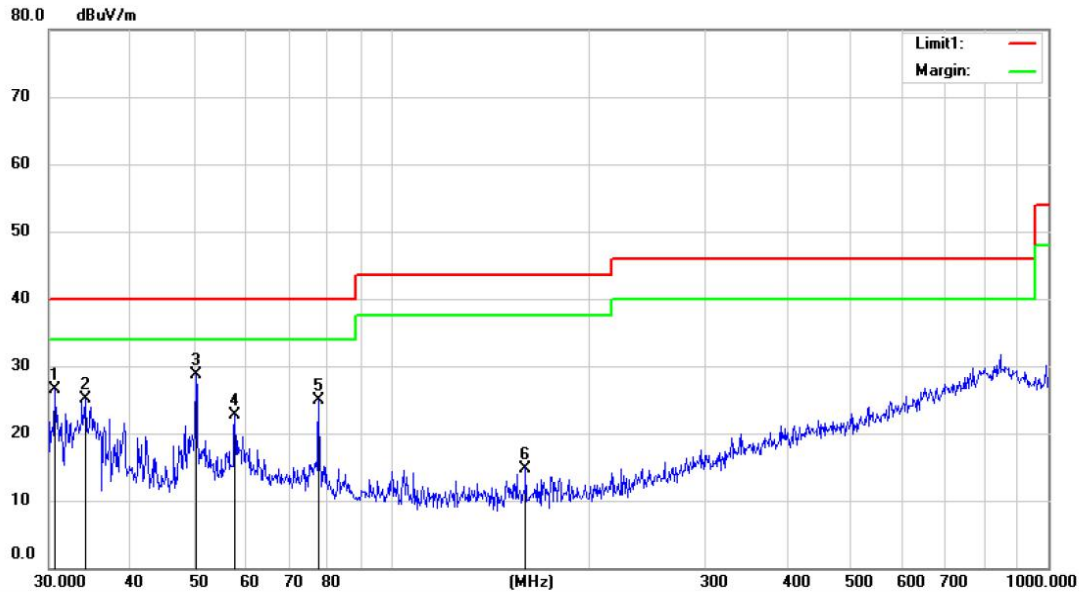


- Spurious Emission below 1GHz (30MHz to 1GHz)
- All antenna modes 2.4G 802.11b/g/n have been tested, and the worst result 802.11b recorded was report as below:

