

RF Test Report

Applicant : Superior Communications DBA PureGear
Product Type : PURECAM
Trade Name : PureGear
Model Number : 07614PG
Test Specification : FCC 47 CFR PART 15 SUBPART C
ANSI C63.10:2013
Receive Date : Jun. 27, 2018
Test Period : Jun. 29, ~ Jul. 30, 2018
Issue Date : Aug. 02, 2018

Issue by

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Taiwan Accreditation Foundation accreditation number: 1330

Test Firm MRA designation number: TW0010

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Revision History

| Rev. | Issue Date | Revisions | Revised By |
|------|---------------|---------------|------------|
| 00 | Aug. 02, 2018 | Initial Issue | Janet Chao |
| | | | |
| | | | |
| | | | |

Verification of Compliance

Issued Date: Aug. 02, 2018

Applicant : Superior Communications DBA PureGear

Product Type : PURECAM

Trade Name : PureGear

Model Number : 07614PG

FCC ID : 2AIIIF-07614PG

EUT Rated Voltage : DC 5V

Test Voltage : 120 Vac / 60 Hz

Applicable Standard : FCC 47 CFR PART 15 SUBPART C
ANSI C63.10:2013

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.

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<http://www.atl-lab.com.tw/e-index.htm>

A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : Jet Lu Reviewed By : Eric Ou Yang
(Manager) (Jet Lu) (Testing Engineer) (Eric Ou Yang)

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1 General Information

1.1 Summary of Test Result

| Standard | Item | Result | Remark |
|--------------|---|--------|--------|
| 15.207 | AC Power Conducted Emission | PASS | ----- |
| 15.247(d) | Transmitter Radiated Emissions | PASS | ----- |
| 15.247(b)(3) | Max. Output Power | PASS | ----- |
| 15.247(a)(2) | 6dB RF Bandwidth | N/A | Note |
| 15.247(e) | Maximum Power Spectral Density | N/A | Note |
| 15.247(d) | Out of Band Conducted Spurious Emission | N/A | Note |
| 15.203 | Antenna Requirement | PASS | ----- |

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

Note: The product adds a heat sink and a car charger. The layout of module and the appearance of the product are partly changed. Besides, the location of the antenna and antenna gain for BT/LE/WLAN, the module of camera and the software version are changed to do Class II Permissive Change, so it is only needed to be tested for AC Power Line Conducted Emission Measurement, Maximum Conducted Output Power Measurement and Transmitter Radiated Emissions Measurement.

1.2 Measurement Uncertainty

| Test Item | Frequency Range | Uncertainty (dB) |
|------------------------|---------------------|------------------|
| Conducted Emission | 9kHz ~ 150KHz | 2.7 |
| | 150kHz ~ 30MHz | 2.7 |
| Radiated Emission | 9kHz ~ 30MHz | 1.7 |
| | 30MHz ~ 1000MHz | 5.7 |
| | 1000MHz ~ 18000MHz | 5.5 |
| | 18000MHz ~ 26500MHz | 4.8 |
| | 26500MHz ~ 40000MHz | 4.8 |
| Conducted Output Power | +0.27 dB / -0.28 dB | |
| RF Bandwidth | 4.96% | |
| Power Spectral Density | +0.71 dB / -0.77 dB | |



2 EUT Description

| | | |
|----------------------------|--|-----------------|
| Applicant | Superior Communications DBA PureGear 5082 4th Street Irwindale California USA, Irwindale, California, 91706, United States | |
| Manufacturer | Shenzhen Auto Range Tech Co., Limited 5/F, Bldg. A1, Atomic Power Industrial Park, Fuming, Guanlan, Shenzhen, Guangdong. P. R. China. | |
| Product Type | PURECAM | |
| Trade Name | PureGear | |
| Model No. | 07614PG | |
| FCC ID | 2AIIF-07614PG | |
| Class II Permissive Change | 1. change the BT/LE/WLAN/GPS antenna's location 2. change the BT//LE/WLAN/GPS antenna's gain to 2.3dBi (the original is 2dBi, and the antenna type remains the same) 3. add a heat sink, and the appearance changes accordingly 4. change the camera module and the module's layout partly changed 5. add an accessory: car charger 6. software version changes to V8.0_000_20180808. | |
| IMEI No. | 35316305670667 | |
| Frequency Range | 2402 ~ 2480 MHz | |
| Modulation Type | GFSK | |
| Operate Temp. Range | -10 ~ +70 °C | |
| Antenna information | Type | Max. Gain (dBi) |
| | Internal Antenna | 2.3 |
| RF Output Power | 0.00067 W | |

EUT Modify Description :

Modify Description:

Class II Permissive change for FCC ID:2AIIF-07614PG, compare to the original EUT, the changes are as below:

1. change the BT/LE/WLAN/GPS antenna's location
2. change the BT//LE/WLAN/GPS antenna's gain to 2.3dBi (the original is 2dBi, and the antenna type remains the same)
3. add a heat sink, and the appearance changes accordingly
4. change the camera module and the module's layout partly changed
5. add an accessory: car charger
6. software version changes to V8.0_000_20180808.

Above changes do not affect the EUT's RF function.

Verify power is smaller than the original case power.

Therefore, the product is only needed to be tested for AC Power Line Conducted Emission Measurement, Maximum Conducted Output Power Measurement and Transmitter Radiated Emissions Measurement

Original Report : 1801FR15

Modify: 1807FR13

3 Test Methodology

3.1. Mode of Operation

Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

| Test Mode |
|---|
| Mode 1: Transmit mode |
| Mode 2: Bluetooth LE Continuous TX mode |

Software used to control the EUT for staying in continuous transmitting mode was programmed.

After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in TX mode only.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

Note: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

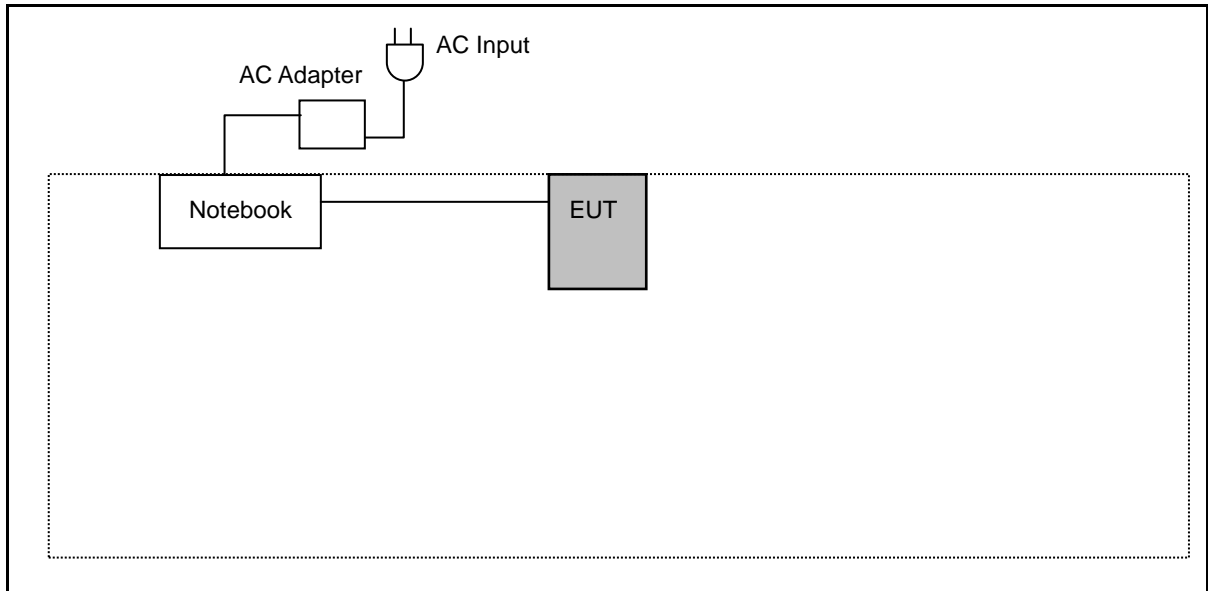
3.2. EUT Exercise Software

| | |
|---|--|
| 1 | Setup the EUT shown on "Configuration of Test System Details." |
| 2 | Turn on the power of all equipment. |
| 3 | Turn on TX function |
| 4 | EUT run test program. |

