



**FCC Part15, Subpart B
ICES-003**

TEST REPORT

For

Z-Wave In-Wall Switch / Dimmer

MODEL NUMBER: WD700

FCC ID: 2AMY9WD700

REPORT NUMBER: 4789810769-2

ISSUE DATE: July 28, 2021

Prepared for

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Prepared by

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Revision History

| Rev. | Issue Date | Revisions | Revised By |
|------|------------|---------------|------------|
| V0 | 7/28/2021 | Initial Issue | |



| Summary of Test Results | | | | |
|--|----------------------------------|---------|--------|----------|
| Standard | Test Item | Limit | Result | Remark |
| FCC Part15, Subpart B ANSI C63.4-2014 ICES-003 Issue 7 | Conducted Disturbance | Class B | PASS | NOTE (2) |
| | Radiated Disturbance below 1 GHz | Class B | PASS | |
| | Radiated Disturbance above 1 GHz | Class B | PASS | NOTE (3) |

Note:

(1) "N/A" denotes test is not applicable in this test report.

(2) This test is only applicable for devices which can be charged or powered by AC power cable.

(3) If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.

(4) This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

(5) The measurement result for the sample received is <Pass> according to < FCC Part15, Subpart B and ICES-003 Issue 7 > when <Accuracy Method> decision rule is applied.



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Golden Mark (HK) Limited
 Address: 6/F., Kimberley Plaza, 45-47 Kimberley Road, Tsim Sha Tsui, Kowloon, Hong Kong

Manufacturer Information

Company Name: Golden Mark (HK) Limited
 Address: 6/F., Kimberley Plaza, 45-47 Kimberley Road, Tsim Sha Tsui, Kowloon, Hong Kong

EUT Information

EUT Name: Z-Wave In-Wall Switch / Dimmer
 Model: WD700
 Sample Received Date: March 30, 2021
 Sample Status: Normal
 Sample ID: 3738779
 Date of Tested: March 30, 2021~ July 28, 2020

| APPLICABLE STANDARDS | |
|-----------------------|--------------|
| STANDARD | TEST RESULTS |
| FCC Part15, Subpart B | PASS |
| ICES-003 Issue 7 | PASS |

Prepared By:

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 Project Engineer

Checked By:

 Shawn Wen
 Laboratory Leader

Approved By:

 Stephen Guo
 Laboratory Manager



2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC Part15 Subpart B & ICES-003 Issue 7 & ANSI C63.4-2014.

3. FACILITIES AND ACCREDITATION

| | |
|---------------------------|--|
| Accreditation Certificate | <p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules</p> <p>ISED (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011</p> |
|---------------------------|--|

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People’s Republic of China

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Test Item | Measurement Frequency Range | K | U(dB) |
|---|-----------------------------|---|-------|
| Conducted emissions from the AC mains power ports | 0.009 MHz ~ 0.15 MHz | 2 | 4.00 |
| Conducted emissions from the AC mains power ports | 0.15 MHz ~ 30 MHz | 2 | 3.62 |
| Radiated emissions | 30 MHz ~ 1 GHz | 2 | 4.00 |
| Radiated emissions | 1 GHz ~ 18 GHz | 2 | 5.78 |

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



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

| | |
|--------------|--------------------------------|
| EUT Name | Z-Wave In-Wall Switch / Dimmer |
| Model Name | WD700 |
| Power supply | 120V, 60Hz |

5.2. TEST MODE

| Test Mode | Description |
|-----------|---|
| Mode 1 | Running (connect the output to lamp and power on) |
| Mode 2 | Z-Wave Receiving |

5.3. EUT ACCESSORY

| Item | Accessory | Brand Name | Model Name | Description |
|------|-----------|------------|------------|-------------|
| / | / | / | / | / |

5.4. SUPPORT UNITS FOR SYSTEM TEST

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. | Specification | Series No. |
|------|-----------|-----------|----------------|---------------|------------|
| 1 | Lamp | / | / | / | / |

The following cables were used to form a representative test configuration during the tests.

| Item | Type of cable | Shielded Type | Ferrite Core | Specification |
|------|---------------|---------------|--------------|---------------|
| 1 | AC | NO | NO | 0.2m |



6. MEASURING EQUIPMENT AND SOFTWARE USED

| Conducted Emissions | | | | | |
|---------------------------------------|--------------|--------------|---------------|----------------|----------------|
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Due Date |
| EMI Test Receiver | R&S | ESR3 | 101961 | Nov. 12, 2020 | Nov. 11, 2021 |
| Two-Line V-Network | R&S | ENV216 | 101983 | Nov. 12, 2020 | Nov. 11, 2021 |
| Artificial Mains Networks | Schwarzbeck | NSLK 8126 | 8126465 | Nov. 12, 2020 | Nov. 11, 2021 |
| Software | | | | | |
| Description | | Manufacturer | Name | Version | |
| Test Software for Conducted Emissions | | Farad | EZ-EMC | Ver. UL-3A1 | |
| Radiated Emissions | | | | | |
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Due Date |
| MXE EMI Receiver | KESIGHT | N9038A | MY56400036 | Nov. 12, 2020 | Nov. 11, 2021 |
| Hybrid Log Periodic Antenna | TDK | HLP-3003C | 130960 | Aug. 11, 2018 | Aug. 10, 2021 |
| Preamplifier | HP | 8447D | 2944A09099 | Nov. 12, 2020 | Nov. 11, 2021 |
| EMI Measurement Receiver | R&S | ESR26 | 101377 | Nov. 12, 2020 | Nov. 11, 2021 |
| Horn Antenna | TDK | HRN-0118 | 130939 | Sept. 17, 2018 | Sept. 17, 2021 |
| Preamplifier | TDK | PA-02-0118 | TRS-305-00067 | Nov. 20, 2020 | Nov. 19, 2021 |
| Software | | | | | |
| Description | | Manufacturer | Name | Version | |
| Test Software for Radiated Emissions | | Farad | EZ-EMC | Ver. UL-3A1 | |

