



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

Telephone: +86 (0) 755 2601 2053

Fax: +86 (0) 755 2671 0594

Email: [ee.shenzhen@sgs.com](mailto:ee.shenzhen@sgs.com)

Report No.: SZEM180200151102

Page: 1 of 19

## **TEST REPORT**

**Application No.:** SZEM1802001511CR (SHEM1801000382CR)  
**FCC ID:** 2ACGNP5536  
**Applicant:** Bestway Inflatables & Material Corp.  
**Address of Applicant:** No. 3065 Cao An Road, Shanghai, China  
**Manufacturer:** Bestway Inflatables & Material Corp.  
**Address of Manufacturer:** No. 3065 Cao An Road, Shanghai, China  
**Factory:** Bestway (Nantong) Recreation Corp.  
**Address of Factory:** No. 8 West Hui Min Road, Economic Development Zone, Rugao, Jiangsu 226500, China.

**Equipment Under Test (EUT):**

**EUT Name:** Remote Control  
**Model No.:** P61232  
**Trade mark:** BESTWAY  
**Standard(s) :** 47 CFR Part 15, Subpart C 15.231  
**Date of Receipt:** 2018-01-15  
**Date of Test:** 2018-02-08 to 2018-02-09  
**Date of Issue:** 2018-03-12

|                     |              |
|---------------------|--------------|
| <b>Test Result:</b> | <b>Pass*</b> |
|---------------------|--------------|

\* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu  
E&E Section Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.




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

Report No.: SZEM180200151102

Page: 2 of 19

| Revision Record |             |            |        |
|-----------------|-------------|------------|--------|
| Version         | Description | Date       | Remark |
| 00              | Original    | 2018-03-12 | /      |
|                 |             |            |        |
|                 |             |            |        |

|                                 |  |  |  |
|---------------------------------|--|--|--|
| <b>Authorized for issue by:</b> |  |  |  |
|                                 |  |  |  |
|                                 |  | <hr/>  |  |
|                                 |  | <b>Foray Chen /Project Engineer</b>  |  |
|                                 |  |  |  |
|                                 |  | <hr/>  |  |
|                                 |  | <b>Eric Fu /Reviewer</b>   |  |



## 2 Test Summary

| Radio Spectrum Technical Requirement |                                  |        |                                  |        |
|--------------------------------------|----------------------------------|--------|----------------------------------|--------|
| Item                                 | Standard                         | Method | Requirement                      | Result |
| Antenna Requirement                  | 47 CFR Part 15, Subpart C 15.231 | N/A    | 47 CFR Part 15, Subpart C 15.203 | Pass   |

N/A: Not applicable

| Radio Spectrum Matter Part                           |                                  |  |   |        |
|--|----------------------------------|--|---|--------|
| Item   | Standard                         | Method                                 | Requirement                                 | Result |
| 20dB Bandwidth                                       | 47 CFR Part 15, Subpart C 15.231 | ANSI C63.10 (2013) Section 6.9         | 47 CFR Part 15, Subpart C 15.231(c)         | Pass   |
| Dwell Time (15.231(a))                               | 47 CFR Part 15, Subpart C 15.231 | ANSI C63.10 (2013) Section 7.8.4       | 47 CFR Part 15, Subpart C 15.231(a)         | Pass   |
| Field Strength of the Fundamental Signal (15.231(b)) | 47 CFR Part 15, Subpart C 15.231 | ANSI C63.10 (2013) Section 6.5         | 47 CFR Part 15, Subpart C 15.231(b)         | Pass   |
| Radiated Emissions                                   | 47 CFR Part 15, Subpart C 15.231 | ANSI C63.10 (2013) Section 6.4&6.5&6.6 | 47 CFR Part 15, Subpart C 15.231(b) &15.209 | Pass   |

