

FCC Radio Test Report

FCC ID: V7TA18

This report concerns: Class II Change

Project No. : 1710C164C
Equipment : AC1200 Dual Band WiFi Repeater, AC750 Dual Band WiFi Repeater
Brand Name : Tenda
Test Model : A18
Series Model : A15
Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address : 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Manufacturer : SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address : 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052
Date of Receipt : May 06, 2020
Date of Test : May 22, 2020 ~ May 27, 2020
Issued Date : Jun. 18, 2020
Report Version : R00
Test Sample : Engineering Sample No.: D171008586, DG20200520146
Standard(s) : FCC Part15, Subpart C (15.247)
 ANSI C63.10-2013

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



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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

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

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

| Report Version | Description | Issued Date |
|----------------|---|---------------|
| R00 | Compared with previous report (BTL-FCCP-1-1710C164), Changed the power board. So the test data of radiated emissions below 1GHz and AC Power Conducted Emissions have been re-evaluated and recorded in the test report, the original test results please refer to original report. | Jun. 18, 2020 |

Remark: For the original report (BTL-FCCP-1-1710C164), the test data, data evaluation and equipment configuration contained was accredited by the Authority of NVLAP according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| Applied Standard(s): FCC Part15 (15.247) , Subpart C | | | |
|--|--------------------------------|----------|--------|
| Standard(s) Section | Test Item | Judgment | Remark |
| 15.207 | Conducted Emission | PASS | -- |
| 15.247(d) 15.205(a) 15.209(a) | Transmitter Radiated Emissions | PASS | -- |

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

1.1 TEST FACILITY

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

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

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

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

A. Conducted Measurement:

| Test Site | Method | Measurement Frequency Range | U, (dB) |
|-----------|--------|-----------------------------|---------|
| DG-C02 | CISPR | 150kHz ~ 30MHz | 2.60 |

B. Radiated Measurement:

| Test Site | Method | Measurement Frequency Range | Ant. H / V | U, (dB) |
|-----------|--------|-----------------------------|---------------|---------|
| DG-CB03 | CISPR | 9kHz ~ 30MHz | V | 3.79 |
| | | 9kHz ~ 30MHz | H | 3.57 |
| | | 30MHz ~ 200MHz | V | 4.88 |
| | | 30MHz ~ 200MHz | H | 4.14 |
| | | 200MHz ~ 1,000MHz | V | 4.62 |
| | | 200MHz ~ 1,000MHz | H | 4.80 |

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

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

| | | |
|---------------------|---|--|
| Equipment | AC1200 Dual Band WiFi Repeater | |
| Brand Name | Tenda | |
| Test Model | A18 | |
| Series Model | A15 | |
| Model Difference(s) | Only differ in product name and model name. | |
| Product Description | Operation Frequency | 2412~2462 MHz |
| | Modulation Technology | 802.11b:DSSS 802.11g:OFDM 802.11n:OFDM |
| | Bit Rate of Transmitter | 802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 300 Mbps |
| | Output Power (Max.) | 802.11b: 18.32dBm 802.11g: 27.23dBm 802.11n(20MHz): 29.38dBm 802.11n(40MHz): 29.12dBm |
| Power Source | AC Mains. | |
| Power Rating | AC100-240V 50/60Hz 0.3A | |

Note:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- Channel List:

| CH01 - CH11 for 802.11b, 802.11g, 802.11n(20MHz) | | | | | | | |
|--|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| CH03 - CH09 for 802.11n(40MHz) | | | | | | | |
| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 01 | 2412 | 04 | 2427 | 07 | 2442 | 10 | 2457 |
| 02 | 2417 | 05 | 2432 | 08 | 2447 | 11 | 2462 |
| 03 | 2422 | 06 | 2437 | 09 | 2452 | | |

3. Table for Filed Antenna

| Ant. | Brand | Model Name | Antenna Type | Connector | Gain (dBi) | Note |
|------|-------|------------|--------------|-----------|------------|------|
| 1 | N/A | N/A | Dipole | N/A | 3 | N/A |
| 2 | N/A | N/A | Dipole | N/A | 3 | N/A |

Note:

This EUT supports MIMO, and all antennas have the same gain.

Antenna Gain=3 dBi. This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain = $G_{ANT} + 10\log(N)$ dBi, that is Directional gain=3+10log(2)dBi=6.01

So, the output power limit is 30-(6.01-6)=29.99, the power spectra density limit is 8-(6.01-6)=7.99.

3.2 DESCRIPTION OF TEST MODES

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

| Pretest Mode | Description |
|--------------|----------------------------------|
| Mode 1 | TX B MODE CHANNEL 01/06/11 |
| Mode 2 | TX G MODE CHANNEL 01/06/11 |
| Mode 3 | TX N-20MHZ MODE CHANNEL 06 |
| Mode 4 | TX N-40MHZ MODE CHANNEL 03/06/09 |
| Mode 5 | TX N-20MHZ MODE CHANNEL 01/06/11 |

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

| For Conducted Test | |
|--------------------|----------------------------|
| Final Test Mode | Description |
| Mode 5 | TX N-20MHZ MODE CHANNEL 06 |

| For Radiated Test | |
|-------------------|----------------------------------|
| Final Test Mode | Description |
| Mode 1 | TX B MODE CHANNEL 01/06/11 |
| Mode 2 | TX G MODE CHANNEL 01/06/11 |
| Mode 3 | TX N-20MHZ MODE CHANNEL 06 |
| Mode 4 | TX N-40MHZ MODE CHANNEL 03/06/09 |

Note:

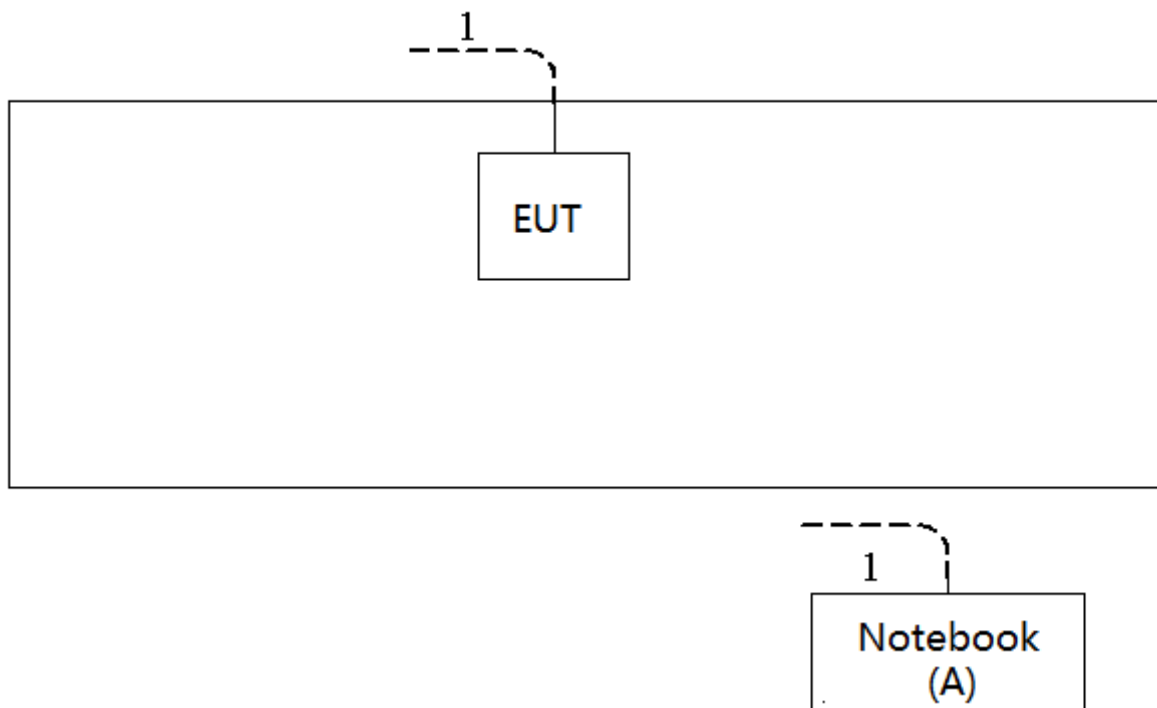
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : BPSK (13Mbps)
802.11n HT40 mode : BPSK (27Mbps)
For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the TX N-20MHZ MODE CHANNEL 06 is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN

| Test software version | MP_TEST | | |
|-----------------------|---------|------|------|
| Frequency (MHz) | 2412 | 2437 | 2462 |
| 802.11b | 41 | 43 | 46 |
| 802.11g | 55 | 63 | 53 |
| 802.11n (20MHz) | 55 | 62 | 53 |
| Frequency (MHz) | 2422 | 2437 | 2452 |
| 802.11n (40MHz) | 53 | 63 | 52 |

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



4

3.5 DESCRIPTION OF SUPPORT UNITS

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

| Item | Equipment | Mfr/Brand | Model/Type No. | Series No. |
|------|-----------|-----------|----------------|------------|
| A | Notebook | Dell | DCSM | G7K832X |

| Item | Shielded Type | Ferrite Core | Length | Note |
|------|---------------|--------------|--------|------------|
| 1 | NO | NO | 10m | RJ45 Cable |

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150KHz-30MHz)

| Frequency of Emission (MHz) | Conducted Limit (dBμV) | |
|-----------------------------|------------------------|-----------|
| | Quasi-peak | Average |
| 0.15 -0.50 | 66 to 56* | 56 to 46* |
| 0.50 -5.0 | 56 | 46 |
| 5.0 -30.0 | 60 | 50 |

Note:

- (1) The limit of " * " decreases with the logarithm of the frequency
- (2) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
 Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

| Receiver Parameters | Setting |
|---------------------|----------|
| Attenuation | 10 dB |
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 KHz |

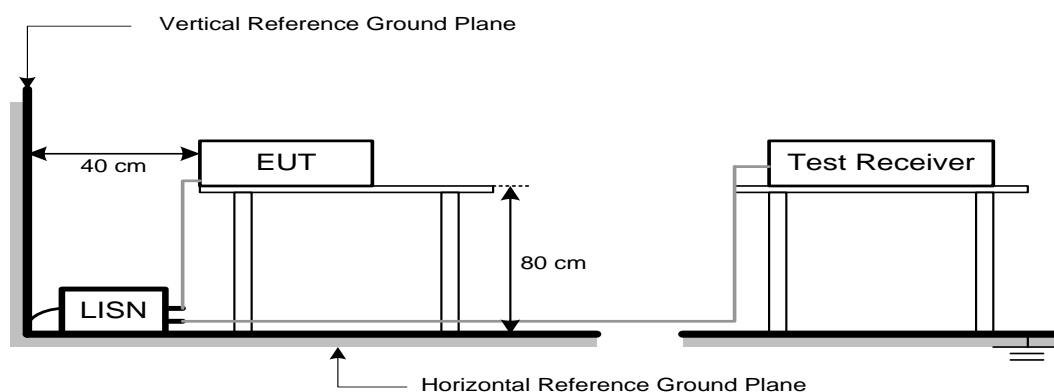
3.1.2 TEST PROCEDURE

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

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



3.1.5 EUT OPERATING CONDITIONS

The EUT was placed on the test table and programmed in normal function.

3.1.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

3.1.7 TEST RESULTS

Please refer to the Appendix A.

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9KHz-1000MHz)

| Frequency (MHz) | Field Strength (microvolts/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 |
| 960~1000 | 500 | 3 |

Notes:

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

| Spectrum Parameter | Setting |
|--|---|
| Attenuation | Auto |
| Start Frequency | 1000 MHz |
| Stop Frequency | 10th carrier harmonic |
| RBW / VBW (Emission in restricted band) | 1MHz / 3MHz for Peak, 1MHz / 1/T for Average |

| Receiver Parameter | Setting |
|------------------------|-----------------------------------|
| Attenuation | Auto |
| Start ~ Stop Frequency | 9KHz~90KHz for PK/AVG detector |
| Start ~ Stop Frequency | 90KHz~110KHz for QP detector |
| Start ~ Stop Frequency | 110KHz~490KHz for PK/AVG detector |
| Start ~ Stop Frequency | 490KHz~30MHz for QP detector |
| Start ~ Stop Frequency | 30MHz~1000MHz for QP detector |

