |
| ROHDE & SCHWARZ Artificial Mains<br>Network (for EUT)         | ESH2-Z5       | 100104       | Dec. 18, 2018 | Dec. 17, 2019 |
| LISN With Adapter (for EUT)                                   | AD10          | C09Ada-001   | Dec. 18, 2018 | Dec. 17, 2019 |
| ROHDE & SCHWARZ Artificial Mains<br>Network (for peripherals) | ESH3-Z5       | 847265/023   | Nov. 5, 2018  | Nov. 4, 2019  |
| SCHWARZBECK<br>Artificial Mains Network (For EUT)             | NNLK8129      | 8129229      | May 3, 2018   | May 2, 2019   |
| SCHWARZBECK<br>Artificial Mains Network (For EUT)             | NNLK 8121     | 8121-808     | Mar. 5, 2018  | Mar. 4, 2019  |
| Software  | Cond_V7.3.7.4 | NA           | NA            | NA            |
| RF cable (JYEBAO)<br>With 10dB PAD                            | 5D-FB         | Cable-C09.01 | Feb. 21, 2018 | Feb. 20, 2019 |
| SUHNER Terminator<br>(For ROHDE & SCHWARZ LISN)               | 65BNC-5001    | E1-010789    | May 8, 2018   | May 7, 2019   |

- Notes:
1. The test was performed in Shielded Room No. 9.
  2. The VCCI Site Registration No. C-1312.
  3. Tested Date: Jan. 31, 2019.

### 4.2 Radiated Emissions up to 1 GHz

| Description & Manufacturer       | Model No.            | Serial No.   | Cal. Date     | Cal. Due      |
|----------------------------------|----------------------|--------------|---------------|---------------|
| ROHDE & SCHWARZ<br>TEST RECEIVER | ESCS 30              | 100291       | Sep. 3, 2018  | Sep. 2, 2019  |
| Schwarzbeck<br>Bilog Antenna     | VULB9168             | 9168-303     | Nov. 22, 2018 | Nov. 21, 2019 |
| Agilent Preamplifier             | 8447D                | 2944A08119   | Feb. 21, 2018 | Feb. 20, 2019 |
| ADT. Turn Table                  | TT100                | 0205         | NA            | NA            |
| ADT. Tower                       | AT100                | 0205         | NA            | NA            |
| Software                         | Radiated_V7.6.15.9.5 | NA           | NA            | NA            |
| ADT RF Switches BOX              | EMH-011              | 1001         | Oct. 25, 2018 | Oct. 24, 2019 |
| Pacific RF cable<br>With 5dB PAD | 8D                   | CABLE-ST2-01 | Oct. 25, 2018 | Oct. 24, 2019 |

- Notes:
1. The test was performed in Open Site No. 2.
  2. The VCCI Site Registration No. R-237.
  3. Tested Date: Jan. 31, 2019

### 4.3 Radiated Emissions above 1 GHz

| Description & Manufacturer        | Model No.           | Serial No.             | Cal. Date     | Cal. Due      |
|-----------------------------------|---------------------|------------------------|---------------|---------------|
| Agilent Spectrum                  | E4446A              | MY51100009             | Jun. 4, 2018  | Jun. 3, 2019  |
| Agilent Test Receiver             | N9038A              | MY51210137             | Jun. 19, 2018 | Jun. 18, 2019 |
| Agilent Preamplifier              | 8449B               | 3008A01201             | Feb. 21, 2019 | Feb. 20, 2020 |
| MITEQ Preamplifier                | AMF-6F-260400-33-8P | 892164                 | Feb. 21, 2019 | Feb. 20, 2020 |
| EMCI Preamplifier                 | EMC184045B          | 980235                 | Feb. 21, 2019 | Feb. 20, 2020 |
| ETS Preamplifier                  | 3117-PA             | 00215857               | Nov. 25, 2018 | Nov.24, 2019  |
| Schwarzbeck Horn Antenna          | BBHA-9170           | 212                    | Nov. 25, 2018 | Nov. 24, 2019 |
| Schwarzbeck Horn Antenna          | BBHA 9120-D1        | D130                   | Nov. 25, 2018 | Nov. 24, 2019 |
| ADT. Turn Table                   | TT100               | 0306                   | NA            | NA            |
| ADT. Tower                        | AT100               | 0306                   | NA            | NA            |
| Software                          | Radiated_V8.7.08    | NA                     | NA            | NA            |
| SUHNER RF cable<br>With 4dB PAD   | SF102               | Cable-CH6-01           | Aug. 13, 2018 | Aug. 12, 2019 |
| SUHNER RF cable<br>With 3/4dB PAD | SF102               | Cable-CH8-02<br>(3.6m) | Aug. 13, 2018 | Aug. 12, 2019 |
| MICRO-TRONICS Notch filter        | BRC50703-01         | 010                    | May 31, 2018  | May 30, 2019  |
| MICRO-TRONICS<br>Band Pass Filter | BRM17690            | 005                    | May 31, 2018  | May 30, 2019  |

- Notes: 1. The test was performed in Chamber No. 6.  
2. The Industry Canada Reference No. IC 7450E-6.  
3. The VCCI Site Registration No. G-257.  
4. Tested Date: Jan. 30, 2019.

## 5 Limits of Test Items

### 5.1 Conducted Emissions from Power Ports

| Frequency (MHz) | Class A (dBuV) |         | Class B (dBuV) |         |
|-----------------|----------------|---------|----------------|---------|
|                 | Quasi-peak     | Average | Quasi-peak     | Average |
| 0.15 - 0.5      | 79             | 66      | 66 - 56        | 56 - 46 |
| 0.50 - 5.0      | 73             | 60      | 56             | 46      |
| 5.0 - 30.0      | 73             | 60      | 60             | 50      |

Notes: 1. The lower limit shall apply at the transition frequencies.  
 2. The limit decreases linearly with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

### 5.2 Radiated Emissions up to 1 GHz

| Frequency range (MHz) | Class A (3 m) Quasi-peak dB $\mu$ V/m | Class A (10 m) Quasi-peak dB $\mu$ V/m | Class B (3 m) Quasi-peak dB $\mu$ V/m | Class B (10 m) Quasi-peak dB $\mu$ V/m |
|-----------------------|---------------------------------------|--|---------------------------------------|--|
| 30-88                 | 50.0                                  | 40.0                                   | 40.0                                  | 30.0                                   |
| 88-216                | 54.0                                  | 43.5                                   | 43.5                                  | 33.1                                   |
| 216-230               | 56.9                                  | 46.4                                   | 46.0                                  | 35.6                                   |
| 230-960               | 57.0                                  | 47.0                                   | 47.0                                  | 37.0                                   |
| 960-1000              | 60.0                                  | 49.5                                   | 54.0                                  | 43.5                                   |

Notes: 1. The lower limit shall apply at the transition frequencies.

### 5.3 Radiated Emissions above 1 GHz

Required highest measurement frequency

| Highest internal frequency ( $F_x$ ) (MHz) | Highest measurement frequency ( $F_M$ ) (GHz) |
|--|---|
| $F_x \leq 108$ MHz                         | 1   |
| 108 MHz < $F_x \leq 500$ MHz               | 2   |
| 500 MHz < $F_x \leq 1$ GHz                 | 5   |
| $F_x > 1$ GHz                              | 5 x $F_x$ up to a maximum of 40 GHz           |

$F_x$  is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test.

| Radiated Emissions Limits at 3 meters (dB $\mu$ V/m) |                     |                     |
|--|---------------------|---------------------|
| Frequency range (GHz)                                | Class A             | Class B             |
| 1 - $F_M$  | Avg: 60<br>Peak: 80 | Avg: 54<br>Peak: 74 |

Notes: 1. These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.

