



Variant FCC RF Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : WCDMA/CDMA/LTE Multi-Mode Digital
Mobile Phone
BRAND NAME : ZTE
MODEL NAME : ZTE A2017U
FCC ID : SRQ-ZTEA2017U
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System

This is a variant report which is only valid together with the original test report. The product was received on Jun. 14, 2016 and testing was completed on Jun. 27, 2016. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

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SUMMARY OF TEST RESULT

| Report Section | FCC Rule | Description | Limit | Result | Remark |
|----------------|--------------------|---|-----------------------|--------|---|
| 3.1 | 15.247(b)(1) | Peak Output Power | ≤ 30dBm | Pass | - |
| 3.2 | 15.247(d) | Radiated Band Edges and Spurious Emission | 15.209(a) & 15.247(d) | Pass | Under limit 6.49 dB at 55.220 MHz |
| 3.3 | 15.203 & 15.247(b) | Antenna Requirement | N/A | Pass | - |



1 General Description

1.1 Applicant

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.2 Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3 Product Feature of Equipment Under Test

| Product Feature | |
|--|--|
| Equipment | WCDMA/CDMA/LTE Multi-Mode Digital Mobile Phone |
| Brand Name | ZTE |
| Model Name | ZTE A2017U |
| FCC ID | SRQ-ZTEA2017U |
| EUT supports Radios application | CDMA/EV-DO/ GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+(16QAM uplink is not supported)/LTE/NFC WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth v3.0 + EDR/Bluetooth v4.0 LE/Bluetooth v4.2 LE |
| IMEI Code | Conducted: 990006780003819 Radiation: NA |
| HW Version | wwdB |
| SW Version | A2017UV1.0.0B07 |
| EUT Stage | Production Unit |

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification | |
|---|--|
| Tx/Rx Frequency Range | 2402 MHz ~ 2480 MHz |
| Number of Channels | 40 |
| Carrier Frequency of Each Channel | 40 Channel(37 hopping + 3 advertising channel) |
| Maximum Output Power to Antenna | Bluetooth 4.0 LE: -0.35 dBm (0.000922 W) Bluetooth 4.2 LE: -0.36 dBm (0.000920 W) |
| Antenna Type | PIFA Antenna with gain -0.50 dBi |
| Type of Modulation | Bluetooth LE : GFSK |

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

| | | | |
|--------------------|---|-----------|----------------------|
| Test Site | SPORTON INTERNATIONAL (KUNSHAN) INC. | | |
| Test Site Location | No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958 | | |
| Test Site No. | Sporton Site No. | | FCC Registration No. |
| | TH01-KS | 03CH03-KS | 306251 |

Note: The test site complies with ANSI C63.4 2014 requirement.

1.7 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

2.1 Descriptions of Test Mode

The RF output power was recorded in the following table:

| Channel | Frequency | Bluetooth LE RF Output Power | |
|---------|-----------|------------------------------|------------------|
| | | Data Rate / Modulation | |
| | | GFSK | |
| | | v4.0 | v4.2 |
| Ch00 | 2402MHz | -1.68 dBm | -1.72 dBm |
| Ch19 | 2440MHz | -1.95 dBm | -1.98 dBm |
| Ch39 | 2480MHz | -0.35 dBm | -0.36 dBm |

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). Pre-scanned tests, X, Y, Z in three orthogonal panels to determine the final configuration (Z plane as worst plane) from all possible combinations.