3.2.2 TEST PROCEDURE

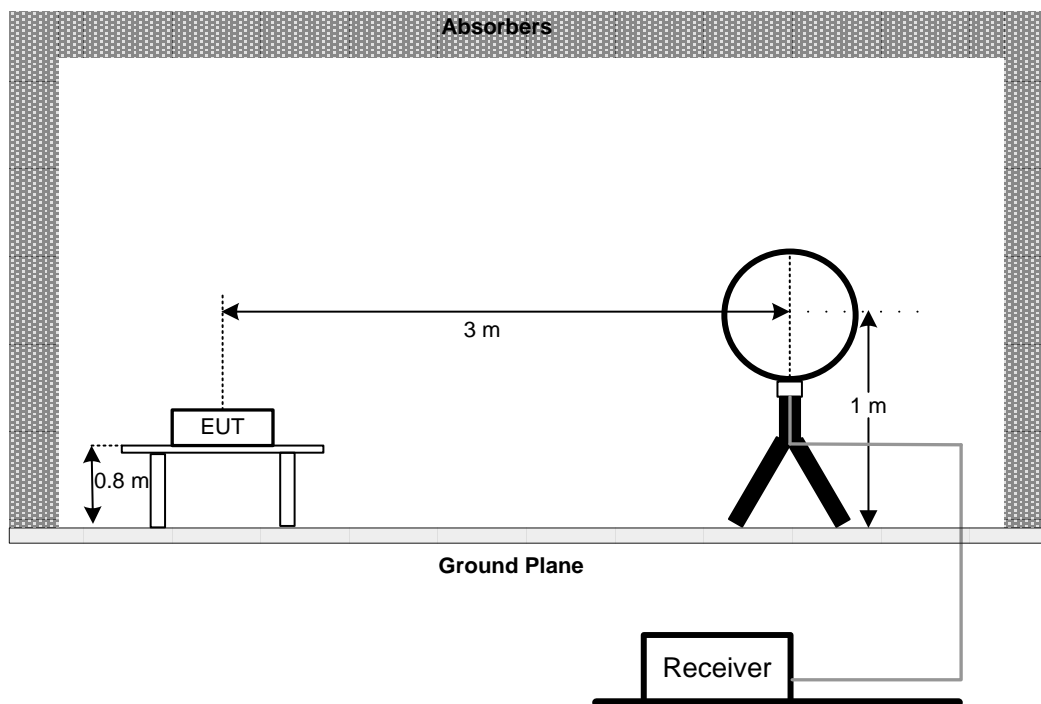
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
(below 1GHz)
- For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.2.3 DEVIATION FROM TEST STANDARD

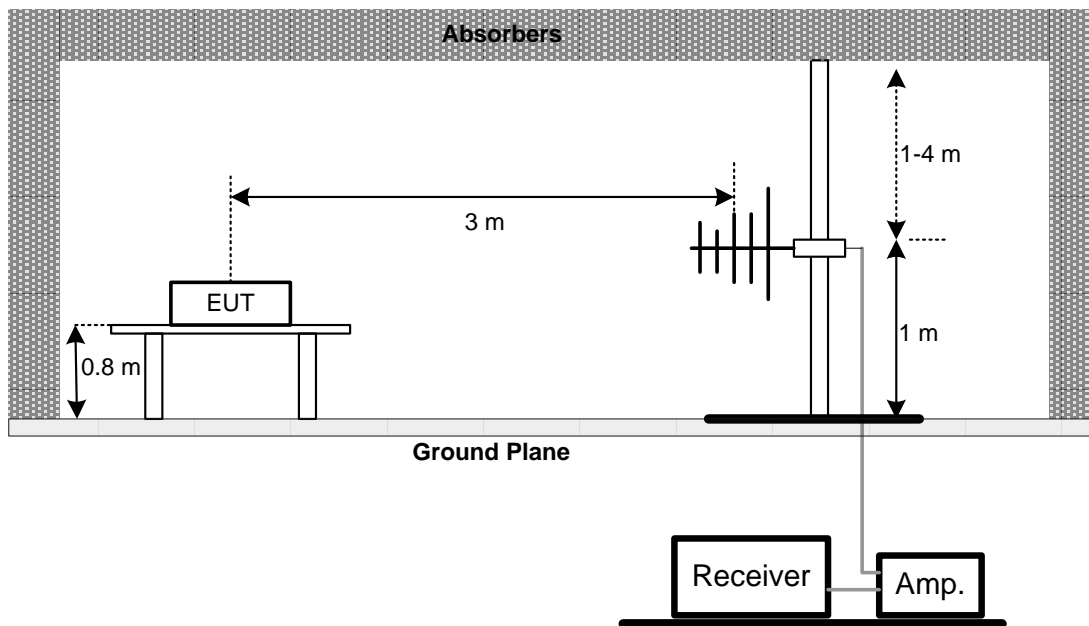
No deviation

3.2.4 TEST SETUP

9 kHz-30 MHz



30 MHz to 1 GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

3.2.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

3.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Appendix B

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

3.2.8 TEST RESULTS (30MHZ TO 1000MHZ)

Please refer to the Appendix C.

Remark:

- (1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

4. MEASUREMENT INSTRUMENTS LIST

| AC Power Line Conducted Emissions | | | | | |
|-----------------------------------|----------------------|--------------|-----------------------|------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | EMI Test Receiver | R&S | ESCI | 100382 | Feb. 28, 2021 |
| 2 | LISN | EMCO | 3816/2 | 52765 | Mar. 01, 2021 |
| 3 | TWO-LINE V-NETWORK | R&S | ENV216 | 101447 | Feb. 28, 2021 |
| 4 | 50Ω Terminator | SHX | TF5-3 | 15041305 | Mar. 01, 2021 |
| 5 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |
| 6 | Cable | N/A | RG223 | 12m | Mar. 10, 2021 |

| Radiated Emissions - 9 kHz to 30 MHz | | | | | |
|--------------------------------------|----------------------|--------------|-----------------------|------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Loop Antenna | EM | EM-6876-1 | 230 | Apr. 16, 2021 |
| 2 | Cable | N/A | RG 213/U | C-102 | May 29, 2021 |
| 3 | EMI Test Receiver | R&S | ESCI | 100895 | Feb. 28, 2021 |
| 4 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |

| Radiated Emissions - 30 MHz to 1 GHz | | | | | |
|--------------------------------------|----------------------|--------------|-----------------------------|-------------|------------------|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Antenna | Schwarzbeck | VULB9160 | 9160-3232 | Mar. 09, 2021 |
| 2* | Amplifier | HP | 8447D | 2944A08742 | Mar. 01, 2021 |
| 3 | Receiver | Agilent | N9038A | MY52130039 | Aug. 03, 2020 |
| 4 | Cable | emci | LMR-400(30MHz-1 GHz)(8m+5m) | N/A | May. 22, 2021 |
| 5 | Controller | CT | SC100 | N/A | N/A |
| 6 | Controller | MF | MF-7802 | MF780208416 | N/A |
| 7 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |

