

EMC Test Report

Report No.: AGC06374170502EE01

PRODUCT DESIGNATION : Bluetooth earbud sports shape
BRAND NAME : N/A
MODEL NAME : 170011
MANUFACTURER :
DATE OF ISSUE : Jun.22, 2017
STANDARD(S) : EN 301 489-1 V2.2.0: 2017-03 (draft)
: EN 301 489-17 V3.2.0: 2017-03 (draft)
REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Revise Record

| Report Version | Revise Time | Issued Date | Valid Version | Notes |
|----------------|-------------|--------------|---------------|-----------------|
| V1.0 | / | Jun.22, 2017 | Valid | Original Report |

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1. TEST REPORT CERTIFICATION

| | |
|--------------------------|-------------------------------|
| Manufacturer | |
| Address | |
| Factory | |
| Address | |
| Product Designation | Bluetooth earbud sports shape |
| Brand Name | N/A |
| Test Model | 170011 |
| Date of test | May 28, 2017 to Jun.13, 2017 |
| Deviation | None |
| Condition of Test Sample | Normal |
| Report Template | AGCRT-EC-BLE/EMC (2013-03-01) |

We, Attestation of Global Compliance (Shenzhen) Co., Ltd., hereby certify that the submitted samples of the above item, as detailed in chapter 2.1 of this report, has been tested in our facility. The test record, data evaluation and test configuration represented herein are true and accurate accounts of measurements of the sample's EMC characteristics under the conditions herein specified.

Time Huang

Tested By _____
 Time Huang(Huang Nanhui) Jun.13, 2017

Forrest Lei

Reviewed By _____
 Forrest Lei(Lei Yonggang) Jun.22, 2017

Solger Zhang

Approved By _____
 Solger Zhang(Zhang Hongyi)
 Authorized Officer Jun.22, 2017

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2. GENERAL INFORMATION

2.1. DESCRIPTION OF EUT

The EUT is a short range, lower power, Bluetooth device.

It is designed by way of FHSS modulation achieves the system operating.

Details of technical specification refer to the description in follows:

Transmitter/Receiver (TX/RX)

| | |
|----------------------------|-----------------------|
| Operating Frequency | 2.402 GHz to 2.480GHz |
| Bluetooth Version | V4.2 |
| Modulation | GFSK, $\pi/4$ -DQPSK |
| Hardware Version | V1.0 |
| Software Version | V1.0 |
| Antenna Type | PCB Antenna |
| Number of channels | 79 |
| Antenna Gain | -0.58dBi |
| Power Supply | DC 3.7V by battery |

Note: The EUT didn't support 8DPSK and BLE.

2.2. OBJECTIVE

Perform Electro Magnetic Interference (EMI) and Electro Magnetic Susceptibility (EMS) tests for CE Marking.

2.3. TEST STANDARDS AND RESULTS

The EUT has been tested according to ETSI EN 301 489-1 V2.2.0 (2017-03) and ETSI EN 301 489-17 V3.2.0 (2017-03).

| | |
|---------------------------|--|
| ETSI EN 301 489-1 | ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements |
| ETSI EN 301 489-17 | ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; |

Note: The standards applied in test are draft.

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2.4. TEST ITEMS AND THE RESULTS

| No. | Basic Standard | Test Type | Result |
|-------------------------------------|----------------|---|--------|
| EMISSION (EN 301 489-1 §7.1) | | | |
| 1 | EN 55032 | Radiated emission | PASS |
| 2 | EN 55032 | Conducted emission, AC ports | N/A |
| 3 | EN 55032 | Conducted emission, Telecom ports | N/A |
| 4 | EN 61000-3-2 | Harmonic current emissions | N/A |
| 5 | EN 61000-3-3 | Voltage fluctuations & flicker | N/A |
| IMMUNITY (EN 301 489-1 §7.2) | | | |
| 6 | EN 61000-4-2 | Electrostatic discharge immunity | PASS |
| 7 | EN 61000-4-3 | Radiated RF electromagnetic field immunity | PASS |
| 8 | EN 61000-4-4 | Electrical fast transient/burst immunity | N/A |
| 9 | ISO 7637-1, -2 | Transients and surges, DC ports | N/A |
| 10 | EN 61000-4-5 | Surge immunity, AC ports, Telecom ports | N/A |
| 11 | EN 61000-4-6 | Immunity to conducted disturbances induced by RF fields | N/A |
| 12 | EN 61000-4-11 | Voltage dips and short interruptions immunity | N/A |

Note:

1. N/A- Not Applicable.
2. The latest versions of basic standards are applied.

2.5. ENVIRONMENTAL CONDITIONS

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

- Temperature: 15°C-35°C
- Humidity: 30-60 %
- Atmospheric pressure: 86-106 kPa

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3. TEST MODE DESCRIPTION

| TEST MODE DESCRIPTION | | |
|-----------------------|---------------------------|-------|
| NO. | EMI TEST MODE DESCRIPTION | WORST |
| 1 | BT Link with charging | V |
| 2 | Standby with charging | |
| NO. | EMS TEST MODE DESCRIPTION | |
| 1 | BT Link with charging | V |
| 2 | Standby with charging | |

Note:

1. V means EMI worst mode.
2. All modes have been tested and only the worst mode test data recorded in the test report.

I/O Port Information (☒ Applicable ☐ Not Applicable)

| I/O Port of EUT | | | |
|-----------------|--------|-------------------|-------------|
| I/O Port Type | Number | Cable Description | Tested With |
| USB Port | 1 | 0.2m Unshielded | 1 |

4. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

- Uncertainty of Conducted Emission, $U_c = \pm 2.75\text{dB}$
- Uncertainty of Radiated Emission, $U_c = \pm 3.2\text{dB}$

5. SUPPORT EQUIPMENT

| Device Type | Manufacturer | Model Name | S/N | Data Cable |
|-------------|--------------|------------|-----|------------|
| IPOD | APPLE | A1367 | N/A | 0 |
| PC | APPLE | A1465 | N/A | 0 |

Note: The PC was the charging device for EUT.