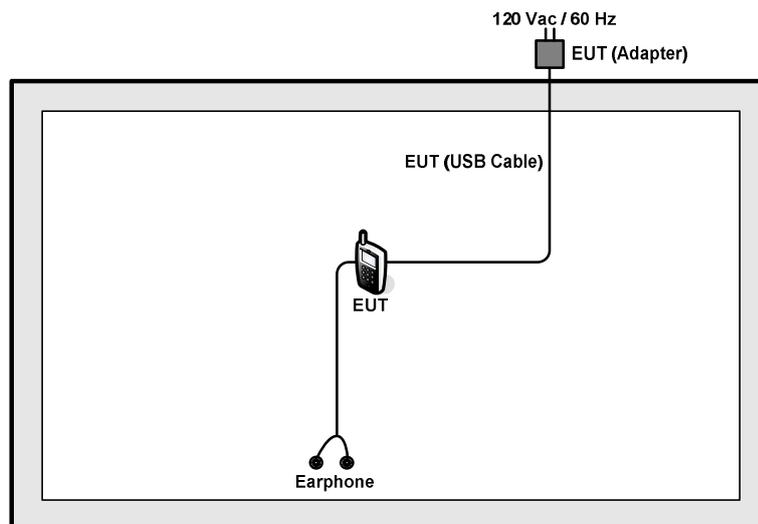
2.2 Test Mode

The following summary table is showing all test modes to demonstrate in compliance with the standard.

| Summary table of Test Cases | |
|--|--|
| Test Item | Data Rate / Modulation |
| | Bluetooth 4.0 LE / Bluetooth 4.2 LE / GFSK |
| Conducted TCs | Mode 1: Bluetooth Tx CH00_2402 MHz_1Mbps Mode 2: Bluetooth Tx CH19_2440 MHz_1Mbps Mode 3: Bluetooth Tx CH39_2480 MHz_1Mbps |
| Radiated TCs | Mode 1: Bluetooth Tx CH39_2480 MHz_1Mbps |
| Remark: For Radiated TCs, The tests were performed with Adapter, Earphone, and USB Cable. | |

2.3 Connection Diagram of Test System

<Bluetooth Tx Mode>



2.4 Support Unit used in test configuration and system

| Item | Equipment | Trade Name | Model Name | FCC ID | Data Cable | Power Cord |
|------|-----------|------------|------------|--------|-------------------|------------|
| 1. | Earphone | Lenovo | SH100 | N/A | Unshielded, 1.2 m | N/A |



2.5 EUT Operation Test Setup

For Bluetooth LE function, the engineering test program was provided and enabled to make EUT continuous transmit/receive.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 5.5 dB.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 5.5 \text{ (dB)} \end{aligned}$$

3 Test Result

3.1 Peak Output Power Measurement

3.1.1 Limit of Peak Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

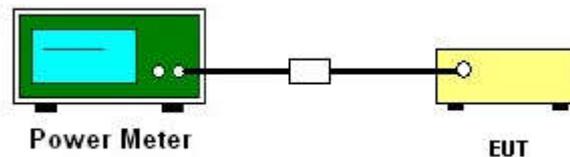
3.1.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

3.1.3 Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v03r05 section 9.1.2 PKPM1 Peak power meter method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.1.4 Test Setup





3.1.5 Test Result of Peak Output Power

| | | | |
|-----------------|------------------|---------------------|---------|
| Test Mode : | Bluetooth 4.0 LE | Temperature : | 24~25°C |
| Test Engineer : | Ivan Zhang | Relative Humidity : | 54~55% |

| Channel | Frequency (MHz) | RF Power (dBm) | | |
|---------|-----------------|----------------|-------------------|-----------|
| | | GFSK | Max. Limits (dBm) | Pass/Fail |
| | | 1 Mbps | | |
| 00 | 2402 | -1.68 | 30.00 | Pass |
| 19 | 2440 | -1.95 | 30.00 | Pass |
| 39 | 2480 | -0.35 | 30.00 | Pass |

| | | | |
|-----------------|------------------|---------------------|---------|
| Test Mode : | Bluetooth 4.2 LE | Temperature : | 24~25°C |
| Test Engineer : | Ivan Zhang | Relative Humidity : | 54~55% |

| Channel | Frequency (MHz) | RF Power (dBm) | | |
|---------|-----------------|----------------|-------------------|-----------|
| | | GFSK | Max. Limits (dBm) | Pass/Fail |
| | | 1 Mbps | | |
| 00 | 2402 | -1.72 | 30.00 | Pass |
| 19 | 2440 | -1.98 | 30.00 | Pass |
| 39 | 2480 | -0.36 | 30.00 | Pass |