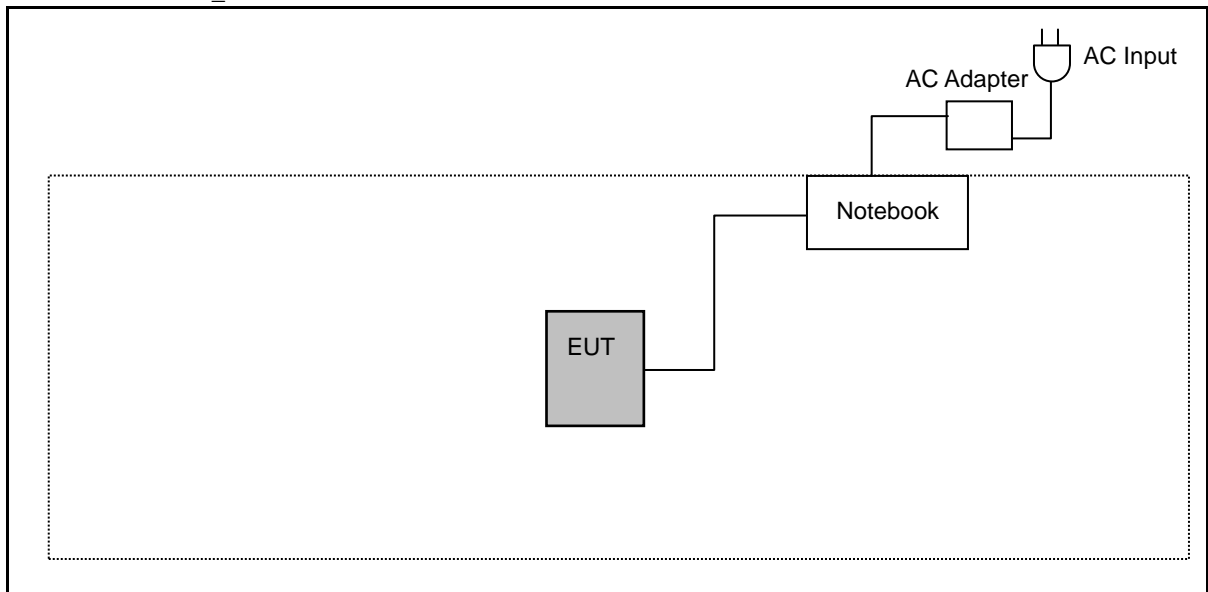
| Measurement Software | |
|----------------------|--------------------------|
| 1 | EZ-EMC Ver. ATL-03A1-1 |
| 2 | EZ-EMC Ver ATL-ITC-3A1-1 |

3.3. Configuration of Test System Details

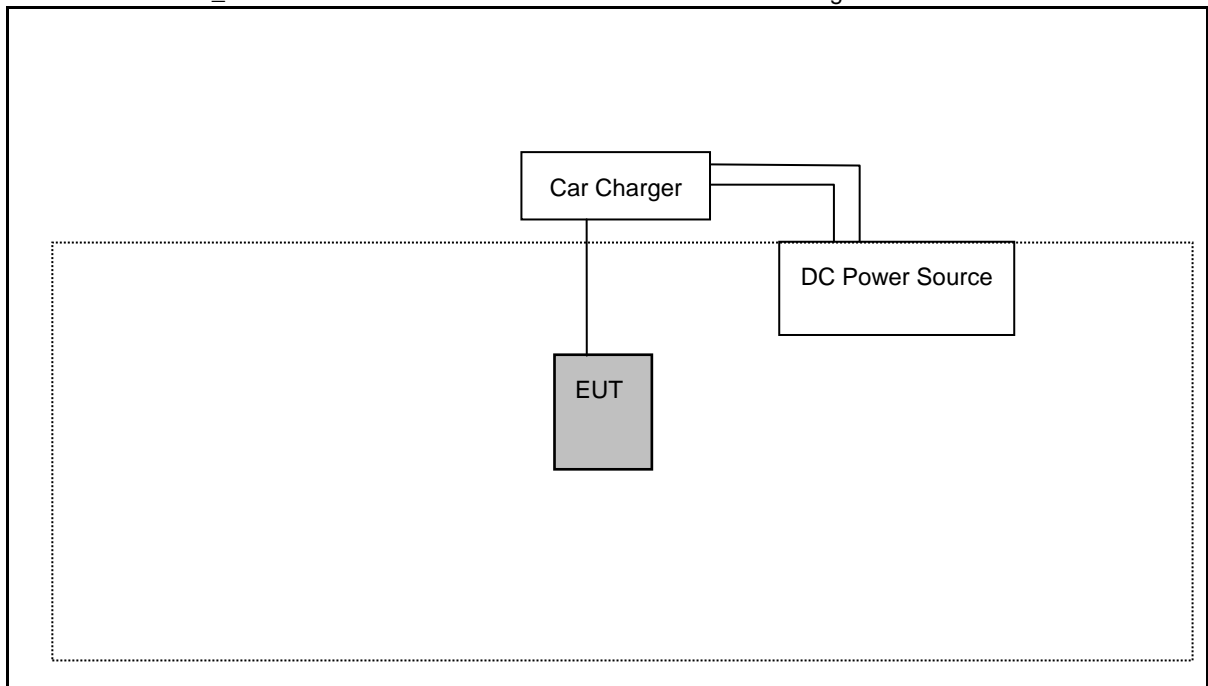
Conducted Emissions



Radiated Emission_ EUT connects to the NB with USB cable



Radiated Emission_ EUT connects to the DC Power Source with the car charger





3.4. Test Instruments

For Conducted Emission

Test Period: Jun. 29, 2018

| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Cal. Period |
|-------------------|--------------|--------------|---------------|------------|-------------|
| EMI Test Receiver | R&S | ESCI | 101000 | 12/18/2017 | 1 year |
| LISN | R&S | ENV216 | 101040 | 04/11/2018 | 1 year |
| LISN | R&S | ENV216 | 101041 | 03/23/2018 | 1 year |

For Radiated Emissions

Test Period: Jul. 01 ~ Jul. 30, 2018

| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Cal. Period |
|-----------------------------------|--------------------------------|------------------------|---------------|------------|-------------|
| Spectrum Analyzer (10Hz~44GHz) | Keysight | N9010A | MY52221312 | 01/15/2018 | 1 year |
| Pre Amplifier (1~26.5GHz) | Agilent | 8449B | 3008A02237 | 10/16/2017 | 1 year |
| Pre Amplifier (100KHz~1.3GHz) | Agilent | 8447D | 2944A11119 | 01/10/2018 | 1 year |
| Broadband Antenna | Schwarzbeck | VULB9168 | 416 | 10/26/2017 | 1 year |
| Horn Antenna (1~18GHz) | SCHWARZBECK MESS-ELEKTRONIK | BBHA9120D | 9120D-550 | 06/22/2018 | 1 year |
| Horn Antenna (18~40GHz) | ETS | 3116 | 86467 | 09/19/2017 | 1 year |
| Loop Antenna | COM-POWER CORPORATION | AL-130 | 121014 | 03/13/2018 | 1 year |
| RF Cable | EMCI | EMC104-N-N-6000 | TE01-1 | 02/20/2018 | 1 year |
| Microwave Cable | EMCI | EMC104-SM-SM-1 3000 | 170814 | 10/31/2017 | 1 year |
| Microwave Cable | EMCI | EMC102-KM-KM-1 4000 | 151001 | 02/20/2018 | 1 year |

For Conducted

Test Period: Jul. 04, 2018

| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Cal. Period |
|-----------------|--------------|------------------|---------------|------------|-------------|
| Power Sensor | Agilent | N1921A | MY45241957 | 12/07/2017 | 1 year |
| Power Meter | Agilent | N1911A | MY45101619 | 12/07/2017 | 1 year |
| Microwave Cable | EMCI | EMC102-SM-SM1500 | 001 | 11/22/2017 | 1 year |



3.5. Test Site Environment

| Items | Required (IEC 60068-1) | Actual |
|----------------------------|------------------------|--------|
| Temperature (°C) | 15-35 | 26 |
| Humidity (%RH) | 25-75 | 60 |
| Barometric pressure (mbar) | 860-1060 | 950 |

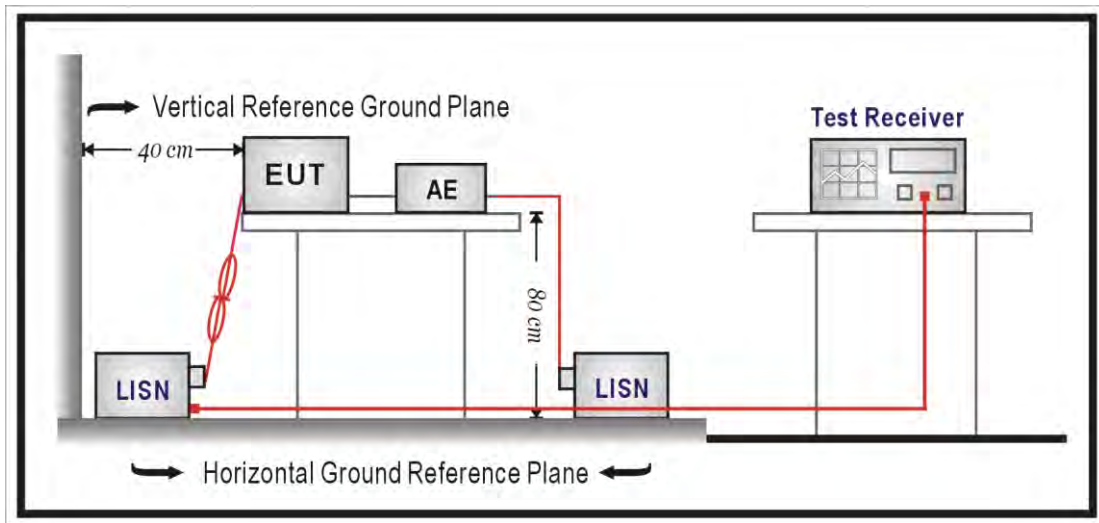
4 Measurement Procedure

4.1. AC Power Line Conducted Emission Measurement

■ Limit

| Frequency (MHz) | Quasi-peak | Average |
|-----------------|------------|----------|
| 0.15 - 0.5 | 66 to 56 | 56 to 46 |
| 0.50 - 5.0 | 56 | 46 |
| 5.0 - 30.0 | 60 | 50 |

■ Test Setup



■ Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a $50\Omega // 50\mu\text{H}$ coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a $50\Omega // 50\mu\text{H}$ coupling impedance with 50ohm termination.