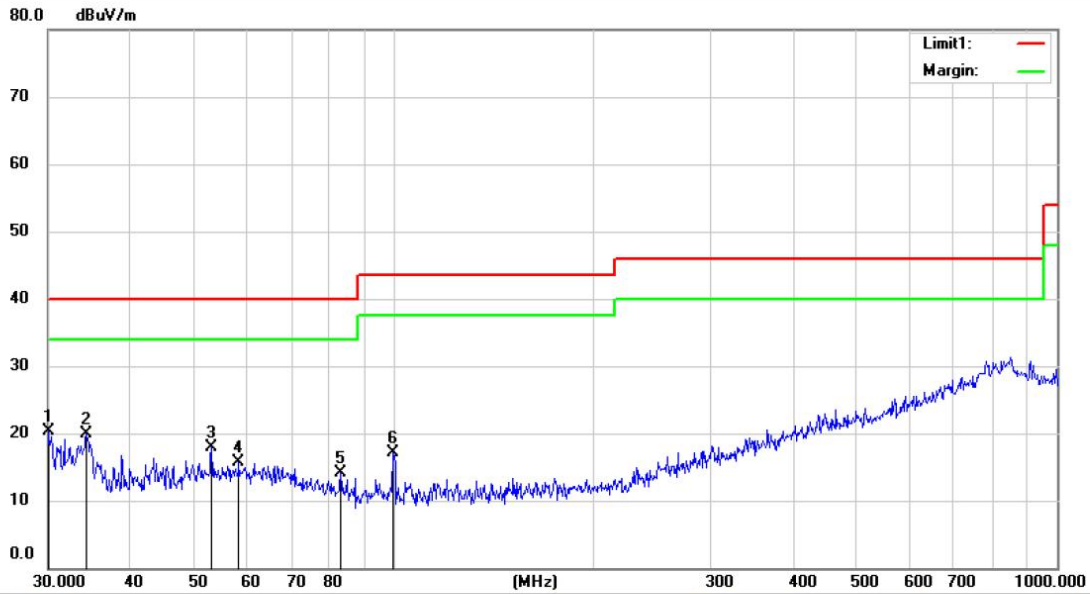


Site: 3m Chamber #1 Polarization: **Vertical** Temperature: 23.4 C
 Limit: (RE)FCC PART 15 CLASS B Power: Humidity: 50 %
 Mode: WIFI 2.4G 2412
 Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | cm | degree |
| 1 | | 30.7051 | 41.06 | -14.53 | 26.53 | 40.00 | -13.47 | QP | |
| 2 | | 34.1261 | 39.24 | -14.10 | 25.14 | 40.00 | -14.86 | QP | |
| 3 | * | 50.3868 | 40.71 | -11.96 | 28.75 | 40.00 | -11.25 | QP | |
| 4 | | 57.6444 | 34.75 | -12.08 | 22.67 | 40.00 | -17.33 | QP | |
| 5 | | 77.4230 | 39.43 | -14.55 | 24.88 | 40.00 | -15.12 | QP | |
| 6 | | 159.9245 | 28.68 | -13.88 | 14.80 | 43.50 | -28.70 | QP | |

*:Maximum data x:Over limit !:over margin

Operator: WHZ

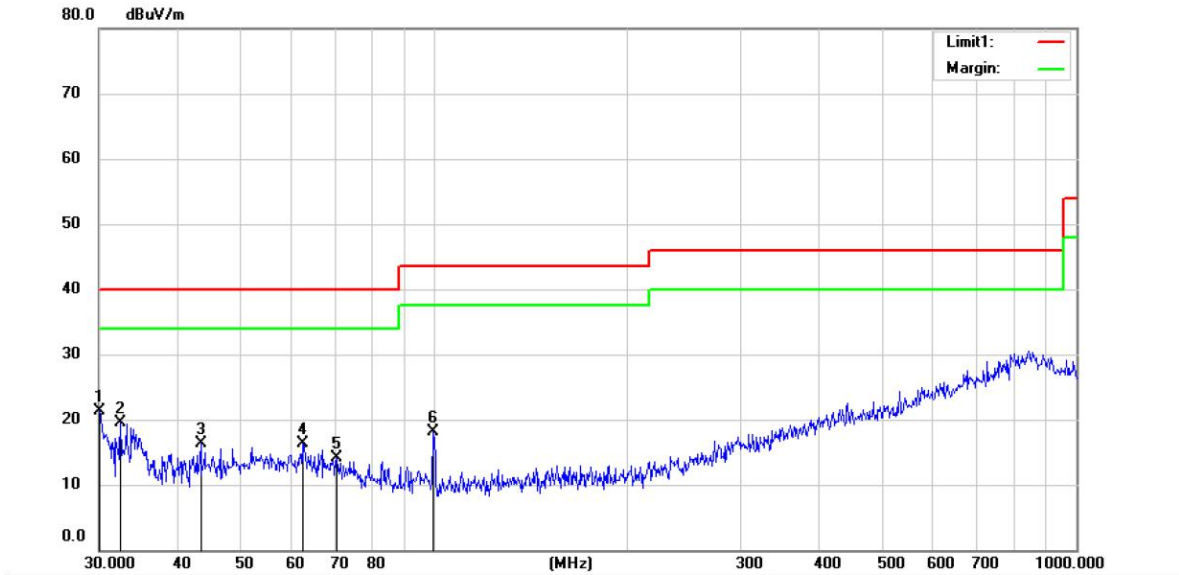


Site 3m Chamber #1 Polarization: **Horizontal** Temperature: 23.4 C
 Limit: (RE)FCC PART 15 CLASS B Power: Humidity: 50 %
 Mode:WIFI 2.4G 2412
 Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|---------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | cm | degree | Comment |
| 1 | * | 30.0263 | 34.91 | -14.58 | 20.33 | 40.00 | -19.67 | QP | | |
| 2 | | 34.3814 | 34.00 | -14.03 | 19.97 | 40.00 | -20.03 | QP | | |
| 3 | | 53.0382 | 29.68 | -11.86 | 17.82 | 40.00 | -22.18 | QP | | |
| 4 | | 58.2540 | 27.75 | -12.09 | 15.66 | 40.00 | -24.34 | QP | | |
| 5 | | 82.9385 | 29.29 | -15.25 | 14.04 | 40.00 | -25.96 | QP | | |
| 6 | | 99.7902 | 31.80 | -14.76 | 17.04 | 43.50 | -26.46 | QP | | |