3.2 Radiated Band Edges and Spurious Emission Measurement

3.2.1 Limit of Radiated Band Edges and Spurious Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

| 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 |

3.2.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

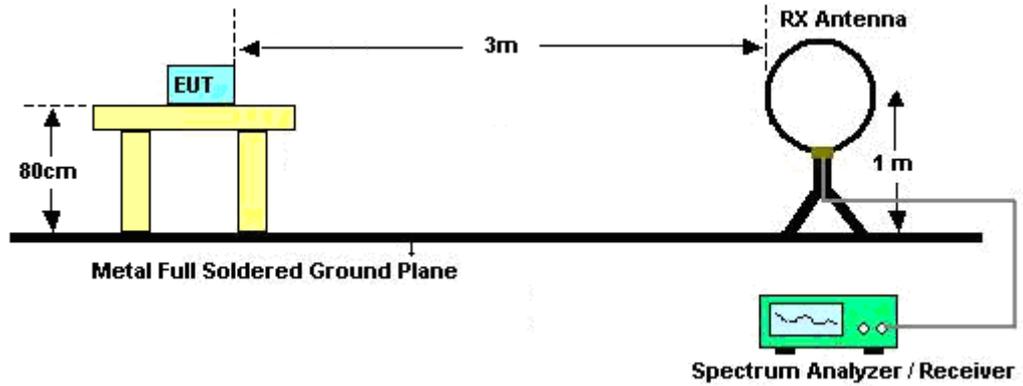


3.2.3 Test Procedures

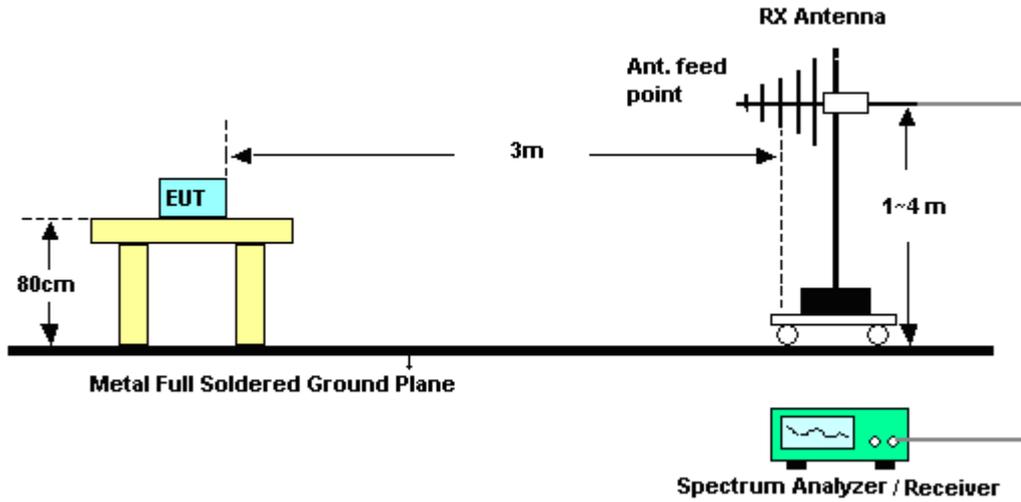
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r05.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.
For average measurement:
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.2.4 Test Setup