N/A: Not applicable



### 3 Contents

|   | Page |
|---|------|
| 1 COVER PAGE .....  | 1    |
| 2 TEST SUMMARY .....  | 3    |
| 3 CONTENTS .....  | 4    |
| 4 GENERAL INFORMATION .....                                   | 5    |
| 4.1 DETAILS OF E.U.T. ....                                    | 5    |
| 4.2 DESCRIPTION OF SUPPORT UNITS .....                        | 5    |
| 4.3 MEASUREMENT UNCERTAINTY .....                             | 5    |
| 4.4 TEST LOCATION.....  | 6    |
| 4.5 TEST FACILITY.....  | 6    |
| 4.6 DEVIATION FROM STANDARDS.....                             | 6    |
| 4.7 ABNORMALITIES FROM STANDARD CONDITIONS .....              | 6    |
| 5 EQUIPMENT LIST.....   | 7    |
| 6 RADIO SPECTRUM TECHNICAL REQUIREMENT .....                  | 8    |
| 6.1 ANTENNA REQUIREMENT .....                                 | 8    |
| 6.1.1 Test Requirement: .....                                 | 8    |
| 6.1.2 Conclusion .....  | 8    |
| 7 RADIO SPECTRUM MATTER TEST RESULTS.....                     | 9    |
| 7.1 20DB BANDWIDTH.....                                       | 9    |
| 7.1.1 E.U.T. Operation .....                                  | 9    |
| 7.1.2 Test Setup Diagram.....                                 | 9    |
| 7.1.3 Measurement Procedure and Data.....                     | 10   |
| 7.2 DWELL TIME (15.231(A)) .....                              | 11   |
| 7.2.1 E.U.T. Operation .....                                  | 11   |
| 7.2.2 Test Setup Diagram.....                                 | 11   |
| 7.2.3 Measurement Procedure and Data.....                     | 12   |
| 7.3 FIELD STRENGTH OF THE FUNDAMENTAL SIGNAL (15.231(B))..... | 13   |
| 7.3.1 E.U.T. Operation .....                                  | 13   |
| 7.3.2 Test Setup Diagram.....                                 | 13   |
| 7.3.3 Measurement Procedure and Data.....                     | 14   |
| 7.4 RADIATED EMISSIONS.....                                   | 15   |
| 7.4.1 E.U.T. Operation .....                                  | 15   |
| 7.4.2 Test Setup Diagram.....                                 | 15   |
| 7.4.3 Measurement Procedure and Data.....                     | 16   |
| 8 TEST SETUP PHOTOGRAPHS .....                                | 19   |
| 9 EUT CONSTRUCTIONAL DETAILS .....                            | 19   |



## 4 General Information

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

Power supply: DC 6V, 2\* CR2032 button cell  
Test voltage: DC 6V  
Operation Frequency: 433.92MHz  
Device Type: Manually operated transmitter

### 4.2 Description of Support Units

The EUT has been tested as an independent unit.

### 4.3 Measurement Uncertainty

| No. | Item                            | Measurement Uncertainty |
|-----|---------------------------------|-------------------------|
| 1   | Radio Frequency                 | 7.25 x 10 <sup>-8</sup> |
| 2   | Timeout                         | 2s                      |
| 3   | Duty cycle                      | 0.37%                   |
| 4   | Occupied Bandwidth              | 3%                      |
| 5   | RF conducted power              | 0.75dB                  |
| 6   | RF power density                | 2.84dB                  |
| 7   | Conducted Spurious emissions    | 0.75dB                  |
| 8   | RF Radiated power               | 4.5dB (Below 1GHz)      |
|     |                                 | 4.8dB (Above 1GHz)      |
| 9   | Radiated Spurious emission test | 4.2dB (Below 30MHz)     |
|     |                                 | 4.4dB (30MHz-1GHz)      |
|     |                                 | 4.6dB (1GHz-18GHz)      |
|     |                                 | 5.2dB (Above 18GHz)     |
| 10  | Temperature test                | 1 °C                    |
| 11  | Humidity test                   | 3%                      |
| 12  | Supply voltages                 | 1.5%                    |
| 13  | Time                            | 3%                      |

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



#### **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 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 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.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