7. EMISSION TEST

7.1. CONDUCTED EMISSIONS MEASUREMENT

LIMITS

| CFR 47 FCC Part15 Subpart B ICES-003 Issue 7 | | | | |
|---|----------------------|---------|----------------------|----------|
| FREQUENCY (MHz) | Class A (dB μ V) | | Class B (dB μ V) | |
| | Quasi-peak | Average | Quasi-peak | Average |
| 0.15 -0.5 | 79.00 | 66.00 | 66 - 56 * | 56 - 46* |
| 0.50 -5.0 | 73.00 | 60.00 | 56.00 | 46.00 |
| 5.0 -30.0 | 73.00 | 60.00 | 60.00 | 50.00 |

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

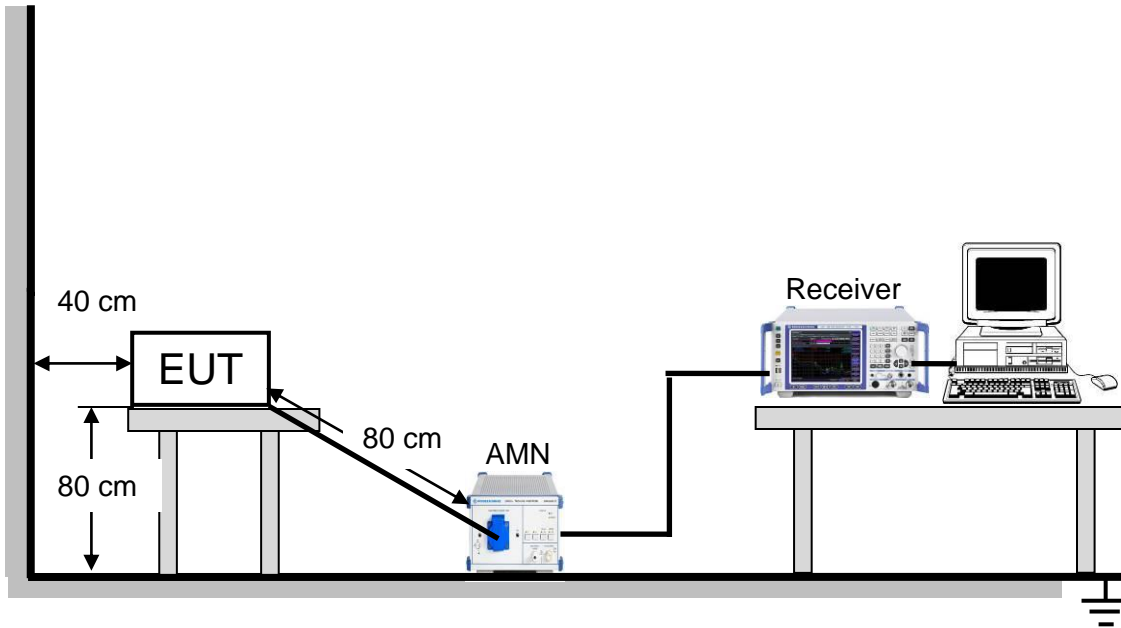
The following table is the setting of the receiver

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

TEST PROCEDURE

1. The testing follows the guidelines in ANSI C63.4-2014.
2. The EUT was placed on the top of a rotating table 0.8 meters above the horizontal ground plane and 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.
3. 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.
4. 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.
5. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal used.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

TEST SETUP



For the actual test configuration, please refer to Appendix I: Photographs of Test Configuration.

TEST ENVIRONMENT

| | | | |
|---------------------|---------|-------------------|--------|
| Temperature | 24.7 °C | Relative Humidity | 69.3 % |
| Atmosphere Pressure | 101 kPa | | |

TEST MODE

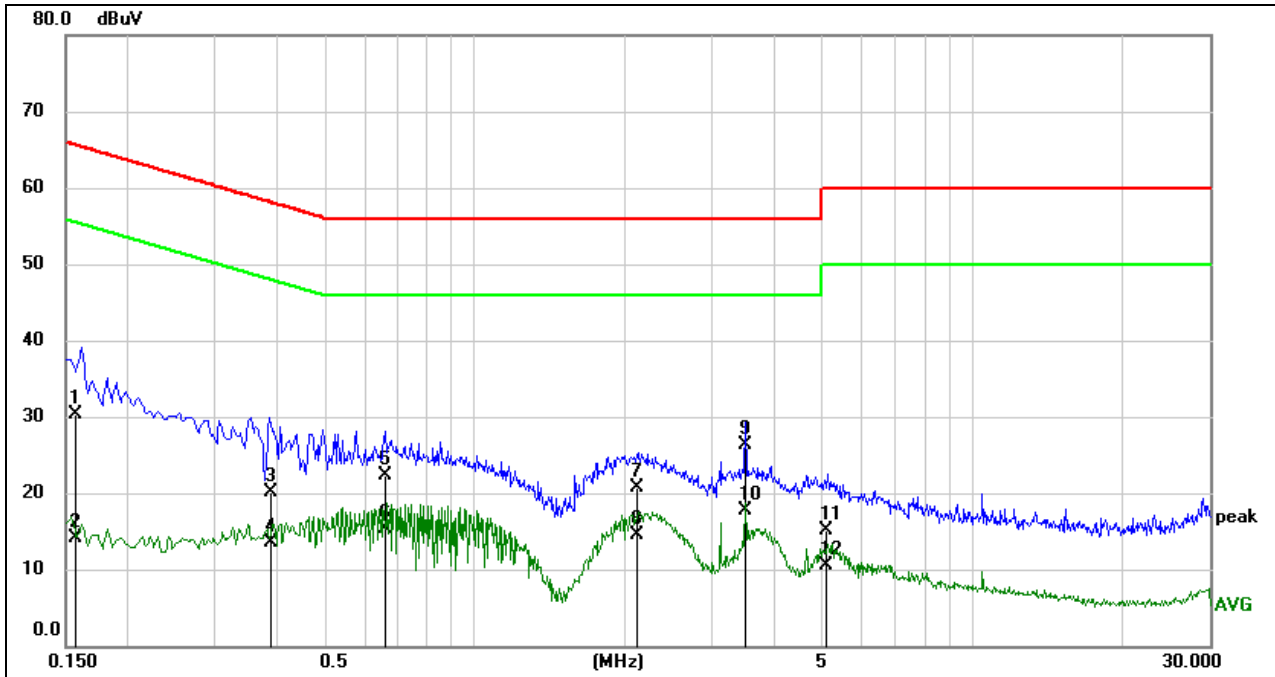
| | |
|------------------|------------|
| Pre-test Mode: | Mode 1 & 2 |
| Final Test Mode: | Mode 1 |

Note: All test modes have been tested, but only the worst case data recorded in the report.