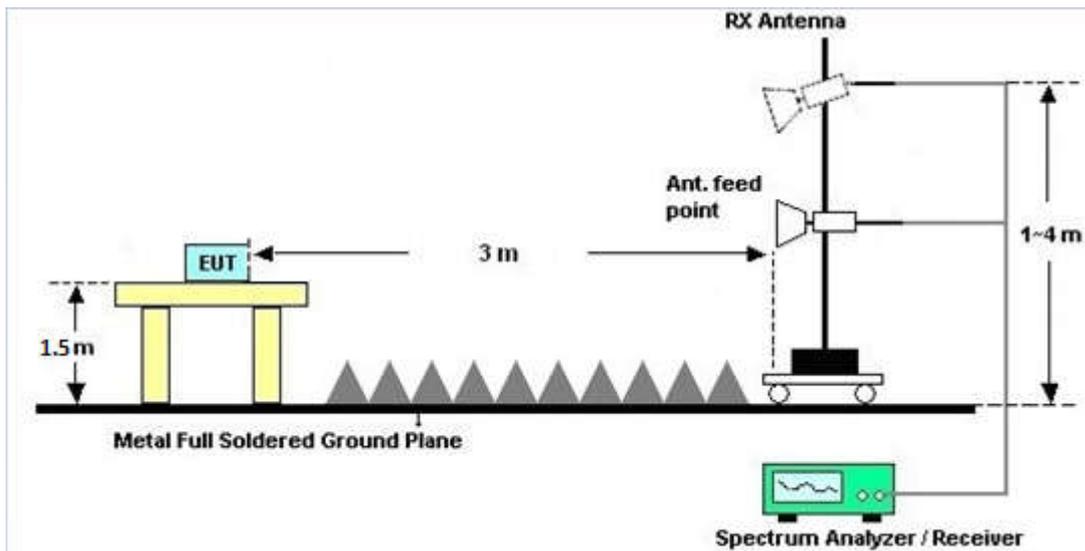
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.2.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A.

3.2.7 Duty Cycle

Please refer to Appendix B.

3.2.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix A.



3.3 Antenna Requirements

3.3.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|-----------------------|--------------|-----------|----------------|-------------------------|------------------|---------------------------------|---------------|-----------------------|
| Spectrum Analyzer | R&S | FSV40 | 101040 | 10Hz~40GHz | Sep. 10, 2015 | Jun. 18, 2016 | Sep. 09, 2016 | Conducted (TH01-KS) |
| Pulse Power Senor | Anritsu | MA2411B | 0917070 | 300MHz~40GHz | Jan. 20, 2016 | Jun. 18, 2016 | Jan. 19, 2017 | Conducted (TH01-KS) |
| Power Meter | Anritsu | ML2495A | 1005002 | 50MHz Bandwidth | Jan. 20, 2016 | Jun. 18, 2016 | Jan. 19, 2017 | Conducted (TH01-KS) |
| EMI Test Receiver | R&S | ESR7 | 101403 | 9kHz~7GHz; Max 30dBm | Sep. 10, 2015 | Jun. 18, 2016~ Jun. 27, 2016 | Sep. 09, 2016 | Radiation (03CH03-KS) |
| EXA Spectrum Analyzer | Keysight | N9010A | MY551502 44 | 10Hz~44GHz | Apr. 22, 2016 | Jun. 18, 2016~ Jun. 27, 2016 | Apr. 21, 2017 | Radiation (03CH03-KS) |
| Loop Antenna | R&S | HFH2-Z2 | 100321 | 9kHz~30MHz | Nov. 07, 2015 | Jun. 18, 2016~ Jun. 27, 2016 | Nov. 06, 2016 | Radiation (03CH03-KS) |
| Bilog Antenna | TeseQ | CBL6112D | 35406 | 25MHz~2GHz | Apr. 16, 2016 | Jun. 18, 2016~ Jun. 27, 2016 | Apr. 15, 2017 | Radiation (03CH03-KS) |
| Horn Antenna | Schwarzbeck | BBHA9120D | 9120D-135 6 | 1GHz~18GHz | Apr. 16, 2016 | Jun. 18, 2016~ Jun. 27, 2016 | Apr. 15, 2017 | Radiation (03CH03-KS) |
| SHF-EHF Horn | com-power | AH-840 | 101070 | 18Ghz~40Ghz | Oct. 10, 2015 | Jun. 18, 2016~ Jun. 27, 2016 | Oct. 09, 2016 | Radiation (03CH03-KS) |
| Amplifier | Burgeon | BPA-530 | 102212 | 0.01MHz~3000MHz | Aug. 10, 2015 | Jun. 18, 2016~ Jun. 27, 2016 | Aug. 09, 2016 | Radiation (03CH03-KS) |
| Amplifier | Agilent | 8449B | 3008A023 70 | 1GHz~26.5GHz | Oct. 24, 2015 | Jun. 18, 2016~ Jun. 27, 2016 | Oct. 23, 2016 | Radiation (03CH03-KS) |
| AC Power Source | Chroma | 61601 | F1040900 04 | N/A | NCR | Jun. 18, 2016~ Jun. 27, 2016 | NCR | Radiation (03CH03-KS) |
| Turn Table | ChamPro | EM 1000-T | 060762-T | 0~360 degree | NCR | Jun. 18, 2016~ Jun. 27, 2016 | NCR | Radiation (03CH03-KS) |
| Antenna Mast | ChamPro | EM 1000-A | 060762-A | 1 m~4 m | NCR | Jun. 18, 2016~ Jun. 27, 2016 | NCR | Radiation (03CH03-KS) |