#### **4.6 Deviation from Standards**

None

#### **4.7 Abnormalities from Standard Conditions**

None



## 5 Equipment List

| Equipment                 | Manufacturer | Model No           | Inventory No | Cal Date   | Cal Due Date |
|---------------------------|--------------|--------------------|--------------|------------|--------------|
| <b>Conducted Test</b>     |              |                    |              |            |              |
| Spectrum Analyzer         | R&S          | FSP-30             | SHEM002-1    | 2017-12-20 | 2018-12-19   |
| Spectrum Analyzer         | Agilent      | N9020A             | SHEM181-1    | 2017-09-26 | 2018-09-25   |
| Power meter               | R&S          | NRP                | SHEM057-1    | 2017-12-26 | 2018-12-25   |
| Power Sensor              | R&S          | NRP-Z22            | SHEM136-1    | 2017-07-22 | 2018-07-21   |
| Power Sensor              | R&S          | NRP-Z91            | SHEM057-2    | 2017-12-26 | 2018-12-25   |
| Signal Generator          | R&S          | SMR40              | SHEM058-1    | 2017-07-03 | 2018-07-02   |
| Signal Generator          | Agilent      | N5182A             | SHEM182-1    | 2017-09-26 | 2018-09-25   |
| Communication Tester      | R&S          | CMW270             | SHEM183-1    | 2017-10-22 | 2018-10-21   |
| Switcher                  | Tonscend     | JS0806             | SHEM184-1    | 2017-09-26 | 2018-09-25   |
| Splitter                  | Anritsu      | MA1612A            | SHEM185-1    | /          | /            |
| Coupler                   | e-meca       | 803-S-1            | SHEM186-1    | /          | /            |
| High-low Temp Cabinet     | Suzhou Zhihe | TL-40              | SHEM087-1    | 2017-09-26 | 2018-09-25   |
| AC Power Stabilizer       | WOCEN        | 6100               | SHEM045-1    | 2017-12-26 | 2018-12-25   |
| DC Power Supply           | QJE          | QJ30003SII         | SHEM046-1    | 2017-12-26 | 2018-12-25   |
| Conducted test Cable      | /            | RF01, RF 02        | /            | 2017-12-26 | 2018-12-25   |
| <b>Radiated Test</b>      |              |                    |              |            |              |
| EMI test receiver         | R&S          | ESU40              | SHEM051-1    | 2017-12-20 | 2018-12-19   |
| Spectrum Analyzer         | R&S          | FSP-30             | SHEM002-1    | 2017-12-20 | 2018-12-19   |
| Loop Antenna (9kHz-30MHz) | Schwarzbeck  | FMZB1519           | SHEM135-1    | 2017-04-10 | 2020-04-09   |
| Antenna (25MHz-2GHz)      | Schwarzbeck  | VULB9168           | SHEM048-1    | 2017-02-28 | 2020-02-27   |
| Antenna (25MHz-3GHz)      | Schwarzbeck  | HL562              | SHEM010-1    | 2017-02-28 | 2020-02-27   |
| Horn Antenna (1-8GHz)     | Schwarzbeck  | HF906              | SHEM009-1    | 2017-10-24 | 2020-10-23   |
| Horn Antenna (1-18GHz)    | Schwarzbeck  | BBHA9120D          | SHEM050-1    | 2017-01-14 | 2020-01-13   |
| Horn Antenna (14-40GHz)   | Schwarzbeck  | BBHA 9170          | SHEM049-1    | 2017-12-03 | 2020-12-02   |
| Pre-amplifier (9kHz-2GHz) | CLAVIIO      | BDLNA-0001-412010  | SHEM164-1    | 2017-08-22 | 2018-08-21   |
| Pre-amplifier (1-18GHz)   | CLAVIIO      | BDLNA-0118-352810  | SHEM050-2    | 2017-08-22 | 2018-08-21   |
| High-amplifier (14-40GHz) | Schwarzbeck  | 10001              | SHEM049-2    | 2017-12-20 | 2018-12-19   |
| Band filter               | LORCH        | 9BRX-875/X150-SR   | SHEM156-1    | /          | /            |
| Band filter               | LORCH        | 13BRX-1950/X500-SR | SHEM083-2    | /          | /            |
| Band filter               | LORCH        | 5BRX-2400/X200-SR  | SHEM155-1    | /          | /            |
| Band filter               | LORCH        | 5BRX-5500/X1000-SR | SHEM157-2    | /          | /            |
| High pass Filter          | Wainwright   | WHK3.0/18G-100SS   | SHEM157-1    | /          | /            |
| High pass Filter          | Wainwright   | WHKS1700-3SS       | SHEM157-3    | /          | /            |
| Semi/Fully Anechoic       | ST           | 11*6*6M            | SHEM078-2    | 2017-07-22 | 2020-07-21   |
| RE test Cable             | /            | RE01, RE02, RE06   | /            | 2017-12-26 | 2018-12-25   |



## 6 Radio Spectrum Technical Requirement

### 6.1 Antenna Requirement

#### 6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

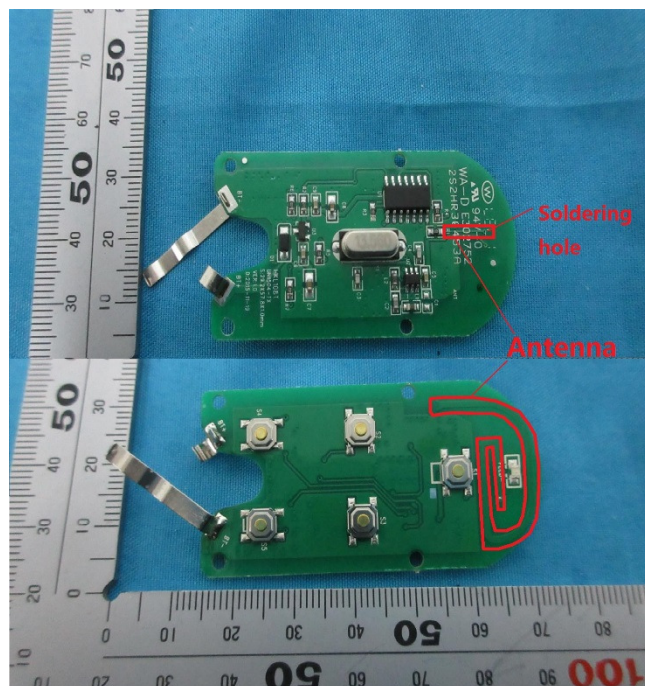
#### 6.1.2 Conclusion

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 an 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 PCB antenna is integrated and no consideration of replacement.





