



Report No.: SZEM190701662602

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# TEST REPORT

Application No.: SZEM1907016626CR

Applicant: HUANG QI TOYS CO., LTD

Address of Applicant: 13 New 1 Lane, Xinxiang Village, Guangyi Road, Chenghai Area, Shantou,

515800, China

Manufacturer: HUANG QI TOYS CO., LTD

Address of Manufacturer: 13 New 1 Lane, Xinxiang Village, Guangyi Road, Chenghai Area, Shantou,

515800, China

**Equipment Under Test (EUT):** 

**EUT Name:** RC cars

**Model No.:** 922-1, 922-2, 922-3, 922-5, 922-6, 922-7, 922-8, 922-9, 922-10, 922-11,

922-12, 922-13, 922-14, 922-15, 922-16, 922-17, 922-18, 929-2, 929-3, 929-5, 920-1, 920-2, 920-3, 920-5, 920-6, 920-7, 920-8, 920-9, 920-10, 920-11, 920-12, 920-13, 920-14, 920-15, 920-16, 920-17, 920-18, 929-6, 929-7, 929-8, 922C-1, 922C-2, 922C-3, 922C-5, 922C-6, 922C-7, 922C-8, 922C-9, 922C-10, 922C-11, 922C-12, 922C-13, 922C-14, 922C-15, 922C-16, 922C-17, 922C-18, 929-9, 929-10, 923-1, 928-1, 928-2, 928-3, 928-5, 928-6, 928-7, 925-1A, 925-2A, 925-3A, 925-5A, 925-6A, 925-8A, 925-9A, 925-10A,

1100, 1102, 1103, 1104, 923-2, MT1004 •

Please refer to section 2 of this report which indicates which model was

actually tested and which were electrically identical.

FCC ID: 2ATZWHQMT1004

Standard(s): 47 CFR Part 15, Subpart C 15.227

**Date of Receipt:** 2019-07-23

**Date of Test:** 2019-07-25 to 2019-07-26

**Date of Issue:** 2019-08-08

Test Result: Pass\*

Keny Xu EMC Laboratory Manager

Ceny. Ku



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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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|         | Revision Record                      |            |  |          |  |  |  |
|---------|--------------------------------------|------------|--|----------|--|--|--|
| Version | Version Chapter Date Modifier Remark |            |  |          |  |  |  |
| 01      |                                      | 2019-08-08 |  | Original |  |  |  |
|         |                                      |            |  |          |  |  |  |
|         |                                      |            |  |          |  |  |  |

| Authorized for issue by: |                             |   |  |
|--------------------------|-----------------------------|---|--|
|                          | Biu chen                    |   |  |
|                          | Bill Chen /Project Engineer | _ |  |
|                          | EvicFu                      |   |  |
|                          | Eric Fu /Reviewer           | _ |  |



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# **Test Summary**

| Radio Spectrum Technical Requirement |                                     |        |                                     |        |  |  |
|--------------------------------------|-------------------------------------|--------|-------------------------------------|--------|--|--|
| Item                                 | Standard                            | Method | Requirement                         | Result |  |  |
| Antenna Requirement                  | 47 CFR Part 15,<br>Subpart C 15.227 | N/A    | 47 CFR Part 15, Subpart<br>C 15.203 | Pass   |  |  |

| Radio Spectrum Matter Part                                 |                                     |                                       |  |        |  |  |
|--|-------------------------------------|---------------------------------------|--|--------|--|--|
| Item   | Standard                            | Method                                | Requirement                                    | Result |  |  |
| 20dB Bandwidth   | 47 CFR Part 15,<br>Subpart C 15.227 | ANSI C63.10 (2013)<br>Section 6.9     | 47 CFR Part 15, Subpart<br>C 15.215            | Pass   |  |  |
| Field Strength of the<br>Fundamental Signal<br>(15.227(a)) | 47 CFR Part 15,<br>Subpart C 15.227 | ANSI C63.10 (2013)<br>Section 6.4     | 47 CFR Part 15, Subpart<br>C 15.227(a)         | Pass   |  |  |
| Radiated Emissions   | 47 CFR Part 15,<br>Subpart C 15.227 | ANSI C63.10 (2013)<br>Section 6.4&6.5 | 47 CFR Part 15, Subpart C 15.227(b) & C 15.209 | Pass   |  |  |