*:Maximum data x:Over limit !:over margin

Operator: WHZ

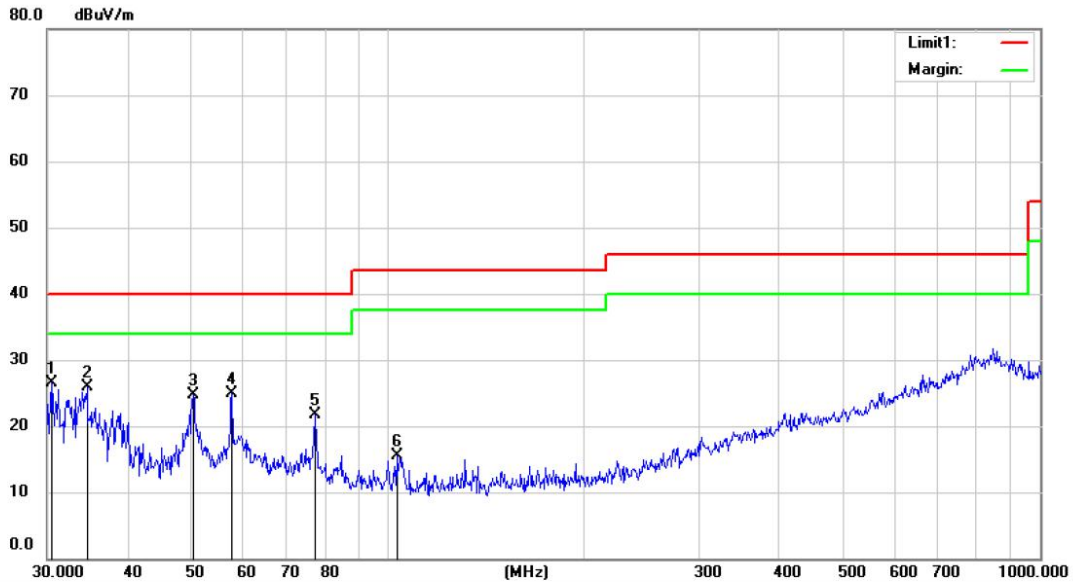


Site: 3m Chamber #1 Polarization: **Horizontal** Temperature: 23.4 C
 Limit: (RE)FCC PART 15 CLASS B Power: Humidity: 50 %
 Mode: WIFI 2.4G 2437
 Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|---------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | cm | degree | Comment |
| 1 | * | 30.0790 | 35.97 | -14.58 | 21.39 | 40.00 | -18.61 | | | QP |
| 2 | | 32.5055 | 33.88 | -14.38 | 19.50 | 40.00 | -20.50 | | | QP |
| 3 | | 43.2017 | 28.98 | -12.74 | 16.24 | 40.00 | -23.76 | | | QP |
| 4 | | 62.2674 | 28.25 | -12.04 | 16.21 | 40.00 | -23.79 | | | QP |
| 5 | | 70.5526 | 27.30 | -13.27 | 14.03 | 40.00 | -25.97 | | | QP |
| 6 | | 99.7902 | 32.93 | -14.76 | 18.17 | 43.50 | -25.33 | | | QP |