TEST RESULTS

| Conducted Emissions | | | |
|---------------------|----------------|--------|------|
| Test Mode: | Mode 1 | Phase: | Line |
| Test Voltage | AC 120 V/60 Hz | | |

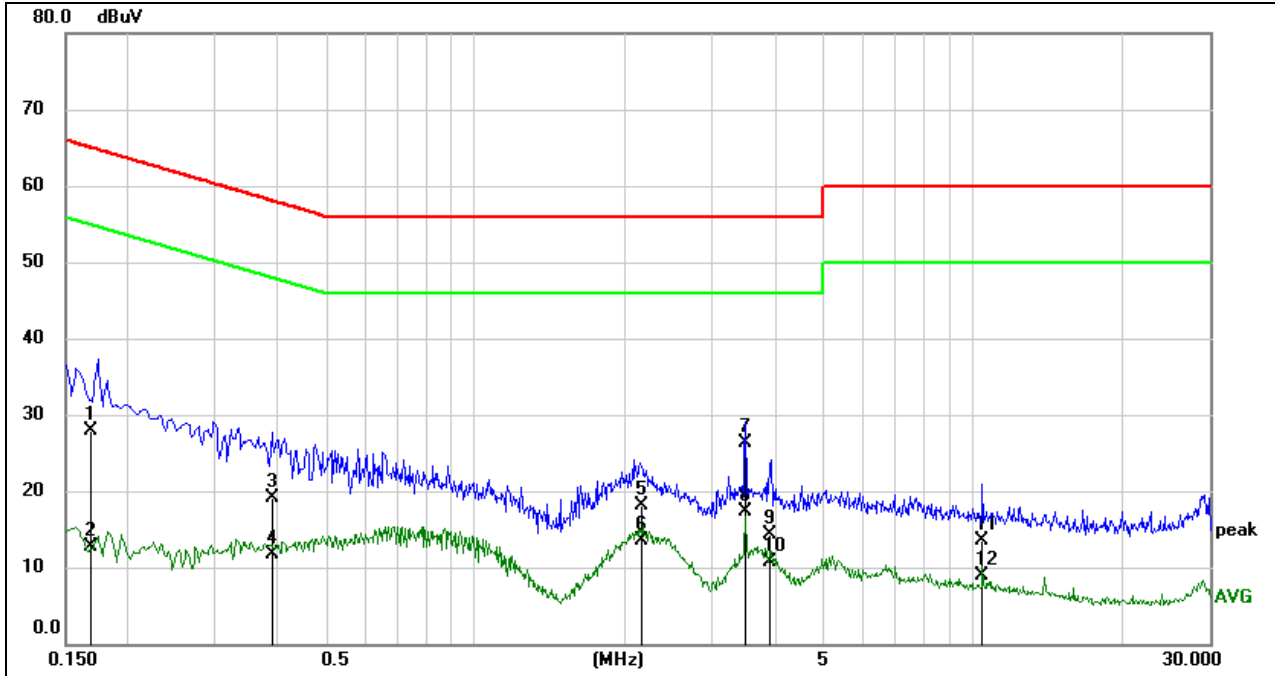


| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|-----|-----------------|----------------|--------------|---------------|--------------|-------------|--------|
| 1 | 0.1577 | 20.65 | 9.59 | 30.24 | 65.58 | -35.34 | QP |
| 2 | 0.1577 | 4.48 | 9.59 | 14.07 | 55.58 | -41.51 | AVG |
| 3 | 0.3892 | 10.44 | 9.59 | 20.03 | 58.08 | -38.05 | QP |
| 4 | 0.3892 | 3.83 | 9.59 | 13.42 | 48.08 | -34.66 | AVG |
| 5 | 0.6583 | 12.80 | 9.60 | 22.40 | 56.00 | -33.60 | QP |
| 6 | 0.6583 | 5.62 | 9.60 | 15.22 | 46.00 | -30.78 | AVG |
| 7 | 2.1025 | 11.00 | 9.63 | 20.63 | 56.00 | -35.37 | QP |
| 8 | 2.1025 | 4.80 | 9.63 | 14.43 | 46.00 | -31.57 | AVG |
| 9 | 3.4958 | 16.74 | 9.61 | 26.35 | 56.00 | -29.65 | QP |
| 10 | 3.4958 | 8.01 | 9.61 | 17.62 | 46.00 | -28.38 | AVG |
| 11 | 5.0966 | 5.45 | 9.62 | 15.07 | 60.00 | -44.93 | QP |
| 12 | 5.0966 | 0.89 | 9.62 | 10.51 | 50.00 | -39.49 | AVG |

Note: 1. Result = Reading +Correct (Insertion Loss + Cable Loss + Attenuator Factor)
 2. Margin = Result - Limit



| Conducted Emissions | | | |
|---------------------|----------------|--------|---------|
| Test Mode: | Mode 1 | Phase: | Neutral |
| Test Voltage | AC 120 V/60 Hz | | |



| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|-----|-----------------|----------------|--------------|---------------|--------------|-------------|--------|
| 1 | 0.1693 | 18.36 | 9.59 | 27.95 | 64.99 | -37.04 | QP |
| 2 | 0.1693 | 3.07 | 9.59 | 12.66 | 54.99 | -42.33 | AVG |
| 3 | 0.3891 | 9.56 | 9.59 | 19.15 | 58.08 | -38.93 | QP |
| 4 | 0.3891 | 2.15 | 9.59 | 11.74 | 48.08 | -36.34 | AVG |
| 5 | 2.1652 | 8.49 | 9.63 | 18.12 | 56.00 | -37.88 | QP |
| 6 | 2.1652 | 3.95 | 9.63 | 13.58 | 46.00 | -32.42 | AVG |
| 7 | 3.4959 | 16.69 | 9.61 | 26.30 | 56.00 | -29.70 | QP |
| 8 | 3.4959 | 7.77 | 9.61 | 17.38 | 46.00 | -28.62 | AVG |
| 9 | 3.9266 | 4.80 | 9.60 | 14.40 | 56.00 | -41.60 | QP |
| 10 | 3.9266 | 1.16 | 9.60 | 10.76 | 46.00 | -35.24 | AVG |
| 11 | 10.4865 | 3.88 | 9.63 | 13.51 | 60.00 | -46.49 | QP |
| 12 | 10.4865 | -0.81 | 9.63 | 8.82 | 50.00 | -41.18 | AVG |