### Remark:

Model No.: 922-1, 922-2, 922-3, 922-5, 922-6, 922-7, 922-8, 922-9, 922-10, 922-11, 922-12, 922-13, 922-14, 922-15, 922-16, 922-17, 922-18, 929-2, 929-3, 929-5, 920-1, 920-2, 920-3, 920-5, 920-6, 920-7, 920-8, 920-9, 920-10, 920-11, 920-12, 920-13, 920-14, 920-15, 920-16, 920-17, 920-18, 929-6, 929-7, 929-8, 922C-1, 922C-2, 922C-3, 922C-5, 922C-6, 922C-7, 922C-8, 922C-9, 922C-10, 922C-11, 922C-12, 922C-13, 922C-14, 922C-15, 922C-16, 922C-17, 922C-18, 929-9, 929-10, 923-1, 928-1, 928-2, 928-3, 928-5, 928-6, 928-7, 925-1A, 925-2A, 925-3A, 925-5A, 925-6A, 925-8A, 925-9A, 925-10A, 1100, 1102, 1103, 1104, 923-2, MT1004

Only the model MT1004 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on color.



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# **General Information**

#### 4.1 Details of E.U.T.

| Power supply:        | TX:DC 3.0V by 1.5V x 2"AA" batteries |
|----------------------|--------------------------------------|
| Operation Frequency: | 27.145MHz                            |
| Modulation Type:     | ASK                                  |
| Antenna Type:        | Integral                             |
| Antenna Gain:        | 0dBi                                 |

# 4.2 Description of Support Units

The EUT has been tested as an independent unit.

# 4.3 Measurement Uncertainty

| No. | Item                            | Measurement Uncertainty |
|-----|---------------------------------|-------------------------|
| 1   | 20dB Bandwidth                  | ± 3%                    |
| 2   | E- Field                        | ± 4.5dB (Below 1GHz)    |
| 3   | Radiated Spurious emission test | ± 4.5dB (Below 1GHz)    |
| 4   | Temperature test                | ± 1 ℃                   |
| 5   | Humidity test                   | ± 3%                    |
| 6   | Time                            | ± 3%                    |



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### 4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

## 4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

### • CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

### • A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

#### VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

# FCC –Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

### Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

### 4.6 Deviation from Standards

None

## 4.7 Abnormalities from Standard Conditions

None



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# **Equipment List**

| 20dB Bandwidth                          |                        |                         |              |            |              |  |
|---|------------------------|-------------------------|--------------|------------|--------------|--|
| Equipment                               | Manufacturer           | Model No                | Inventory No | Cal Date   | Cal Due Date |  |
| Shielding Room                          | SAEMC                  | MSR733                  | SEM001-09    | 2019-06-13 | 2024-06-12   |  |
| DC Power Supply                         | ZhaoXin                | RXN-305D                | SEM011-02    | 2018-09-25 | 2019-09-24   |  |
| Spectrum Analyzer                       | Rohde & Schwarz        | FSP                     | SEM004-06    | 2018-09-27 | 2019-09-26   |  |
| Measurement Software                    | JS Tonscend            | JS1120-2<br>BT/WIFI V2. | N/A          | N/A        | N/A          |  |
| Coaxial Cable                           | SGS                    | N/A                     | SEM031-02    | 2019-07-11 | 2020-07-10   |  |
| Attenuator                              | Weinschel Associates   | WA41                    | SEM021-09    | N/A        | N/A          |  |
| Signal Generator                        | KEYSIGHT               | N5173B                  | SEM006-05    | 2018-09-27 | 2019-09-26   |  |
| Power Meter                             | Rohde & Schwarz        | NRVS                    | SEM014-02    | 2018-09-25 | 2019-09-24   |  |
| Electric and Magnetic<br>Field Analyzer | Narda                  | NBM-<br>550/EHP-50F     | EMC2143      | 2018-02-07 | 2020-02-06   |  |
| Electric Field Probe<br>(100KHz-3GHz)   | WANDEL &<br>GOLTERMANN | EMR-20                  | EMC0907      | 2019-05-21 | 2020-05-20   |  |
| EMF Tester                              | Narda                  | ELT-400                 | SZE039-4     | 2019-07-08 | 2020-07-07   |  |