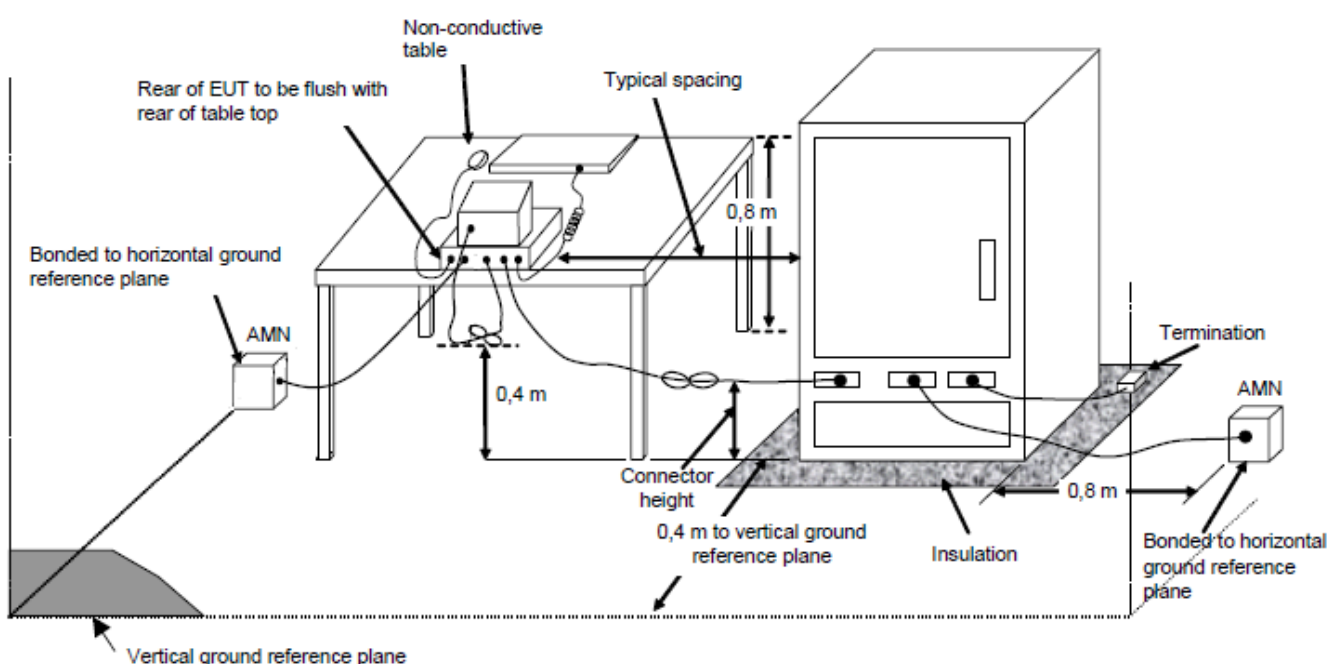
At and above 1 GHz, if the ITE or digital apparatus is an outdoor unit of home satellite receiving systems, it shall comply with the limits in Table A.7 in clause A.2 of CAN/CSA-CISPR 32:17 (in Annex A therein). For these types of ITE or digital apparatus, the highest measurement frequency shall be 18 GHz.

## 6 Test Arrangements

### 6.1 Conducted Emissions from Power Ports

- For the table-top EUT is placed on a 0.8 meter to the top of rotating table; for the the floor standing EUT shall be insulated (by insulation of 12 mm) from the horizontal reference ground plane. The EUT is placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units are connected to the power mains through another LISN. They provide coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The test results of conducted emissions at mains ports are recorded of six worst margins for quasi-peak (mandatory) [and average (if necessary)] values against the limits at frequencies of interest unless the margin is 20 dB or greater.

Note: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

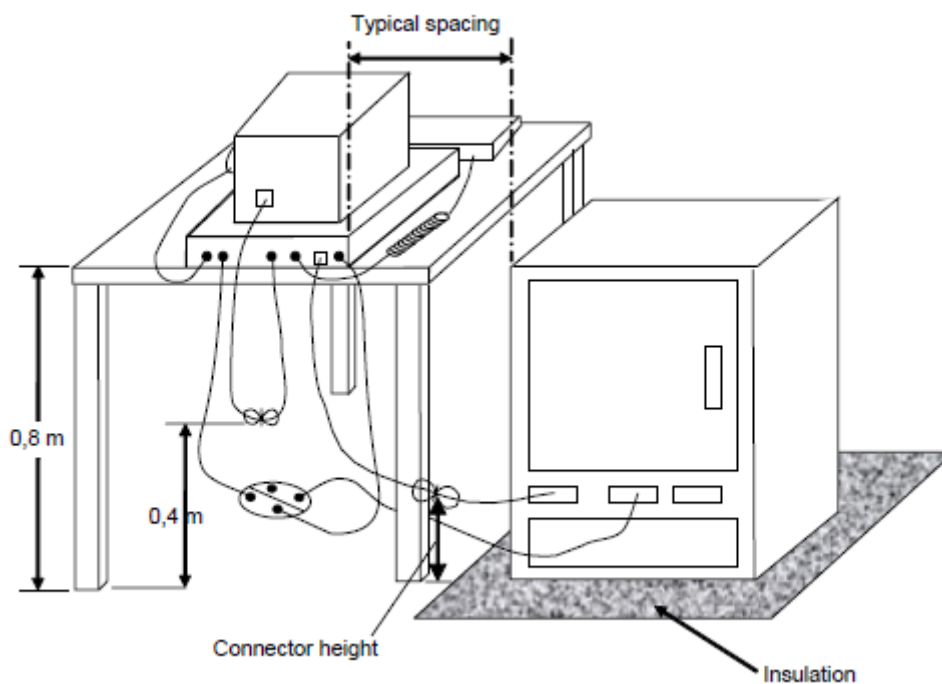


For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

## 6.2 Radiated Emissions up to 1 GHz

- a. For the table-top EUT is placed on a 0.8 meter to the top of rotating table; for the the floor standing EUT shall be insulated (by insulation of 12 mm) from the horizontal reference ground plane. The rotating table is rotated 360 degrees to determine the position of the highest radiation. If the equipment requires a dedicated ground connection, this shall be provided and bonded to the RGP.
- b. The EUT was set 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is up to 1 GHz.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency up to 1GHz.

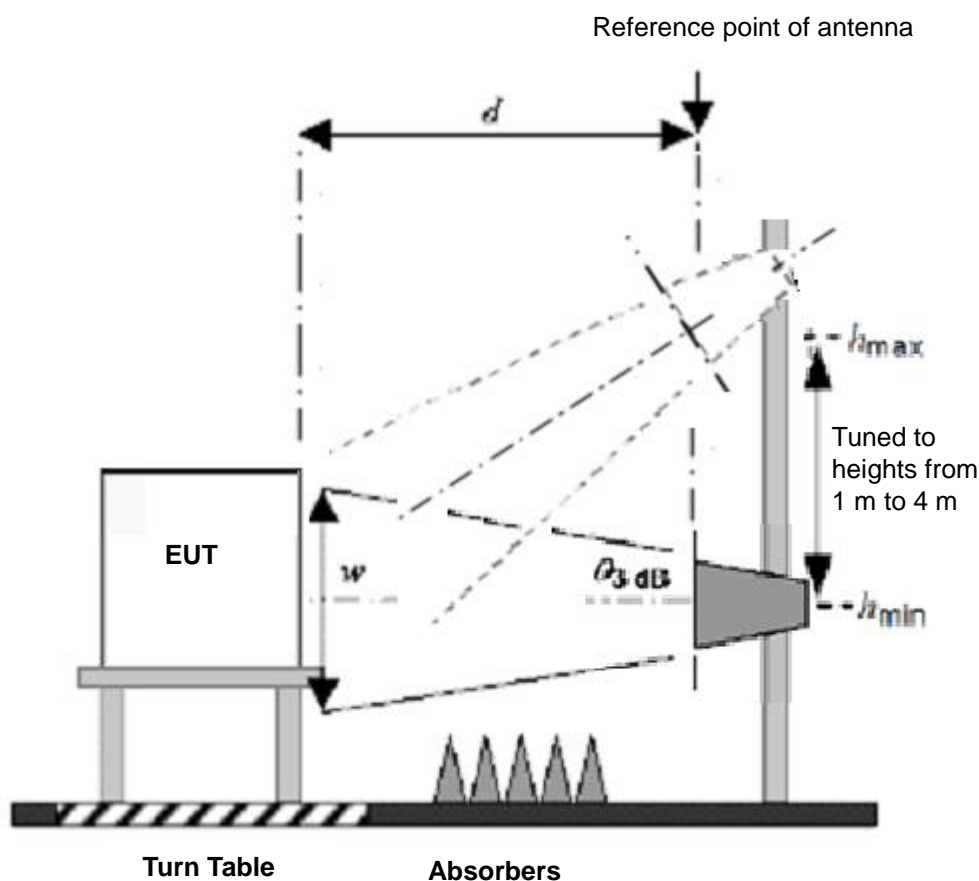


For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

### 6.3 Radiated Emissions above 1 GHz

- For the table-top EUT is placed on a 0.8 meter to the top of rotating table; for the the floor standing EUT shall be insulated (by insulation of 12 mm) from the horizontal reference ground plane. The rotating table is rotated 360 degrees to determine the position of the highest radiation. If the equipment requires a dedicated ground connection, this shall be provided and bonded to the RGP.
- The EUT was set  $d = 3$  meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The spectrum analyzer system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

Note: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection (PK) at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average detection (AV) at frequency above 1GHz.