NCR: No Calibration Required



5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

| | |
|---|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 4.5dB |
|---|-------|

Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

| | |
|---|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 4.5dB |
|---|-------|

Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

| | |
|---|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$) | 4.6dB |
|---|-------|



Appendix A. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

BLE (Band Edge @ 3m)

| BLE | Note | Frequency | Level | Over | Limit | Read | Antenna | Cable | Preamp | Ant | Table | Peak | Pol. |
|-------------------------|---|-----------|------------------|--------|------------------|----------------|----------|--------|--------|--------|---------|---------|---------|
| | | (MHz) | (dB μ V/m) | (dB) | (dB μ V/m) | (dB μ V) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| BLE CH 39 2480MHz | * | 2480.076 | 90.79 | - | - | 94.4 | 27.64 | 5.69 | 36.94 | 100 | 137 | P | H |
| | * | 2480.076 | 90.51 | - | - | 94.12 | 27.64 | 5.69 | 36.94 | 100 | 137 | A | H |
| | | 2490.88 | 50.99 | -23.01 | 74 | 54.44 | 27.77 | 5.71 | 36.93 | 100 | 137 | P | H |
| | | 2483.5 | 41.67 | -12.33 | 54 | 45.28 | 27.64 | 5.69 | 36.94 | 100 | 137 | A | H |
| | * | 2479.993 | 89.7 | - | - | 93.31 | 27.64 | 5.69 | 36.94 | 100 | 104 | P | V |
| | * | 2479.993 | 89.6 | - | - | 93.21 | 27.64 | 5.69 | 36.94 | 100 | 104 | A | V |
| | | 2492.98 | 51.11 | -22.89 | 74 | 54.56 | 27.77 | 5.71 | 36.93 | 100 | 104 | P | V |
| | | 2488.18 | 41.48 | -12.52 | 54 | 44.93 | 27.77 | 5.71 | 36.93 | 100 | 104 | A | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |



2.4GHz 2400~2483.5MHz

BLE (Harmonic @ 3m)

| BLE | Note | Frequency (MHz) | Level (dB μ V/m) | Over Limit (dB) | Limit Line (dB μ V/m) | Read Level (dB μ V) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Ant Pos (cm) | Table Pos (deg) | Peak Avg. (P/A) | Pol. (H/V) |
|-------------------------|---|----------------------|---------------------------|-------------------------|-----------------------------------|---------------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| BLE CH 39 2480MHz | | 4962 | 36.95 | -37.05 | 74 | 57.83 | 31.72 | 9.32 | 61.92 | 100 | 360 | P | H |
| | | 7440 | 39.71 | -34.29 | 74 | 53.27 | 34.44 | 11.3 | 59.3 | 100 | 360 | P | H |
| | | 4962 | 36.4 | -37.6 | 74 | 57.28 | 31.72 | 9.32 | 61.92 | 100 | 360 | P | V |
| | | 7440 | 40.71 | -33.29 | 74 | 54.27 | 34.44 | 11.3 | 59.3 | 100 | 360 | P | V |
| Remark | 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |



Emission below 1GHz

2.4GHz BLE (LF)

| BLE | Note | Frequency | Level | Over | Limit | Read | Antenna | Cable | Preamp | Ant | Table | Peak | Pol. |
|---------------------|--|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| | | (MHz) | (dBμV/m) | (dB) | (dBμV/m) | (dBμV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| 2.4GHz BLE LF | | 55.22 | 26.88 | -13.12 | 40 | 50.99 | 7.6 | 0.89 | 32.6 | 100 | 254 | P | H |
| | | 146.4 | 29.33 | -14.17 | 43.5 | 46.56 | 13.75 | 1.46 | 32.44 | - | - | P | H |
| | | 189.08 | 28 | -15.5 | 43.5 | 47.52 | 11.37 | 1.67 | 32.56 | - | - | P | H |
| | | 232.73 | 27.53 | -18.47 | 46 | 45.84 | 12.33 | 1.73 | 32.37 | - | - | P | H |
| | | 312.27 | 31.91 | -14.09 | 46 | 46.9 | 15.12 | 2.18 | 32.29 | - | - | P | H |
| | | 323.91 | 31.74 | -14.26 | 46 | 46.44 | 15.33 | 2.21 | 32.24 | - | - | P | H |
| | | 55.22 | 33.51 | -6.49 | 40 | 57.62 | 7.6 | 0.89 | 32.6 | 100 | 21 | P | V |
| | | 70.74 | 27.42 | -12.58 | 40 | 50.79 | 8.14 | 1 | 32.51 | - | - | P | V |
| | | 103.72 | 24.95 | -18.55 | 43.5 | 42.87 | 13.15 | 1.23 | 32.3 | - | - | P | V |
| | | 153.19 | 31.08 | -12.42 | 43.5 | 48.39 | 13.62 | 1.5 | 32.43 | - | - | P | V |
| | | 190.05 | 25.01 | -18.49 | 43.5 | 44.59 | 11.31 | 1.68 | 32.57 | - | - | P | V |
| | | 323.91 | 27.07 | -18.93 | 46 | 41.77 | 15.33 | 2.21 | 32.24 | - | - | P | V |
| Remark | 1. No other spurious found. 2. All results are PASS against limit line. | | | | | | | | | | | | |



Note symbol

| | |
|-----|--|
| * | Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| ! | Test result is over limit line. |
| P/A | Peak or Average |
| H/V | Horizontal or Vertical |



A calculation example for radiated spurious emission is shown as below:

| WIFI | Note | Frequency | Level | Over | Limit | Read | Antenna | Cable | Preamp | Ant | Table | Peak | Pol. |
|---------|------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant. | | | | Limit | Line | Level | Factor | Loss | Factor | Pos | Pos | Avg. | |
| 1+2 | | (MHz) | (dBμV/m) | (dB) | (dBμV/m) | (dBμV) | (dB/m) | (dB) | (dB) | (cm) | (deg) | (P/A) | (H/V) |
| 802.11b | | 2390 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | P | H |
| CH 01 | | | | | | | | | | | | | |
| 2412MHz | | 2390 | 43.54 | -10.46 | 54 | 42.6 | 32.22 | 4.58 | 35.86 | 103 | 308 | A | H |

- Level(dBμV/m) =
Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
- Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

- Level(dBμV/m)
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

- Level(dBμV/m)
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
- Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