## 7 Radio Spectrum Matter Test Results

### 7.1 20dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.231(c)

Test Method: ANSI C63.10 (2013) Section 6.9

Limit:

| Frequency range(MHz) | Limit                                       |
|----------------------|---|
| 70-900               | No wider than 0.25% of the center frequency |
| Above 900            | No wider than 0.5% of the center frequency  |

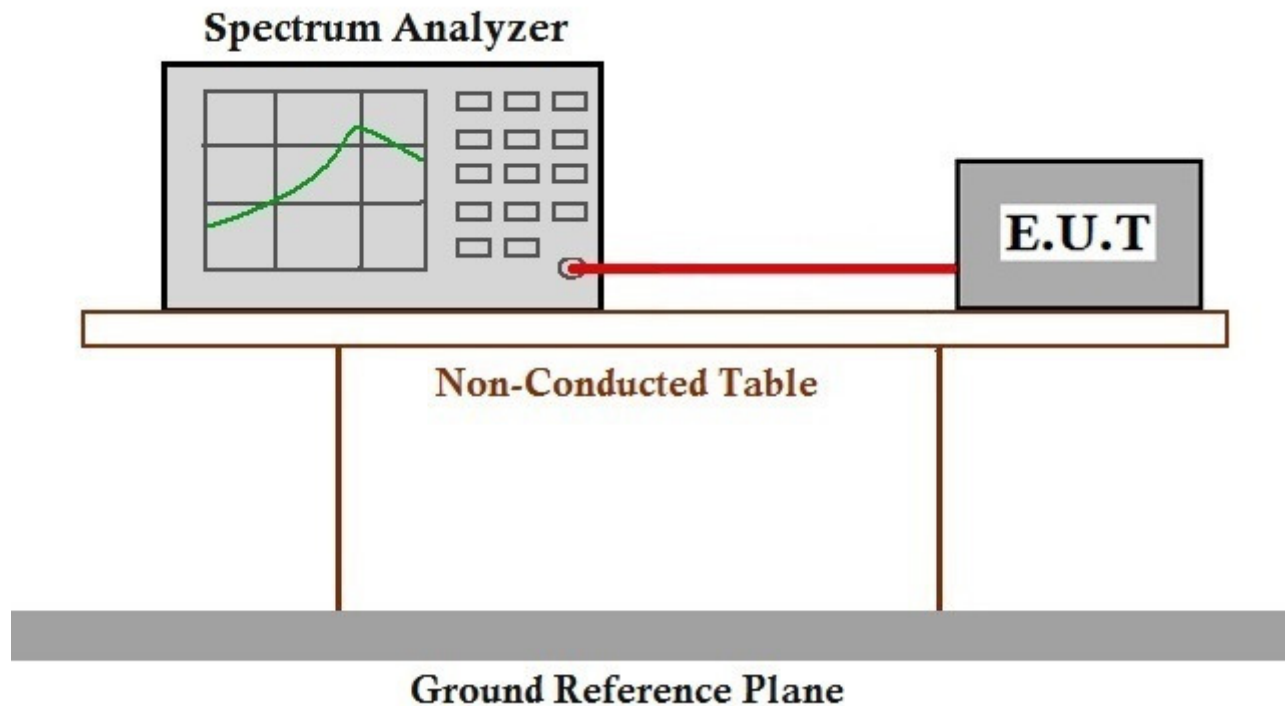
#### 7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar

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

#### 7.1.2 Test Setup Diagram

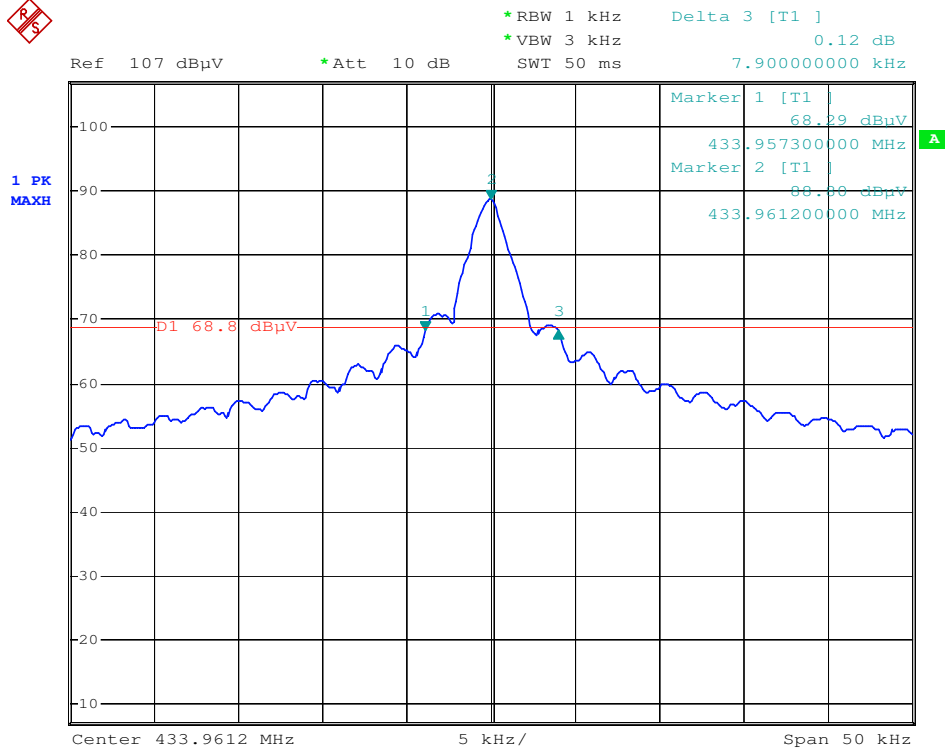




7.1.3 Measurement Procedure and Data

| Frequency(MHz) | 20dB bandwidth (kHz) | Limit (kHz) | Results |
|----------------|----------------------|-------------|---------|
| 433.92         | 7.90                 | 1084.8      | Pass    |