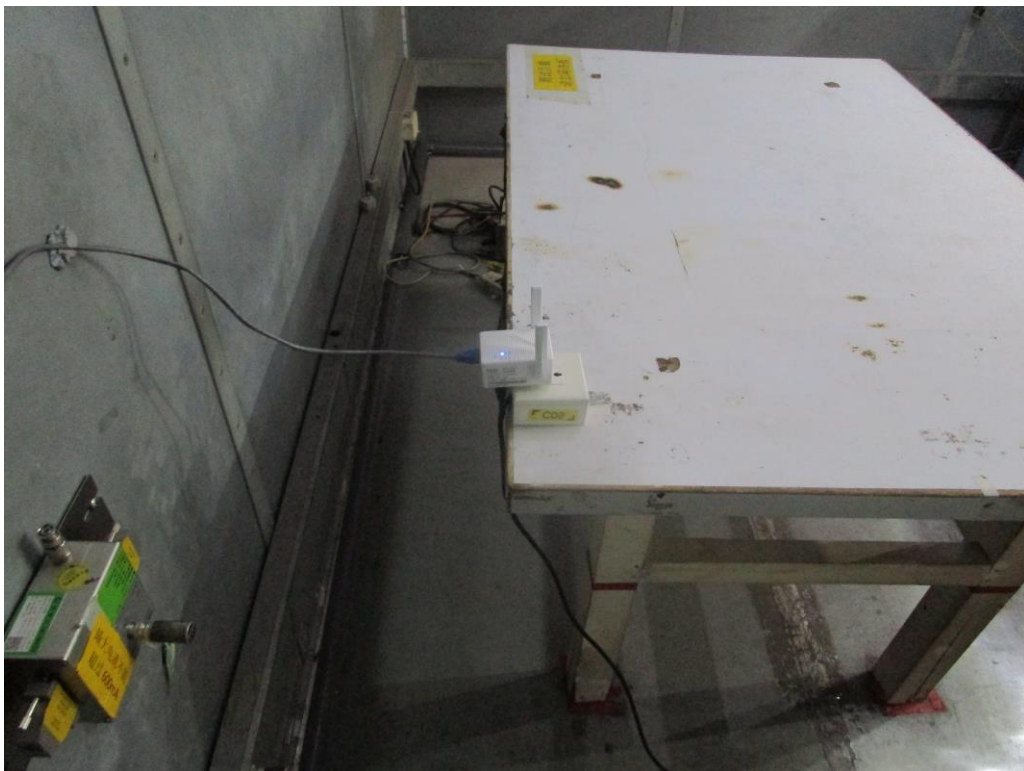
Remark: "N/A" denotes no model name, serial no. or calibration specified.

"*" calibration period of equipment list is three year.

All calibration period of equipment list is one year.

5. EUT TEST PHOTO

AC Power Line Conducted Emissions Test Photos



Radiated Emissions Test Photos

9KHz to 30MHz



Radiated Emissions Test Photos

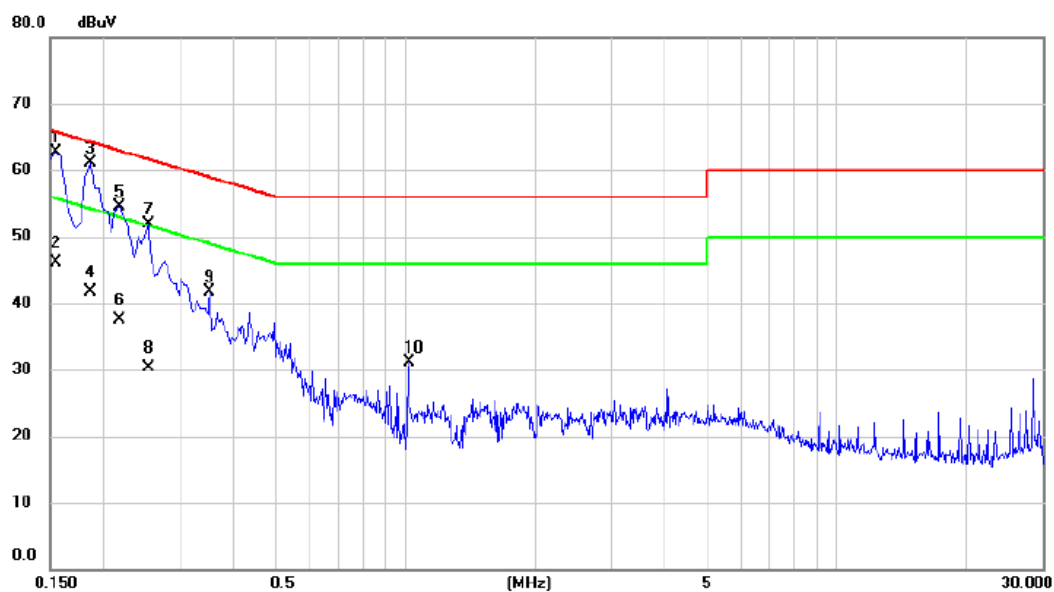
30MHz to 1000MHz



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

| | |
|---------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
| Test Voltage: | AC 120V / 60Hz |