Tabletop device shall be placed on a non-conducting platform, of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The wall of screened room shall be located 40cm to the rear of the EUT. Other surfaces of tabletop or floor standing EUT shall be at least 80cm from any other ground conducting surface including one or more LISNs. For floor-standing device shall be placed under the EUT with a 12mm insulating material.

Conducted emissions were investigated over the frequency range from 0.15 MHz to 30 MHz using a resolution bandwidth of 9 kHz. The equipment under test (EUT) shall be meet the limits in section 4.1, as applicable, including the average limit and the quasi-peak limit when using respectively, an average detector and quasi-peak detector measured in accordance with the methods described of related standard. When all of peak value were complied with quasi-peak and average limit from 150kHz to 30MHz then quasi-peak and average measurement was unnecessary.

The AMN shall be placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane for AMNs mounted on top of the ground reference plane. This distance is between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment shall be at least 0,8 m from the AMN. If the mains power cable is longer than 1m then the cable shall be folded back and forth at the centre of the lead to form a bundle no longer than 0.4m. All of interconnecting cables that hang closer than 40cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long. All of EUT and AE shall be separate place more than 0.1m. All 50 Ω ports of the LISN shall be resistively terminated into 50 Ω loads when not connected to the measuring instrument.

If the reading of the measuring receiver shows fluctuations close to the limit, the reading shall be observed for at least 15 s at each measurement frequency; the higher reading shall be recorded with the exception of any brief isolated high reading which shall be ignored.

4.2. Transmitter Radiated Emissions Measurement

■ Limit

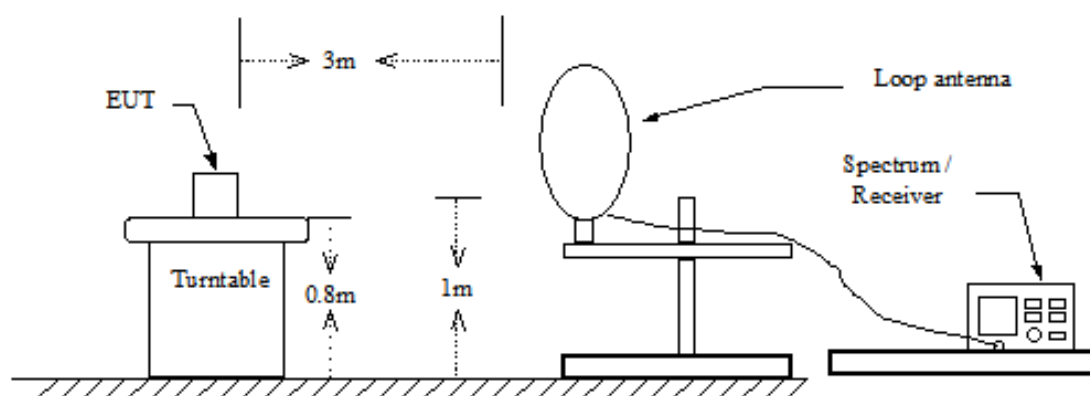
According to §15.209(a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength ($\mu\text{V}/\text{m}$ at meter) | Measurement Distance (meters) |
|--------------------|--|----------------------------------|
| 0.009 – 0.490 | $2400 / F$ (kHz) | 300 |
| 0.490 – 1.705 | $24000 / F$ (kHz) | 30 |
| 1.705 – 30.0 | 30 | 30 |
| 30 - 88 | 100** | 3 |
| 88-216 | 150** | 3 |
| 216-960 | 200** | 3 |
| Above 960 | 500 | 3 |

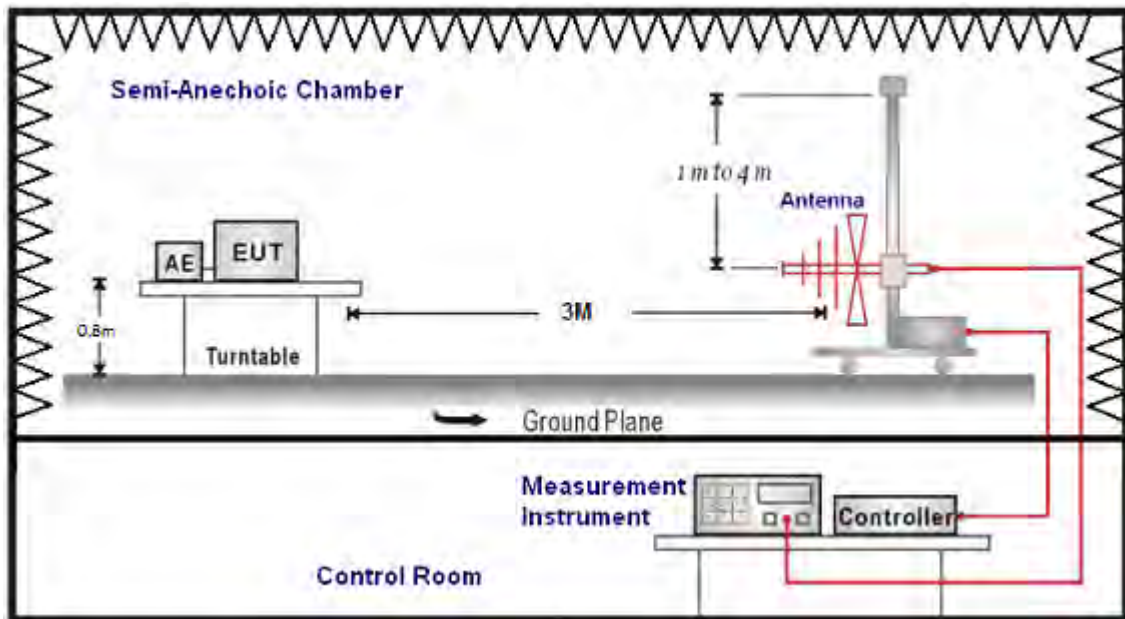
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

■ Setup

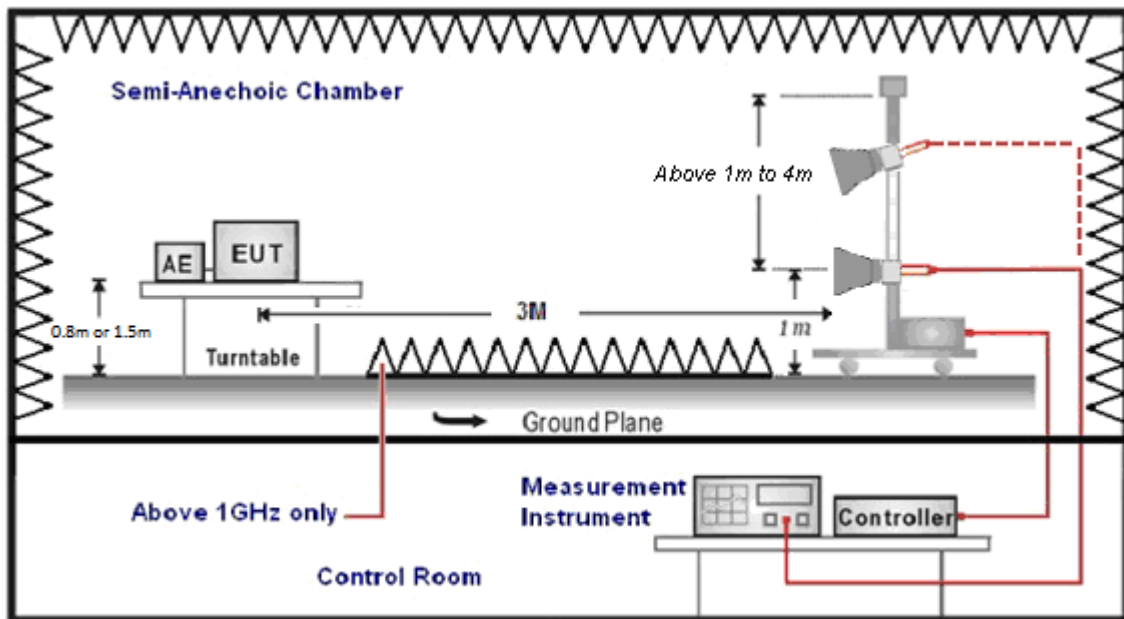
9kHz ~ 30MHz



Below 1GHz



Above 1GHz



■ Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 or 1.5 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 9 kHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements when Duty cycle >98% / 1/T for average measurements when Duty cycle <98%. A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m).