6. IDENTIFICATION OF THE RESPONSIBLE TESTING LOCATION

| | |
|-----------------|--|
| Site | Attestation of Global Compliance (Shenzhen) Co., Ltd |
| Location | 2/F., Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China |

7. TEST EQUIPMENT LIST

TEST EQUIPMENT OF RADIATED EMISSION TEST

| Description | Manufacturer | Model No. | S/N | Calibration Date | Calibration Due. |
|----------------------------|--------------|-------------|--------------|------------------|------------------|
| Spectrum Analyzer | AGILENT | E4440A | US41421290 | July 23,2016 | July 22,2017 |
| EMI Test Receiver | R&S | ESCI | 100694 | July 02,2016 | July 01,2017 |
| Wideband Frequency Antenna | SCHWARZBECK | VULB9168 | VULB9168-494 | Mar.12, 2017 | Mar.11, 2018 |
| Horn Antenna | EM | EM-AH-10180 | 67 | Mar.01, 2017 | Feb.28, 2018 |
| Amplifier | EM | EM30180 | 060552 | Mar.01, 2017 | Feb.28, 2018 |

TEST EQUIPMENT OF ESD TEST

| Description | Manufacturer | Model No. | S/N | Calibration Date | Calibration Due. |
|---------------|--------------|-----------|-------------|------------------|------------------|
| ESD Generator | EM | DITO | P1527160053 | Dec.03, 2016 | Dec.02, 2017 |

TEST EQUIPMENT OF RS IMMUNITY TEST

| Description | Manufacturer | Model No. | S/N | Calibration Date | Calibration Due. |
|----------------------------|--------------|--------------|-----------------|------------------|------------------|
| Signal Generator | R&S | SML03 | 102525 | July 23,2016 | July 22,2017 |
| Wideband Frequency Antenna | SCHWARZBECK | VULB9168 | VULB9168-494 | Mar.12,2017 | Mar.11, 2018 |
| Horn Antenna | EM | EM-AH-10180 | 67 | Mar.01,2017 | Feb.28,2018 |
| Power Probe | R&S | URV5-Z4 | 100124 | July 29,2016 | July 28,2017 |
| Power Meter | R&S | NRVD | 8323781027 | July 29,2016 | July 28,2017 |
| Power Amplifier | KALMUS | 7100LC | 04-02/17-06-001 | July 01,2016 | Jun.30,2017 |
| RF Amplifier | MILMEGA | AS0104-55_55 | 1004793 | July 01,2016 | Jun.30,2017 |
| RF Amplifier | MILMEGA | AS1860-50 | 1465421 | July 01,2016 | Jun.30,2017 |
| RF Amplifier | MILMEGA | AS0102-55 | 1531879 | July 01,2016 | Jun.30,2017 |
| Directional Couple | WERLATONE | C5571-10 | 99463 | July 16,2016 | July 15,2017 |
| Directional Couple | WERLATONE | C6026-10 | 99482 | July 16,2016 | July 15,2017 |

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8. EMISSION TEST

8.1. RADIATED DISTURBANCE MEASUREMENT

8.1.1. LIMITS OF RADIATED DISTURBANCES

Limits for radiated disturbance 30M to1 GHz at a measurement distance of 3 m

| Frequency range (MHz) | Quasi peak limits(dBuV/m), for Class B ITE, at 3m measurement distance |
|-----------------------|---|
| 30 - 230 | 40 |
| 230 - 1000 | 47 |

Limits for radiated disturbance above 1 GHz at a measurement distance of 3 m

| Frequency range (MHz) | Limits (dBuV/m), Class B ITE | |
|-----------------------|------------------------------|---------|
| | Peak | Average |
| 1000-3000MHz | 70 | 50 |
| 3000-6000MHz | 74 | 54 |

Notes:

1. The lower limit shall apply at the transition frequency.
2. Additional provisions may be required for cases where interference occurs.