| Field Strength of the Fundamental Signal (15.227(a)) |                         |                     |              |            |              |  |
|--|-------------------------|---------------------|--------------|------------|--------------|--|
| Equipment  | Manufacturer            | Model No            | Inventory No | Cal Date   | Cal Due Date |  |
| 10m Semi-Anechoic<br>Chamber                         | SAEMC                   | FSAC1018            | SEM001-03    | 2018-03-31 | 2021-03-30   |  |
| Measurement Software                                 | AUDIX                   | e3 V8.2014-6-<br>27 | N/A          | N/A        | N/A          |  |
| Coaxial Cable  | SGS                     | N/A                 | SEM029-01    | 2019-07-11 | 2020-07-10   |  |
| EMI Test Receiver<br>(9kHz-7GHz)                     | Rohde & Schwarz         | ESR                 | SEM004-03    | 2019-04-01 | 2020-03-31   |  |
| BiConiLog Antenna<br>(26-3000MHz)                    | ETS-LINDGREN            | 3142C               | SEM003-02    | 2019-05-24 | 2022-05-23   |  |
| Pre-amplifier  | Sonoma Instrument<br>Co | 310N                | SEM005-04    | 2019-04-12 | 2020-04-11   |  |
| Active Loop Antenna                                  | ETS-Lindgren            | 6502                | SEM003-08    | 2017-08-22 | 2020-08-21   |  |

| Radiated Emissions(30MHz-1GHz) |                      |                     |              |            |              |  |
|--------------------------------|----------------------|---------------------|--------------|------------|--------------|--|
| Equipment                      | Manufacturer         | Model No            | Inventory No | Cal Date   | Cal Due Date |  |
| 3m Semi-Anechoic<br>Chamber    | ETS-LINDGREN         | N/A                 | SEM001-01    | 2017-08-05 | 2020-08-04   |  |
| Measurement Software           | AUDIX                | e3 V8.2014-6-<br>27 | N/A          | N/A        | N/A          |  |
| Coaxial Cable                  | SGS                  | N/A                 | SEM025-01    | 2019-07-11 | 2020-07-10   |  |
| EMI Test Receiver              | Agilent Technologies | N9038A              | SEM004-05    | 2018-09-25 | 2019-09-24   |  |



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| BiConiLog Antenna<br>(26-3000MHz) | ETS-LINDGREN         | 3142C | SEM003-01 | 2017-06-27 | 2020-06-26 |
|-----------------------------------|----------------------|-------|-----------|------------|------------|
| Pre-amplifier<br>(0.1-1300MHz)    | Agilent Technologies | 8447D | SEM005-01 | 2019-04-01 | 2020-03-31 |

| Radiated Emissions(9kHz-30MHz)    |                         |                     |              |            |              |  |
|-----------------------------------|-------------------------|---------------------|--------------|------------|--------------|--|
| Equipment                         | Manufacturer            | Model No            | Inventory No | Cal Date   | Cal Due Date |  |
| 10m Semi-Anechoic<br>Chamber      | SAEMC                   | FSAC1018            | SEM001-03    | 2018-03-31 | 2021-03-30   |  |
| Measurement Software              | AUDIX                   | e3 V8.2014-6-<br>27 | N/A          | N/A        | N/A          |  |
| Coaxial Cable                     | SGS                     | N/A                 | SEM029-01    | 2019-07-11 | 2020-07-10   |  |
| EMI Test Receiver<br>(9kHz-7GHz)  | Rohde & Schwarz         | ESR                 | SEM004-03    | 2019-04-01 | 2020-03-31   |  |
| BiConiLog Antenna<br>(26-3000MHz) | ETS-LINDGREN            | 3142C               | SEM003-02    | 2019-05-24 | 2022-05-23   |  |
| Pre-amplifier                     | Sonoma Instrument<br>Co | 310N                | SEM005-04    | 2019-04-12 | 2020-04-11   |  |
| Active Loop Antenna               | ETS-Lindgren            | 6502                | SEM003-08    | 2017-08-22 | 2020-08-21   |  |

| General used equipment             |   |                       |           |            |              |  |  |  |
|------------------------------------|---|-----------------------|-----------|------------|--------------|--|--|--|
| Equipment                          | Manufacturer                                    | Model No Inventory No |           | Cal Date   | Cal Due Date |  |  |  |
| Humidity/ Temperature<br>Indicator | Shanghai<br>Meteorological<br>Industry Factory  | ZJ1-2B                | SEM002-03 | 2018-09-27 | 2019-09-26   |  |  |  |
| Humidity/ Temperature<br>Indicator | Shanghai<br>Meteorological<br>Industry Factory  | ZJ1-2B                | SEM002-04 | 2018-09-27 | 2019-09-26   |  |  |  |
| Humidity/ Temperature<br>Indicator | Mingle  | N/A                   | SEM002-08 | 2018-09-27 | 2019-09-26   |  |  |  |
| Barometer                          | Changchun<br>Meteorological<br>Industry Factory | DYM3                  | SEM002-01 | 2019-04-04 | 2020-04-03   |  |  |  |