Note: 1. Result = Reading +Correct (Insertion Loss + Cable Loss + Attenuator Factor)
 2. Margin = Result - Limit



7.2. RADIATED EMISSIONS MEASUREMENT

LIMITS

Below 1 GHz

| CFR 47 FCC Part 15 Subpart B | | |
|------------------------------|----------------------------------|----------------------------------|
| Frequency (MHz) | Class A | Class B |
| | Field strength (dBuV/m) (at 3 m) | Field strength (dBuV/m) (at 3 m) |
| 30 - 88 | 49.5 | 40 |
| 88 - 216 | 53.9 | 43.5 |
| 216 - 960 | 56.9 | 46 |
| Above 960 | 60 | 54 |

| ICES-003 Issue 7 | | |
|------------------|----------------------------------|----------------------------------|
| Frequency (MHz) | Class A | Class B |
| | Field strength (dBuV/m) (at 3 m) | Field strength (dBuV/m) (at 3 m) |
| 30 - 88 | 50 | 40 |
| 88 - 216 | 54 | 43.5 |
| 216 - 230 | 56.9 | 46 |
| 230 - 960 | 57 | 47 |
| Above 960 | 60 | 54 |

Note: The different between FCC Part 15 Subpart B limit and ICES-003 Issue 7 limit is only in frequency band 230 MHz to 960 MHz, the limit of FCC Part 15 Subpart B is 1 dB smaller than the limit of ICES-003 Issue 7, if the test result complies with FCC Part 15 Subpart B limit, it deemed to comply with ICES-003 Issue 7 limit.

Above 1 GHz

| CFR 47 FCC Part 15 Subpart B ICES-003 Issue 7 | | | | |
|--|-------------------|---------|-------------------|---------|
| Frequency (MHz) | Class A | | Class B | |
| | (dBuV/m) (at 3 m) | | (dBuV/m) (at 3 m) | |
| | Peak | Average | Peak | Average |
| Above 1000 | 80 | 60 | 74 | 54 |



Test Frequency Range of Radiated Disturbance Measurement

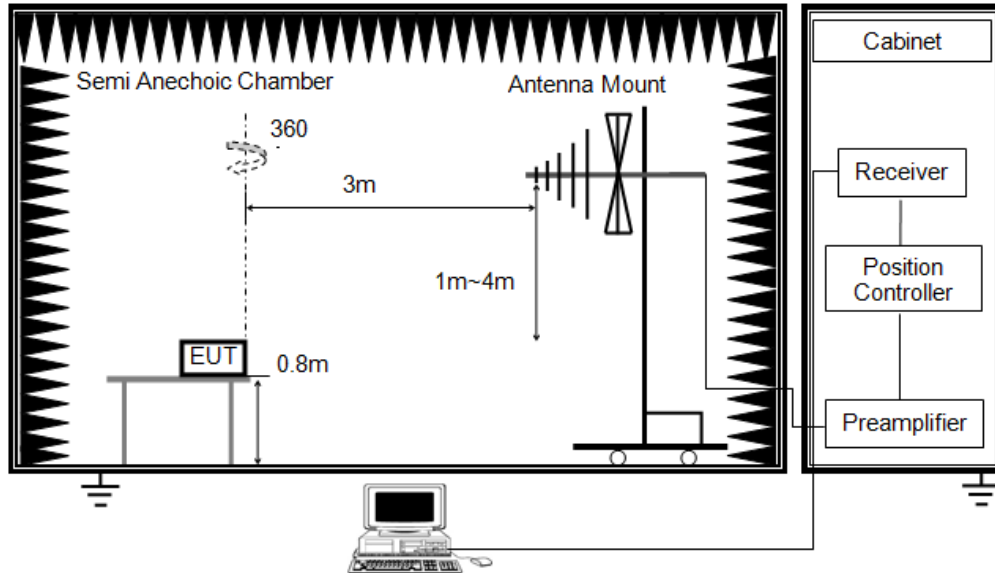
| Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz) | Range (MHz) |
|---|---|
| Below 1.705 | 30 |
| 1.705 - 108 | 1000 |
| 108 - 500 | 2000 |
| 500 - 1000 | 5000 |
| Above 1000 | 5 th harmonic of the highest frequency or 40 GHz, whichever is lower |

NOTE:

- (1) The limit for radiated test was performed according to FCC Part 15, Subpart B;
- (2) The tighter limit applies at the band edges;
- (3) Emission level (dBuV/m) = 20log Emission level (uV/m),
3m Emission level = 10 m Emission level + 20log(10 m/3 m);

TEST SETUP AND PROCEDURE

Below 1 GHz and above 30 MHz

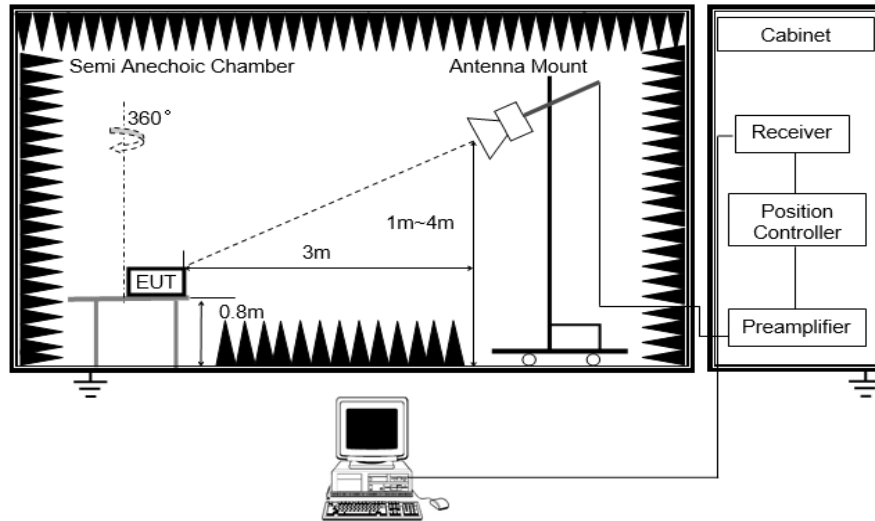


The setting of the spectrum analyser

| | |
|----------|-------------|
| RBW | 120 kHz |
| VBW | 300 kHz |
| Sweep | Auto |
| Detector | Peak and QP |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.4-2014.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp was used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. 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.
5. 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.
6. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal used.
7. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
8. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

Above 1 GHz



The setting of the spectrum analyser

| | |
|----------|------------------------|
| RBW | 1 MHz |
| VBW | 3 MHz |
| Sweep | Auto |
| Detector | Peak: Peak AVG: RMS |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.4-2014.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80 cm above ground.
4. 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.
5. 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.
6. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal used.
7. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
8. For measurement above 1 GHz, the peak emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the peak limit specified in Section 15.109. If peak result complies with average limit, average result is deemed to comply with average limit.
9. The average emission measurement will be measured by the RMS detector and must comply with the average limit specified in Section 15.109.