*:Maximum data x:Over limit !:over margin

Operator: WHZ

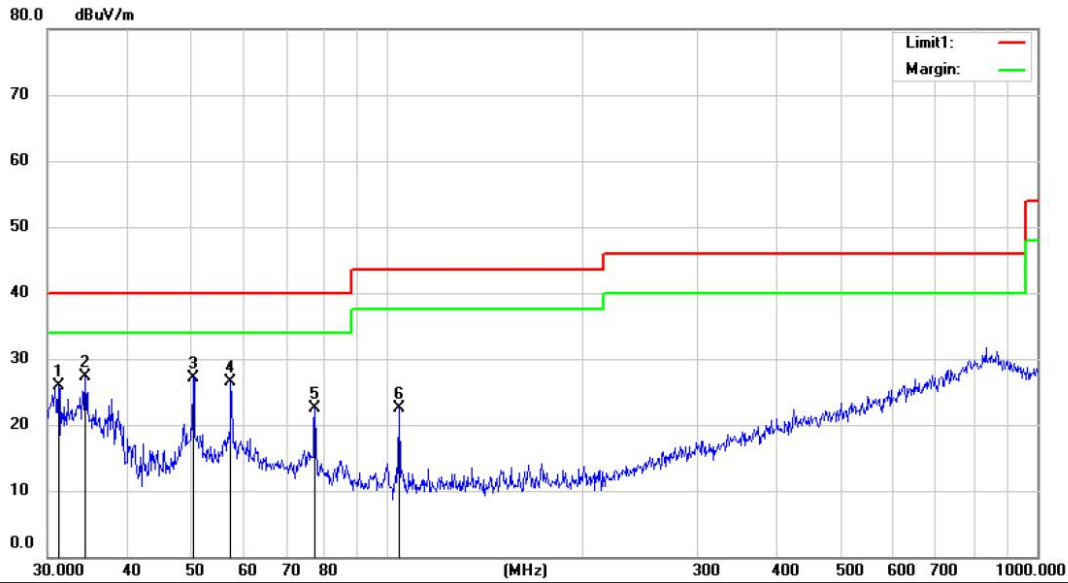


Site 3m Chamber #1 Polarization: **Vertical** Temperature: 23.4 C
 Limit: (RE)FCC PART 15 CLASS B Power: Humidity: 50 %
 Mode:WIFI 2.4G 2437
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Over dB | Antenna Height cm | Table Degree | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|-------------------------|-----------------|----------|---------|
| 1 | * | 30.5574 | 41.06 | -14.54 | 26.52 | 40.00 | -13.48 | | | QP | |
| 2 | | 34.5324 | 39.94 | -13.98 | 25.96 | 40.00 | -14.04 | | | QP | |
| 3 | | 50.3647 | 36.71 | -11.96 | 24.75 | 40.00 | -15.25 | | | QP | |
| 4 | | 57.6192 | 36.97 | -12.08 | 24.89 | 40.00 | -15.11 | | | QP | |
| 5 | | 77.3890 | 36.15 | -14.54 | 21.61 | 40.00 | -18.39 | | | QP | |
| 6 | | 103.3968 | 29.94 | -14.46 | 15.48 | 43.50 | -28.02 | | | QP | |