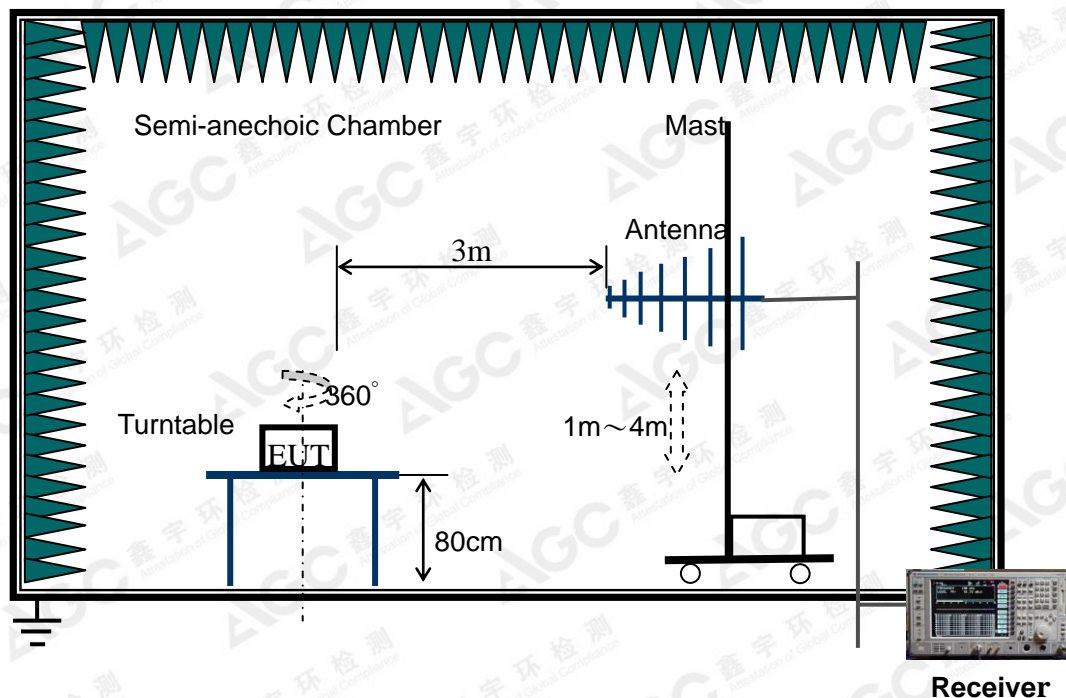
8.1.2. TEST PROCEDURE

- (1). The EUT was placed on the top of an insulating table 0.8 meters above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- (2). The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- (3).The antenna is a broadband antenna, and its height is varied from 1 to 4 meter 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.
- (4). For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to the heights from 1 to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

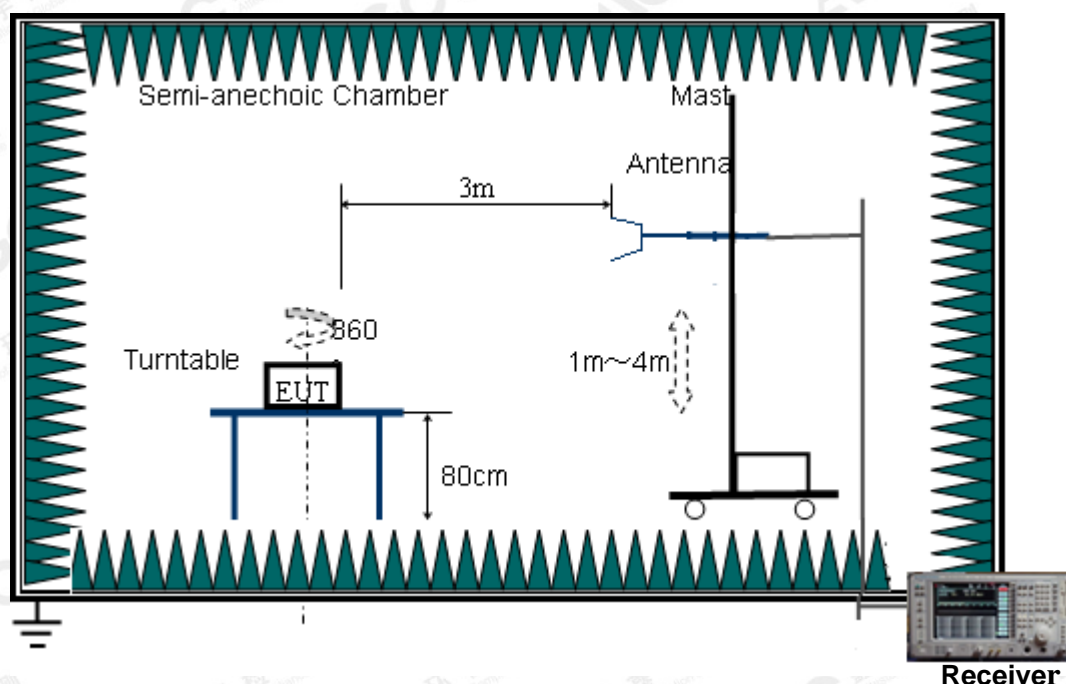
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8.1.3. BLOCK DIAGRAM OF TEST SETUP

Radiated Disturbance below 1 GHz



Radiated Disturbance above 1 GHz

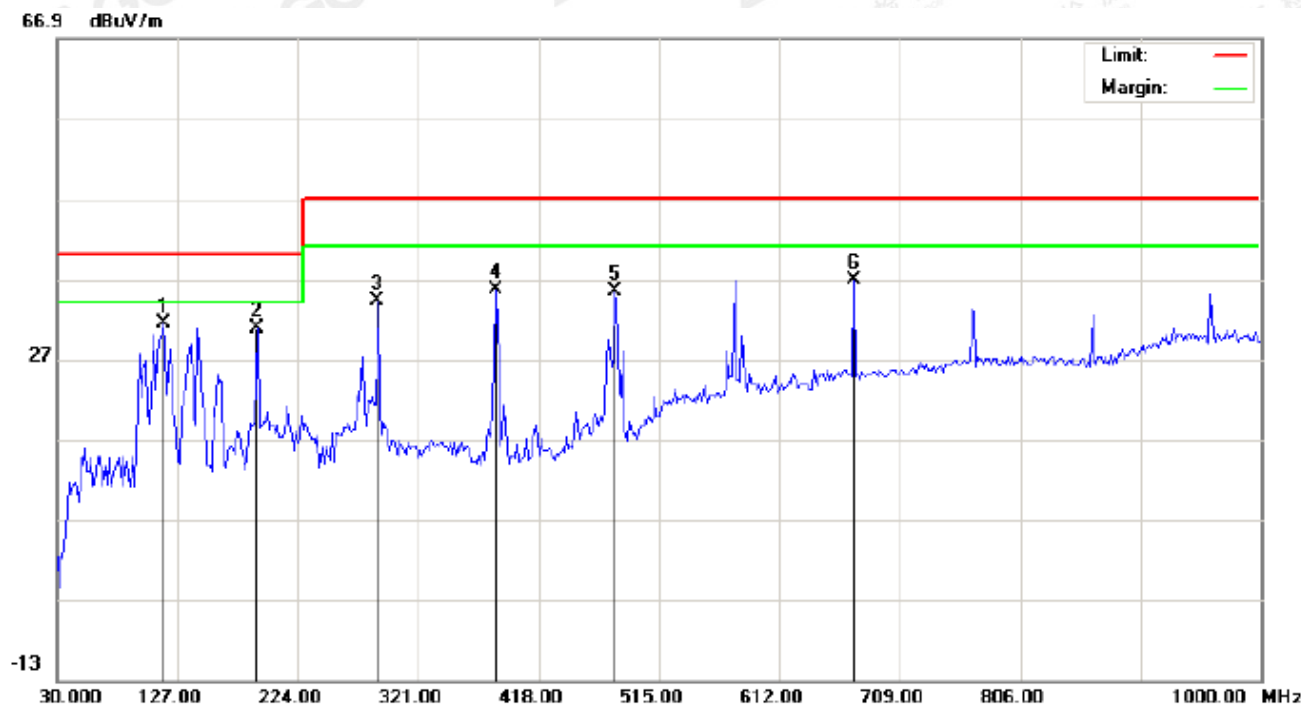


For the actual test configuration, please refer to the related item-Photographs of the Test Configuration.

