# Test Report

| | | |
|---|---|---|
| **Report No.** | : | **MTi250109035-0101E1** |
| **Date of issue** | : | **2025-07-21** |
| **Applicant** | : | **Etronicon (Zhejiang) Electronic Technologies Co., Ltd.** |
| **Product** | : | **Wireless Power Charger** |
| **Model(s)** | : | **YN-42V15A** |
| **FCC ID** | : | **2BQKT-YN-42V15A** |

**Shenzhen Microtest Co., Ltd.**

# TEST REPORT

Report No.: MTi250109035-0101E1

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Report No.: MTi250109035-0101E1

| Test Result Certification | | |
|---|---|---|
| Applicant | Etronicon (Zhejiang) Electronic Technologies Co., Ltd. | |
| Applicant Address | No. 1 Building, No. 88, Binhe Road, Lin'an District, Hangzhou City, 311300 Zhejiang, P. R. China | |
| Manufacturer | Etronicon (Zhejiang) Electronic Technologies Co., Ltd. | |
| Manufacturer Address | No. 1 Building, No. 88, Binhe Road, Lin'an District, Hangzhou City, 311300 Zhejiang, P. R. China | |
| Factory | Etronicon (Zhejiang) Electronic Technologies Co., Ltd. | |
| Factory Address | No. 1 Building, No. 88, Binhe Road, Lin'an District, Hangzhou City, 311300 Zhejiang, P. R. China | |
| **Product description** | | |
| Product name | Wireless Power Charger | |
| Trademark | Etronicon | |
| Model name | YN-42V15A | |
| Series Model(s) | N/A | |
| Standards | 47 CFR Part 18 | |
| **Testing Information** | | |
| Date of test | 2025-03-17 to 2025-06-17 | |
| Test result | Pass | |
| Prepared by: | James Qin | James Qin |
| Reviewed by: | David Lee | David. Lee |
| Approved by: | Lewis Lian | Lewis Lian |

# 1 General Description

## 1.1 Description of the EUT

| | |
|---|---|
| Product name: | Wireless Power Charger |
| Model name: | YN-42V15A |
| Series Model(s): | N/A |
| Model difference: | N/A |
| Electrical rating: | Input: 110V±20%, 220V±20%/ 32A<br>Output: 700W±35W |
| Accessories: | N/A |
| Hardware version: | V1.0 |
| Software version: | V1.0 |
| Test sample(s) number: | MTi250109035-01-R002 |
| **RF specification** | |
| Operating frequency range: | 52±0.5 kHz |
| Antenna(s) type: | Coil |

## 1.2 Description of test modes

For test, the EUT has been pre-tested under the following test modes, Only the worst case data will be shown in the report.

| No. | Emission test modes |
|---|---|
| Mode1 | wrieless out |

### 1.3 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

| | |
|---|---|
| Temperature: | 15°C ~ 35°C |
| Humidity: | 20% RH ~ 75% RH |
| Atmospheric pressure: | 98 kPa ~ 101 kPa |

### 1.4 Description of support units

| **Support equipment list** | | | |
|---|---|---|---|
| Description | Model | Serial No. | Manufacturer |
| / | / | / | / |
| **Support cable list** | | | |
| Description | Length (m) | From | To |
| / | / | / | / |

### 1.5 Measurement uncertainty

| Measurement | Uncertainty |
|---|---|
| Conducted emissions (AMN 150kHz~30MHz) | ±3.1dB |
| Radiated emissions (9kHz~30MHz) | ±4.3dB |
| Temperature | ±1 °C |
| Humidity | ± 5 % |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

## 2 Summary of Test Result

| No. | Item | Standard | Requirement | Result |
|---|---|---|---|---|
| 1 | Conducted Emissions on AC Power Line | 47 CFR Part 18 | 18.307 | Pass |
| 2 | Radiated Emissions (9kHz-30MHz) | 47 CFR Part 18 | 18.305 | Pass |
| 3 | Radiated Emissions (30MHz-1000MHz) | 47 CFR Part 18 | 18.305 | Pass |