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

## 7 Test Results of Test Item

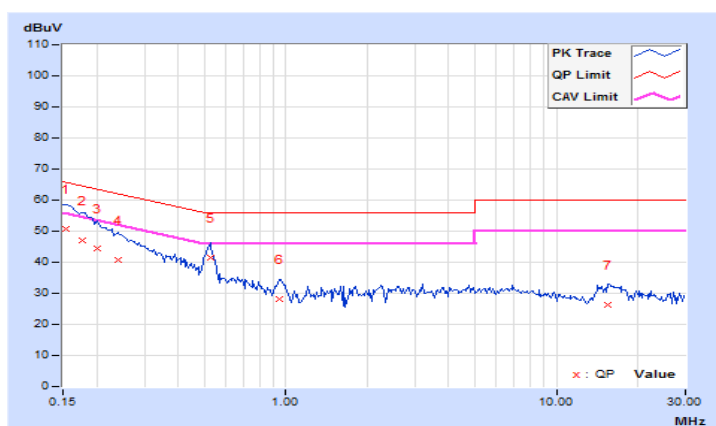
### 7.1 Conducted Emissions from Power Ports

|                 |                |  |                                      |
|-----------------|----------------|--|--------------------------------------|
| Frequency Range | 150kHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9kHz |
| Input Power     | 12Vdc          | Environmental Conditions                 | 22°C, 71%RH                          |
| Tested by       | Chin-Wen Wang  |  |                                      |
| Test Mode       | Mode 1         |  |                                      |

| Phase Of Power : Positive (+) |                 |                        |                      |       |                       |       |              |       |             |        |
|-------------------------------|-----------------|------------------------|----------------------|-------|-----------------------|-------|--------------|-------|-------------|--------|
| No                            | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) |       | Emission Level (dBuV) |       | Limit (dBuV) |       | Margin (dB) |        |
|                               |                 |                        | Q.P.                 | AV.   | Q.P.                  | AV.   | Q.P.         | AV.   | Q.P.        | AV.    |
| 1                             | 0.15391         | 10.14                  | 40.58                | 16.74 | 50.72                 | 26.88 | 65.79        | 55.79 | -15.07      | -28.91 |
| 2                             | 0.17734         | 10.15                  | 37.02                | 15.26 | 47.17                 | 25.41 | 64.61        | 54.61 | -17.44      | -29.20 |
| 3                             | 0.20078         | 10.15                  | 34.27                | 14.87 | 44.42                 | 25.02 | 63.58        | 53.58 | -19.16      | -28.56 |
| 4                             | 0.23984         | 10.16                  | 30.49                | 11.60 | 40.65                 | 21.76 | 62.10        | 52.10 | -21.45      | -30.34 |
| 5                             | 0.52500         | 10.20                  | 31.40                | 25.13 | 41.60                 | 35.33 | 56.00        | 46.00 | -14.40      | -10.67 |
| 6                             | 0.95078         | 10.27                  | 17.94                | 9.73  | 28.21                 | 20.00 | 56.00        | 46.00 | -27.79      | -26.00 |
| 7                             | 15.55469        | 10.93                  | 15.21                | 9.82  | 26.14                 | 20.75 | 60.00        | 50.00 | -33.86      | -29.25 |

#### Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

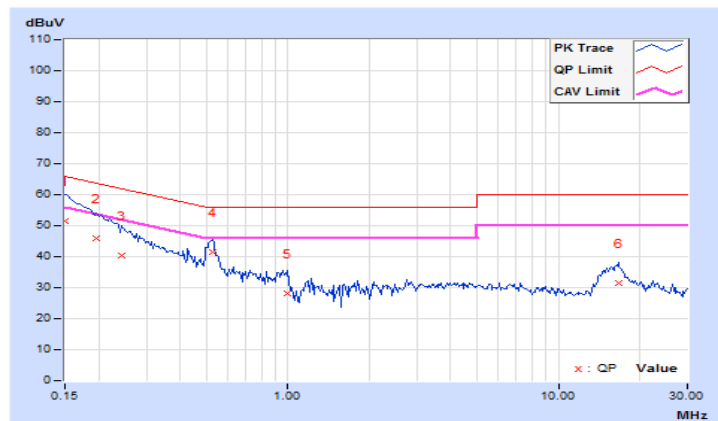


|                 |                |  |                                      |
|-----------------|----------------|--|--------------------------------------|
| Frequency Range | 150kHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9kHz |
| Input Power     | 12Vdc          | Environmental Conditions                 | 22°C, 71%RH                          |
| Tested by       | Chin-Wen Wang  |  |                                      |
| Test Mode       | Mode 1         |  |                                      |

| Phase Of Power : Negative (-) |                 |                        |                      |       |                       |       |              |       |             |        |
|-------------------------------|-----------------|------------------------|----------------------|-------|-----------------------|-------|--------------|-------|-------------|--------|
| No                            | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) |       | Emission Level (dBuV) |       | Limit (dBuV) |       | Margin (dB) |        |
|                               |                 |                        | Q.P.                 | AV.   | Q.P.                  | AV.   | Q.P.         | AV.   | Q.P.        | AV.    |
| 1                             | 0.15000         | 10.18                  | 41.21                | 20.01 | 51.39                 | 30.19 | 66.00        | 56.00 | -14.61      | -25.81 |
| 2                             | 0.19687         | 10.19                  | 35.82                | 14.64 | 46.01                 | 24.83 | 63.74        | 53.74 | -17.73      | -28.91 |
| 3                             | 0.24375         | 10.20                  | 30.20                | 11.81 | 40.40                 | 22.01 | 61.97        | 51.97 | -21.57      | -29.96 |
| 4                             | 0.52500         | 10.24                  | 31.34                | 25.15 | 41.58                 | 35.39 | 56.00        | 46.00 | -14.42      | -10.61 |
| 5                             | 0.99766         | 10.33                  | 17.71                | 10.20 | 28.04                 | 20.53 | 56.00        | 46.00 | -27.96      | -25.47 |
| 6                             | 16.62109        | 10.84                  | 20.51                | 15.05 | 31.35                 | 25.89 | 60.00        | 50.00 | -28.65      | -24.11 |

**Remarks:**

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

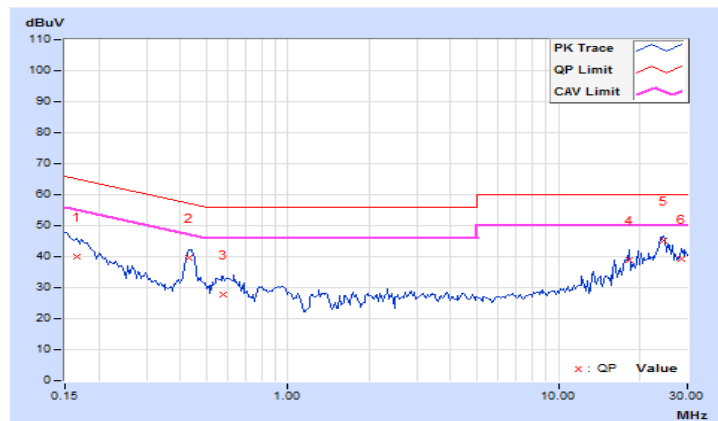


|                 |                |  |                                      |
|-----------------|----------------|--|--------------------------------------|
| Frequency Range | 150kHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9kHz |
| Input Power     | 55Vdc          | Environmental Conditions                 | 22°C, 71%RH                          |
| Tested by       | Chin-Wen Wang  |  |                                      |
| Test Mode       | Mode 2         |  |                                      |

| Phase Of Power : Positive (+) |                 |                        |                      |              |                       |              |              |              |               |              |
|-------------------------------|-----------------|------------------------|----------------------|--------------|-----------------------|--------------|--------------|--------------|---------------|--------------|
| No                            | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) |              | Emission Level (dBuV) |              | Limit (dBuV) |              | Margin (dB)   |              |
|                               |                 |                        | Q.P.                 | AV.          | Q.P.                  | AV.          | Q.P.         | AV.          | Q.P.          | AV.          |
| 1                             | 0.16562         | 10.14                  | 29.73                | 20.72        | 39.87                 | 30.86        | 65.18        | 55.18        | -25.31        | -24.32       |
| 2                             | 0.43125         | 10.19                  | 29.54                | 24.50        | 39.73                 | 34.69        | 57.23        | 47.23        | -17.50        | -12.54       |
| 3                             | 0.57969         | 10.21                  | 17.67                | 12.27        | 27.88                 | 22.48        | 56.00        | 46.00        | -28.12        | -23.52       |
| 4                             | 18.24219        | 11.06                  | 27.94                | 24.58        | 39.00                 | 35.64        | 60.00        | 50.00        | -21.00        | -14.36       |
| <b>5</b>                      | <b>24.41797</b> | <b>11.14</b>           | <b>34.21</b>         | <b>33.09</b> | <b>45.35</b>          | <b>44.23</b> | <b>60.00</b> | <b>50.00</b> | <b>-14.65</b> | <b>-5.77</b> |
| 6                             | 28.68750        | 11.15                  | 27.93                | 25.89        | 39.08                 | 37.04        | 60.00        | 50.00        | -20.92        | -12.96       |