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8.1.4 TEST RESULT

RADIATED EMISSION BELOW 1GHz- HORIZONTAL



Site: site #1
Limit: EN55032 ClassB 3M Radiation
EUT: Bluetooth earbud sports shape
M/N: 170011
Mode: BT Link with charging
Note:

Polarization: **Horizontal**
Power:
Distance:

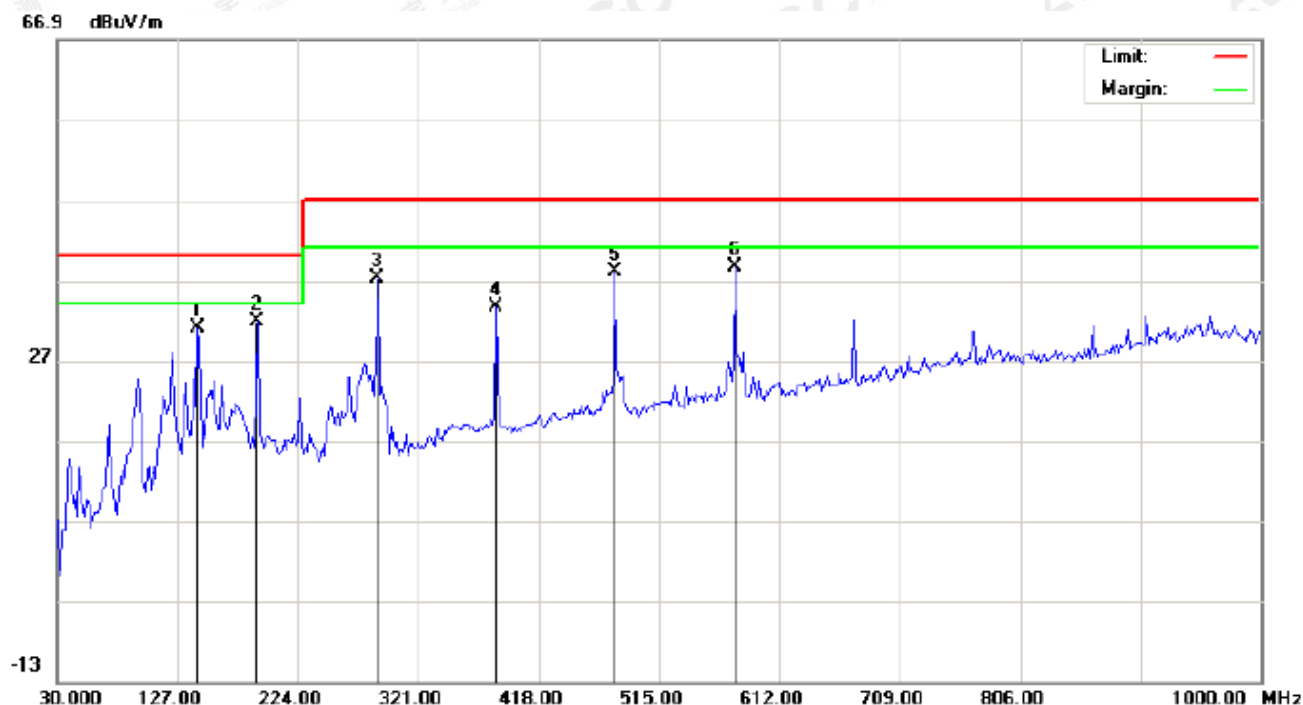
Temperature: 22.4
Humidity: 52.5 %

| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | | cm | degree | |
| 1 | * | 115.6833 | 24.62 | 6.86 | 31.48 | 40.00 | -8.52 | peak | | | |
| 2 | | 191.6665 | 19.24 | 11.61 | 30.85 | 40.00 | -9.15 | peak | | | |
| 3 | | 288.6666 | 20.68 | 13.48 | 34.16 | 47.00 | -12.84 | peak | | | |
| 4 | | 384.0500 | 16.64 | 18.96 | 35.60 | 47.00 | -11.40 | peak | | | |
| 5 | | 479.4331 | 14.55 | 20.91 | 35.46 | 47.00 | -11.54 | peak | | | |
| 6 | | 671.8165 | 12.28 | 24.43 | 36.71 | 47.00 | -10.29 | peak | | | |

RESULT: PASS

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RADIATED EMISSION BELOW 1GHz- VERTICAL



Site: site #1
Limit: EN55032 ClassB 3M Radiation
EUT: Bluetooth earbud sports shape
M/N: 170011
Mode: BT Link with charging
Note:

Polarization: **Vertical**
Power:
Distance:

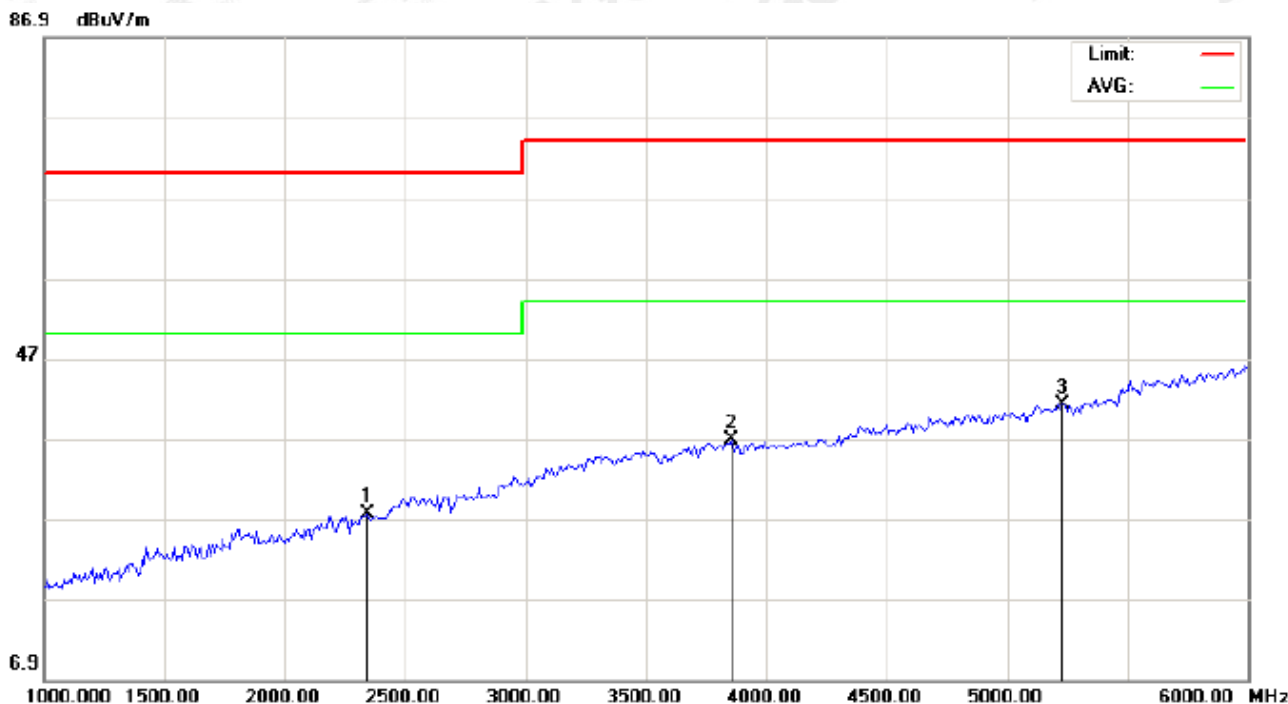
Temperature: 22.4
Humidity: 52.5 %

| No. | Mk | Freq. | Reading | Factor | Measurement | Limit | Over | Detector | Antenna Height | Table Degree | Comment |
|-----|----|----------|---------|--------|-------------|--------|--------|----------|----------------|--------------|---------|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | | cm | degree | |
| 1 | | 143.1666 | 15.74 | 15.22 | 30.96 | 40.00 | -9.04 | peak | | | |
| 2 | * | 191.6666 | 20.64 | 11.11 | 31.75 | 40.00 | -8.25 | peak | | | |
| 3 | | 288.6666 | 22.04 | 15.07 | 37.11 | 47.00 | -9.89 | peak | | | |
| 4 | | 384.0500 | 14.65 | 18.96 | 33.61 | 47.00 | -13.39 | peak | | | |
| 5 | | 479.4332 | 17.09 | 20.91 | 38.00 | 47.00 | -9.00 | peak | | | |
| 6 | | 576.4333 | 15.95 | 22.61 | 38.56 | 47.00 | -8.44 | peak | | | |

RESULT: PASS

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RADIATED EMISSION ABOVE 1GHz – HORIZONTAL



Site: site #1
Limit: EN55032 Class B Above 1G(Peak)
EUT:Bluetooth earbud sports shape
M/N:170011
Mode:BT Link with charging
Note:

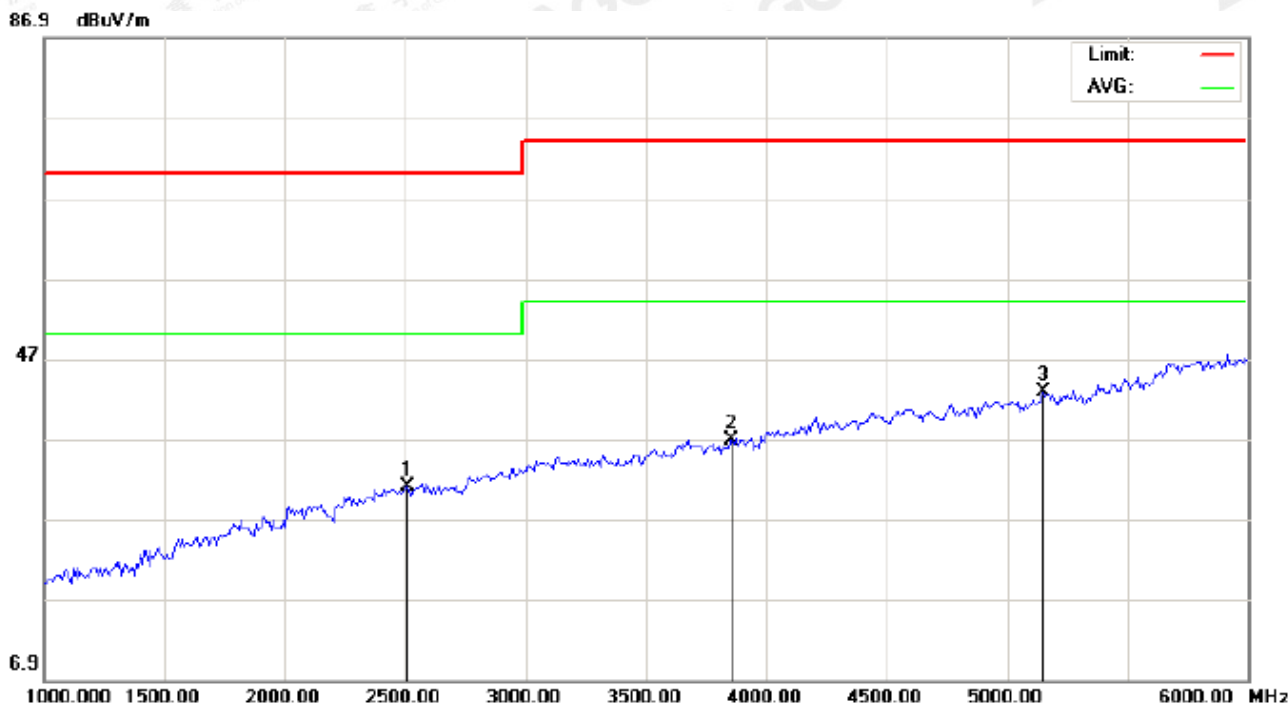
Polarization: **Horizontal**
Power:
Distance: 3m
Temperature: 24.6
Humidity: 54.6 %