TEST ENVIRONMENT

| Radiated Emissions - Below 1 GHz | | Radiated Emissions - Above 1 GHz | |
|----------------------------------|---------|----------------------------------|---------|
| Temperature: | 25.3 °C | Temperature: | 25.4 °C |
| Humidity: | 67.0 % | Humidity: | 59.7 % |
| Atmosphere Pressure | 101 kPa | Atmosphere Pressure | 101 kPa |

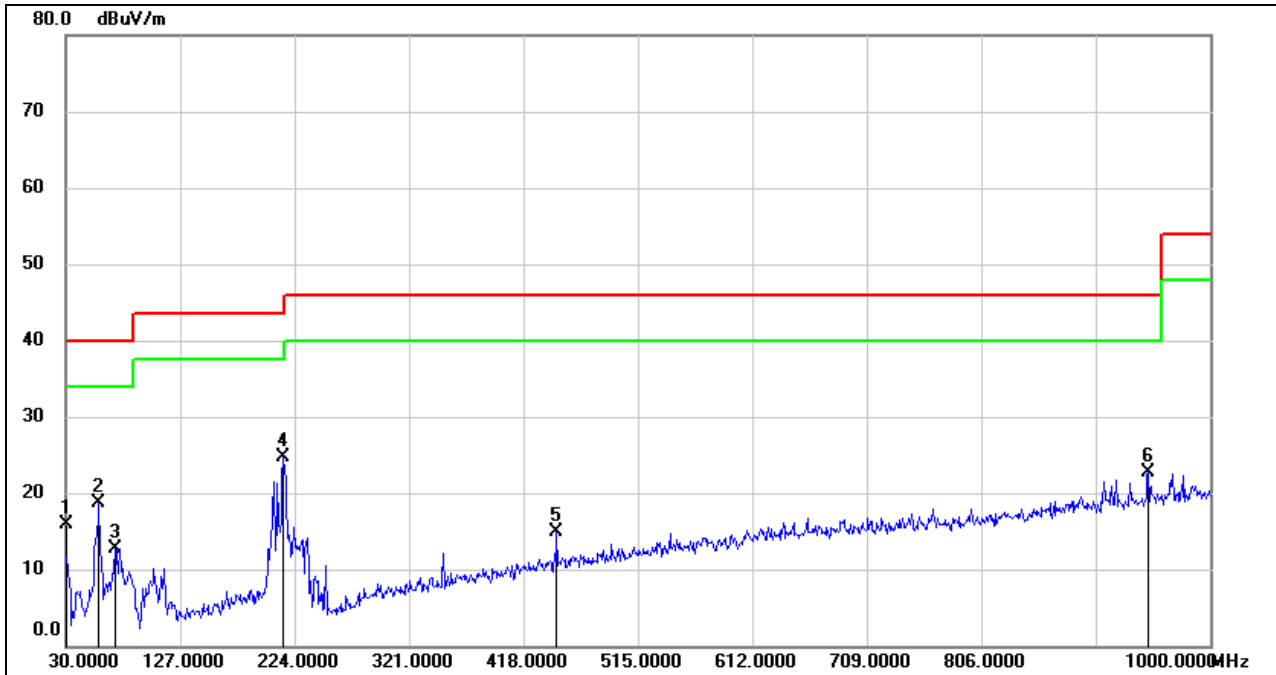
TEST MODE

| Radiated Emissions - Below 1 GHz | | Radiated Emissions - Above 1 GHz | |
|----------------------------------|------------|----------------------------------|------------|
| Pre-test Mode: | Mode 1 & 2 | Pre-test Mode: | Mode 1 & 2 |
| Final Test Mode: | Mode 1 & 2 | Final Test Mode: | Mode 1 |

Note: All test modes have been tested, but only the worst case data recorded in the report.

**TEST RESULTS**

| Radiated Emissions – Below 1 GHz | | | |
|----------------------------------|----------|---------------|----------------|
| Measurement Method | Radiated | Polar: | Horizontal |
| Test Mode: | Mode 1 | Test Voltage: | AC 120 V/60 Hz |