**Remarks:**

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

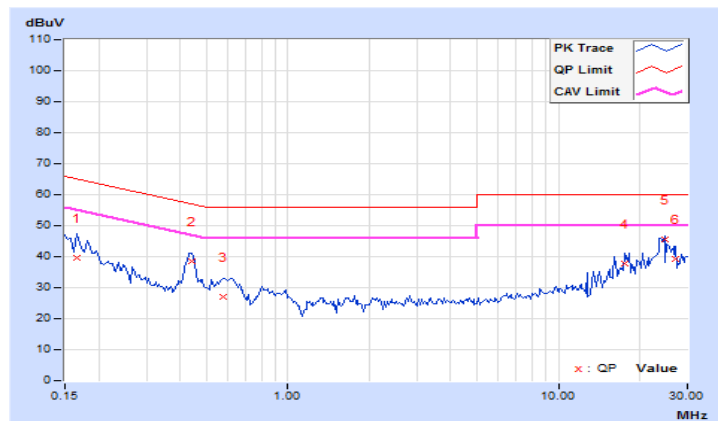


|                 |                |  |                                      |
|-----------------|----------------|--|--------------------------------------|
| Frequency Range | 150kHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9kHz |
| Input Power     | 55Vdc          | Environmental Conditions                 | 22°C, 71%RH                          |
| Tested by       | Chin-Wen Wang  |  |                                      |
| Test Mode       | Mode 2         |  |                                      |

| Phase Of Power : Negative (-) |                 |                        |                      |       |                       |       |              |       |             |        |
|-------------------------------|-----------------|------------------------|----------------------|-------|-----------------------|-------|--------------|-------|-------------|--------|
| No                            | Frequency (MHz) | Correction Factor (dB) | Reading Value (dBuV) |       | Emission Level (dBuV) |       | Limit (dBuV) |       | Margin (dB) |        |
|                               |                 |                        | Q.P.                 | AV.   | Q.P.                  | AV.   | Q.P.         | AV.   | Q.P.        | AV.    |
| 1                             | 0.16562         | 10.18                  | 29.41                | 19.24 | 39.59                 | 29.42 | 65.18        | 55.18 | -25.59      | -25.76 |
| 2                             | 0.43906         | 10.23                  | 28.37                | 23.63 | 38.60                 | 33.86 | 57.08        | 47.08 | -18.48      | -13.22 |
| 3                             | 0.57578         | 10.25                  | 16.82                | 11.73 | 27.07                 | 21.98 | 56.00        | 46.00 | -28.93      | -24.02 |
| 4                             | 17.69531        | 10.87                  | 26.87                | 23.70 | 37.74                 | 34.57 | 60.00        | 50.00 | -22.26      | -15.43 |
| 5                             | 24.89844        | 10.73                  | 34.94                | 32.63 | 45.67                 | 43.36 | 60.00        | 50.00 | -14.33      | -6.64  |
| 6                             | 27.16016        | 10.65                  | 28.45                | 26.34 | 39.10                 | 36.99 | 60.00        | 50.00 | -20.90      | -13.01 |

**Remarks:**

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



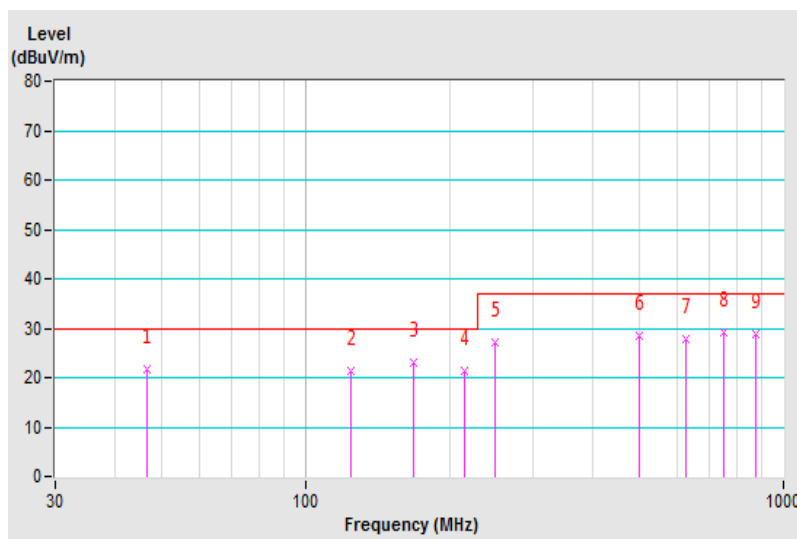
## 7.2 Radiated Emissions up to 1 GHz

|                 |              |  |                         |
|-----------------|--------------|--|-------------------------|
| Frequency Range | 30MHz ~ 1GHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP), 120kHz |
| Input Power     | 12Vdc        | Environmental Conditions                 | 22°C, 73%RH             |
| Tested by       | Paul Chen    |  |                         |
| Test Mode       | Mode 1       |  |                         |

| Antenna Polarity & Test Distance : Horizontal at 10 m |                 |                         |                |             |                    |                      |                  |                          |
|---|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1   | 46.53           | 21.77 QP                | 30.00          | -8.23       | 4.00 H             | 33                   | 30.54            | -8.77                    |
| 2   | 124.98          | 21.51 QP                | 30.00          | -8.49       | 4.00 H             | 42                   | 31.90            | -10.39                   |
| 3   | 168.00          | 23.11 QP                | 30.00          | -6.89       | 4.00 H             | 306                  | 32.28            | -9.17                    |
| 4   | 216.00          | 21.31 QP                | 30.00          | -8.69       | 4.00 H             | 270                  | 32.85            | -11.54                   |
| 5   | 249.98          | 27.26 QP                | 37.00          | -9.74       | 3.75 H             | 244                  | 37.40            | -10.14                   |
| 6   | 500.02          | 28.37 QP                | 37.00          | -8.63       | 1.89 H             | 321                  | 31.93            | -3.56                    |
| 7   | 625.02          | 27.72 QP                | 37.00          | -9.28       | 1.42 H             | 106                  | 28.07            | -0.35                    |
| 8   | 750.03          | 29.09 QP                | 37.00          | -7.91       | 1.00 H             | 115                  | 27.96            | 1.13                     |
| 9   | 875.00          | 28.81 QP                | 37.00          | -8.19       | 1.00 H             | 314                  | 26.23            | 2.58                     |

### Remarks:

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

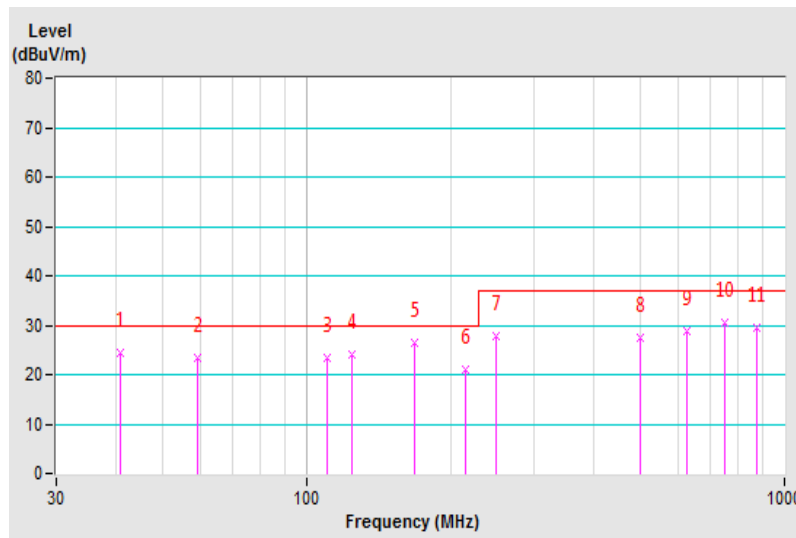


|                 |              |  |                         |
|-----------------|--------------|--|-------------------------|
| Frequency Range | 30MHz ~ 1GHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP), 120kHz |
| Input Power     | 12Vdc        | Environmental Conditions                 | 22°C, 73%RH             |
| Tested by       | Paul Chen    |  |                         |
| Test Mode       | Mode 1       |  |                         |