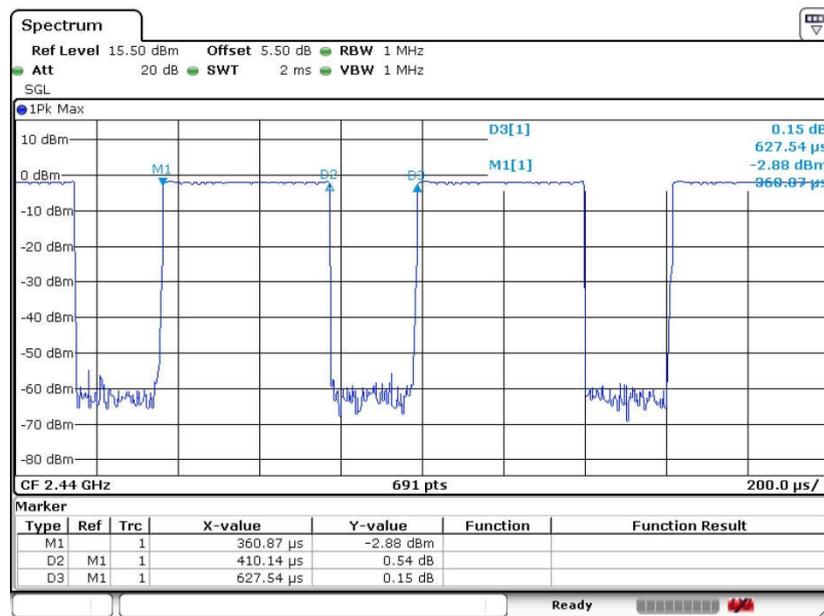
Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix B. Duty Cycle Plots

| Band | Duty Cycle(%) | T(ms) | 1/T(kHz) | VBW Setting |
|------------------|---------------|-------|----------|-------------|
| Bluetooth 4.0 LE | 65.36 | 0.41 | 2.44 | 3kHz |
| Bluetooth 4.2 LE | 86.11 | 2.16 | 0.46 | 1kHz |

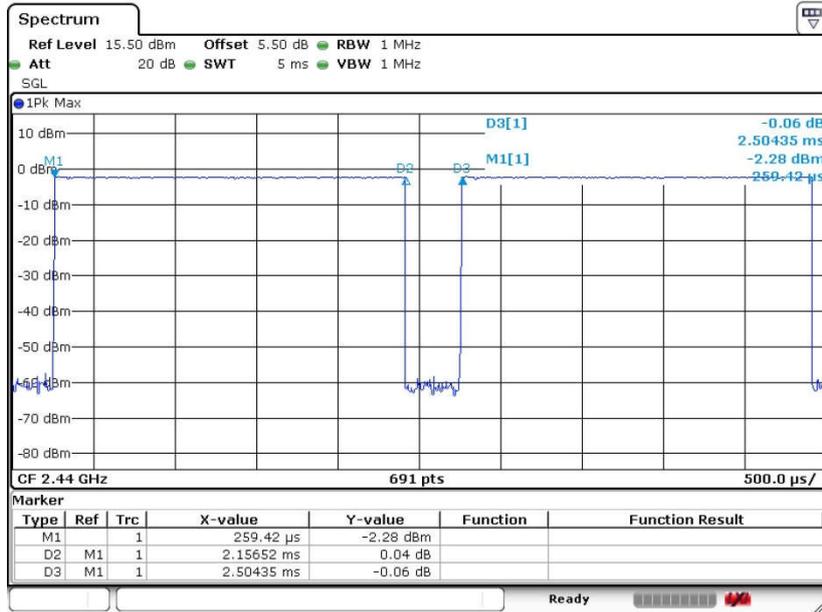
Bluetooth v4.0 LE



Date: 18 JUN 2016 02:14:00



Bluetooth v4.2 LE



Date: 18 JUN 2016 02:37:13



Appendix D. Product Equality Declaration

ZTE CORPORATION**Product Change Description**

As the applicant of the below model, [ZTE Corporation] declares that the product,