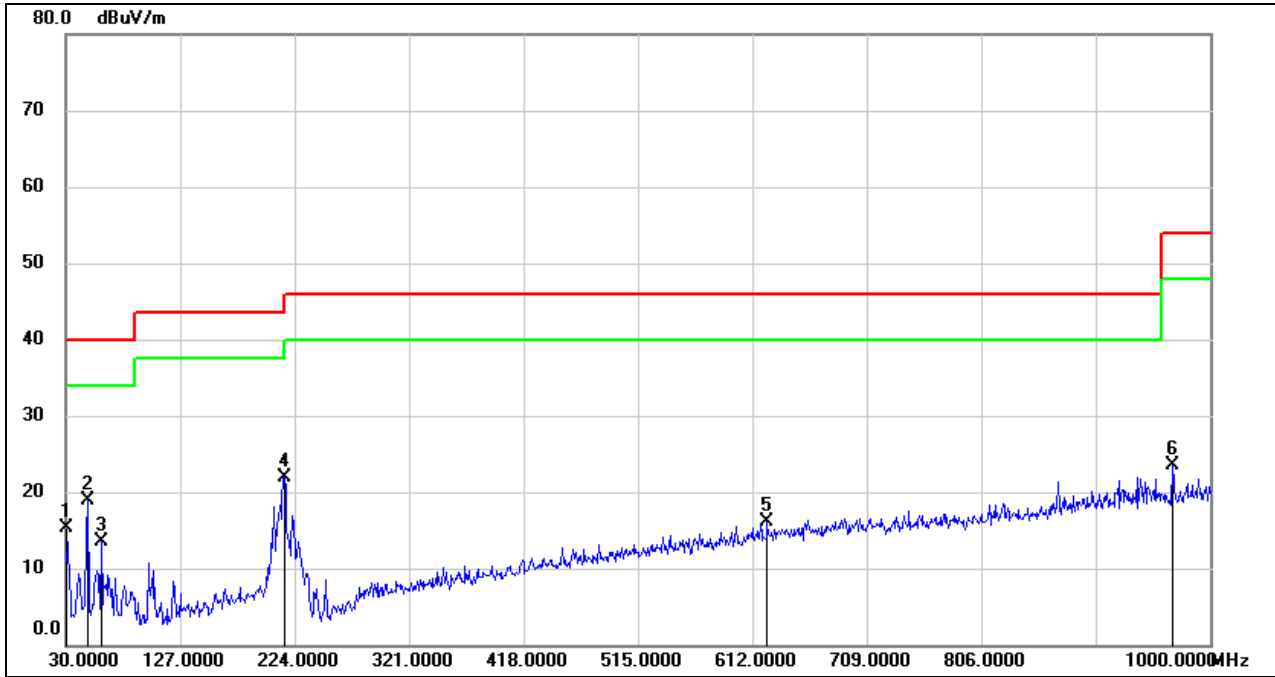


| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1 | 30.0000 | 34.89 | -18.94 | 15.95 | 40.00 | -24.05 | QP |
| 2 | 58.1300 | 39.29 | -20.55 | 18.74 | 40.00 | -21.26 | QP |
| 3 | 71.7100 | 33.44 | -20.70 | 12.74 | 40.00 | -27.26 | QP |
| 4 | 214.3000 | 42.33 | -17.66 | 24.67 | 43.50 | -18.83 | QP |
| 5 | 446.1300 | 27.40 | -12.52 | 14.88 | 46.00 | -31.12 | QP |
| 6 | 947.6200 | 27.19 | -4.43 | 22.76 | 46.00 | -23.24 | QP |

Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
2. Margin = Result - Limit



| Radiated Emissions – Below 1 GHz | | | |
|----------------------------------|----------|---------------|----------------|
| Measurement Method | Radiated | Polar: | Vertical |
| Test Mode: | Mode 1 | Test Voltage: | AC 120 V/60 Hz |

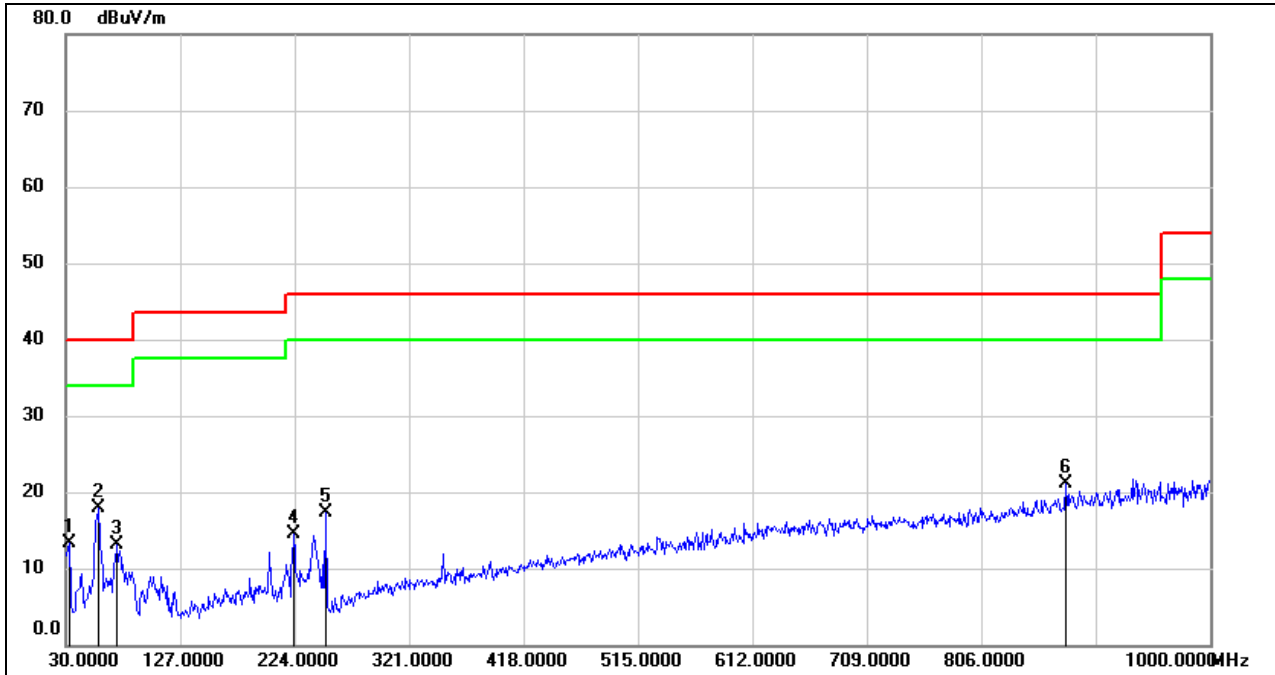


| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1 | 30.0000 | 34.16 | -18.94 | 15.22 | 40.00 | -24.78 | QP |
| 2 | 48.4300 | 39.44 | -20.63 | 18.81 | 40.00 | -21.19 | QP |
| 3 | 60.0700 | 34.05 | -20.49 | 13.56 | 40.00 | -26.44 | QP |
| 4 | 215.2700 | 39.69 | -17.76 | 21.93 | 43.50 | -21.57 | QP |
| 5 | 624.6100 | 25.35 | -9.31 | 16.04 | 46.00 | -29.96 | QP |
| 6 | 967.9900 | 27.94 | -4.43 | 23.51 | 54.00 | -30.49 | QP |

Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
 2. Margin = Result - Limit



| Radiated Emissions – Below 1 GHz | | | |
|----------------------------------|----------|---------------|----------------|
| Measurement Method | Radiated | Polar: | Horizontal |
| Test Mode: | Mode 2 | Test Voltage: | AC 120 V/60 Hz |