| Antenna Polarity & Test Distance : Vertical at 10 m |                 |                         |                |             |                    |                      |                  |                          |
|---|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1   | 40.73           | 24.57 QP                | 30.00          | -5.43       | 1.34 V             | 79                   | 33.73            | -9.16                    |
| 2   | 59.44           | 23.35 QP                | 30.00          | -6.65       | 1.42 V             | 132                  | 32.97            | -9.62                    |
| 3   | 110.77          | 23.47 QP                | 30.00          | -6.53       | 1.00 V             | 1                    | 35.45            | -11.98                   |
| 4   | 124.98          | 24.06 QP                | 30.00          | -5.94       | 1.00 V             | 70                   | 34.45            | -10.39                   |
| 5   | 168.00          | 26.29 QP                | 30.00          | -3.71       | 1.00 V             | 180                  | 35.46            | -9.17                    |
| 6   | 216.01          | 21.07 QP                | 30.00          | -8.93       | 1.00 V             | 75                   | 32.61            | -11.54                   |
| 7   | 250.00          | 27.66 QP                | 37.00          | -9.34       | 1.00 V             | 37                   | 37.80            | -10.14                   |
| 8   | 500.02          | 27.45 QP                | 37.00          | -9.55       | 3.36 V             | 349                  | 31.01            | -3.56                    |
| 9   | 625.04          | 28.73 QP                | 37.00          | -8.27       | 2.90 V             | 184                  | 29.08            | -0.35                    |
| 10  | 749.99          | 30.44 QP                | 37.00          | -6.56       | 2.57 V             | 336                  | 29.31            | 1.13                     |
| 11  | 875.01          | 29.62 QP                | 37.00          | -7.38       | 2.09 V             | 105                  | 27.05            | 2.57                     |

Remarks:

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

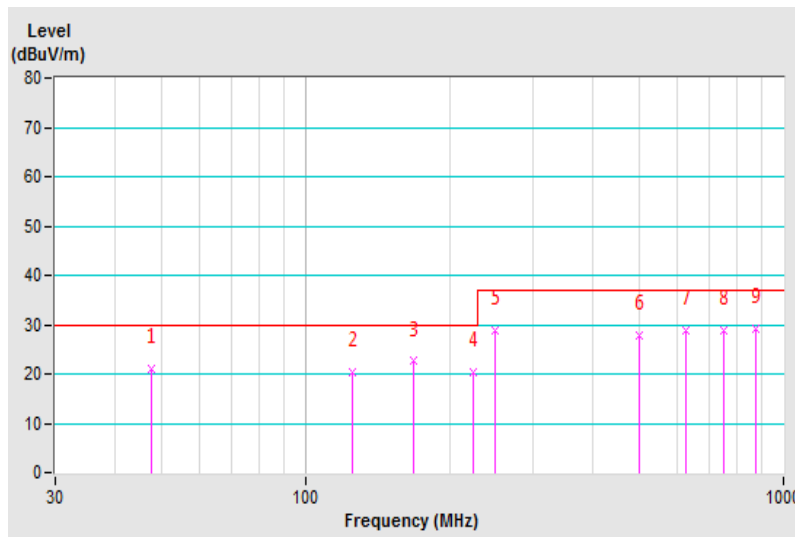


|                 |              |  |                         |
|-----------------|--------------|--|-------------------------|
| Frequency Range | 30MHz ~ 1GHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP), 120kHz |
| Input Power     | 55Vdc        | Environmental Conditions                 | 22°C, 73%RH             |
| Tested by       | Paul Chen    |  |                         |
| Test Mode       | Mode 2       |  |                         |

| Antenna Polarity & Test Distance : Horizontal at 10 m |                 |                         |                |             |                    |                      |                  |                          |
|---|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1   | 47.55           | 20.94 QP                | 30.00          | -9.06       | 4.00 H             | 57                   | 29.67            | -8.73                    |
| 2   | 125.01          | 20.49 QP                | 30.00          | -9.51       | 4.00 H             | 261                  | 30.88            | -10.39                   |
| 3   | 168.02          | 22.54 QP                | 30.00          | -7.46       | 4.00 H             | 100                  | 31.71            | -9.17                    |
| 4   | 223.92          | 20.50 QP                | 30.00          | -9.50       | 4.00 H             | 313                  | 31.90            | -11.40                   |
| 5   | 250.00          | 28.93 QP                | 37.00          | -8.07       | 3.88 H             | 242                  | 39.07            | -10.14                   |
| 6   | 500.01          | 27.90 QP                | 37.00          | -9.10       | 1.97 H             | 131                  | 31.46            | -3.56                    |
| 7   | 625.01          | 28.68 QP                | 37.00          | -8.32       | 1.44 H             | 87                   | 29.03            | -0.35                    |
| 8   | 749.99          | 28.72 QP                | 37.00          | -8.28       | 1.00 H             | 180                  | 27.59            | 1.13                     |
| 9   | 875.01          | 29.07 QP                | 37.00          | -7.93       | 1.00 H             | 89                   | 26.50            | 2.57                     |

Remarks:

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

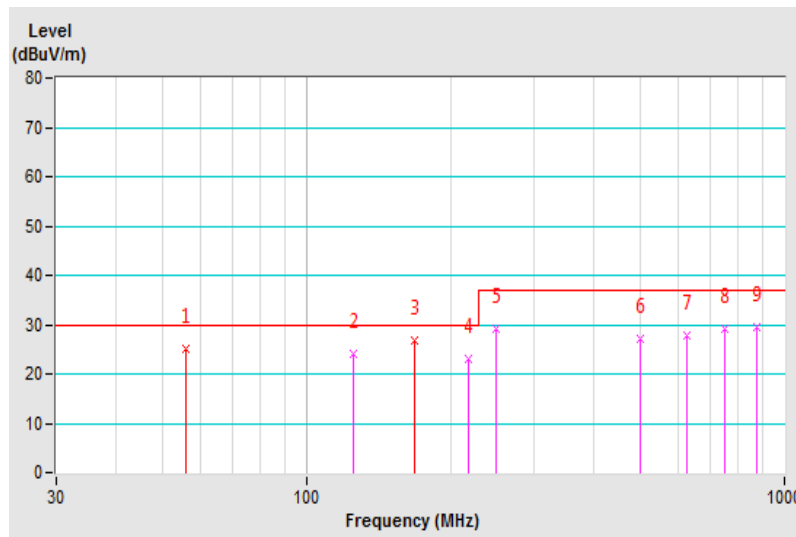


|                 |              |  |                         |
|-----------------|--------------|--|-------------------------|
| Frequency Range | 30MHz ~ 1GHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP), 120kHz |
| Input Power     | 55Vdc        | Environmental Conditions                 | 22°C, 73%RH             |
| Tested by       | Paul Chen    |  |                         |
| Test Mode       | Mode 2       |  |                         |

| Antenna Polarity & Test Distance : Vertical at 10 m |                 |                         |                |              |                    |                      |                  |                          |
|---|-----------------|-------------------------|----------------|--------------|--------------------|----------------------|------------------|--------------------------|
| No  | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB)  | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1   | 55.92           | 25.09 QP                | 30.00          | -4.91        | 1.35 V             | 309                  | 34.32            | -9.23                    |
| 2   | 125.02          | 24.13 QP                | 30.00          | -5.87        | 1.00 V             | 332                  | 34.52            | -10.39                   |
| <b>3</b>  | <b>168.00</b>   | <b>26.93 QP</b>         | <b>30.00</b>   | <b>-3.07</b> | <b>1.00 V</b>      | <b>326</b>           | <b>36.10</b>     | <b>-9.17</b>             |
| 4   | 218.96          | 23.15 QP                | 30.00          | -6.85        | 1.00 V             | 37                   | 34.68            | -11.53                   |
| 5   | 249.99          | 29.29 QP                | 37.00          | -7.71        | 1.00 V             | 305                  | 39.43            | -10.14                   |
| 6   | 500.00          | 27.01 QP                | 37.00          | -9.99        | 3.15 V             | 217                  | 30.57            | -3.56                    |
| 7   | 625.00          | 27.84 QP                | 37.00          | -9.16        | 3.05 V             | 115                  | 28.19            | -0.35                    |
| 8   | 750.00          | 29.21 QP                | 37.00          | -7.79        | 2.65 V             | 45                   | 28.08            | 1.13                     |
| 9   | 875.00          | 29.40 QP                | 37.00          | -7.60        | 2.28 V             | 243                  | 26.83            | 2.57                     |