# 3 Test Facilities and accreditations

## 3.1 Test laboratory

| | |
|---|---|
| Test laboratory: | Shenzhen Microtest Co., Ltd. |
| Test site location: | 101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China |
| Telephone: | (86-755)88850135 |
| Fax: | (86-755)88850136 |
| CNAS Registration No.: | CNAS L5868 |
| FCC Registration No.: | 448573 |
| IC Registration No.: | 21760 |
| CABID: | CN0093 |

## 4 List of test equipment

| No. | Equipment | Manufacturer | Model | Serial No. | Cal. date | Cal. Due |
|---|---|---|---|---|---|---|
| Conducted Emissions on AC Power Line | | | | | | |
| 1 | EMI Test Receiver | Rohde&schwarz | ESCI3 | 101368 | 2025-03-13 | 2026-03-12 |
| 2 | Artificial mains network | Schwarzbeck | NSLK 8127 | 183 | 2025-03-18 | 2026-03-17 |
| 3 | Artificial Mains Network | Rohde & Schwarz | ESH2-Z5 | 100263 | 2025-03-18 | 2026-03-17 |
| 4 | Artificial mains network | Schwarzbeck | NSLK 8127 | 183 | 2024-03-21 | 2025-03-20 |
| 5 | Artificial Mains Network | Rohde & Schwarz | ESH2-Z5 | 100263 | 2024-03-20 | 2025-03-19 |
| Radiated Emissions (9kHz-30MHz) | | | | | | |
| 1 | EMI Test Receiver | Rohde&schwarz | ESCI7 | 101166 | 2025-03-14 | 2026-03-13 |
| 2 | Active Loop Antenna | Schwarzbeck | FMZB 1519 B | 00066 | 2024-03-23 | 2026-03-22 |
| 3 | Amplifier | Hewlett-Packard | 8447F | 3113A06184 | 2025-03-18 | 2026-03-17 |
| 4 | Amplifier | Hewlett-Packard | 8447F | 3113A06184 | 2024-03-20 | 2025-03-19 |
| Radiated Emissions (30MHz-1000MHz) | | | | | | |
| 1 | EMI Test Receiver | Rohde&schwarz | ESCI7 | 101166 | 2025-03-14 | 2026-03-13 |
| 2 | TRILOG Broadband Antenna | schwarabeck | VULB 9163 | 9163-1338 | 2025-05-23 | 2027-05-22 |
| 3 | TRILOG Broadband Antenna | schwarabeck | VULB 9163 | 9163-1338 | 2023-06-11 | 2025-06-10 |
| 4 | Active Loop Antenna | Schwarzbeck | FMZB 1519 B | 00066 | 2024-03-23 | 2026-03-22 |
| 5 | Amplifier | Hewlett-Packard | 8447F | 3113A06184 | 2025-03-18 | 2026-03-17 |
| 6 | Amplifier | Hewlett-Packard | 8447F | 3113A06184 | 2024-03-20 | 2025-03-19 |

## 5 Emission Test Results (EMI)

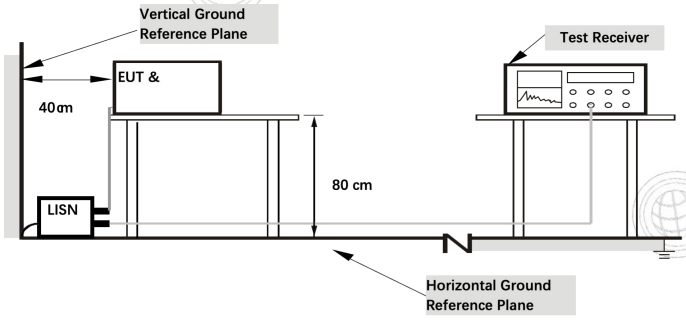
### 5.1 Conducted Emissions on AC Power Line

| | |
|---|---|
| Test Requirement: | 18.307 |
| Test Limit: | Frequency of emission (MHz) / Conducted limit (dBμV): Quasi-peak / Average<br>0.15-0.5: 66 to 56 * / 56 to 46 *<br>0.5-5: 56 / 46<br>5-30: 60 / 50<br>*Decreases with the logarithm of the frequency. |
| Test Method: | MP-5 Clause 7 |
| Procedure: | An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.<br>Remark: Level= Read Level+ Cable Loss+ LISN Factor |