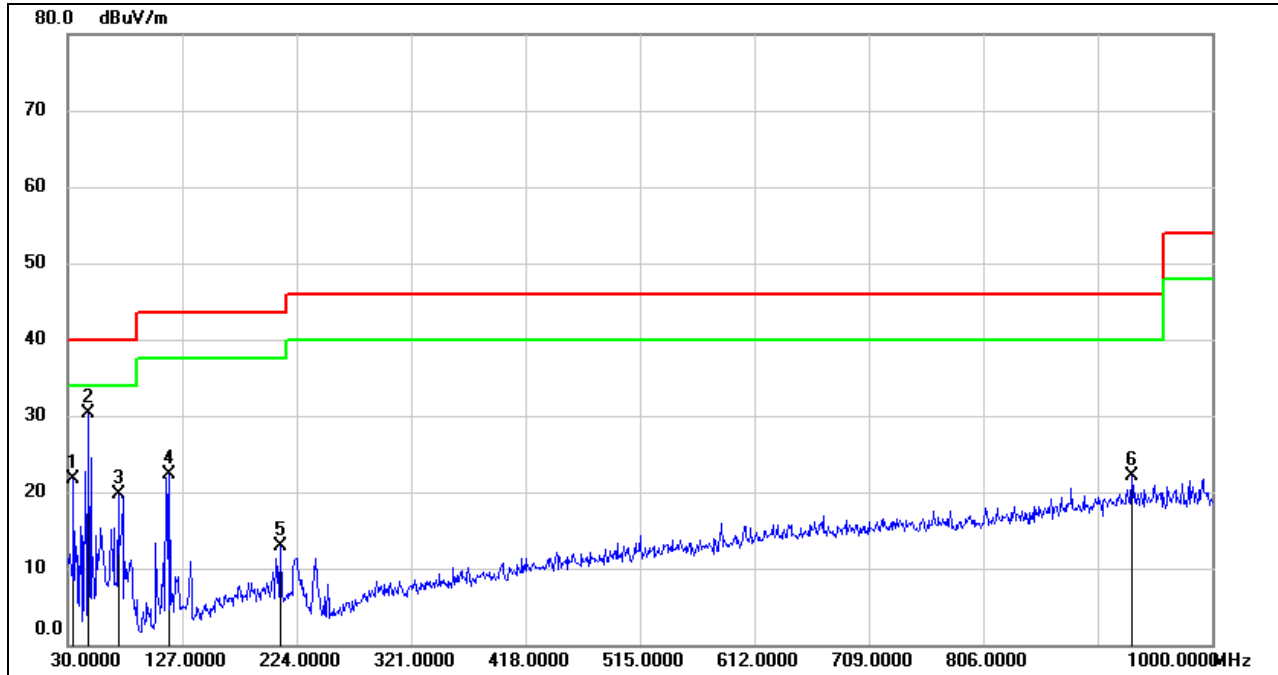


| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1 | 32.9100 | 32.56 | -19.22 | 13.34 | 40.00 | -26.66 | QP |
| 2 | 58.1300 | 38.54 | -20.55 | 17.99 | 40.00 | -22.01 | QP |
| 3 | 73.6500 | 33.87 | -20.84 | 13.03 | 40.00 | -26.97 | QP |
| 4 | 223.0300 | 32.88 | -18.32 | 14.56 | 46.00 | -31.44 | QP |
| 5 | 250.1900 | 36.15 | -18.91 | 17.24 | 46.00 | -28.76 | QP |
| 6 | 877.7800 | 26.76 | -5.58 | 21.18 | 46.00 | -24.82 | QP |

Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
 2. Margin = Result - Limit



| Radiated Emissions – Below 1 GHz | | | |
|----------------------------------|----------|---------------|----------------|
| Measurement Method | Radiated | Polar: | Vertical |
| Test Mode: | Mode 2 | Test Voltage: | AC 120 V/60 Hz |