Remarks:

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



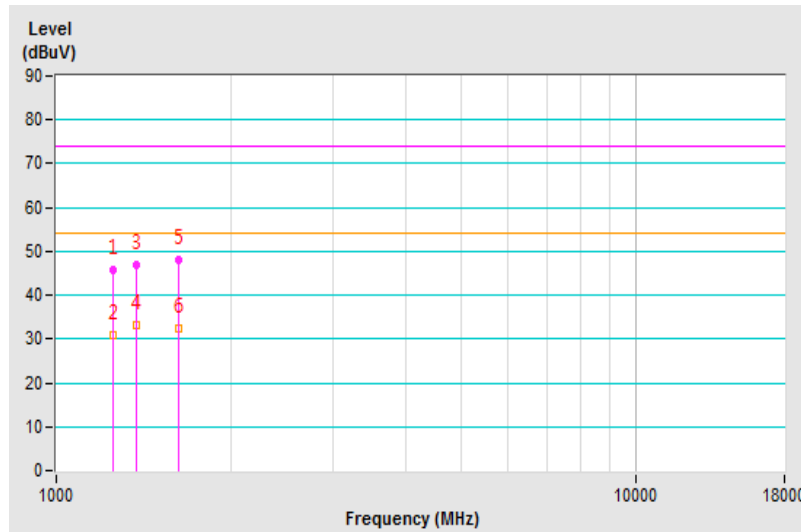
### 7.3 Radiated Emissions above 1 GHz

|                 |             |  |                                |
|-----------------|-------------|--|--------------------------------|
| Frequency Range | 1GHz ~ 8GHz | Detector Function & Resolution Bandwidth | Peak (PK) / Average (AV), 1MHz |
| Input Power     | 12Vdc       | Environmental Conditions                 | 20°C, 71%RH                    |
| Tested by       | Vincent Lin |  |                                |
| Test Mode       | Mode 1      |  |                                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|--|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1  | 1250.03         | 45.82 PK                | 74.00          | -28.18      | 1.15 H             | 72                   | 50.67            | -4.85                    |
| 2  | 1250.03         | 30.90 AV                | 54.00          | -23.10      | 1.15 H             | 72                   | 35.75            | -4.85                    |
| 3  | 1374.95         | 46.89 PK                | 74.00          | -27.11      | 1.00 H             | 228                  | 50.68            | -3.79                    |
| 4  | 1374.95         | 33.18 AV                | 54.00          | -20.82      | 1.00 H             | 228                  | 36.97            | -3.79                    |
| 5  | 1625.01         | 48.12 PK                | 74.00          | -25.88      | 1.73 H             | 5                    | 52.73            | -4.61                    |
| 6  | 1625.01         | 32.33 AV                | 54.00          | -21.67      | 1.73 H             | 5                    | 36.94            | -4.61                    |

Remarks:

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

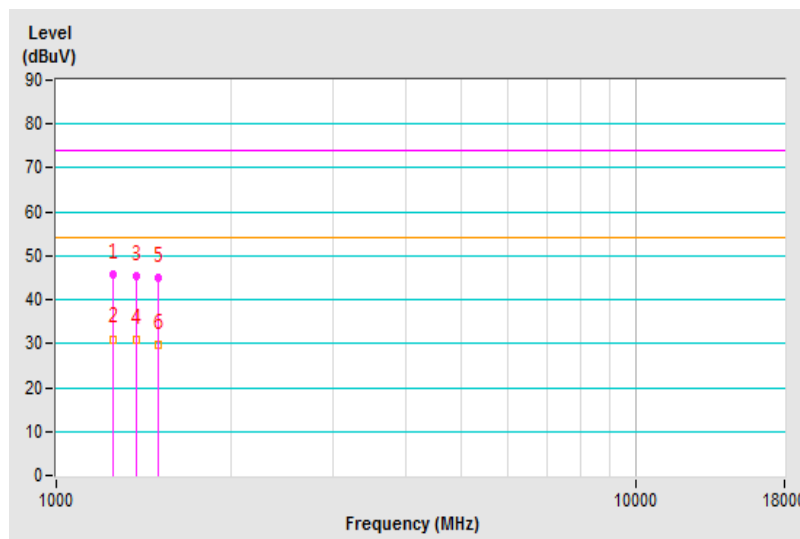


|                        |             |   |                                |
|------------------------|-------------|---|--------------------------------|
| <b>Frequency Range</b> | 1GHz ~ 8GHz | <b>Detector Function &amp; Resolution Bandwidth</b> | Peak (PK) / Average (AV), 1MHz |
| <b>Input Power</b>     | 12Vdc       | <b>Environmental Conditions</b>                     | 20°C, 71%RH                    |
| <b>Tested by</b>       | Vincent Lin |   |                                |
| <b>Test Mode</b>       | Mode 1      |   |                                |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|--|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1  | 1250.01         | 45.62 PK                | 74.00          | -28.38      | 1.94 V             | 4                    | 50.47            | -4.85                    |
| 2  | 1250.01         | 31.05 AV                | 54.00          | -22.95      | 1.94 V             | 4                    | 35.90            | -4.85                    |
| 3  | 1375.05         | 45.27 PK                | 74.00          | -28.73      | 2.25 V             | 172                  | 49.06            | -3.79                    |
| 4  | 1375.05         | 30.73 AV                | 54.00          | -23.27      | 2.25 V             | 172                  | 34.52            | -3.79                    |
| 5  | 1499.99         | 44.83 PK                | 74.00          | -29.17      | 2.65 V             | 175                  | 49.30            | -4.47                    |
| 6  | 1499.99         | 29.67 AV                | 54.00          | -24.33      | 2.65 V             | 175                  | 34.14            | -4.47                    |

Remarks:

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

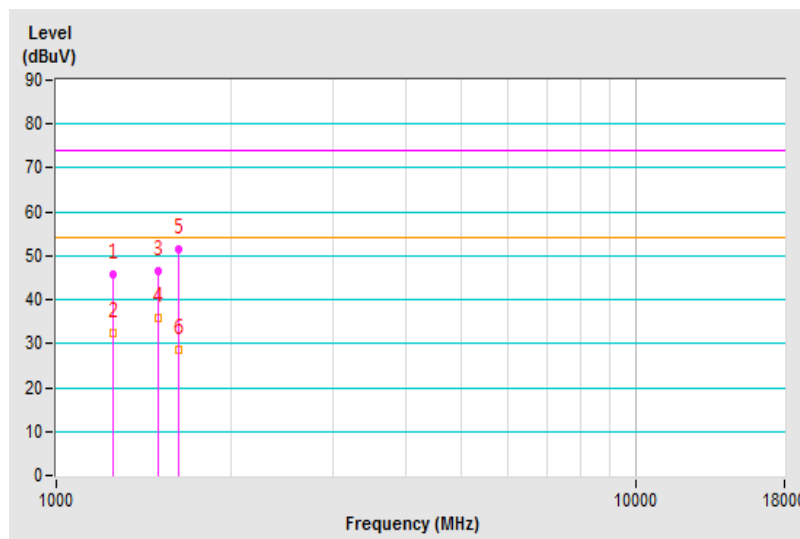


|                 |             |  |                                |
|-----------------|-------------|--|--------------------------------|
| Frequency Range | 1GHz ~ 8GHz | Detector Function & Resolution Bandwidth | Peak (PK) / Average (AV), 1MHz |
| Input Power     | 55Vdc       | Environmental Conditions                 | 20°C, 71%RH                    |
| Tested by       | Vincent Lin |  |                                |
| Test Mode       | Mode 2      |  |                                |

| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|--|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1  | 1249.95         | 45.77 PK                | 74.00          | -28.23      | 2.14 H             | 1                    | 50.63            | -4.86                    |
| 2  | 1249.95         | 32.41 AV                | 54.00          | -21.59      | 2.14 H             | 1                    | 37.27            | -4.86                    |
| 3  | 1499.96         | 46.63 PK                | 74.00          | -27.37      | 1.91 H             | 39                   | 51.10            | -4.47                    |
| 4  | 1499.96         | 35.84 AV                | 54.00          | -18.16      | 1.91 H             | 39                   | 40.31            | -4.47                    |
| 5  | 1624.83         | 51.33 PK                | 74.00          | -22.67      | 2.49 H             | 358                  | 55.94            | -4.61                    |
| 6  | 1624.83         | 28.52 AV                | 54.00          | -25.48      | 2.49 H             | 358                  | 33.13            | -4.61                    |

Remarks:

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

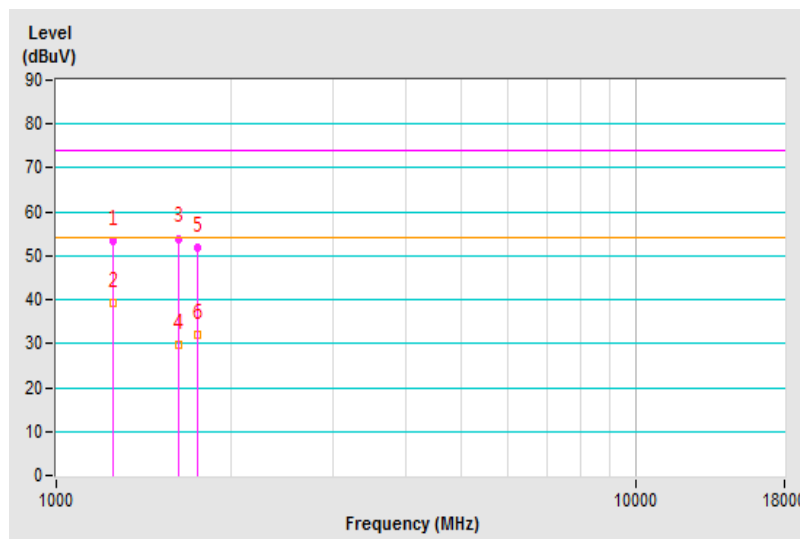


|                 |             |  |                                |
|-----------------|-------------|--|--------------------------------|
| Frequency Range | 1GHz ~ 8GHz | Detector Function & Resolution Bandwidth | Peak (PK) / Average (AV), 1MHz |
| Input Power     | 55Vdc       | Environmental Conditions                 | 20°C, 71%RH                    |
| Tested by       | Vincent Lin |  |                                |
| Test Mode       | Mode 2      |  |                                |

| Antenna Polarity & Test Distance : Vertical at 3 m |                 |                         |                |             |                    |                      |                  |                          |
|--|-----------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No   | Frequency (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1  | 1250.13         | 53.30 PK                | 74.00          | -20.70      | 2.34 V             | 79                   | 58.15            | -4.85                    |
| 2  | 1250.13         | 39.24 AV                | 54.00          | -14.76      | 2.34 V             | 79                   | 44.09            | -4.85                    |
| 3  | 1625.03         | 53.92 PK                | 74.00          | -20.08      | 3.07 V             | 146                  | 58.53            | -4.61                    |
| 4  | 1625.03         | 29.61 AV                | 54.00          | -24.39      | 3.07 V             | 146                  | 34.22            | -4.61                    |
| 5  | 1750.02         | 51.72 PK                | 74.00          | -22.28      | 1.04 V             | 0                    | 56.08            | -4.36                    |
| 6  | 1750.02         | 32.14 AV                | 54.00          | -21.86      | 1.04 V             | 0                    | 36.50            | -4.36                    |

Remarks:

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



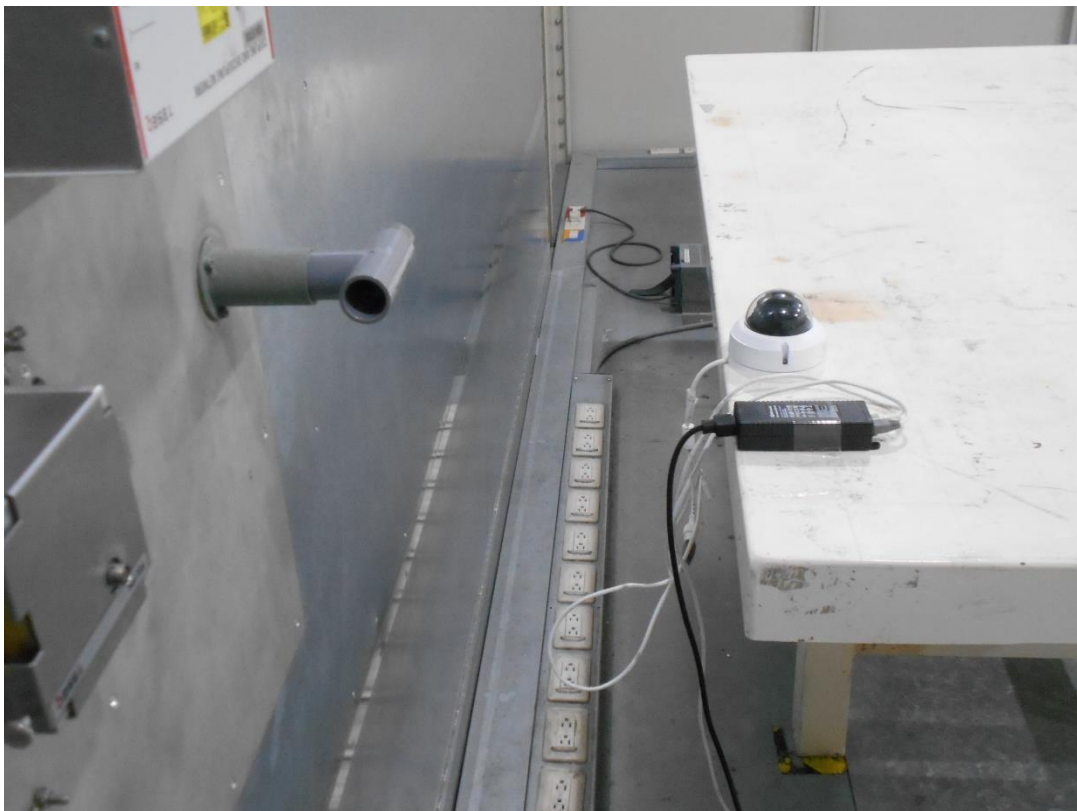
## 8 Pictures of Test Arrangements

### 8.1 Conducted Emissions from Power Ports

Mode 1



Mode 2



## 8.2 Radiated Emissions up to 1 GHz

Mode 1

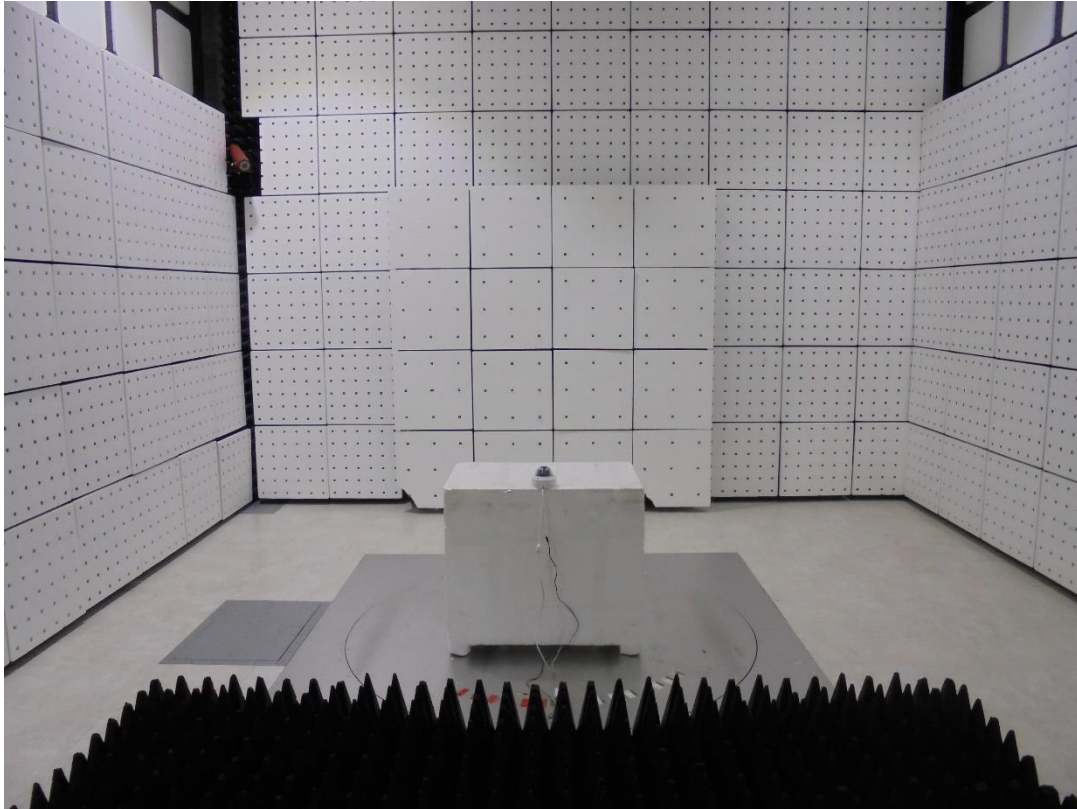
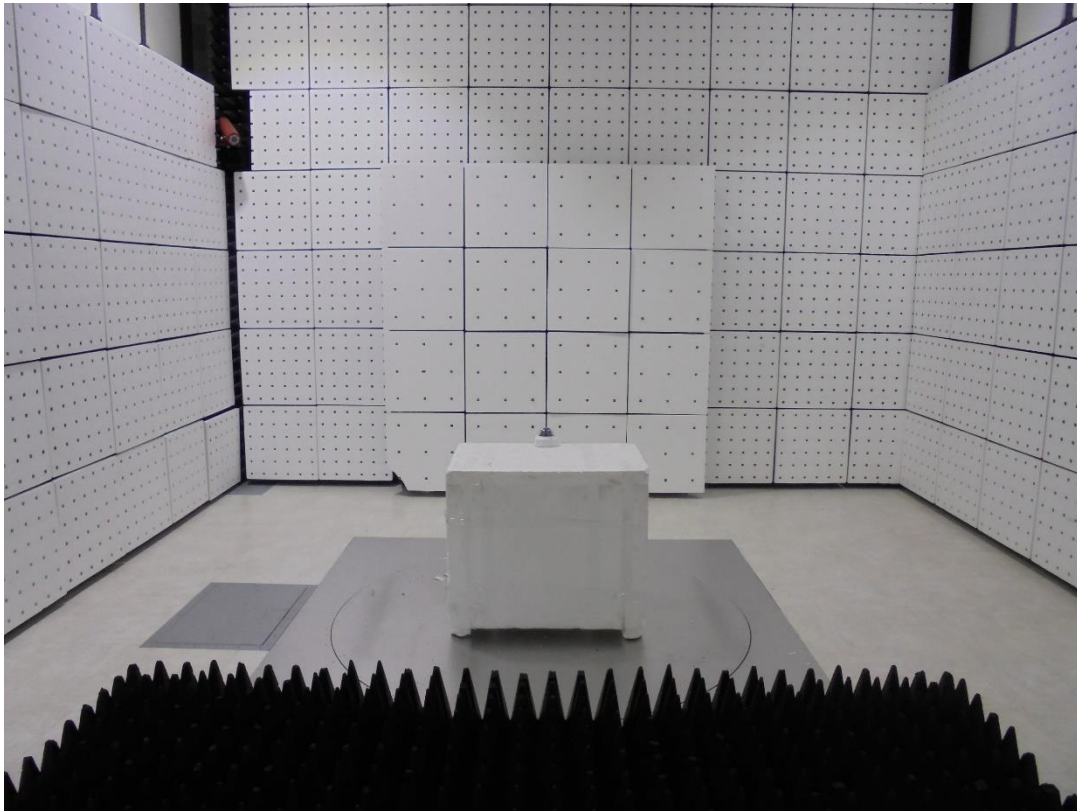


Mode 2

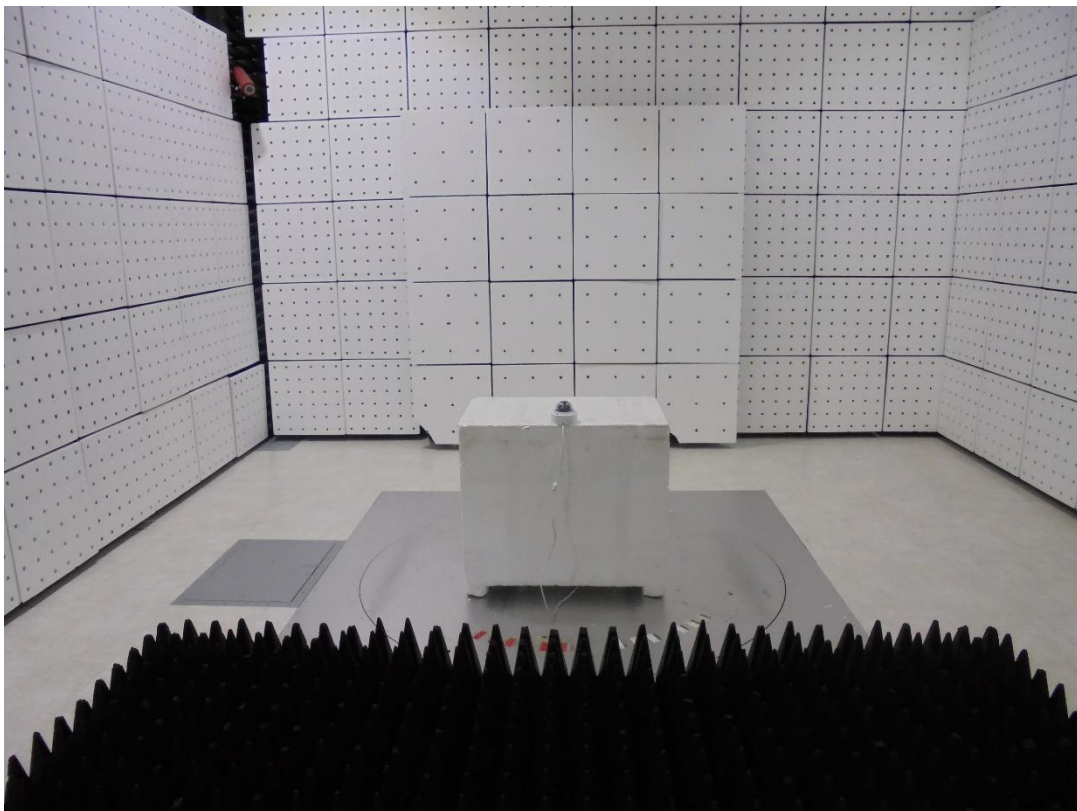
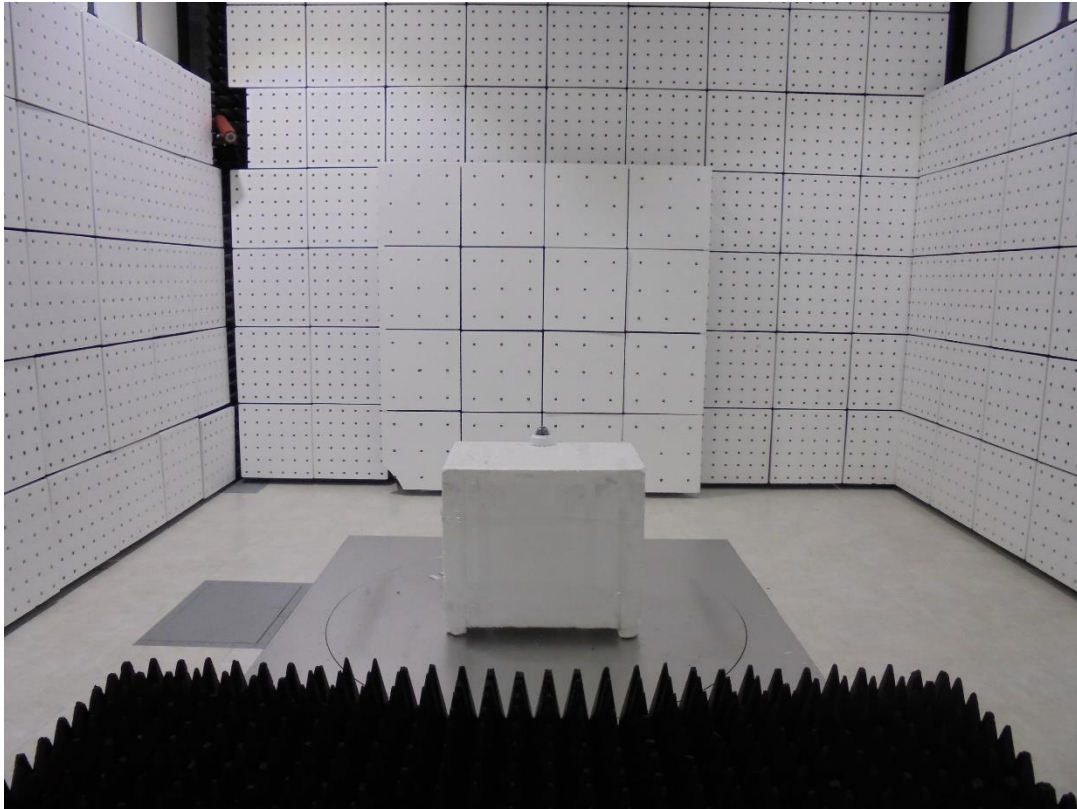


### 8.3 Radiated Emissions above 1 GHz

Mode 1



Mode 2



## 9 Information of the Testing Laboratories

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

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

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