*:Maximum data x:Over limit !:over margin

Operator: WHZ

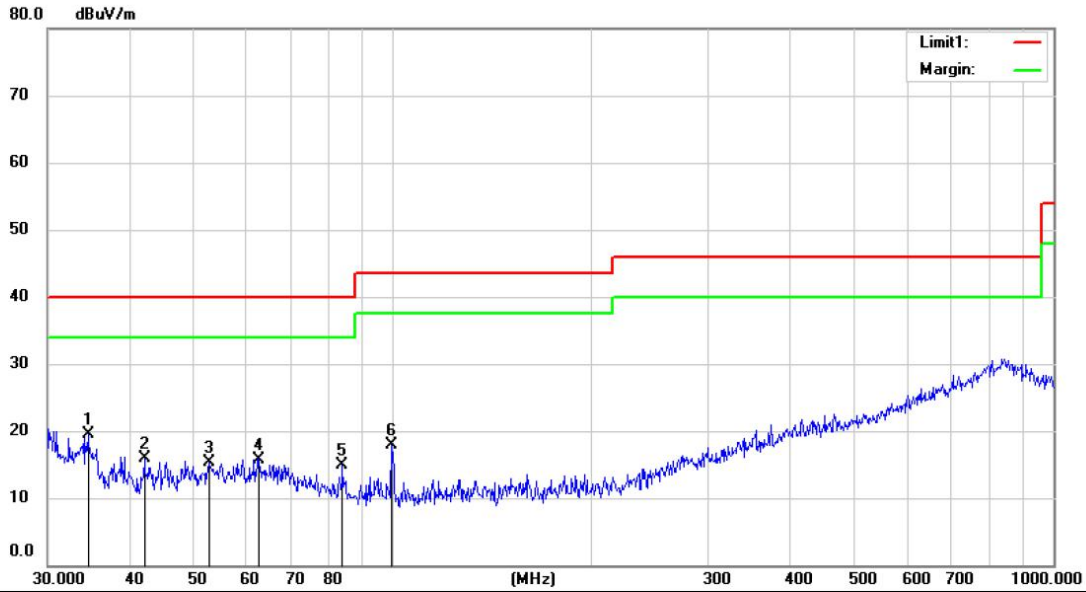


Site: 3m Chamber #1 Polarization: **Vertical** Temperature: 23.4 C
 Limit: (RE)FCC PART 15 CLASS B Power: Humidity: 50 %
 Mode: WIFI 2.4G 2462
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Over dB | Antenna Height cm | Table Degree | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|----------------------------|-----------------|------------|-------------------------|-----------------|----------|---------|
| 1 | | 31.2482 | 40.32 | -14.51 | 25.81 | 40.00 | -14.19 | | | QP | |
| 2 | * | 34.3663 | 41.37 | -14.03 | 27.34 | 40.00 | -12.66 | | | QP | |
| 3 | | 50.3647 | 39.15 | -11.96 | 27.19 | 40.00 | -12.81 | | | QP | |
| 4 | | 57.5687 | 38.54 | -12.08 | 26.46 | 40.00 | -13.54 | | | QP | |
| 5 | | 77.4230 | 36.96 | -14.55 | 22.41 | 40.00 | -17.59 | | | QP | |
| 6 | | 104.4445 | 36.88 | -14.36 | 22.52 | 43.50 | -20.98 | | | QP | |

*:Maximum data x:Over limit !:over margin

Operator: WHZ



Site 3m Chamber #1 Polarization: **Horizontal** Temperature: 23.4 C
 Limit: (RE)FCC PART 15 CLASS B Power: Humidity: 50 %
 Mode:WIFI 2.4G 2462
 Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Antenna Height | Table Degree | |
|-----|-----|---------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | cm | degree | Comment |
| 1 | * | 34.5930 | 33.41 | -13.96 | 19.45 | 40.00 | -20.55 | | | QP |
| 2 | | 42.1357 | 28.74 | -12.86 | 15.88 | 40.00 | -24.12 | | | QP |
| 3 | | 52.6214 | 27.17 | -11.83 | 15.34 | 40.00 | -24.66 | | | QP |
| 4 | | 62.6781 | 27.86 | -12.06 | 15.80 | 40.00 | -24.20 | | | QP |
| 5 | | 83.8891 | 30.21 | -15.35 | 14.86 | 40.00 | -25.14 | | | QP |
| 6 | | 99.7902 | 32.74 | -14.76 | 17.98 | 43.50 | -25.52 | | | QP |

*:Maximum data x:Over limit !:over margin

Operator: WHZ

8.6 CONDUCTED EMISSIONS TEST

8.6.1 Applicable Standard

According to FCC Part 15.207(a)

8.6.2 Conformance Limit

| Frequency(MHz) | Conducted Emission Limit | |
|----------------|--------------------------|---------|
| | Quasi-peak | Average |
| 0.15-0.5 | 66-56 | 56-46 |
| 0.5-5.0 | 56 | 46 |
| 5.0-30.0 | 60 | 50 |

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

8.6.3 Test Configuration

Test according to clause 7.3conducted emission test setup

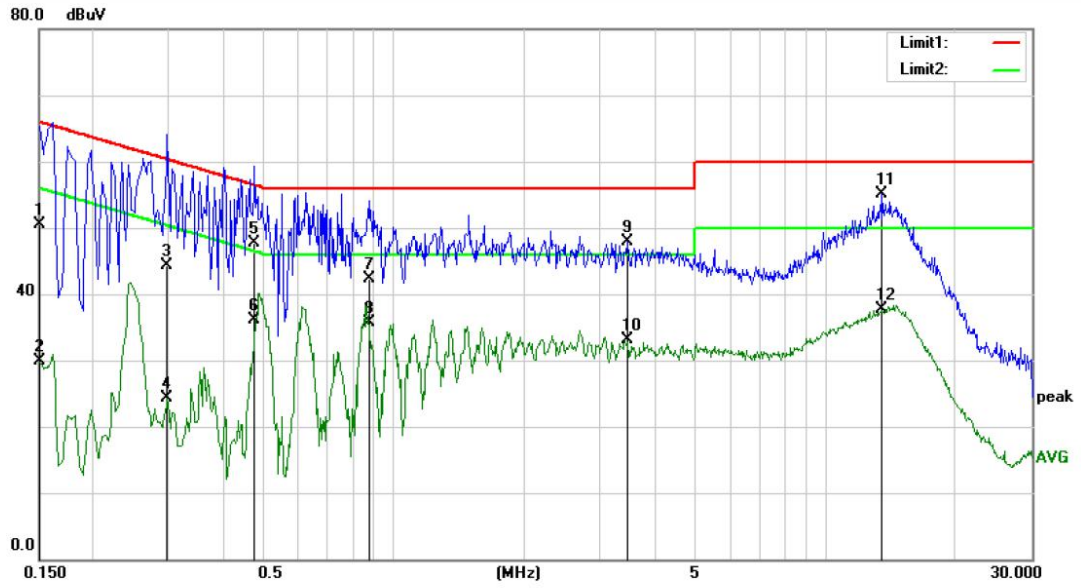
8.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