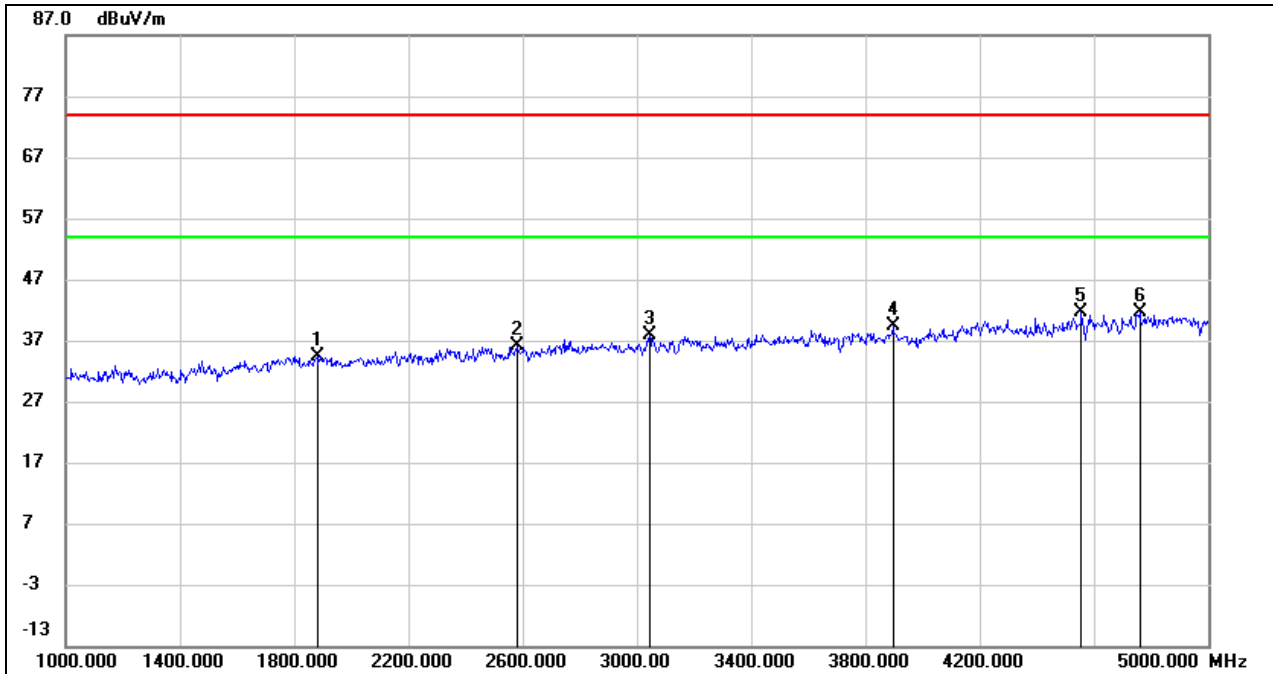


| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1 | 30.0000 | 34.16 | -18.94 | 15.22 | 40.00 | -24.78 | QP |
| 2 | 48.4300 | 39.44 | -20.63 | 18.81 | 40.00 | -21.19 | QP |
| 3 | 60.0700 | 34.05 | -20.49 | 13.56 | 40.00 | -26.44 | QP |
| 4 | 215.2700 | 39.69 | -17.76 | 21.93 | 43.50 | -21.57 | QP |
| 5 | 624.6100 | 25.35 | -9.31 | 16.04 | 46.00 | -29.96 | QP |
| 6 | 967.9900 | 27.94 | -4.43 | 23.51 | 54.00 | -30.49 | QP |

Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
 2. Margin = Result - Limit



| Radiated Emissions – Above 1 GHz | | | |
|----------------------------------|----------|---------------|----------------|
| Measurement Method | Radiated | Polar: | Horizontal |
| Test Mode: | Mode 1 | Test Voltage: | AC 120 V/60 Hz |

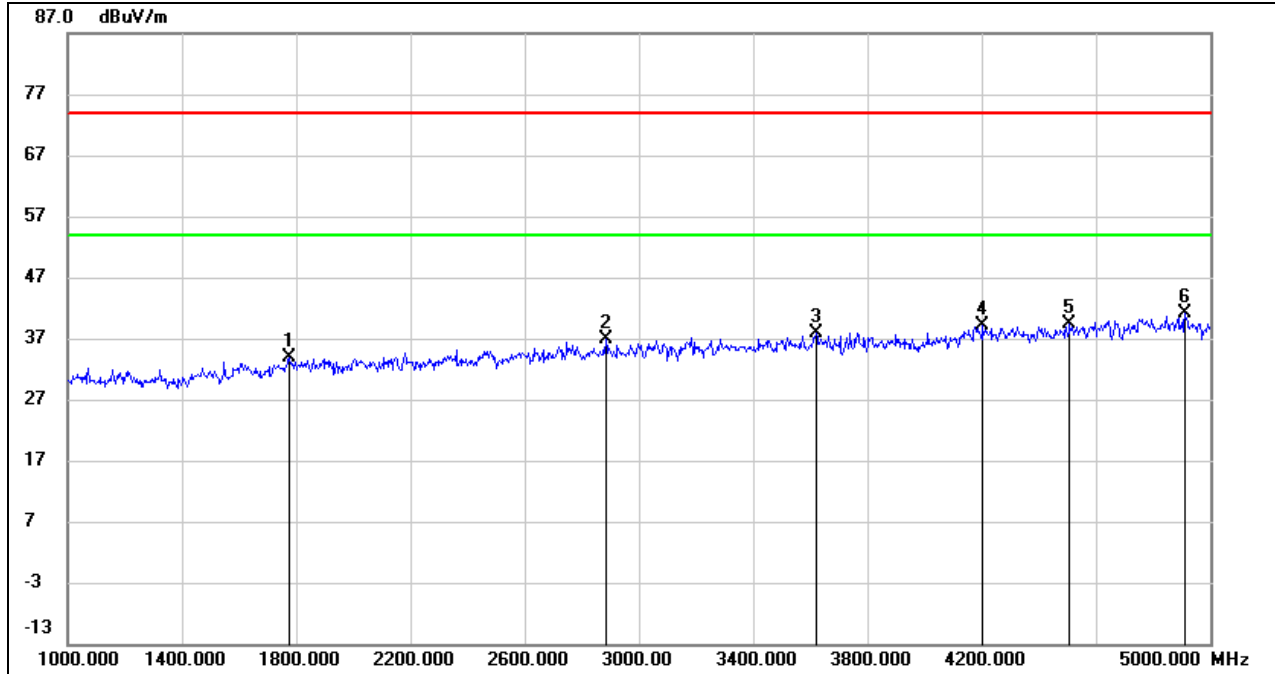


| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1 | 1880.000 | 44.52 | -10.10 | 34.42 | 74.00 | -39.58 | peak |
| 2 | 2580.000 | 44.13 | -7.93 | 36.20 | 74.00 | -37.80 | peak |
| 3 | 3044.000 | 43.36 | -5.51 | 37.85 | 74.00 | -36.15 | peak |
| 4 | 3896.000 | 42.77 | -3.43 | 39.34 | 74.00 | -34.66 | peak |
| 5 | 4556.000 | 42.55 | -0.86 | 41.69 | 74.00 | -32.31 | peak |
| 6 | 4760.000 | 41.37 | 0.35 | 41.72 | 74.00 | -32.28 | peak |

- Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
 2. Margin = Result - Limit
 3. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 4. Peak: Peak detector.



| Radiated Emissions – Above 1 GHz | | | |
|----------------------------------|----------|---------------|----------------|
| Measurement Method | Radiated | Polar: | Vertical |
| Test Mode: | Mode 1 | Test Voltage: | AC 120 V/60 Hz |



| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|-----|-----------------|----------------|----------------|-----------------|----------------|-------------|--------|
| 1 | 1776.000 | 44.15 | -10.22 | 33.93 | 74.00 | -40.07 | peak |
| 2 | 2884.000 | 43.07 | -6.15 | 36.92 | 74.00 | -37.08 | peak |
| 3 | 3620.000 | 41.97 | -4.09 | 37.88 | 74.00 | -36.12 | peak |
| 4 | 4204.000 | 40.91 | -1.67 | 39.24 | 74.00 | -34.76 | peak |
| 5 | 4508.000 | 40.45 | -1.18 | 39.27 | 74.00 | -34.73 | peak |
| 6 | 4912.000 | 40.24 | 0.77 | 41.01 | 74.00 | -32.99 | peak |

- Note: 1. Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)
 2. Margin = Result - Limit
 3. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 4. Peak: Peak detector.

END OF REPORT