Test plot as follows:



**7.2 Dwell Time (15.231(a))**

Test Requirement 47 CFR Part 15, Subpart C 15.231(a)

Test Method: ANSI C63.10 (2013) Section 7.8.4

Limit:

|                                     | Device type  | Limit  |
|-------------------------------------|--|--|
| <input checked="" type="checkbox"/> | Manually operated transmitter  | The switch automatically deactivate the transmitter within not more than 5 seconds of being released |
| <input type="checkbox"/>            | Automatically actived transmitter  | Cease transmission within 5 seconds after activation   |
| <input type="checkbox"/>            | Periodic transmissions to determine system integrity of transmitters used in security or safety applications | The total transmission time does not exceed 2 seconds per hour                                       |

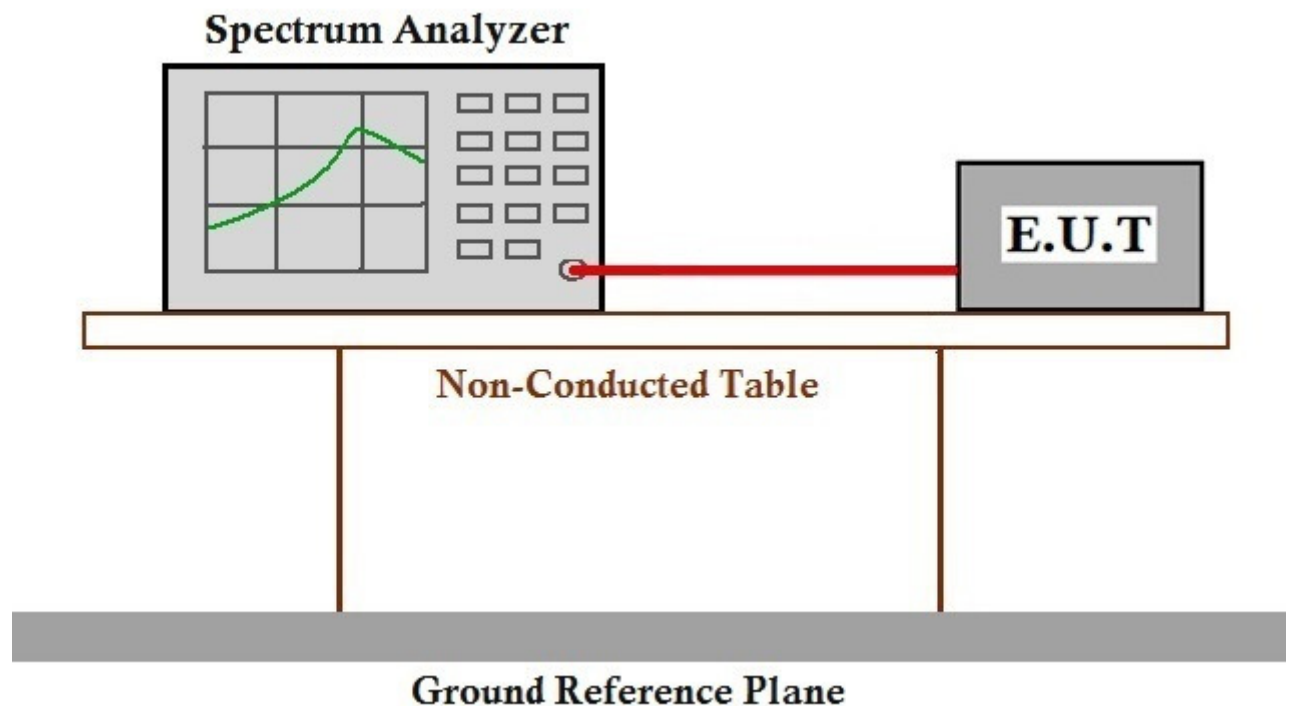
**7.2.1 E.U.T. Operation**

Operating Environment:

Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar

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

**7.2.2 Test Setup Diagram**





**7.3 Field Strength of the Fundamental Signal (15.231(b))**

Test Requirement N/A  
 Test Method: ANSI C63.10 (2013) Section 6.5  
 Limit:

| Fundamental frequency(MHz) | Field strength of fundamental(microvolts/meter) | Field strength of spurious emissions(microvolts/meter) |
|----------------------------|---|--|
| 40.66-40.70                | 2250  | 225  |
| 70-130                     | 1250  | 125  |
| 130-174                    | 1250 to 3750                                    | 125 to 375   |
| 174-260                    | 3750  | 375  |
| 260-470                    | 3750 to 12500                                   | 375 to 1250  |
| Above 470                  | 12500   | 1250   |