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#### Radio Spectrum Technical Requirement 6

## **Antenna Requirement**

## 6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

#### 6.1.2 Conclusion

### Standard Requirement:

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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0dBi.

Antenna location: Refer to Appendix(Internal photos)



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#### 7 **Radio Spectrum Matter Test Results**

## 7.1 20dB Bandwidth

**Test Requirement** 47 CFR Part 15, Subpart C 15.215 Test Method: ANSI C63.10 (2013) Section 6.9

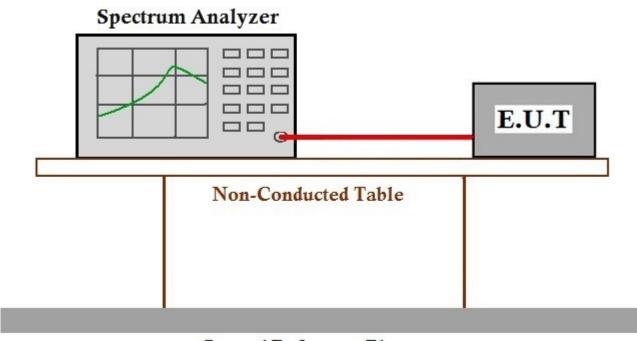
### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: Humidity: 41.4 % RH Atmospheric Pressure: 1005 mbar

Test mode a:TX mode Keep the EUT in transmitting with modulation mode.

### 7.1.2 Test Setup Diagram



# Ground Reference Plane

### 7.1.3 Measurement Procedure and Data

| Mode | Frequency (MHz) | -20dB Bandwidth(KHz) | Limit | Conclusion |
|------|-----------------|----------------------|-------|------------|
| Tx   | 27.145          | 0.142                | N/A   | Pass       |



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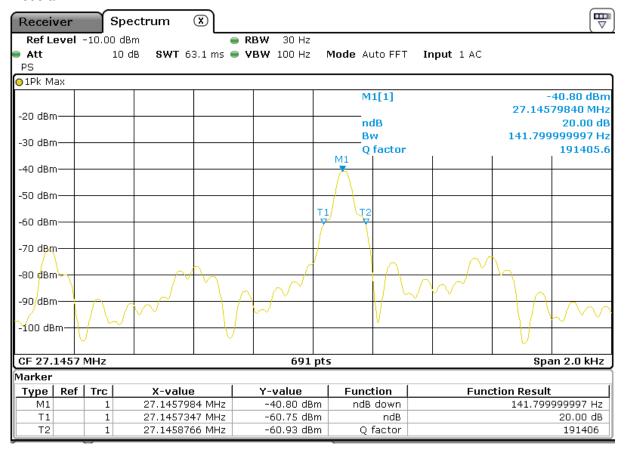
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### Mode a:





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# 7.2 Field Strength of the Fundamental Signal (15.227(a))

Test Requirement 47 CFR Part 15, Subpart C 15.227(a) Test Method: ANSI C63.10 (2013) Section 6.4

Measurement Distance: 3m

Limit: ≤ 10000 microvolts/meter at 3 meters, the emission limit is based on

measurement instrumentation employing an average Detector:. The

provisions in § 15.35 for limiting peak emissions apply.



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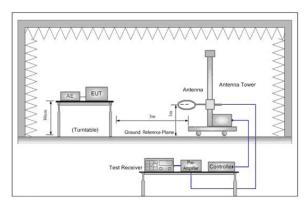
### 7.2.1 E.U.T. Operation

Operating Environment:

Humidity: 62.1 % RH Temperature: 24.9 °C Atmospheric Pressure: 1005 mbar

Test mode a:TX mode Keep the EUT in transmitting with modulation mode.