The actual field intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

$$(1) \text{ Amplitude (dBuV/m) = FI (dBuV) + AF (dBuV) + CL (dBuV) - Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

$$(2) \text{ Actual Amplitude (dBuV/m) = Amplitude (dBuV) - Dis(dB)}$$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

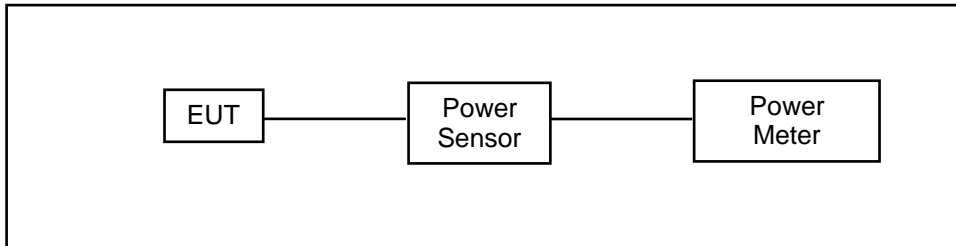
Data of measurement within this frequency range without mark in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

4.3. Maximum Conducted Output Power Measurement

■ Limit

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm.

■ Test Setup



■ Test Procedure

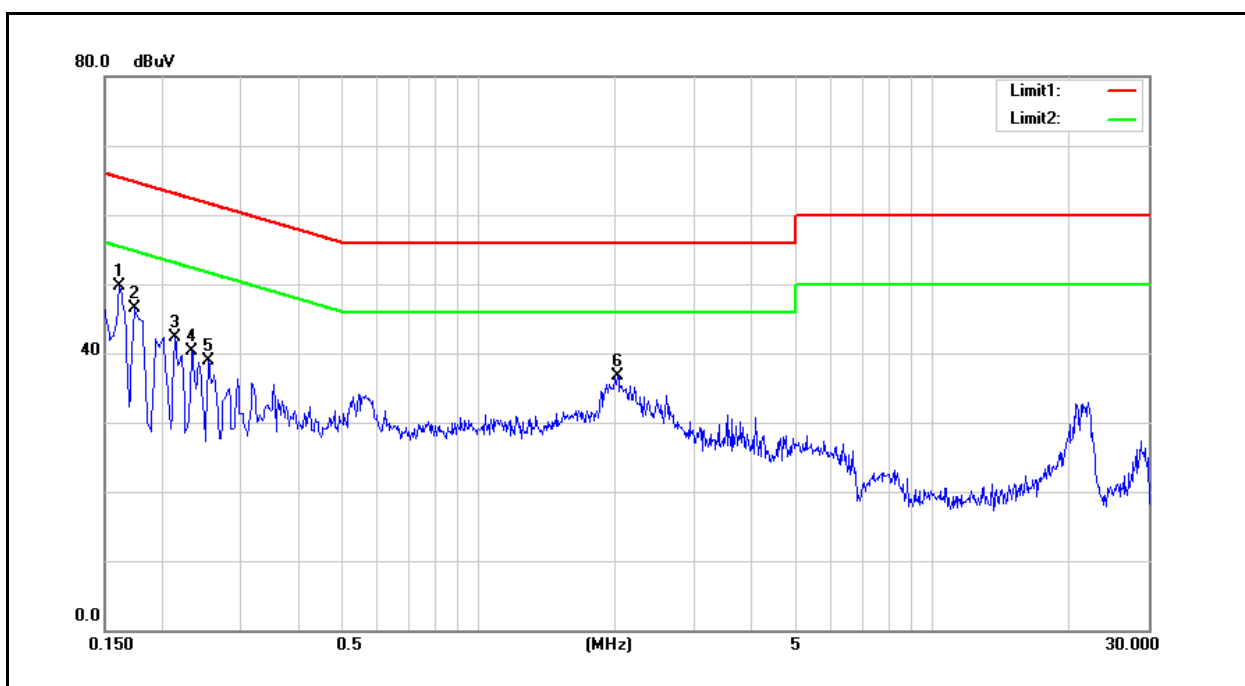
The testing follows the Measurement Procedure of ANSI C63.10-2013 section 11.9.2.3 Method AVGPM.

The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor..

5 Test Results

Annex A. AC Power Line Conducted Emission

| | | | |
|--------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Line: | L1 |
| Test Mode: | Mode 1 | Power: | AC 120V/60Hz |
| | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Description: | | | |

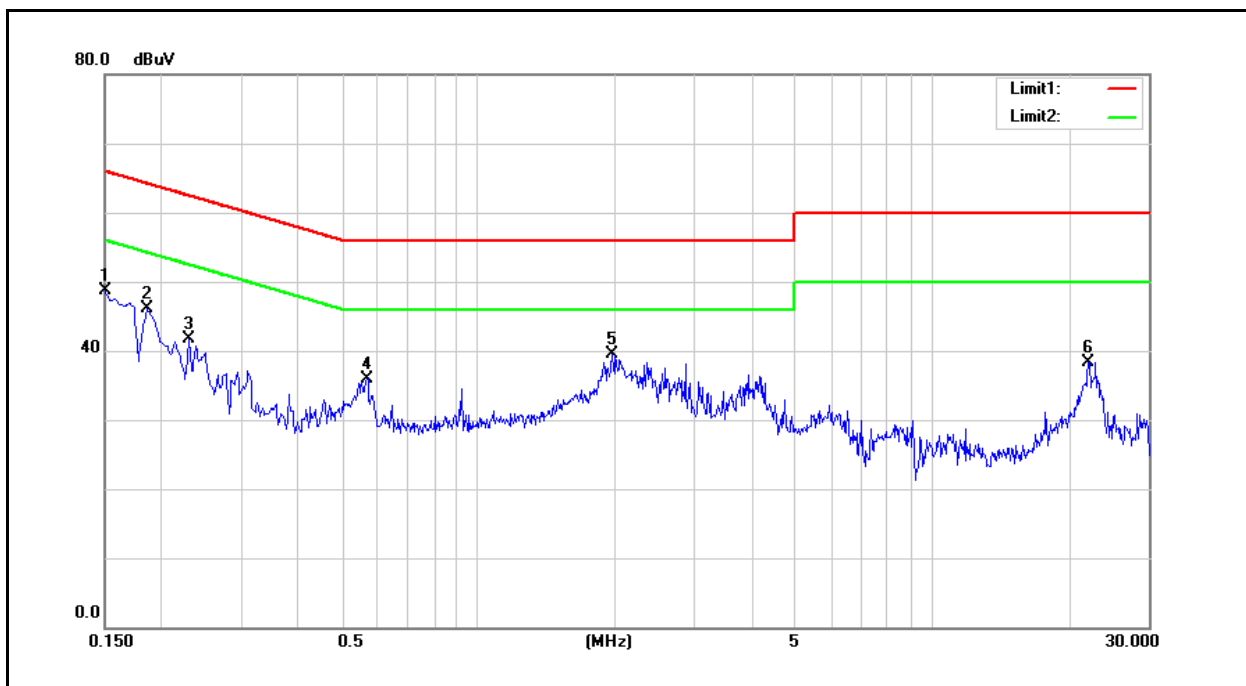


| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|--------------------|-------------------------|--------------------------|------------------------------|------------------------|-------------------------|-----------------------|------------------------|----------------------|-----------------------|--------|
| 1 | 0.1620 | 35.71 | 18.60 | 9.67 | 45.38 | 28.27 | 65.36 | 55.36 | -19.98 | -27.09 | Pass |
| 2 | 0.1740 | 33.39 | 16.40 | 9.67 | 43.06 | 26.07 | 64.77 | 54.77 | -21.71 | -28.70 | Pass |
| 3 | 0.2140 | 27.34 | 12.90 | 9.68 | 37.02 | 22.58 | 63.05 | 53.05 | -26.03 | -30.47 | Pass |
| 4 | 0.2340 | 25.50 | 13.37 | 9.68 | 35.18 | 23.05 | 62.31 | 52.31 | -27.13 | -29.26 | Pass |
| 5 | 0.2540 | 22.72 | 10.36 | 9.69 | 32.41 | 20.05 | 61.63 | 51.63 | -29.22 | -31.58 | Pass |
| 6 | 2.0260 | 22.87 | 15.00 | 9.74 | 32.61 | 24.74 | 56.00 | 46.00 | -23.39 | -21.26 | Pass |

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

| | | | |
|--------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Line: | N |
| Test Mode: | Mode 1 | Power: | AC 120V/60Hz |
| | | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Description: | | | |



| No. | Frequency (MHz) | QP reading (dBuV) | AVG reading (dBuV) | Correction factor (dB) | QP result (dBuV) | AVG result (dBuV) | QP limit (dBuV) | AVG limit (dBuV) | QP margin (dB) | AVG margin (dB) | Remark |
|-----|-----------------|-------------------|--------------------|------------------------|------------------|-------------------|-----------------|------------------|----------------|-----------------|--------|
| 1 | 0.1500 | 37.17 | 15.97 | 9.68 | 46.85 | 25.65 | 66.00 | 56.00 | -19.15 | -30.35 | Pass |
| 2 | 0.1860 | 31.24 | 14.13 | 9.69 | 40.93 | 23.82 | 64.21 | 54.21 | -23.28 | -30.39 | Pass |
| 3 | 0.2300 | 25.55 | 12.21 | 9.69 | 35.24 | 21.90 | 62.45 | 52.45 | -27.21 | -30.55 | Pass |
| 4 | 0.5700 | 22.48 | 12.73 | 9.70 | 32.18 | 22.43 | 56.00 | 46.00 | -23.82 | -23.57 | Pass |
| 5 | 1.9780 | 24.61 | 18.06 | 9.77 | 34.38 | 27.83 | 56.00 | 46.00 | -21.62 | -18.17 | Pass |
| 6 | 22.1420 | 19.59 | 10.36 | 10.62 | 30.21 | 20.98 | 60.00 | 50.00 | -29.79 | -29.02 | Pass |

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB) = Cable loss (dB) + L.I.S.N. factor (dB).