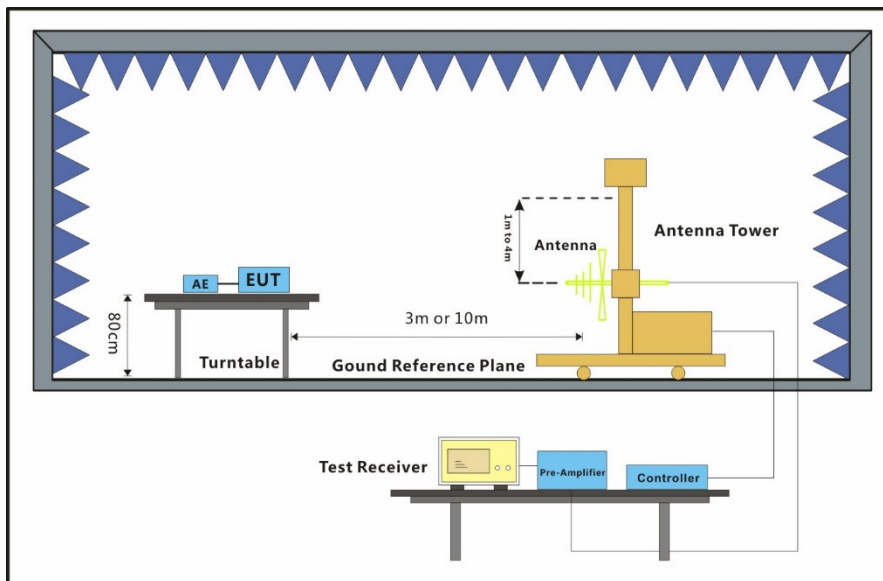
Remark: the emission limit is based on measurement instrumentation employing an average detector at a distance of 3 meters. The frequencies above 1000MHz are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

| Limit:<br>(Field strength of the fundamental signal) | Frequency | Limit (dBuV/m @3m) | Remark        |
|--|-----------|--------------------|---------------|
|  | 433.92MHz | 80.83              | Average Value |
|  |           | 100.83             | Peak Value    |

**7.3.1 E.U.T. Operation**

Operating Environment:  
 Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar  
 Test mode a: Engineering mode:Keep the EUT in transmitting with modulation mode.

**7.3.2 Test Setup Diagram**





**7.3.3 Measurement Procedure and Data**

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. 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.
- e. 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.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. 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.
- h. 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

| Freq. (MHz) | Result Level (dBμV/m) | Limit Line (dBμV/m) | Over Limit (dB) | Detector | Polarization |
|-------------|-----------------------|---------------------|-----------------|----------|--------------|
| 433.92      | 72.24                 | 80.80               | -8.56           | Peak     | Vertical     |
|             | 77.74                 | 80.80               | -3.06           | Peak     | Horizontal   |

Remark: If the Peak value below the AV Limit, the AV test doesn't perform for this submission.

### 7.4 Radiated Emissions

Test Requirement N/A  
 Test Method: ANSI C63.10 (2013) Section 6.4&6.5&6.6  
 Limit:

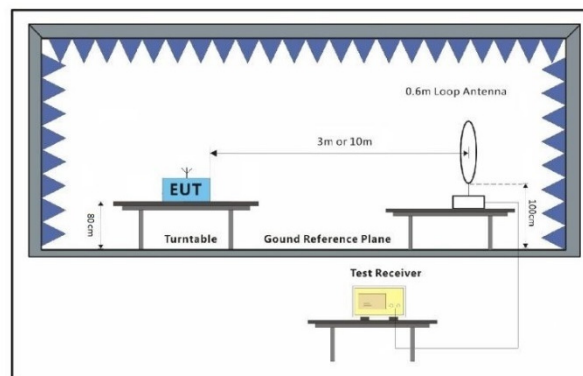
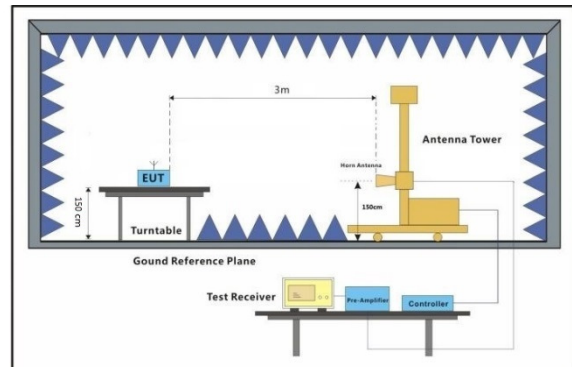
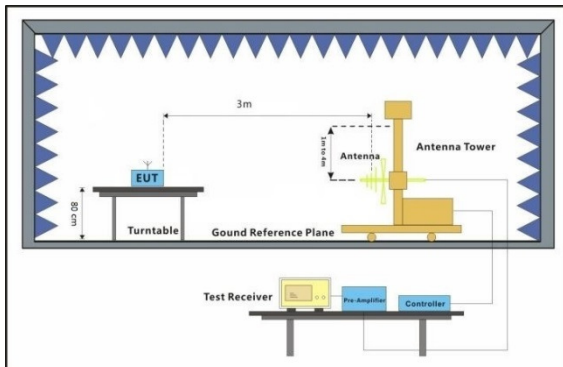
| Frequency(MHz) | Field strength(microvolts/meter) | Measurement distance(meters) |
|----------------|----------------------------------|------------------------------|
| 0.009-0.490    | 2400/F(kHz)                      | 300                          |
| 0.490-1.705    | 24000/F(kHz)                     | 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 quasi-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.