#### 5.1.1 E.U.T. Operation:

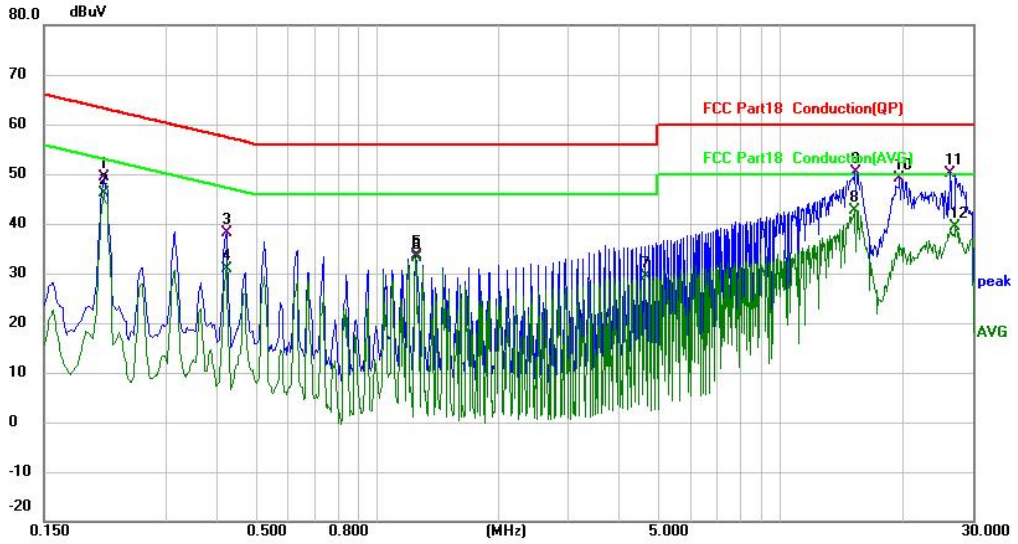
| Operating Environment: | | | | | |
|---|---|---|---|---|---|
| Temperature: | 26 °C | Humidity: | 57 % | Atmospheric Pressure: | 100 kPa |
| Pre test mode: | Mode1 | | | | |
| Final test mode: | Mode1 | | | | |

#### 5.1.2 Test Setup Diagram:



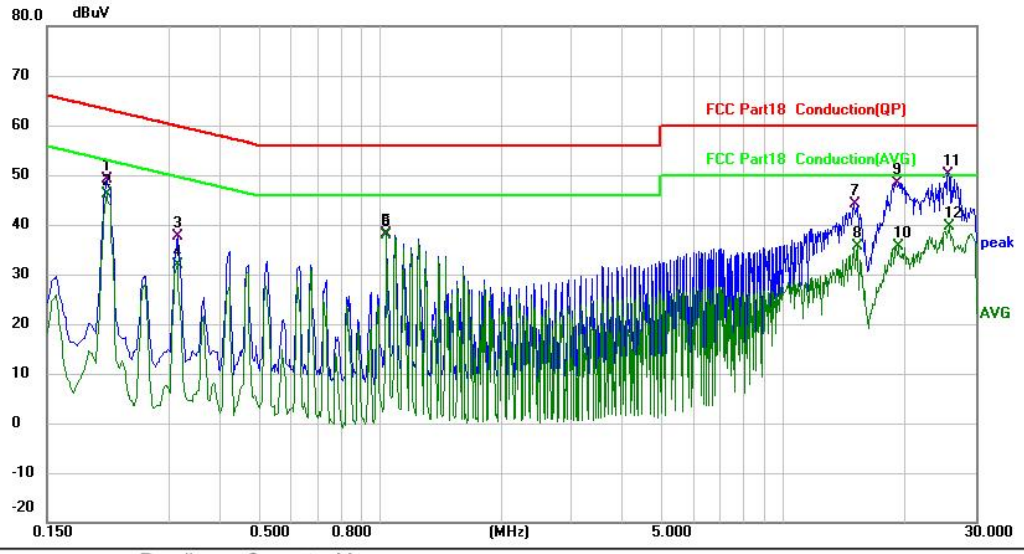
### 5.1.3 Test Data:

Mode1 / Line: Line




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.2100 | 39.09 | 10.18 | 49.27 | 63.21 | -13.94 | QP | |
| 2 | * | 0.2100 | 35.84 | 10.18 | 46.02 | 53.21 | -7.19 | AVG | |
| 3 | | 0.4220 | 27.89 | 10.20 | 38.09 | 57.41 | -19.32 | QP | |
| 4 | | 0.4220 | 20.60 | 10.20 | 30.80 | 47.41 | -16.61 | AVG | |
| 5 | | 1.2460 | 23.55 | 10.19 | 33.74 | 56.00 | -22.26 | QP | |
| 6 | | 1.2460 | 23.01 | 10.19 | 33.20 | 46.00 | -12.80 | AVG | |
| 7 | | 4.6340 | 19.08 | 10.25 | 29.33 | 46.00 | -16.67 | AVG | |
| 8 | | 15.2740 | 32.15 | 10.45 | 42.60 | 50.00 | -7.40 | AVG | |
| 9 | | 15.3780 | 39.81 | 10.46 | 50.27 | 60.00 | -9.73 | QP | |
| 10 | | 19.7939 | 38.55 | 10.53 | 49.08 | 60.00 | -10.92 | QP | |
| 11 | | 26.3380 | 39.53 | 10.66 | 50.19 | 60.00 | -9.81 | QP | |
| 12 | | 27.1700 | 28.73 | 10.68 | 39.41 | 50.00 | -10.59 | AVG | |

Mode1 / Line: Neutral




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.2100 | 39.00 | 10.19 | 49.19 | 63.21 | -14.02 | QP | |
| 2 | * | 0.2100 | 35.89 | 10.19 | 46.08 | 53.21 | -7.13 | AVG | |
| 3 | | 0.3140 | 27.43 | 10.19 | 37.62 | 59.86 | -22.24 | QP | |
| 4 | | 0.3140 | 21.62 | 10.19 | 31.81 | 49.86 | -18.05 | AVG | |
| 5 | | 1.0380 | 27.91 | 10.20 | 38.11 | 56.00 | -17.89 | QP | |
| 6 | | 1.0380 | 27.64 | 10.20 | 37.84 | 46.00 | -8.16 | AVG | |
| 7 | | 15.0620 | 33.70 | 10.45 | 44.15 | 60.00 | -15.85 | QP | |
| 8 | | 15.2700 | 25.09 | 10.45 | 35.54 | 50.00 | -14.46 | AVG | |
| 9 | | 19.0660 | 37.97 | 10.52 | 48.49 | 60.00 | -11.51 | QP | |
| 10 | | 19.2700 | 25.13 | 10.52 | 35.65 | 50.00 | -14.35 | AVG | |
| 11 | | 25.6100 | 39.45 | 10.66 | 50.11 | 60.00 | -9.89 | QP | |
| 12 | | 25.8180 | 28.91 | 10.66 | 39.57 | 50.00 | -10.43 | AVG | |