| No. | Mk | Freq. MHz | Reading dBuV | Factor dB/m | Measurement dBuV/m | Limit dBuV/m | Over dB | Detector | Antenna Height cm | Table Degree degree | Comment |
|-----|----|--------------|-----------------|----------------|-----------------------|-----------------|------------|----------|-------------------------|---------------------------|---------|
| 1 | | 2341.667 | 37.27 | -9.74 | 27.53 | 70.00 | -42.47 | peak | | | |
| 2 | | 3858.333 | 42.54 | -5.68 | 36.86 | 74.00 | -37.14 | peak | | | |
| 3 | * | 5233.333 | 43.06 | -1.80 | 41.26 | 74.00 | -32.74 | peak | | | |

RESULT: PASS

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RADIATED EMISSION ABOVE 1GHz - VERTICAL



Site: site #1
Limit: EN55032 Class B Above 1G(Peak)
EUT: Bluetooth earbud sports shape
M/N: 170011
Mode: BT Link with charging
Note:

Polarization: **Vertical**
Power:
Distance: 3m

Temperature: 24.6
Humidity: 54.6 %

| No. | Mk | Freq. MHz | Reading dBuV | Factor dB/m | Measurement dBuV/m | Limit dBuV/m | Over dB | Detector | Antenna Height cm | Table Degree degree | Comment |
|-----|----|--------------|-----------------|----------------|-----------------------|-----------------|------------|----------|-------------------------|---------------------------|---------|
| 1 | | 2508.333 | 40.53 | -9.55 | 30.98 | 70.00 | -39.02 | peak | | | |
| 2 | | 3858.333 | 42.54 | -5.68 | 36.86 | 74.00 | -37.14 | peak | | | |
| 3 | * | 5150.000 | 44.60 | -1.80 | 42.80 | 74.00 | -31.20 | peak | | | |

RESULT: PASS

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9. IMMUNITY TEST

9.1. GENERAL PERFORMANCE CRITERIA

1. Performance criteria for Continuous phenomena applied to Transmitter (CT)

The performance criteria A shall apply.

Tests shall be repeated with the EUT in standby mode (if applicable) to ensure that unintentional transmission does not occur. In systems using acknowledgement signals, it is recognized that an ACKnowledgement (ACK) or Not ACKnowledgement (NACK) transmission may occur, and steps should be taken to ensure that any transmission resulting from the application of the test is correctly interpreted.

2. Performance criteria for Transient phenomena applied to Transmitter (TT)

The performance criteria B shall apply, except for voltage dips of 100 ms and voltage interruptions of 5 000 ms duration, for which performance criteria C shall apply.

Tests shall be repeated with the EUT in standby mode (if applicable) to ensure that unintentional transmission does not occur. In systems using acknowledgement signals, it is recognized that an acknowledgement (ACK) or not-acknowledgement (NACK) transmission may occur, and steps should be taken to ensure that any transmission resulting from the application of the test is correctly interpreted.

3. Performance criteria for Continuous phenomena applied to Receiver (CR)

The performance criteria A shall apply.

Where the EUT is a transceiver, under no circumstances, shall the transmitter operate unintentionally during the test. In systems using acknowledgement signals, it is recognized that an ACK or NACK transmission may occur, and steps should be taken to ensure that any transmission resulting from the application of the test is correctly interpreted.

4. Performance criteria for Transient phenomena applied to Receiver (TR)

The performance criteria B shall apply, except for voltage dips of 100 ms and voltage interruptions of 5 000 ms duration for which performance criteria C shall apply.

Where the EUT is a transceiver, under no circumstances, shall the transmitter operate unintentionally during the test. In systems using acknowledgement signals, it is recognized that an ACK or NACK transmission may occur, and steps should be taken to ensure that any transmission resulting from the application of the test is correctly interpreted.

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9.2. ELECTROSTATIC DISCHARGE IMMUNITY TEST

9.2.1 TEST SPECIFICATION

| | |
|---------------------|--|
| Basic Standard | EN 61000-4-2 |
| Discharge Impedance | 330Ω / 150 pF |
| Discharge Voltage | Air Discharge -8 kV , Contact Discharge - 4 kV |
| Polarity | Positive / Negative |
| Number of Discharge | Minimum 20 times at each test point |
| Discharge Mode | Single discharge |
| Discharge Period | 1-second minimum |