### 7.2.2 Test Setup Diagram



### 7.2.3 Measurement Procedure and Data

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1Ghz at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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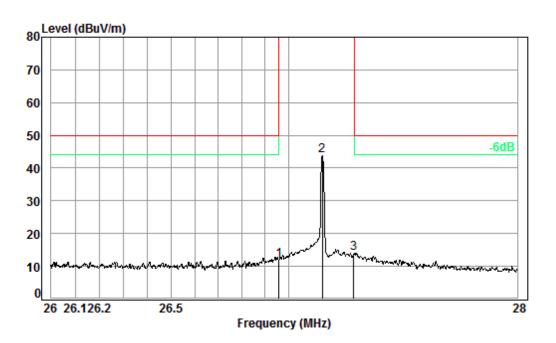


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Detector:Peak

Mode:a; Polarization:Horizontal



Condition: 3m HORIZONTAL

Job No. : 16626CR

Test mode: a

|      |       | Cable | Ant    | Preamp | Read  |        | Limit  | 0ver   |
|------|-------|-------|--------|--------|-------|--------|--------|--------|
|      | Freq  | Loss  | Factor | Factor | Level | Level  | Line   | Limit  |
| _    |       |       |        |        |       |        |        |        |
|      | MHz   | dB    | dB/m   | dB     | dBuV  | dBuV/m | dBuV/m | dB     |
|      |       |       |        |        |       |        |        |        |
| 1 pp | 26.96 | 0.60  | 23.31  | 27.67  | 15.77 | 12.01  | 50.00  | -37.99 |
| 2    | 27.15 | 0.60  | 23.22  | 27.67  | 47.67 | 43.82  | 100.00 | -56.18 |
| 3    | 27.28 | 0.60  | 23.15  | 27.67  | 17.83 | 13.91  | 100.00 | -86.09 |



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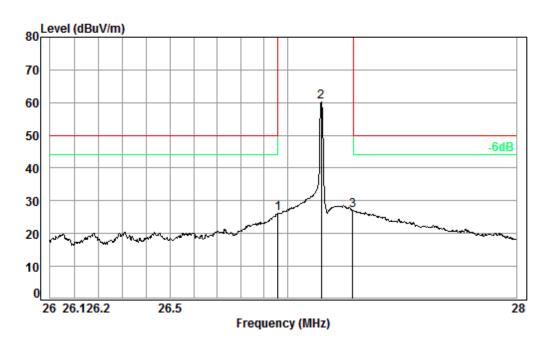
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Mode:a; Polarization:Vertical



Condition: 3m VERTICAL Job No. : 16626CR

Test mode: a

|      |       | Cable | Ant    | Preamp | Read  |        | Limit  | 0ver   |
|------|-------|-------|--------|--------|-------|--------|--------|--------|
|      | Freq  | Loss  | Factor | Factor | Level | Level  | Line   | Limit  |
| _    |       |       |        |        |       |        |        |        |
|      | MHz   | dB    | dB/m   | dB     | dBuV  | dBuV/m | dBuV/m | dB     |
|      |       |       |        |        |       |        |        |        |
| 1 pp | 26.96 | 0.60  | 23.31  | 27.67  | 29.84 | 26.08  | 50.00  | -23.92 |
| 2    | 27.15 | 0.60  | 23.22  | 27.67  | 64.21 | 60.36  | 100.00 | -39.64 |
| 3    | 27.28 | 0.60  | 23.15  | 27.67  | 30.99 | 27.07  | 100.00 | -72.93 |



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# 7.3 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.227(b) & C 15.209

Test Method: ANSI C63.10 (2013) Section 6.4&6.5

Measurement Distance: 3m

Limit:

| 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                            |  |  |
| Above 960      | 500                              | 3                            |  |  |

Remark: The emission limits shown in the above table are based on measurements employing a CISPR guasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.



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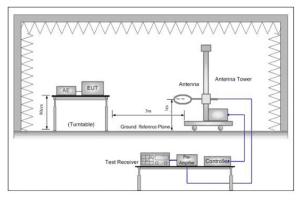
### 7.3.1 E.U.T. Operation

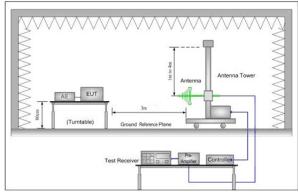
Operating Environment:

Atmospheric Pressure: 1005 mbar Temperature: 24.9 °C Humidity: 62.1 % RH

Test mode a:TX mode Keep the EUT in transmitting with modulation mode.