## 5.2 Radiated Emissions (9kHz-30MHz)

| | | | | | |
|---|---|---|---|---|---|
| Test Requirement: | 18.305 | | | | |
| Test Limit: | Equipment | Operating frequency | RF Power generated by equipment (watts) | Field strength limit (uV/m) | Distance (meters) |
| | Any type unless otherwise specified (miscellaneous) | Any ISM frequency | Below 500 | 25 | 300 |
| | | | 500 or more | 25 × SQRT(power/ 500) | 300 (1) |
| | | Any non-ISM frequency | Below 500 | 15 | 300 |
| | | | 500 or more | 15 × SQRT(power/ 500) | 300 (1) |
| | Industrial heaters and RF stabilized arc welders | On or below 5,725 MHz | Any | 10 | 1,600 |
| | | Above 5,725 MHz | Any | (2) | (2) |
| | Medical diathermy | Any ISM frequency | Any | 25 | 300 |
| | | Any non-ISM frequency | Any | 15 | 300 |
| | Ultrasonic | Below 490 kHz | Below 500 | 2,400/F(kHz) | 300 |
| | | | 500 or more | 2,400/F(kHz) × SQRT(power/ 500) | 300 (3) |
| | | 490 to 1,600 kHz | Any | 24,000/F(kHz) | 30 |
| | | Above 1,600 kHz | Any | 15 | 30 |
| | Induction cooking ranges | Below 90 kHz | Any | 1,500 | 30 (4) |
| | | On or above 90 kHz | Any | 300 | 30 (4) |
| | (1) Field strength may not exceed 10 μV/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.<br>(2) Reduced to the greatest extent possible.<br>(3) Field strength may not exceed 10 μV/m at 1600 meters. Consumer equipment is not permitted the increase in field strength otherwise permitted here for over 500 watts.<br>(4) Induction cooking ranges manufactured prior to February 1, 1980, shall be subject to the field strength limits for miscellaneous ISM equipment.<br><br>Note: | | | | |

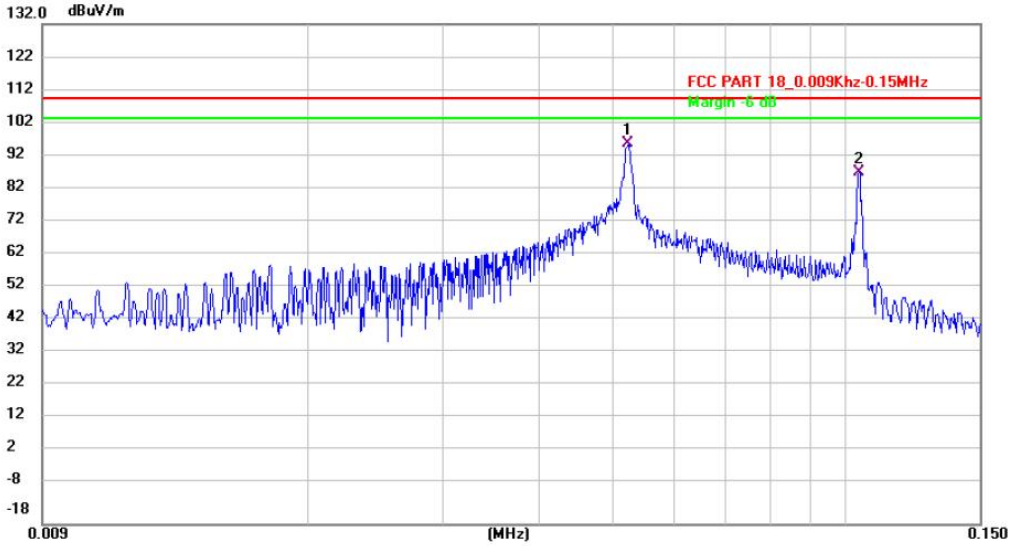
| | |
|---|---|
| | Max power is 735W<br>Limit=20lg(25*SQRT(power/500))+20lg(300/3) @ 3m distance.<br>The limit for radiated test was performed according to;<br>The tighter limit applies at the band edges;<br>Emission level (dBuV/m) = 20log Emission level (uV/m), 3m Emission level = 300m Emission level + 20log(300m/3m); |
| Test Method: | MP-5 Clause 5/6 |
| Procedure: | Frequency range: 9KHz-30MHz<br>An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by loop antenna with 2 orthogonal polarities.<br>The red line show in graphic is the limit in standard used in this section.<br>Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor |

### 5.2.1 E.U.T. Operation:

| Operating Environment: | | | | | |
|---|---|---|---|---|---|
| Temperature: | 22.4 °C | Humidity: | 53 % | Atmospheric Pressure: | 101 kPa |
| Pre test mode: | Mode1 | | | | |
| Final test mode: | Mode1 | | | | |

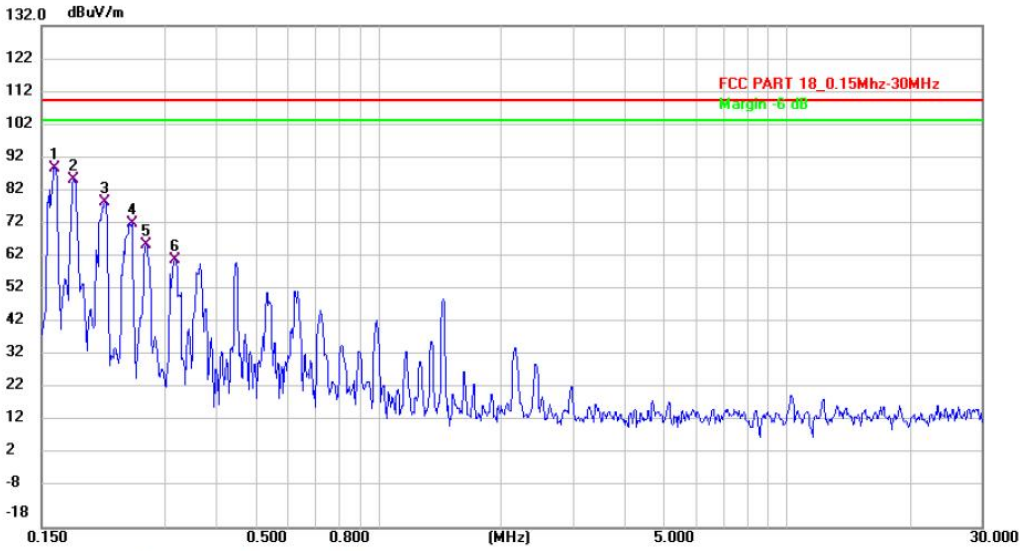
### 5.2.2 Test Data:

Mode1 / Polarization: Horizontal




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 0.0522 | 75.27 | 20.78 | 96.05 | 109.63 | -13.58 | QP | |
| 2 | | 0.1043 | 66.95 | 20.53 | 87.48 | 109.63 | -22.15 | QP | |

Mode1 / Polarization: Vertical




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 0.1615 | 68.90 | 20.62 | 89.52 | 109.63 | -20.11 | QP | |
| 2 | | 0.1796 | 65.55 | 20.67 | 86.22 | 109.63 | -23.41 | QP | |
| 3 | | 0.2139 | 58.51 | 20.74 | 79.25 | 109.63 | -30.38 | QP | |
| 4 | | 0.2494 | 52.21 | 20.83 | 73.04 | 109.63 | -36.59 | QP | |
| 5 | | 0.2700 | 45.69 | 20.87 | 66.56 | 109.63 | -43.07 | QP | |
| 6 | | 0.3183 | 40.97 | 20.99 | 61.96 | 109.63 | -47.67 | QP | |

## 5.3 Radiated Emissions (30MHz-1000MHz)

| | |
|---|---|
| Test Requirement: | 18.305 |

Test Limit:

| Equipment | Operating frequency | RF Power generated by equipment (watts) | Field strength limit (uV/m) | Distance (meters) |
|---|---|---|---|---|
| Any type unless otherwise specified (miscellaneous) | Any ISM frequency | Below 500 | 25 | 300 |
| | | 500 or more | 25 × SQRT(power/500) | 300 (1) |
| | Any non-ISM frequency | Below 500 | 15 | 300 |
| | | 500 or more | 15 × SQRT(power/500) | 300 (1) |
| Industrial heaters and RF stabilized arc welders | On or below 5,725 MHz | Any | 10 | 1,600 |
| | Above 5,725 MHz | Any | (2) | (2) |
| Medical diathermy | Any ISM frequency | Any | 25 | 300 |
| | Any non-ISM frequency | Any | 15 | 300 |
| Ultrasonic | Below 490 kHz | Below 500 | 2,400/F(kHz) | 300 |
| | | 500 or more | 2,400/F(kHz) × SQRT(power/500) | 300 (3) |
| | 490 to 1,600 kHz | Any | 24,000/F(kHz) | 30 |
| | Above 1,600 kHz | Any | 15 | 30 |
| Induction cooking ranges | Below 90 kHz | Any | 1,500 | 30 (4) |
| | On or above 90 kHz | Any | 300 | 30 (4) |

(1) Field strength may not exceed 10 μV/m at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.
(2) Reduced to the greatest extent possible.
(3) Field strength may not exceed 10 μV/m at 1600 meters. Consumer equipment is not permitted the increase in field strength otherwise permitted here for over 500 watts.
(4) Induction cooking ranges manufactured prior to February 1, 1980, shall be subject to the field strength limits for miscellaneous ISM equipment.

Note:

| | |
|---|---|
| | Max power is 735W<br>Limit=20lg(25*SQRT(power/500))+20lg(300/3) @ 3m distance.<br>The limit for radiated test was performed according to;<br>The tighter limit applies at the band edges;<br>Emission level (dBuV/m) = 20log Emission level (uV/m), 3m Emission level = 300m Emission level + 20log(300m/3m); |
| Test Method: | MP-5 Clause 5/6 |
| Procedure: | Frequency range: 30MHz-1000MHz<br>An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.<br>Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor |

### 5.3.1 E.U.T. Operation:

| Operating Environment: | | | | | |
|---|---|---|---|---|---|
| Temperature: | 22.4 °C | Humidity: | 53 % | Atmospheric Pressure: | 101 kPa |
| Pre test mode: | Mode1 | | | | |
| Final test mode: | Mode1 | | | | |

### 5.3.2 Test Data:

Mode1 / Polarization: Horizontal


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 43.8119 | 40.12 | -7.56 | 32.56 | 69.63 | -37.07 | QP | |
| 2 | | 81.7831 | 48.23 | -12.64 | 35.59 | 69.63 | -34.04 | QP | |
| 3 | * | 102.7192 | 46.51 | -7.88 | 38.63 | 69.63 | -31.00 | QP | |
| 4 | | 112.9196 | 45.44 | -7.96 | 37.48 | 69.63 | -32.15 | QP | |
| 5 | | 141.8262 | 46.79 | -9.79 | 37.00 | 69.63 | -32.63 | QP | |
| 6 | | 221.3917 | 40.22 | -8.49 | 31.73 | 69.63 | -37.90 | QP | |

Mode1 / Polarization: Vertical


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 44.5867 | 42.23 | -7.48 | 34.75 | 69.63 | -34.88 | QP | |
| 2 | | 49.1865 | 41.74 | -7.25 | 34.49 | 69.63 | -35.14 | QP | |
| 3 | * | 62.6505 | 46.36 | -9.72 | 36.64 | 69.63 | -32.99 | QP | |
| 4 | | 72.5913 | 44.69 | -11.44 | 33.25 | 69.63 | -36.38 | QP | |
| 5 | | 93.4402 | 42.79 | -11.52 | 31.27 | 69.63 | -38.36 | QP | |
| 6 | | 102.0013 | 38.63 | -7.95 | 30.68 | 69.63 | -38.95 | QP | |

## Photographs of the test setup

Refer to Appendix - Test Setup Photos

## Photographs of the EUT

Refer to Appendix - EUT Photos

# Statement

1. This report is invalid without the seal and signature of the laboratory.

2. The test results of this report are only responsible for the samples submitted.Client shall be responsible for representativeness of the sample and authenticity of the material.
3. The report shall not be partially reproduced without the written consent of the Laboratory.
4. This report is invalid if transferred, altered or tampered with in any form without authorization.
5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

****** END OF REPORT ******