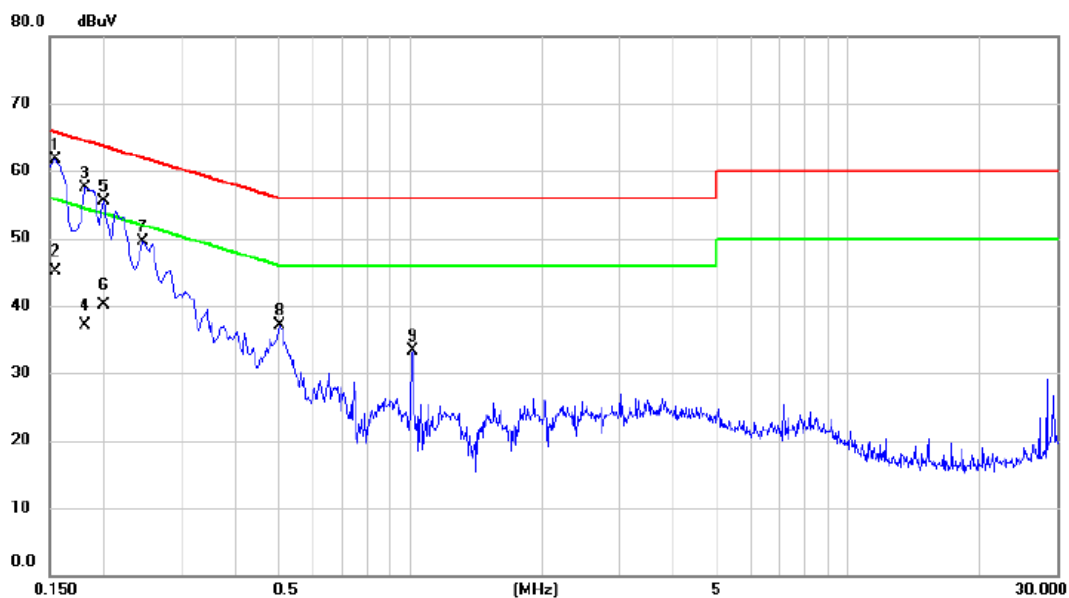
Line



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|--------------|----------|---------|
| 1 | * | 0.1545 | 53.02 | 9.70 | 62.72 | 65.75 | -3.03 | peak | |
| 2 | | 0.1545 | 36.50 | 9.70 | 46.20 | 55.75 | -9.55 | AVG | |
| 3 | | 0.1860 | 51.16 | 9.86 | 61.02 | 64.21 | -3.19 | peak | |
| 4 | | 0.1860 | 31.80 | 9.86 | 41.66 | 54.21 | -12.55 | AVG | |
| 5 | | 0.2175 | 44.65 | 9.90 | 54.55 | 62.91 | -8.36 | peak | |
| 6 | | 0.2175 | 27.60 | 9.90 | 37.50 | 52.91 | -15.41 | AVG | |
| 7 | | 0.2535 | 42.08 | 9.88 | 51.96 | 61.64 | -9.68 | peak | |
| 8 | | 0.2535 | 20.40 | 9.88 | 30.28 | 51.64 | -21.36 | AVG | |
| 9 | | 0.3525 | 31.70 | 9.91 | 41.61 | 58.90 | -17.29 | peak | |
| 10 | | 1.0184 | 21.16 | 10.01 | 31.17 | 56.00 | -24.83 | peak | |

| | |
|---------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
| Test Voltage: | AC 120V / 60Hz |

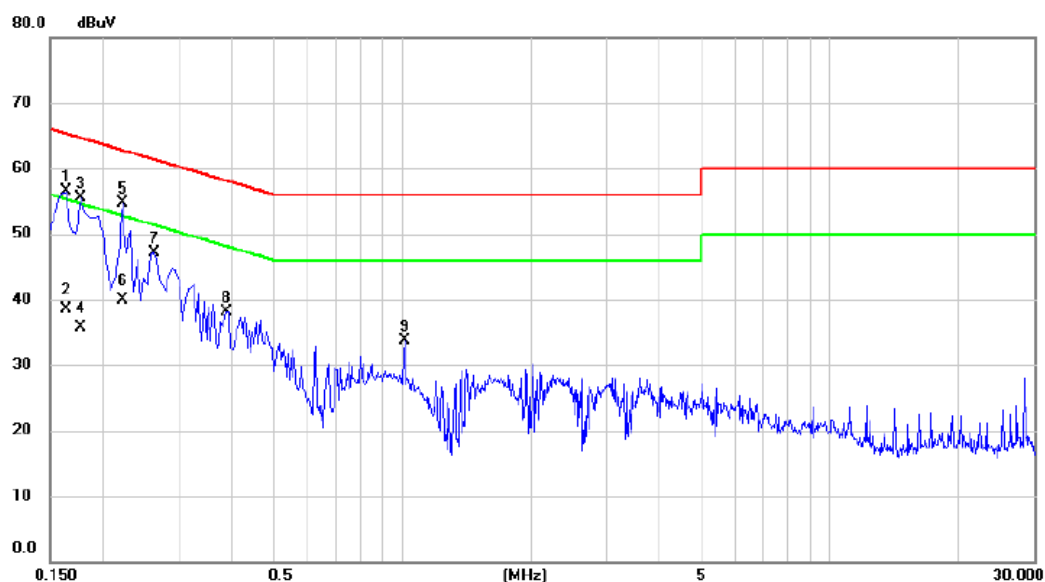
Neutral



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|--------------|----------|---------|
| 1 | * | 0.1545 | 51.99 | 9.77 | 61.76 | 65.75 | -3.99 | peak | |
| 2 | | 0.1545 | 35.30 | 9.77 | 45.07 | 55.75 | -10.68 | AVG | |
| 3 | | 0.1815 | 47.55 | 9.94 | 57.49 | 64.42 | -6.93 | peak | |
| 4 | | 0.1815 | 27.10 | 9.94 | 37.04 | 54.42 | -17.38 | AVG | |
| 5 | | 0.1995 | 45.58 | 10.01 | 55.59 | 63.63 | -8.04 | peak | |
| 6 | | 0.1995 | 30.10 | 10.01 | 40.11 | 53.63 | -13.52 | AVG | |
| 7 | | 0.2445 | 39.46 | 9.97 | 49.43 | 61.94 | -12.51 | peak | |
| 8 | | 0.5055 | 26.93 | 10.14 | 37.07 | 56.00 | -18.93 | peak | |
| 9 | | 1.0140 | 23.09 | 10.30 | 33.39 | 56.00 | -22.61 | peak | |

| | |
|---------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
| Test Voltage: | AC 240V / 50Hz |