Annex B. Transmitter Radiated Emissions Test Results

Below 1GHz

| Standard: | FCC Part 15.247 | | | Test Distance: | 3m | | |
|--------------------|---------------------------------------|--------------------------|--------------------|---------------------|----------------|--------|---------------------|
| Test item: | Harmonic | | | Power: | AC 120V/60Hz | | |
| Test Mode: | Mode 1 | | | Temp.(°C)/Hum.(%RH) | 26(°C)/60%RH | | |
| Description: | EUT connects to NB with the USB cable | | | | | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 176.4700 | 42.97 | -10.92 | 32.05 | 43.50 | -11.45 | peak | H |
| 201.6900 | 47.52 | -13.24 | 34.28 | 43.50 | -9.22 | peak | H |
| 268.6200 | 43.21 | -11.29 | 31.92 | 46.00 | -14.08 | peak | H |
| 481.0500 | 39.24 | -5.17 | 34.07 | 46.00 | -11.93 | peak | H |
| 715.7900 | 30.58 | -1.51 | 29.07 | 46.00 | -16.93 | peak | H |
| 854.5000 | 30.66 | 0.76 | 31.42 | 46.00 | -14.58 | peak | H |
| 172.5900 | 43.67 | -10.59 | 33.08 | 43.50 | -10.42 | peak | V |
| 201.6900 | 42.62 | -13.24 | 29.38 | 43.50 | -14.12 | peak | V |
| 478.1400 | 36.92 | -5.31 | 31.61 | 46.00 | -14.39 | peak | V |
| 687.6600 | 38.29 | -2.04 | 36.25 | 46.00 | -9.75 | peak | V |
| 783.6900 | 34.71 | 0.17 | 34.88 | 46.00 | -11.12 | peak | V |
| 924.3400 | 28.97 | 2.12 | 31.09 | 46.00 | -14.91 | peak | V |

Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

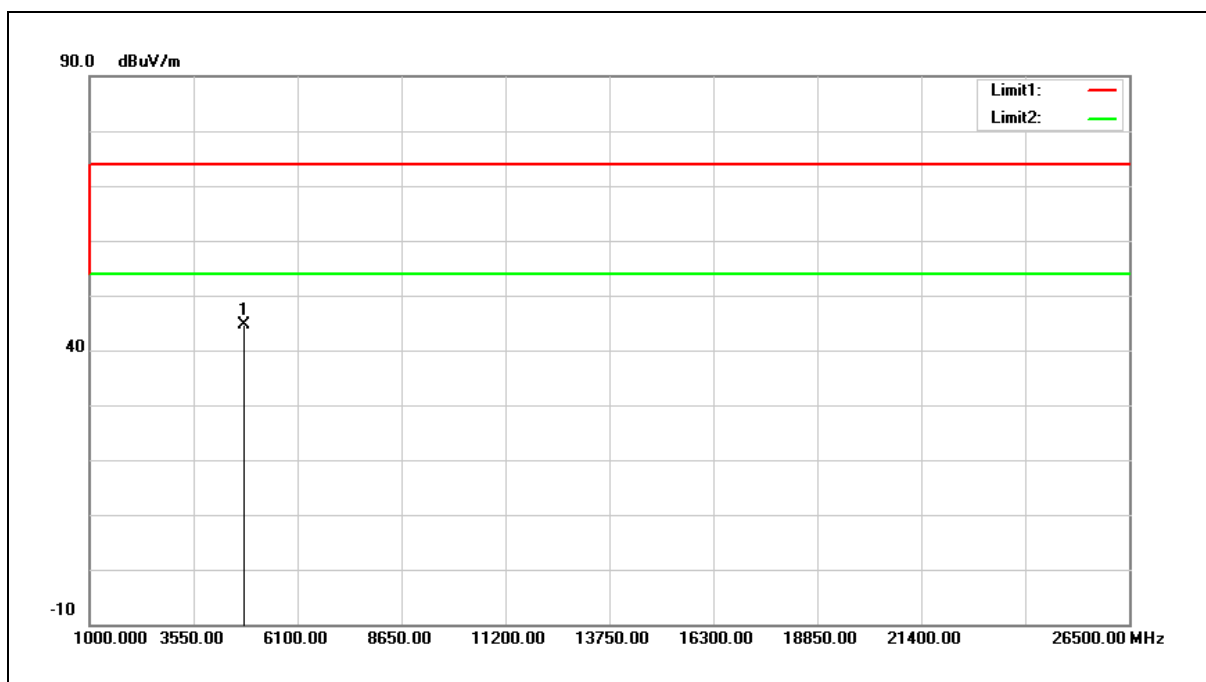
3. No emission found between lowest internal used/generated frequencies to 30MHz (9 kHz~30MHz).

| Standard: | | FCC Part 15.247 | | Test Distance: | | 3m | |
|--------------------|-------------------|--|--------------------|----------------------|----------------|--------------|---------------------|
| Test item: | | Harmonic | | Power: | | AC 120V/60Hz | |
| Test Mode: | | Mode 1 | | Temp.(°C)/Hum.(%RH): | | 26(°C)/60%RH | |
| Description: | | EUT connects to DC Power Source with the car charger | | | | | |
| Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark | Ant.Polar. H / V |
| 647.8900 | 35.80 | -2.38 | 33.42 | 46.00 | -12.58 | peak | H |
| 696.3900 | 37.09 | -1.99 | 35.10 | 46.00 | -10.90 | peak | H |
| 743.9200 | 37.72 | -0.98 | 36.74 | 46.00 | -9.26 | peak | H |
| 792.4200 | 35.35 | 0.19 | 35.54 | 46.00 | -10.46 | peak | H |
| 839.9500 | 35.67 | 0.67 | 36.34 | 46.00 | -9.66 | peak | H |
| 935.9800 | 30.47 | 2.58 | 33.05 | 46.00 | -12.95 | peak | H |
| 30.9700 | 47.37 | -11.62 | 35.75 | 40.00 | -4.25 | peak | V |
| 81.4100 | 44.82 | -14.77 | 30.05 | 40.00 | -9.95 | peak | V |
| 110.5100 | 44.70 | -14.35 | 30.35 | 43.50 | -13.15 | peak | V |
| 792.4200 | 37.85 | 0.19 | 38.04 | 46.00 | -7.96 | peak | V |
| 839.9500 | 35.09 | 0.67 | 35.76 | 46.00 | -10.24 | peak | V |
| 935.9800 | 34.30 | 2.58 | 36.88 | 46.00 | -9.12 | peak | V |

- Note: 1. Result (dBuV) = Correction factor (dB) + Reading(dBuV).
2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).
3. No emission found between lowest internal used/generated frequencies to 30MHz (9 kHz~30MHz).

Above 1GHz

| | | | |
|-------------|-----------------|-----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Frequency: | 2402MHz | Temp.(°C)/Hum. (%RH): | 26(°C)/60%RH |
| Mode: | Mode 2 | | |
| Ant.Polar.: | Horizontal | | |



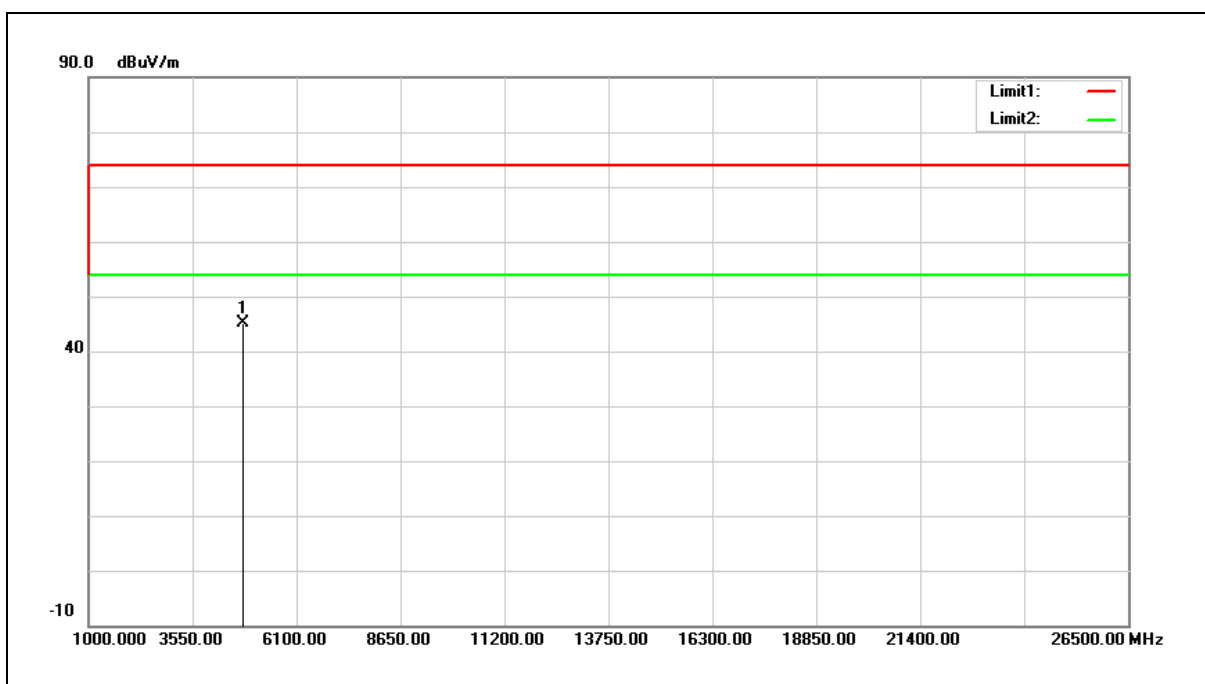
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|
| 1 | 4804.000 | 48.92 | -4.35 | 44.57 | 74.00 | -29.43 | peak |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