#### 7.4.1 E.U.T. Operation

Operating Environment:  
 Temperature: 21 °C Humidity: 45 % RH Atmospheric Pressure: 1010 mbar  
 Test mode a: Engineering mode:Keep the EUT in transmitting with modulation mode.

#### 7.4.2 Test Setup Diagram





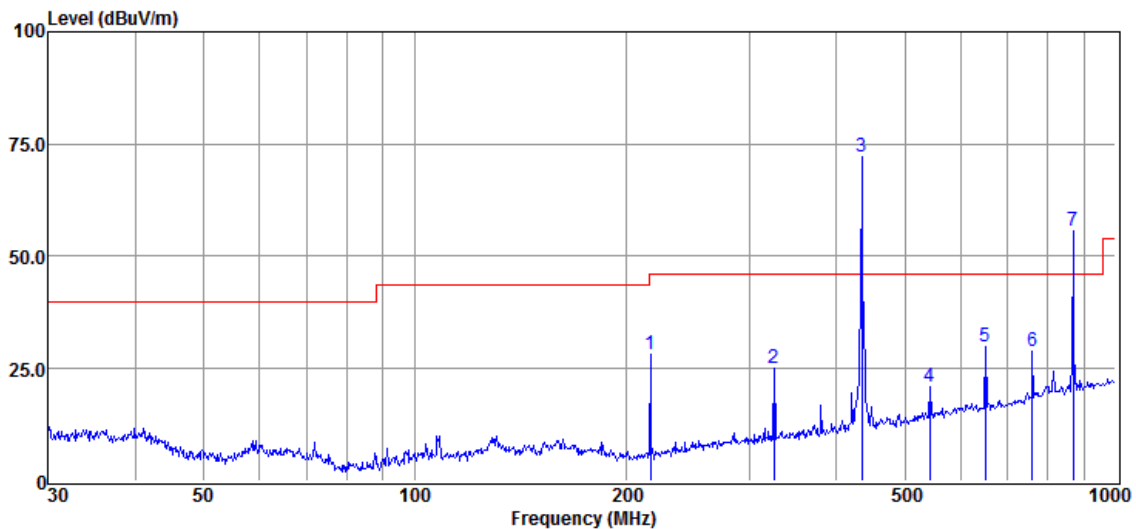


### 7.4.3 Measurement Procedure and Data

For testing performed with the loop antenna, the center of the loop was positioned 1 m above the ground and positioned with its plane vertical at the specified distance from the EUT. During testing the loop was rotated about its vertical axis for maximum response at each azimuth and also investigated with the loop positioned in the horizontal plane. Only the worst position of vertical was shown in the report.

Below 1GHz

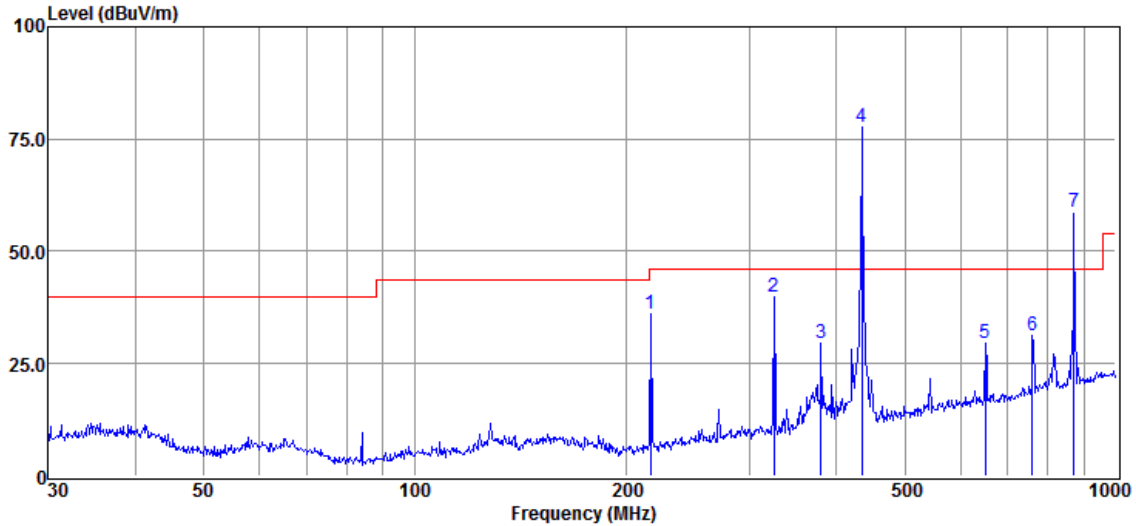
Vertical:



| Item   | Freq.  | Read Level   | Antenna Factor | Preamp Factor | Cable Loss | Result Level       | Limit Line     | Over Limit | Detector | Polarization |
|--------|--------|--------------|----------------|---------------|------------|--------------------|----------------|------------|----------|--------------|
| (Mark) | (MHz)  | (dB $\mu$ V) | (dB/m)         | (dB)          | (dB)       | (dB $\mu$ V/m)     | (dB $\mu$ V/m) | (dB)       |          |              |
| 1      | 216.78 | 59.66        | 10.15          | 42.50         | 0.72       | 28.03              | 46.00          | -17.97     | QP       | Vertical     |
| 2      | 325.60 | 52.82        | 13.73          | 42.32         | 0.88       | 25.11              | 46.00          | -20.89     | QP       | Vertical     |
| 3      | 433.96 | 97.42        | 15.87          | 42.11         | 1.06       | Fundamental signal |                |            | Peak     | Vertical     |
| 4      | 543.27 | 43.73        | 18.22          | 42.16         | 1.26       | 21.05              | 46.00          | -24.95     | QP       | Vertical     |
| 5      | 651.94 | 50.69        | 19.84          | 42.25         | 1.51       | 29.79              | 46.00          | -16.21     | QP       | Vertical     |
| 6      | 760.70 | 48.38        | 21.27          | 42.60         | 1.91       | 28.96              | 46.00          | -17.04     | QP       | Vertical     |
| 7      | 869.13 | 73.06        | 22.46          | 42.10         | 2.31       | 55.73              | 60.80          | -5.07      | QP       | Vertical     |



Horizontal:



| Item   | Freq.  | Read Level | Antenna Factor | Preamplifier Factor | Cable Loss | Result Level       | Limit Line | Over Limit | Detector | Polarization |
|--------|--------|------------|----------------|---------------------|------------|--------------------|------------|------------|----------|--------------|
| (Mark) | (MHz)  | (dBμV)     | (dB/m)         | (dB)                | (dB)       | (dBμV/m)           | (dBμV/m)   | (dB)       |          |              |
| 1      | 216.78 | 67.55      | 10.15          | 42.50               | 0.72       | 35.92              | 46.00      | -10.08     | QP       | Vertical     |
| 2      | 325.60 | 67.55      | 13.73          | 42.32               | 0.88       | 39.84              | 46.00      | -6.16      | QP       | Vertical     |
| 3      | 379.91 | 56.04      | 14.75          | 42.15               | 0.96       | 29.60              | 46.00      | -16.40     | QP       | Vertical     |
| 4      | 433.96 | 102.92     | 15.87          | 42.11               | 1.06       | Fundamental signal |            |            | Peak     | Vertical     |
| 5      | 651.94 | 50.38      | 19.84          | 42.25               | 1.51       | 29.48              | 46.00      | -16.52     | QP       | Vertical     |
| 6      | 760.70 | 50.69      | 21.27          | 42.60               | 1.91       | 31.27              | 46.00      | -14.73     | QP       | Vertical     |
| 7      | 872.18 | 76.11      | 22.49          | 42.10               | 2.31       | 58.81              | 60.80      | -1.99      | QP       | Vertical     |



Above 1GHz

| Mark | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Emission (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Detector | polarization |
|------|-----------------|----------------|-------------|-------------------|----------------|-----------------|----------|--------------|
| 1    | 1301.93         | 45.52          | -7.38       | 38.14             | 54             | -15.86          | peak     | Horizontal   |
| 2    | 1738.24         | 54.43          | -4.99       | 49.44             | 54             | -4.56           | peak     | Horizontal   |
| 3    | 2172.51         | 41.83          | -2.93       | 38.9              | 54             | -15.10          | peak     | Horizontal   |
| 1    | 1302.66         | 45.80          | -7.38       | 38.42             | 54             | -15.58          | peak     | Vertical     |
| 2    | 1735.04         | 49.47          | -4.99       | 44.48             | 54             | -9.52           | peak     | Vertical     |
| 3    | 2170.1          | 45.43          | -2.93       | 42.50             | 54             | -11.50          | peak     | Vertical     |

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 Level + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) If Peak Result comply with AV limit, AV Result is deemed to comply with QP limit
- 3) No any other emissions level which are attenuated less than 20dB below the limit. According to 15.31(o), the amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part. Hence there no other emissions have been reported.



## **8 Test Setup Photographs**

Refer to the < Test Setup photos-FCC>.

## **9 EUT Constructional Details**

Refer to the < External Photos > & < Internal Photos >.

**- End of the Report -**