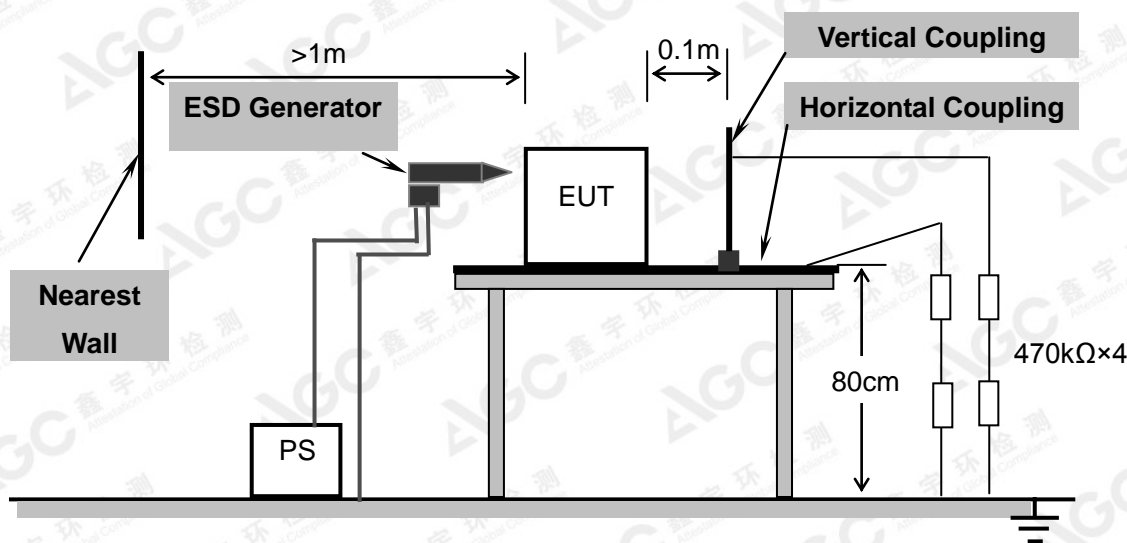
9.2.2 TEST PROCEDURE

The test procedure was in accordance with EN 61000-4-2:

- Electrostatic discharges were applied only to those points and surfaces of the EUT that are accessible to users during normal operation.
- The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.
- The time interval between two successive single discharges was at least 1 second.
- The ESD generator was held perpendicularly to the surface to which the discharge was applied and the return cable was at least 0.2 meters from the EUT.
- Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.
- Air discharges were applied with the round discharge tip of the discharge electrode approaching the EUT as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator was removed from the EUT and re-triggered for a new single discharge. The test was repeated until all discharges were completed.
- At least ten single discharges (in the most sensitive polarity) were applied to the Horizontal Coupling Plane at points on each side of the EUT. The ESD generator was positioned vertically at a distance of 0.1 meters from the EUT with the discharge electrode touching the HCP.
- At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the Vertical Coupling Plane in sufficiently different positions that the four faces of the EUT were completely illuminated. The VCP (dimensions 0.5m×0.5m) was placed vertically to and 0.1 meters from the EUT.

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9.2.3 TEST SETUP



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

9.2.4 TEST RESULT

TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.3.2 and EN 61000-4-2 for the measurement methods.

TEST RESULTS

| Criteria | During Test | After Test |
|----------|--|--|
| A | Shall operate as intended. May show degradation of performance (see note 1). Shall be no loss of function. Shall be no unintentional transmissions. | Shall operate as intended. Shall be no degradation of performance (see note 2). Shall be no loss of function. Shall be no loss of stored data or user programmable functions. |
| B | May show loss of function (one or more). May show degradation of performance (see note 1). No unintentional transmissions. | Functions shall be self-recoverable. Shall operate as intended after recovering. Shall be no degradation of performance (see note 2). Shall be no loss of stored data or user programmable functions. |

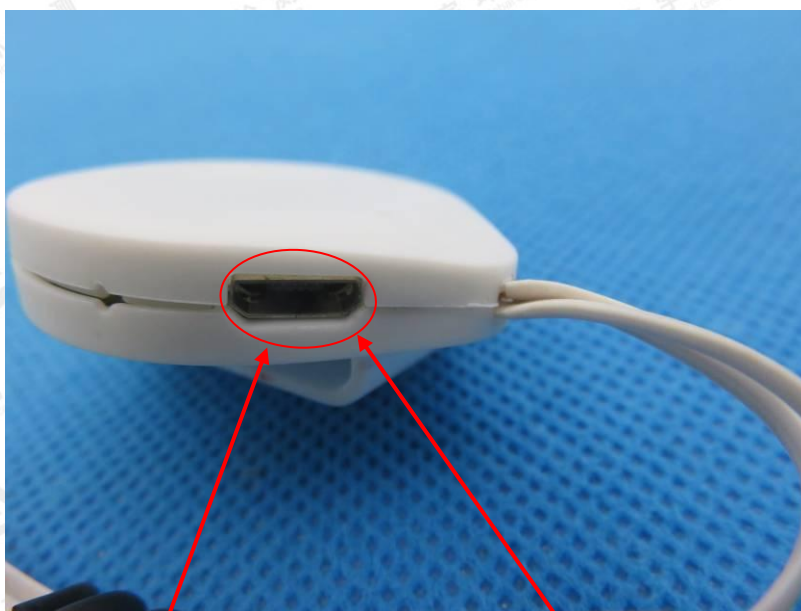
NOTE 1: Degradation of performance during the test is understood as a degradation to a level not below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance.
If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

NOTE 2: No degradation of performance after the test is understood as no degradation below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. After the test no change of actual operating data or user retrievable data is allowed. If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

DESCRIPTION OF THE ELECTROSTATIC DISCHARGES (ESD)

| Amount of Discharges | Voltage | Coupling | Observation | performance | Result (Pass/Fail) |
|----------------------|------------------|------------------------|------------------|-------------|--------------------|
| Mini 20 / Point | ±2KV, ±4kV | Contact Discharge | No Function Loss | A | Pass |
| Mini 20 / Point | ±2KV, ±4kV, ±8kV | Air Discharge | No Function Loss | A | Pass |
| Mini 20 / Point | ±2KV, ±4kV | Indirect Discharge HCP | No Function Loss | A | Pass |
| Mini 20 / Point | ±2KV, ±4kV | Indirect Discharge VCP | No Function Loss | A | Pass |