| | | | |
|-------------|-----------------|-----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Frequency: | 2402MHz | Temp.(°C)/Hum. (%RH): | 26(°C)/60%RH |
| Mode: | Mode 2 | | |
| Ant.Polar.: | Vertical | | |



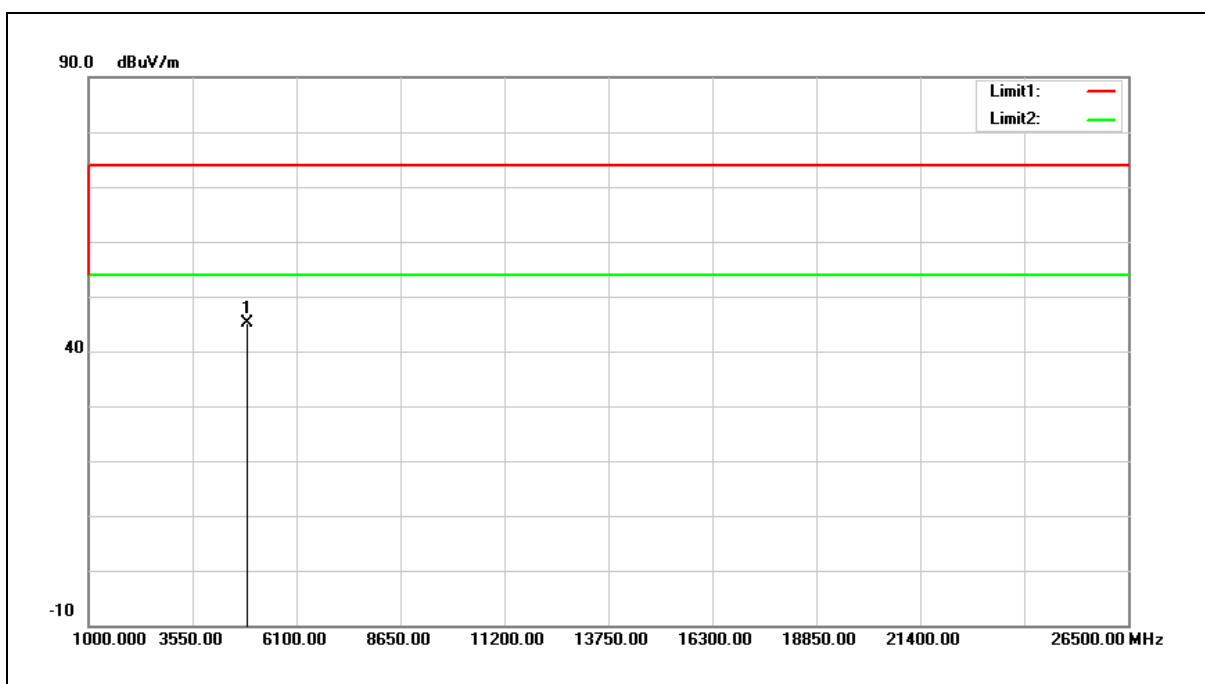
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|
| 1 | 4804.000 | 49.53 | -4.35 | 45.18 | 74.00 | -28.82 | peak |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

| | | | |
|-------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Frequency: | 2440MHz | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | Mode 2 | | |
| Ant.Polar.: | Horizontal | | |



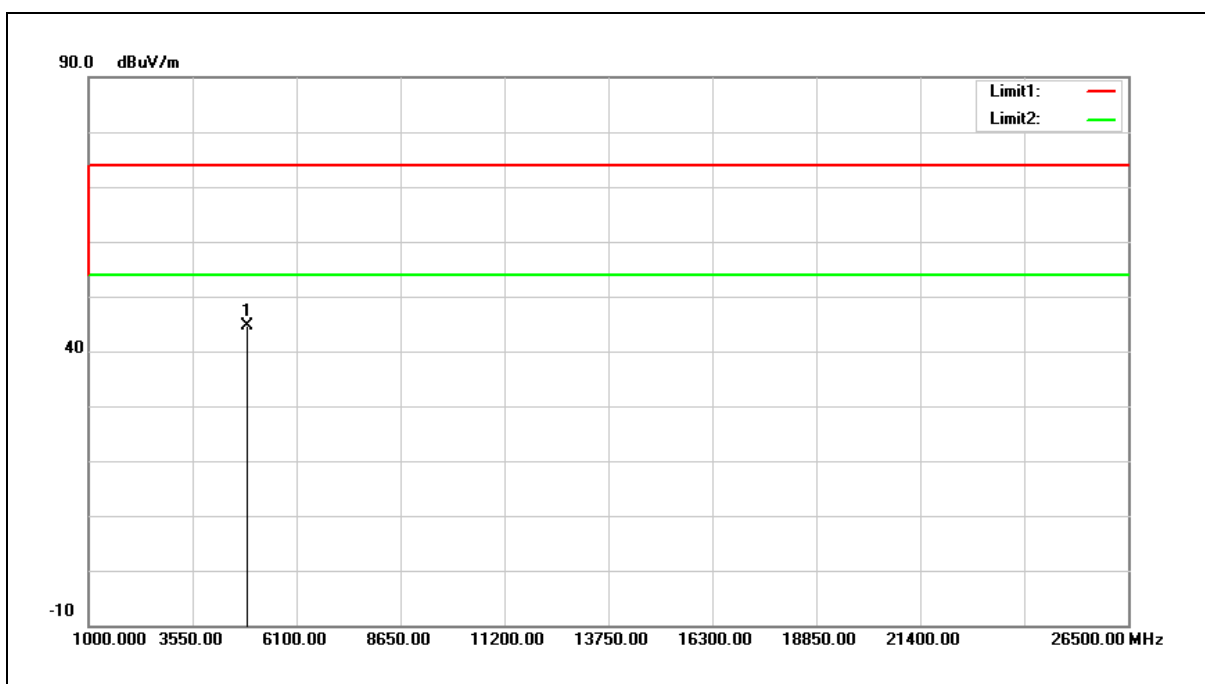
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|
| 1 | 4880.000 | 49.42 | -4.37 | 45.05 | 74.00 | -28.95 | peak |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

| | | | |
|-------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Frequency: | 2440MHz | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | Mode 2 | | |
| Ant.Polar.: | Vertical | | |



| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|
| 1 | 4880.000 | 48.94 | -4.37 | 44.57 | 74.00 | -29.43 | peak |

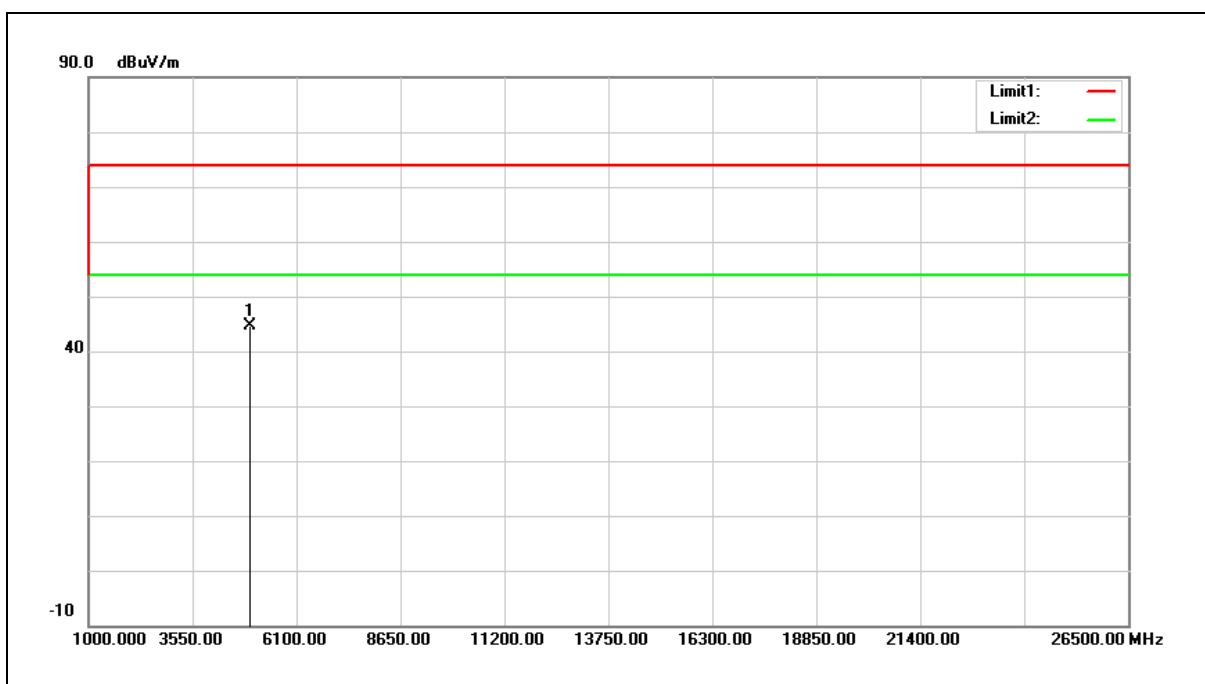
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.