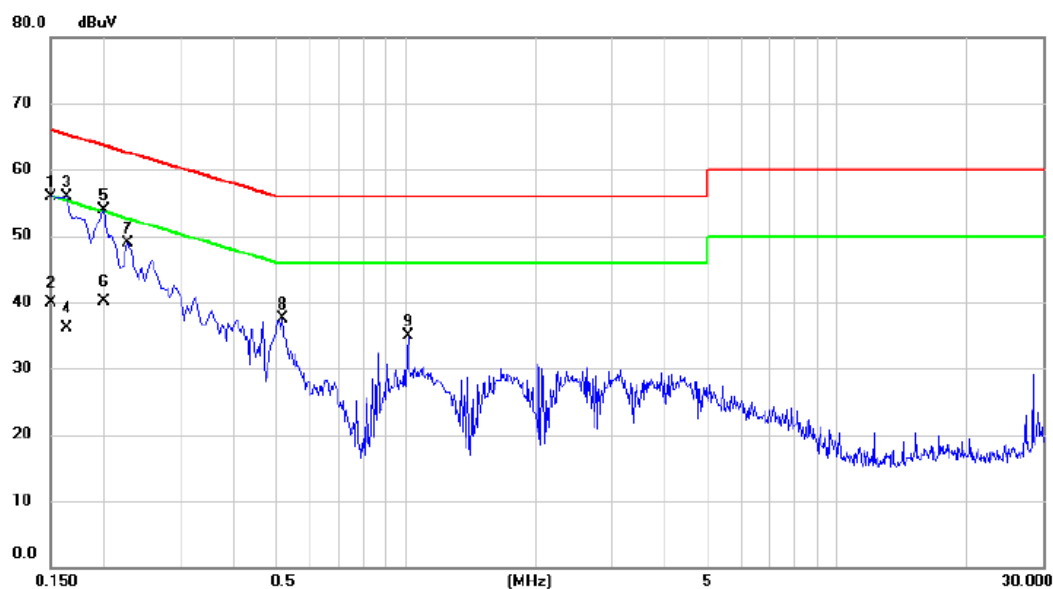
Line



| No. | Mk. | Freq. MHz | Reading Level dBuV | Correct Factor dB | Measure- ment dBuV | Limit dBuV | Margin dB | Detector | Comment |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|--------------|----------|---------|
| 1 | | 0.1635 | 46.72 | 9.77 | 56.49 | 65.28 | -8.79 | peak | |
| 2 | | 0.1635 | 28.70 | 9.77 | 38.47 | 55.28 | -16.81 | AVG | |
| 3 | | 0.1770 | 45.57 | 9.84 | 55.41 | 64.63 | -9.22 | peak | |
| 4 | | 0.1770 | 25.90 | 9.84 | 35.74 | 54.63 | -18.89 | AVG | |
| 5 | * | 0.2220 | 44.78 | 9.89 | 54.67 | 62.74 | -8.07 | peak | |
| 6 | | 0.2220 | 30.10 | 9.89 | 39.99 | 52.74 | -12.75 | AVG | |
| 7 | | 0.2625 | 37.23 | 9.88 | 47.11 | 61.35 | -14.24 | peak | |
| 8 | | 0.3885 | 28.21 | 9.92 | 38.13 | 58.10 | -19.97 | peak | |
| 9 | | 1.0140 | 23.71 | 10.01 | 33.72 | 56.00 | -22.28 | peak | |

| | |
|---------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
| Test Voltage: | AC 240V / 50Hz |

Neutral

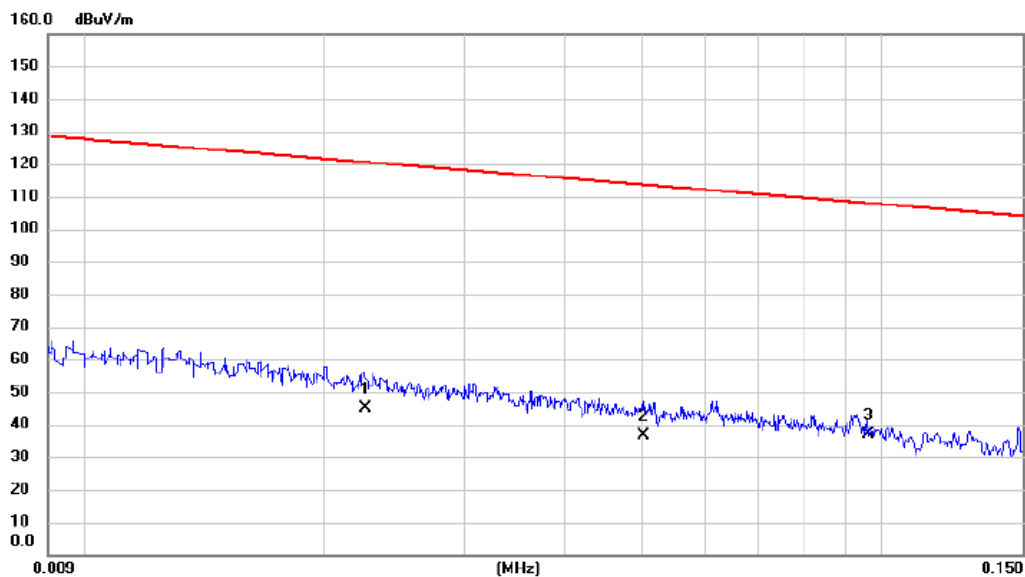


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|-----|-----|--------|---------------|----------------|--------------|-------|--------|----------|---------|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1500 | 46.15 | 9.74 | 55.89 | 66.00 | -10.11 | peak | |
| 2 | | 0.1500 | 30.10 | 9.74 | 39.84 | 56.00 | -16.16 | AVG | |
| 3 | * | 0.1635 | 46.02 | 9.85 | 55.87 | 65.28 | -9.41 | peak | |
| 4 | | 0.1635 | 26.30 | 9.85 | 36.15 | 55.28 | -19.13 | AVG | |
| 5 | | 0.1995 | 43.80 | 10.01 | 53.81 | 63.63 | -9.82 | peak | |
| 6 | | 0.1995 | 30.10 | 10.01 | 40.11 | 53.63 | -13.52 | AVG | |
| 7 | | 0.2265 | 38.95 | 9.99 | 48.94 | 62.58 | -13.64 | peak | |
| 8 | | 0.5190 | 27.34 | 10.15 | 37.49 | 56.00 | -18.51 | peak | |
| 9 | | 1.0140 | 24.61 | 10.30 | 34.91 | 56.00 | -21.09 | peak | |

APPENDIX B - RADIATED EMISSION (9KHZ TO 30MHZ)

| | |
|------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
|------------|----------------------------|

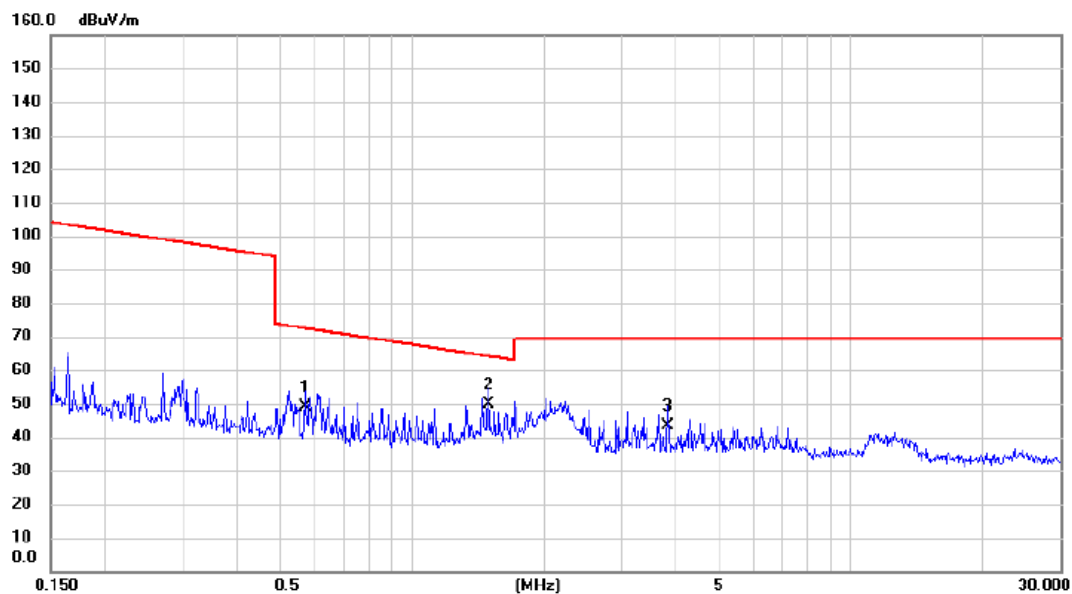
Ant 0°



| No. | Mk. | Freq. MHz | Reading Level dBuV/m | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|----------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 | | 0.0225 | 31.76 | 13.05 | 44.81 | 120.56 | -75.75 | AVG | |
| 2 | | 0.0502 | 24.28 | 12.33 | 36.61 | 113.59 | -76.98 | AVG | |
| 3 | * | 0.0960 | 24.43 | 12.62 | 37.05 | 107.96 | -70.91 | QP | |

| | |
|------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
|------------|----------------------------|