8.6.5 Test Results

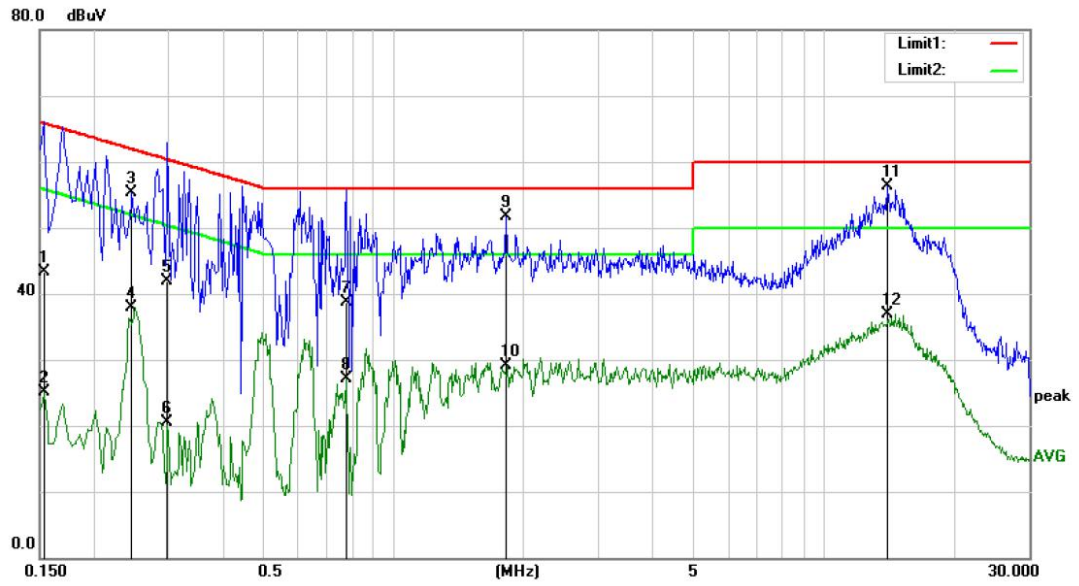
Pass

The AC120V voltage has been tested, and the worst result recorded was report as below:



Site Conduction #2 Phase: **N** Temperature: 25.3
 Limit: (CE)FCC PART 15 class B_QP Power: AC 120V/60Hz Humidity: 37 %
 Note:

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Over | Detector | Comment |
|-----|-----|---------|---------------|----------------|-------------|-------|--------|----------|---------|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | | |
| 1 | | 0.1500 | 40.08 | 10.52 | 50.60 | 66.00 | -15.40 | QP | |
| 2 | | 0.1500 | 19.46 | 10.52 | 29.98 | 56.00 | -26.02 | AVG | |
| 3 | | 0.2980 | 33.91 | 10.39 | 44.30 | 60.30 | -16.00 | QP | |
| 4 | | 0.2980 | 13.95 | 10.39 | 24.34 | 50.30 | -25.96 | AVG | |
| 5 | | 0.4740 | 37.37 | 10.33 | 47.70 | 56.44 | -8.74 | QP | |
| 6 | | 0.4740 | 25.86 | 10.33 | 36.19 | 46.44 | -10.25 | AVG | |
| 7 | | 0.8780 | 32.05 | 10.35 | 42.40 | 56.00 | -13.60 | QP | |
| 8 | | 0.8780 | 25.26 | 10.35 | 35.61 | 46.00 | -10.39 | AVG | |
| 9 | | 3.4740 | 37.47 | 10.40 | 47.87 | 56.00 | -8.13 | QP | |
| 10 | | 3.4740 | 22.71 | 10.40 | 33.11 | 46.00 | -12.89 | AVG | |
| 11 | * | 13.5100 | 44.40 | 10.66 | 55.06 | 60.00 | -4.94 | QP | |
| 12 | | 13.5100 | 26.95 | 10.66 | 37.61 | 50.00 | -12.39 | AVG | |