[ZTE A2017U]

[ZTE Corporation]

is the variant of the initial certified product,

[ZTE A2017U]

[ZTE Corporation]

[Project Number:16ZTE027]

SOFTWARE MODIFICATIONS:

Protocol Stack changes: NO

MMS/STK changes: NO

JAVA changes: NO

Other changes detailed: NO

HARDWARE MODIFICATION:

Band changes: NO

Power Amplifier changes: NO

Antenna changes: GPS/WiFi/Bluetooth 3in1 antenna is now updated.

Aiming at improving GPS performance, we updated this antenna and this result to 1dB efficiency better than previous one. Meanwhile, WiFi/Bluetooth efficiency was slightly down.

Before



After

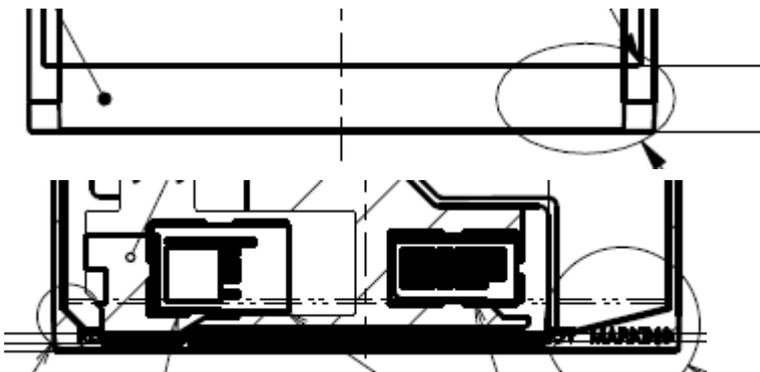


PCB Layout changes: NO

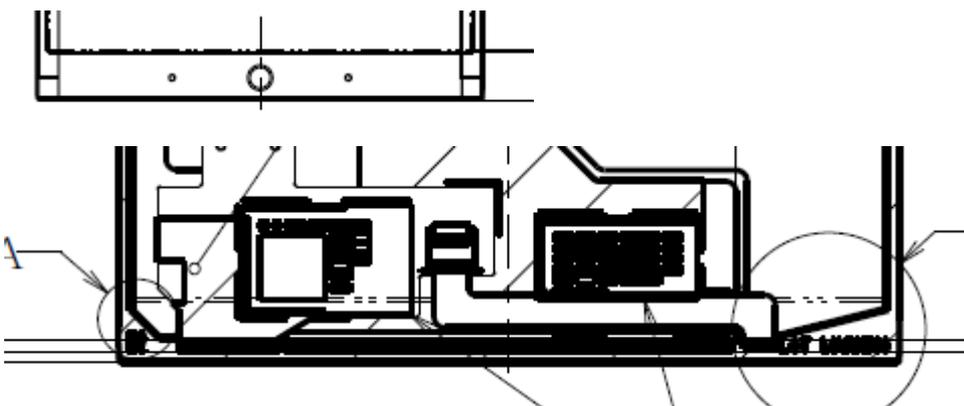
Components on PCB changes: NO

LCD changes: Yes, Added touch key and touch key FPC

Before



After



Speaker changes: NO

Camera changes: NO

Vibrator changes: NO

Bluetooth changes: NO

FM changes: NO

Other changes: NO

MECHANICAL MODIFICATIONS:

Use new metal front/back cover or keypad: NO

Mechanical shell changes: NO

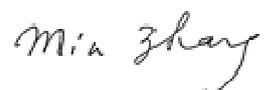
Other changes detailed: NO

ACCESSORY MODIFICATIONS:

Battery changes:NO

AC Adaptor changes:NO

Earphone changes:NO



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