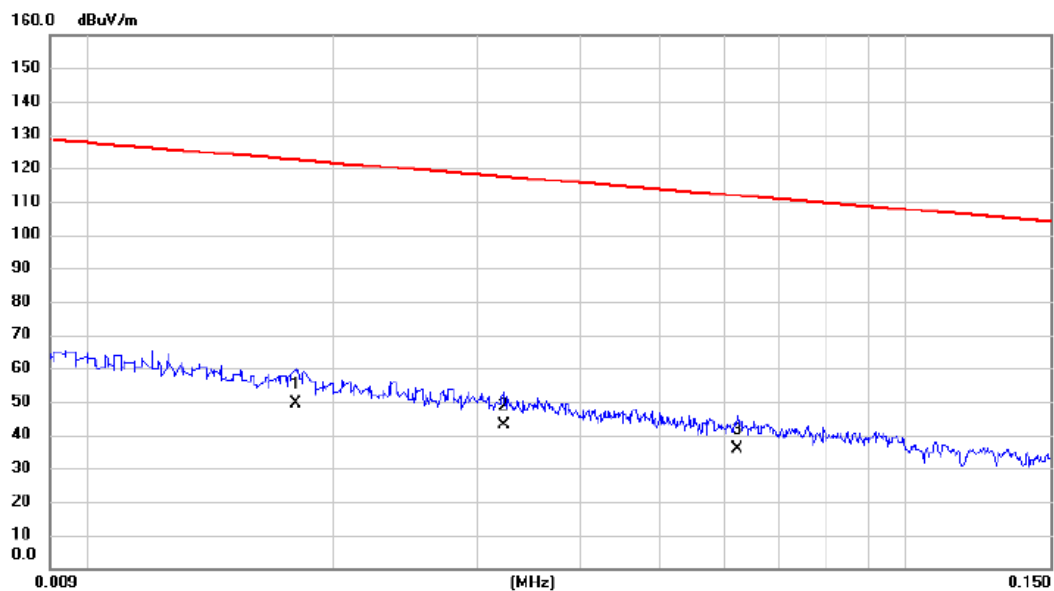
Ant 0°



| No. | Mk. | Freq. MHz | Reading Level dBuV/m | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|----------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 | | 0.5701 | 37.46 | 11.74 | 49.20 | 72.48 | -23.28 | QP | |
| 2 | * | 1.4953 | 38.36 | 11.31 | 49.67 | 64.11 | -14.44 | QP | |
| 3 | | 3.8196 | 32.95 | 10.48 | 43.43 | 69.54 | -26.11 | QP | |

| | |
|------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
|------------|----------------------------|

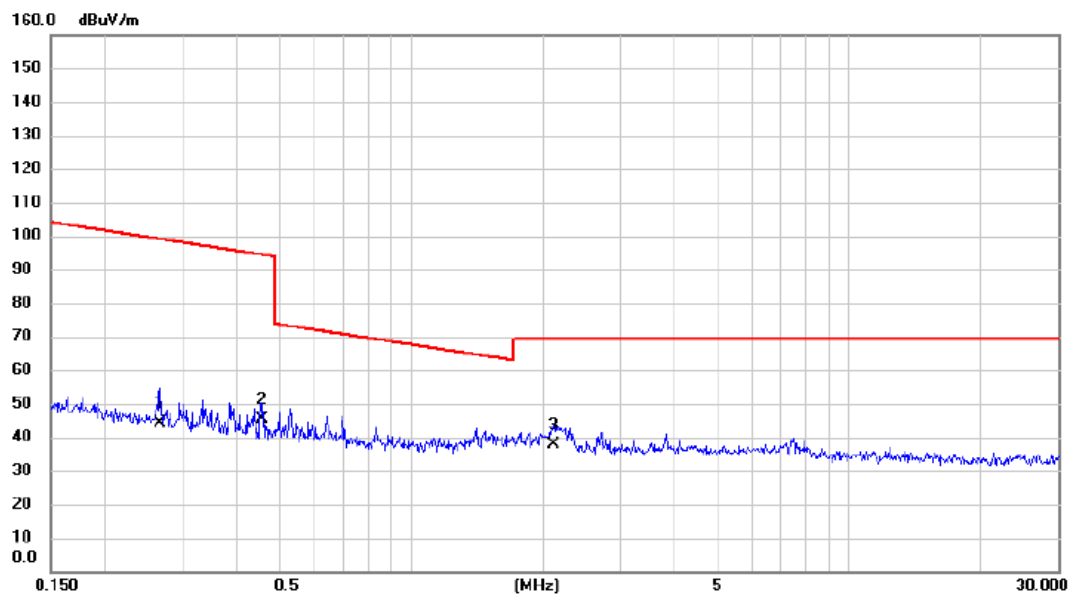
Ant 90°



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|-----|-----|--------|---------------|----------------|-------------|--------|--------|----------|---------|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 0.0180 | 35.85 | 13.74 | 49.59 | 122.50 | -72.91 | AVG | |
| 2 | | 0.0323 | 30.29 | 12.80 | 43.09 | 117.42 | -74.33 | AVG | |
| 3 | | 0.0623 | 23.34 | 12.40 | 35.74 | 111.72 | -75.98 | AVG | |

| | |
|------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
|------------|----------------------------|