| | | | |
|-------------|-----------------|-----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Frequency: | 2480MHz | Temp.(°C)/Hum. (%RH): | 26(°C)/60%RH |
| Mode: | Mode 2 | | |
| Ant.Polar.: | Horizontal | | |



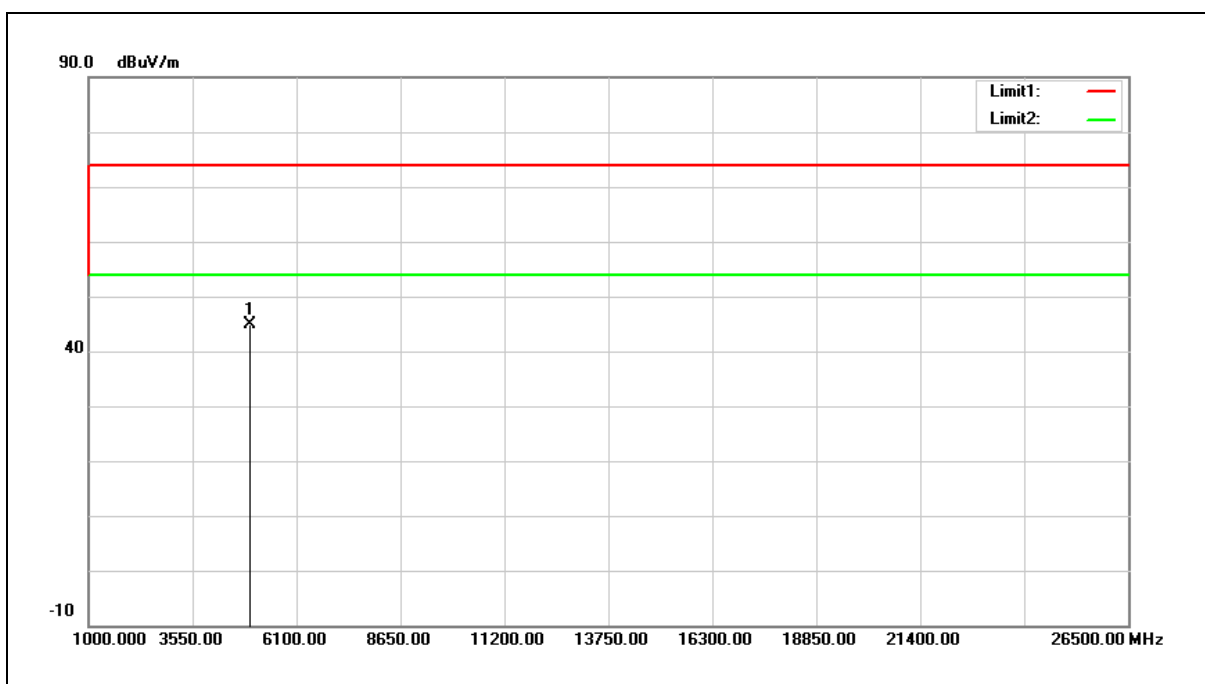
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|--------------------|-------------------|--------------------------|--------------------|-------------------|----------------|--------|
| 1 | 4960.000 | 49.01 | -4.39 | 44.62 | 74.00 | -29.38 | peak |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

| | | | |
|-------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Frequency: | 2480MHz | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | Mode 2 | | |
| Ant.Polar.: | Vertical | | |



| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|-----------------------|-----------------|----------------|-------------|--------|
| 1 | 4960.000 | 49.16 | -4.39 | 44.77 | 74.00 | -29.23 | peak |

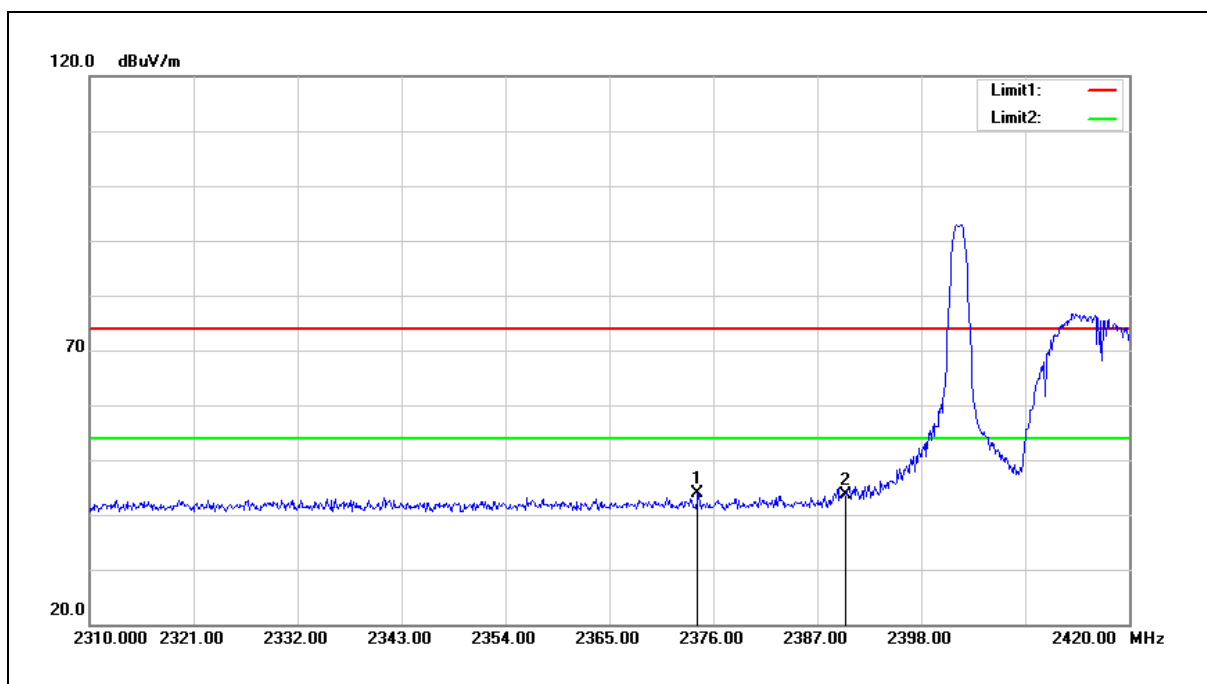
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Band Edge

| | | | |
|--------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Mode: | Mode 2 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Ant.Polar.: | Horizontal | | |
| Description: | | | |



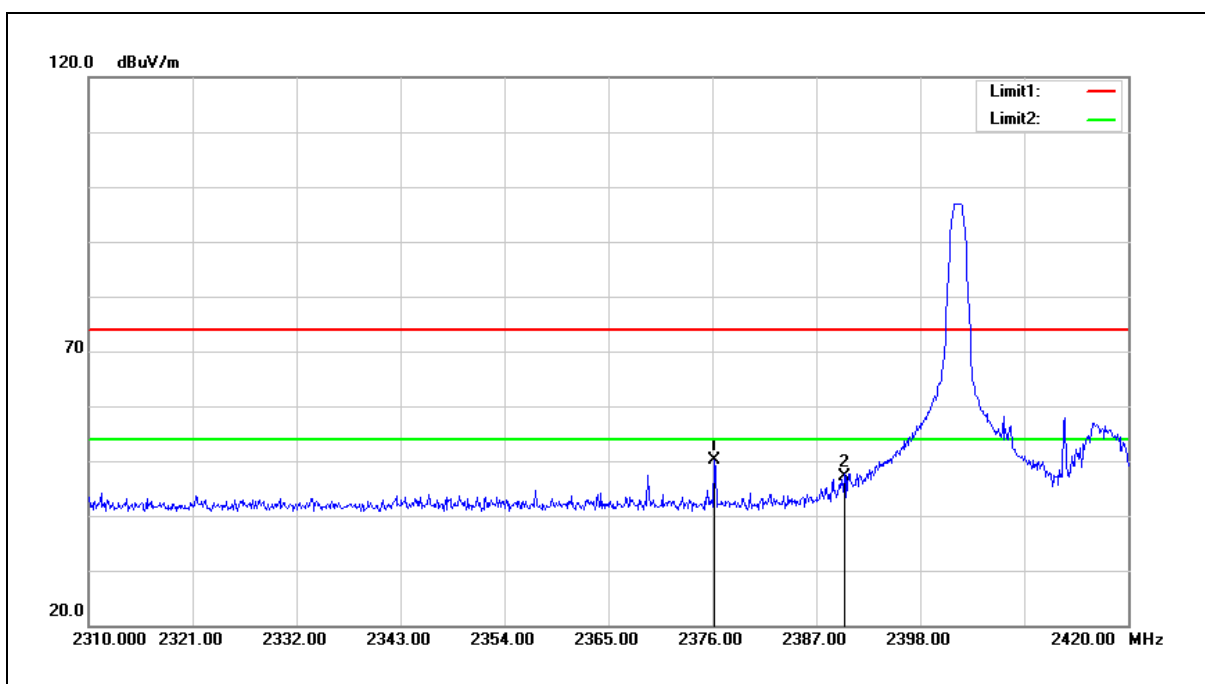
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|-----------------------|-----------------|----------------|-------------|--------|
| 1 | 2374.350 | 53.65 | -9.71 | 43.94 | 74.00 | -30.06 | peak |
| 2 | 2390.000 | 53.14 | -9.62 | 43.52 | 74.00 | -30.48 | peak |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