Note: operating mode include all modes of EMS in page 7



Contact Discharge

Air Discharge

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9.3. RADIATED, RADIO FREQUENCY ELECTROMAGNETIC FIELD IMMUNITY TEST

9.3.1 TEST SPECIFICATION

| | |
|---------------------|-------------------------------------|
| Basic Standard | EN 61000-4-3 |
| Frequency Range | 80 MHz – 6000MHz |
| Field Strength | 3V/m |
| Modulation | 1 kHz sine wave, 80%, AM modulation |
| Frequency Step | 1% of fundamental |
| Polarity of Antenna | Horizontal and Vertical |
| Test Distance | 3m |
| Antenna Height | 1.5m |
| Dwell Time | 3 seconds |

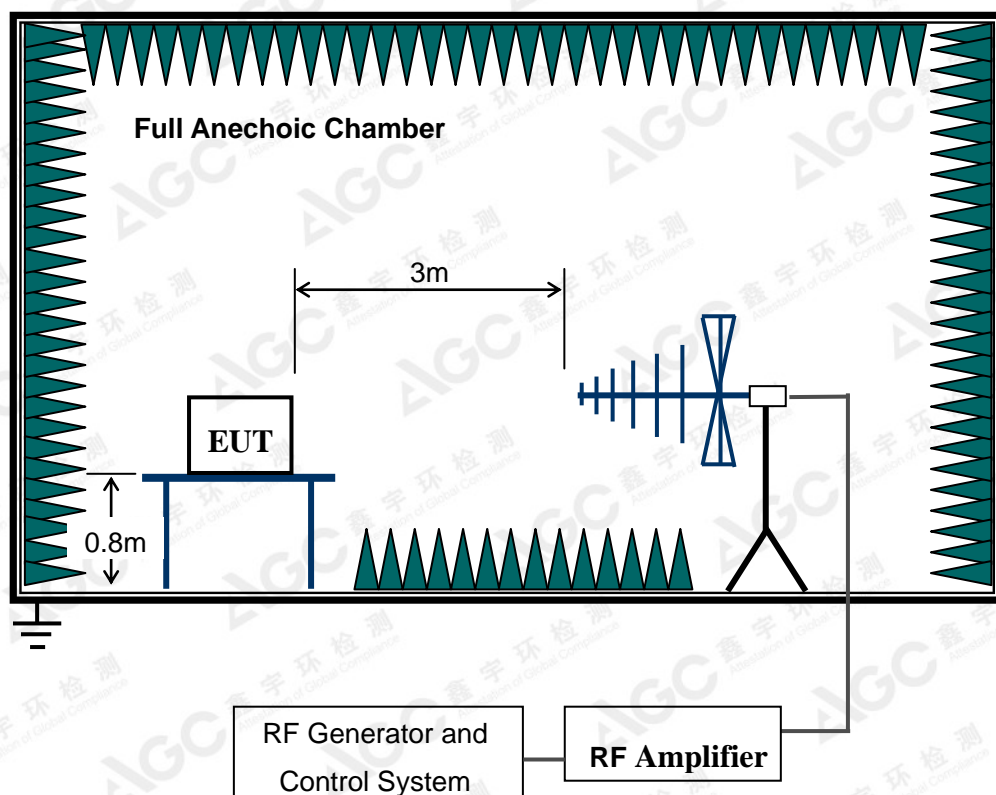
9.3.2 TEST PROCEDURE

The test procedure was in accordance with EN 61000-4-3.

- The testing was performed in a fully anechoic chamber. The transmit antenna was located at a distance of 3 meters from the EUT.
- The test signal was 80% amplitude modulated with a 1 kHz sine wave.
- The frequency range was swept from 80 MHz to 6000MHz with the exception of the exclusion band for transmitters, receivers and duplex transceivers. The rate of sweep did not exceed 1.5×10^{-3} decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.
- The field strength level was 3V/m.
- The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

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9.3.3 TEST SETUP



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

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9.3.4 TEST RESULT

TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.2.2, ETSI EN 301 489-17 and EN 61000-4-3 for the measurement methods.

TEST RESULTS

| Criteria | During Test | After Test |
|----------|--|--|
| A | Shall operate as intended. May show degradation of performance (see note 1). Shall be no loss of function. Shall be no unintentional transmissions. | Shall operate as intended. Shall be no degradation of performance (see note 2). Shall be no loss of function. Shall be no loss of stored data or user programmable functions. |

NOTE 1: Degradation of performance during the test is understood as a degradation to a level not below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

NOTE 2: No degradation of performance after the test is understood as no degradation below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. After the test no change of actual operating data or user retrievable data is allowed. If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

| Freq. Range (MHz) | Field | Modulation | Polarity | Position | Observation | performance | Result (Pass/Fail) |
|-------------------|-------|------------|----------|----------|------------------|-------------|--------------------|
| 80-6000 | 3V/m | Yes | H / V | Front | No Function Loss | A | PASS |
| 80-6000 | 3V/m | Yes | H / V | Back | No Function Loss | A | PASS |
| 80-6000 | 3V/m | Yes | H / V | Left | No Function Loss | A | PASS |
| 80-6000 | 3V/m | Yes | H / V | Right | No Function Loss | A | PASS |
| 80-6000 | 3V/m | Yes | H / V | Top | No Function Loss | A | PASS |
| 80-6000 | 3V/m | Yes | H / V | Bottom | No Function Loss | A | PASS |

Note: operating mode include all modes of EMS in page 7

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APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Refer to Attached file (APPENDIX I).

APPENDIX B: PHOTOGRAPHS OF EUT

Refer to Attached file (APPENDIX I).

----END OF REPORT----

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