Ant 90°

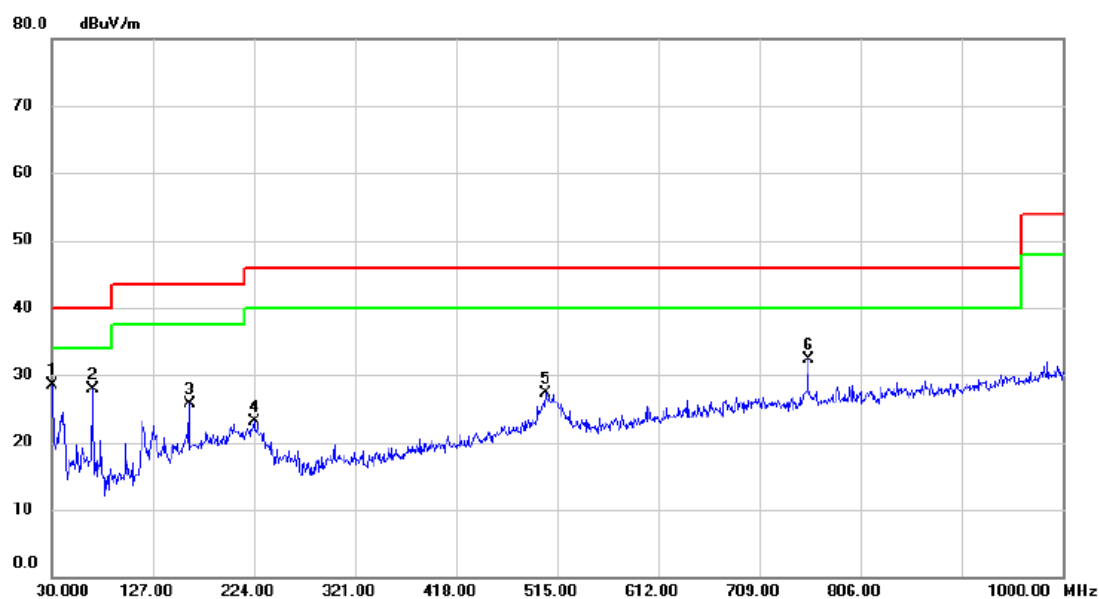


| No. | Mk. | Freq. MHz | Reading Level dBuV/m | Correct Factor dB | Measure- ment dBuV/m | Limit dBuV/m | Margin dB | Detector | Comment |
|-----|-----|--------------|----------------------------|-------------------------|----------------------------|-----------------|--------------|----------|---------|
| 1 | | 0.2672 | 31.93 | 12.46 | 44.39 | 99.07 | -54.68 | AVG | |
| 2 | | 0.4564 | 33.34 | 11.89 | 45.23 | 94.42 | -49.19 | AVG | |
| 3 | * | 2.1213 | 26.76 | 10.95 | 37.71 | 69.54 | -31.83 | QP | |

APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode: TX N-20MHZ MODE CHANNEL 06

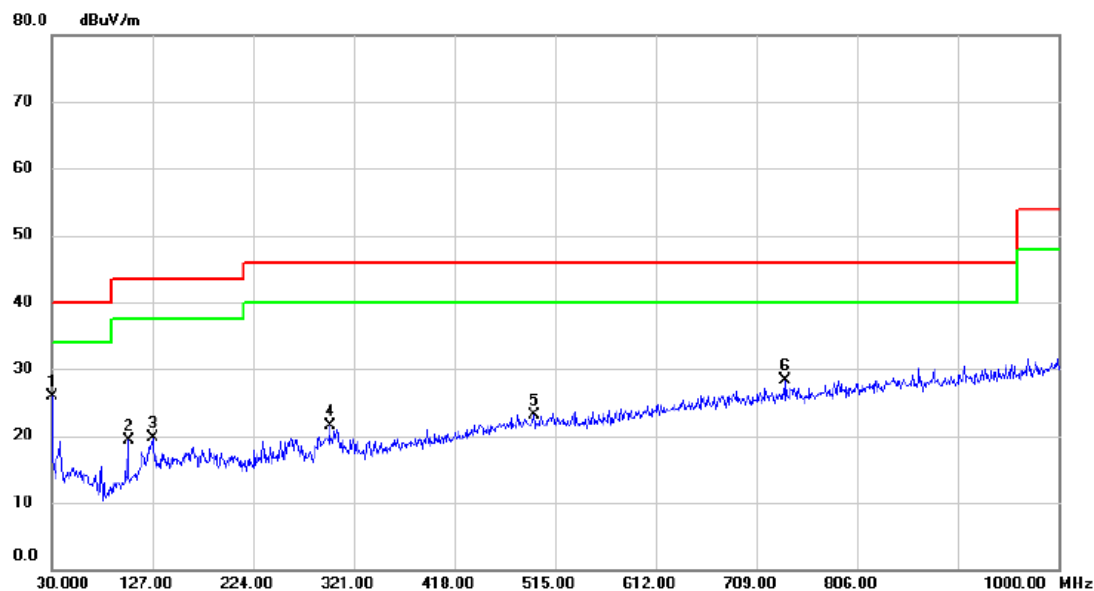
Vertical



| No. | Mk. | Freq. | Reading | Correct | Measure- | Limit | Margin | | |
|-----|-----|---------|---------|---------|----------|--------|--------|----------|---------|
| | | MHz | Level | Factor | ment | | | Detector | Comment |
| | | | dBuV | dB | dBuV/m | dBuV/m | dB | | |
| 1 | * | 30.000 | 43.19 | -14.60 | 28.59 | 40.00 | -11.41 | peak | |
| 2 | | 68.800 | 43.54 | -15.54 | 28.00 | 40.00 | -12.00 | peak | |
| 3 | | 161.920 | 36.58 | -10.79 | 25.79 | 43.50 | -17.71 | peak | |
| 4 | | 224.000 | 36.95 | -13.90 | 23.05 | 46.00 | -22.95 | peak | |
| 5 | | 503.360 | 34.28 | -6.94 | 27.34 | 46.00 | -18.66 | peak | |
| 6 | | 755.560 | 35.09 | -2.69 | 32.40 | 46.00 | -13.60 | peak | |

| | |
|------------|----------------------------|
| Test Mode: | TX N-20MHZ MODE CHANNEL 06 |
|------------|----------------------------|

Horizontal



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|-----|-----|---------|---------------|----------------|-------------|--------|--------|----------|---------|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 30.000 | 40.42 | -14.60 | 25.82 | 40.00 | -14.18 | peak | |
| 2 | | 103.720 | 33.85 | -14.55 | 19.30 | 43.50 | -24.20 | peak | |
| 3 | | 127.000 | 32.35 | -12.61 | 19.74 | 43.50 | -23.76 | peak | |
| 4 | | 297.720 | 32.43 | -10.89 | 21.54 | 46.00 | -24.46 | peak | |
| 5 | | 494.630 | 30.02 | -7.00 | 23.02 | 46.00 | -22.98 | peak | |
| 6 | | 737.130 | 31.11 | -2.88 | 28.23 | 46.00 | -17.77 | peak | |

End of Test Report