| | | | |
|--------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Mode: | Mode 2 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Ant.Polar.: | Vertical | | |
| Description: | | | |



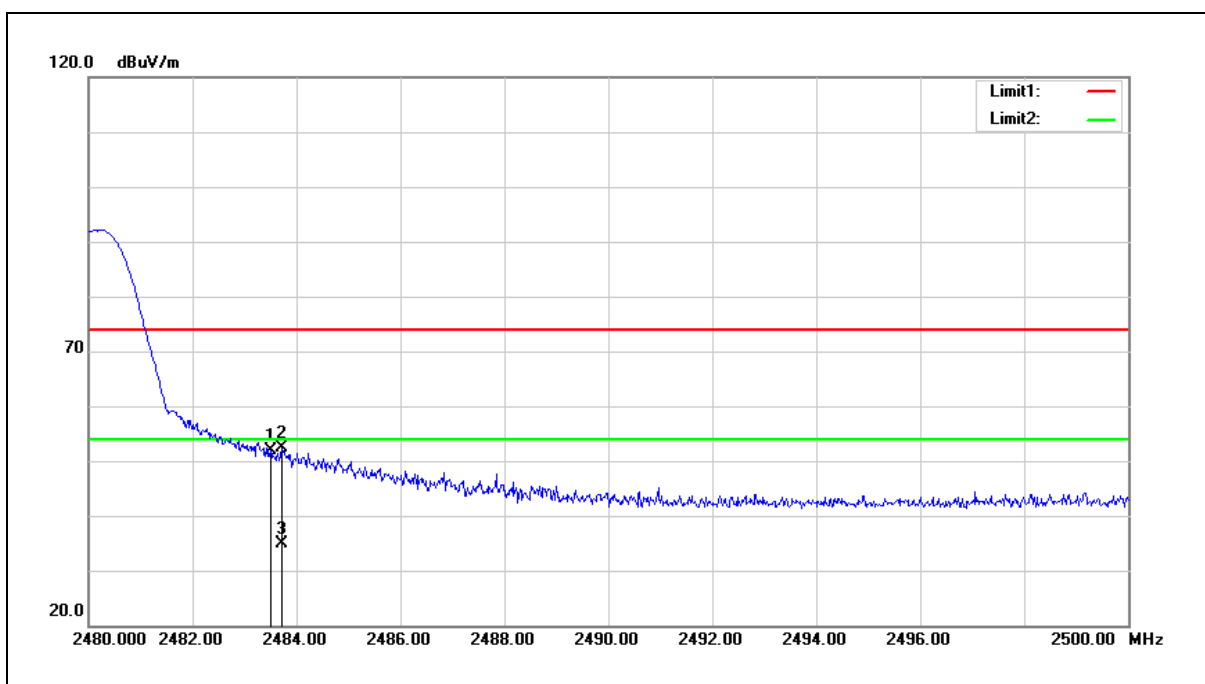
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|-----------------------|-----------------|----------------|-------------|--------|
| 1 | 2376.220 | 59.73 | -9.70 | 50.03 | 74.00 | -23.97 | peak |
| 2 | 2390.000 | 56.79 | -9.62 | 47.17 | 74.00 | -26.83 | peak |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

| | | | |
|--------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Mode: | Mode 2 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Ant.Polar.: | Horizontal | | |
| Description: | | | |



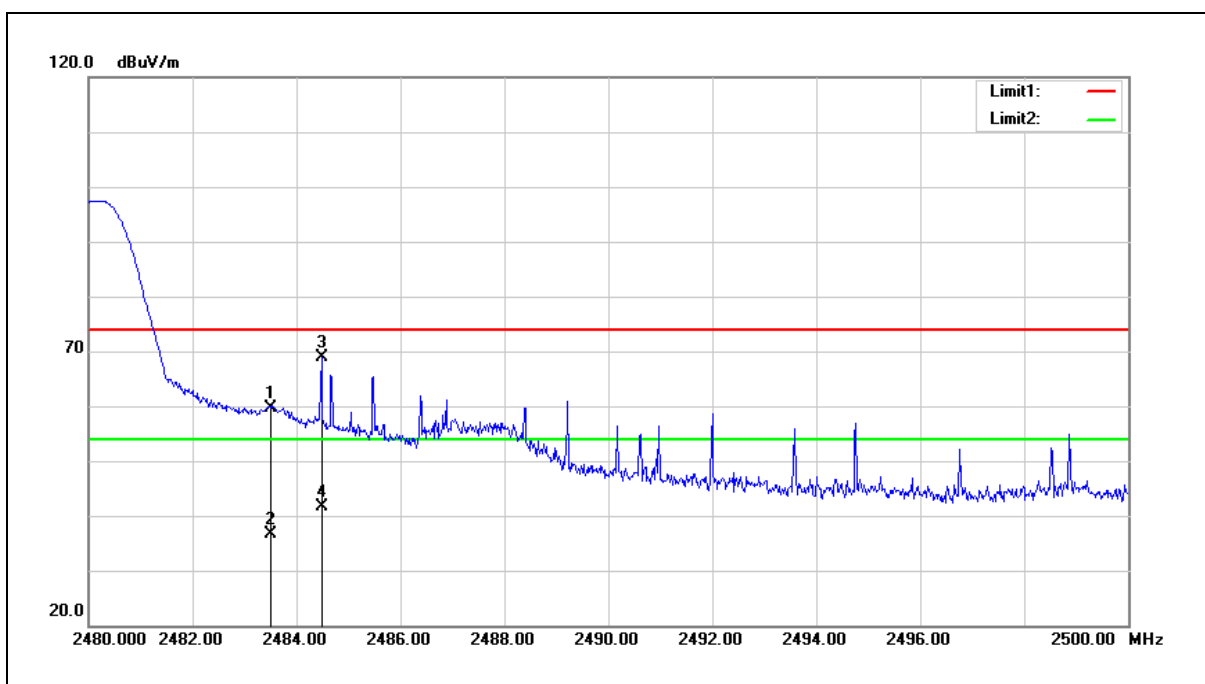
| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|-----------------------|-----------------|----------------|-------------|--------|
| 1 | 2483.500 | 61.07 | -9.20 | 51.87 | 74.00 | -22.13 | peak |
| 2 | 2483.720 | 61.56 | -9.20 | 52.36 | 74.00 | -21.64 | peak |
| 3 | 2483.720 | 44.04 | -9.20 | 34.84 | 54.00 | -19.16 | AVG |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

| | | | |
|--------------|-----------------|----------------------|--------------|
| Standard: | FCC Part 15.247 | Test Distance: | 3m |
| Test item: | Harmonic | Power: | AC 120V/60Hz |
| Mode: | Mode 2 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Ant.Polar.: | Vertical | | |
| Description: | | | |



| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|-----------------------|-----------------|----------------|-------------|--------|
| 1 | 2483.500 | 68.93 | -9.20 | 59.73 | 74.00 | -14.27 | peak |
| 2 | 2483.500 | 45.95 | -9.20 | 36.75 | 54.00 | -17.25 | AVG |
| 3 | 2484.480 | 78.06 | -9.20 | 68.86 | 74.00 | -5.14 | peak |
| 4 | 2484.480 | 50.94 | -9.20 | 41.74 | 54.00 | -12.26 | AVG |

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3.When the peak results are less than average limit, so not need to evaluate the average.

Annex C. Conducted Test Results

Maximum Conducted Output Power Measurement

| Frequency (MHz) | Peak Power | | | | Limit (dBm) |
|--------------------|------------|---------|--------|---------|----------------|
| | Original | | Verify | | |
| | (dBm) | (W) | (dBm) | (W) | |
| 2402 | -1.73 | 0.00067 | -3.97 | 0.00040 | < 30 |
| 2440 | -2.28 | 0.00059 | -3.81 | 0.00042 | < 30 |
| 2480 | -3.13 | 0.00049 | -3.76 | 0.00042 | < 30 |

Note: The relevant measured result has the offset with cable loss already.