Site Conduction #2

Phase: **L1**

Temperature: 25.3

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

Humidity: 37 %

Note:

| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Over dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|---------|
| 1 | | 0.1540 | 32.78 | 10.52 | 43.30 | 65.78 | -22.48 | QP | |
| 2 | | 0.1540 | 14.52 | 10.52 | 25.04 | 55.78 | -30.74 | AVG | |
| 3 | | 0.2460 | 44.93 | 10.41 | 55.34 | 61.89 | -6.55 | QP | |
| 4 | | 0.2460 | 27.52 | 10.41 | 37.93 | 51.89 | -13.96 | AVG | |
| 5 | | 0.2980 | 31.61 | 10.39 | 42.00 | 60.30 | -18.30 | QP | |
| 6 | | 0.2980 | 10.12 | 10.39 | 20.51 | 50.30 | -29.79 | AVG | |
| 7 | | 0.7780 | 28.38 | 10.32 | 38.70 | 56.00 | -17.30 | QP | |
| 8 | | 0.7780 | 16.83 | 10.32 | 27.15 | 46.00 | -18.85 | AVG | |
| 9 | | 1.8260 | 41.46 | 10.32 | 51.78 | 56.00 | -4.22 | QP | |
| 10 | | 1.8260 | 18.78 | 10.32 | 29.10 | 46.00 | -16.90 | AVG | |
| 11 | * | 14.0060 | 45.58 | 10.65 | 56.23 | 60.00 | -3.77 | QP | |
| 12 | | 14.0060 | 26.30 | 10.65 | 36.95 | 50.00 | -13.05 | AVG | |

8.7 ANTENNA APPLICATION

8.7.1 Antenna Requirement

| Standard | Requirement |
|--------------------|--|
| FCC CRF Part15.203 | An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded. |

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.7.2 Result

PASS.

The EUT is integral antenna, the gain is 3.87 dBi.

- Note:
- Antenna uses a permanently attached antenna which is not replaceable.
 - Not using a standard antenna jack or electrical connector for antenna replacement
 - The antenna has to be professionally installed (please provide method of installation)

Which in accordance to section 15.203, please refer to the internal photos.

Detail of factor for radiated emission

| Frequency(MHz) | Ant_F(dB) | Cab_L(dB) | Preamp(dB) | Correct Factor(dB) |
|----------------|-----------|-----------|------------|--------------------|
| 0.009 | 20.6 | 0.03 | \ | 20.63 |
| 0.15 | 20.7 | 0.1 | \ | 20.8 |
| 1 | 20.9 | 0.15 | \ | 21.05 |
| 10 | 20.1 | 0.28 | \ | 20.38 |
| 30 | 18.8 | 0.45 | \ | 19.25 |
| | | | | |
| 30 | 11.7 | 0.62 | 27.9 | -15.58 |
| 100 | 12.5 | 1.02 | 27.8 | -14.28 |
| 300 | 12.9 | 1.91 | 27.5 | -12.69 |
| 600 | 19.2 | 2.92 | 27 | -4.88 |
| 800 | 21.1 | 3.54 | 26.6 | -1.96 |
| 1000 | 22.3 | 4.17 | 26.2 | 0.27 |
| | | | | |
| 1000 | 25.6 | 1.76 | 41.4 | -14.04 |
| 3000 | 28.9 | 3.27 | 43.2 | -11.03 |
| 5000 | 31.1 | 4.2 | 44.6 | -9.3 |
| 8000 | 36.2 | 5.95 | 44.7 | -2.55 |
| 10000 | 38.4 | 6.3 | 43.9 | 0.8 |
| 12000 | 38.5 | 7.14 | 42.3 | 3.34 |
| 15000 | 40.2 | 8.15 | 41.4 | 6.95 |
| 18000 | 45.4 | 9.02 | 41.3 | 13.12 |
| | | | | |
| 18000 | 37.9 | 1.81 | 47.9 | -8.19 |
| 21000 | 37.9 | 1.95 | 48.7 | -8.85 |
| 25000 | 39.3 | 2.01 | 42.8 | -1.49 |
| 28000 | 39.6 | 2.16 | 46.0 | -4.24 |
| 31000 | 41.2 | 2.24 | 44.5 | -1.06 |
| 34000 | 41.5 | 2.29 | 46.6 | -2.81 |
| 37000 | 43.8 | 2.30 | 46.4 | -0.3 |
| 40000 | 43.2 | 2.50 | 42.2 | 3.5 |

*** End of Report ***