### 7.3.2 Test Setup Diagram





#### 7.3.3 Measurement Procedure and Data

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground for below 1GHz at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- g. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor



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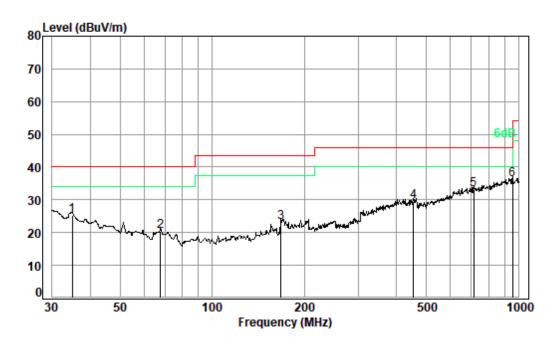


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Detector: QP

Mode:a: Polarization:Horizontal



Condition: 3m HORIZONTAL

Job No. : 12248CR

Test Mode: a

|      | Freq   |      |       | Preamp<br>Factor |       |        |        |        |
|------|--------|------|-------|------------------|-------|--------|--------|--------|
|      | MHz    | dB   | dB/m  | dB               | dBuV  | dBuV/m | dBuV/m | dB     |
| 1    | 34.88  | 0.60 | 19.88 | 27.65            | 32.42 | 25.25  | 40.00  | -14.75 |
| 2    | 67.91  | 0.80 | 12.88 | 27.53            | 34.22 | 20.37  | 40.00  | -19.63 |
| 3    | 167.82 | 1.35 | 15.66 | 27.52            | 33.69 | 23.18  | 43.50  | -20.32 |
| 4    | 454.31 | 2.43 | 23.66 | 27.82            | 31.28 | 29.55  | 46.00  | -16.45 |
| 5    | 714.17 | 2.95 | 27.99 | 27.53            | 29.68 | 33.09  | 46.00  | -12.91 |
| 6 pp | 955.44 | 3.66 | 30.08 | 26.90            | 29.27 | 36.11  | 46.00  | -9.89  |



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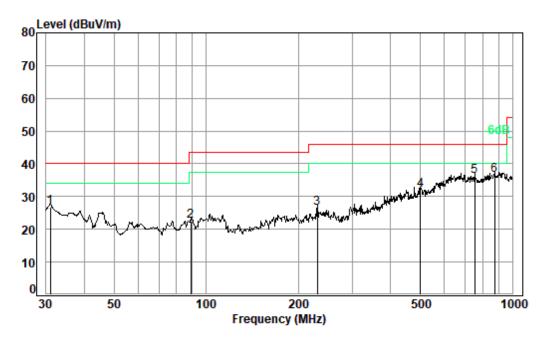
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Mode:a; Polarization:Vertical



Condition: 3m VERTICAL Job No. : 16626CR

Test Mode: a

|      | Freq   |      |       | Preamp<br>Factor |       |        |        |        |
|------|--------|------|-------|------------------|-------|--------|--------|--------|
| -    | MHz    | dB   | dB/m  | dB               | dBuV  | dBuV/m | dBuV/m | dB     |
| 1    | 30.96  | 0.60 | 21.95 | 27.67            | 31.91 | 26.79  | 40.00  | -13.21 |
| 2    | 88.96  | 1.10 | 12.99 | 27.50            | 35.91 | 22.50  | 43.50  | -21.00 |
| 3    | 230.91 | 1.58 | 18.09 | 27.53            | 34.36 | 26.50  | 46.00  | -19.50 |
| 4    | 501.18 | 2.60 | 24.63 | 27.88            | 32.46 | 31.81  | 46.00  | -14.19 |
| 5    | 752.74 | 3.07 | 28.23 | 27.48            | 32.31 | 36.13  | 46.00  | -9.87  |
| 6 pp | 875.25 | 3.51 | 29.49 | 27.16            | 30.71 | 36.55  | 46.00  | -9.45  |

### Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

- 2) Scan from 9kHz to 1GHz, the disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



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#### **Photographs** 8

# 8.1 Test Setup

Please refer to setup photos.

# 8.2 EUT Constructional Details (EUT Photos)

Please refer to external and internal photos for details.

- End of the Report -



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