

Variant FCC RF Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : CDMA/LTE Digital Mobile Handset
BRAND NAME : ZTE
MODEL NAME : ZTE FLASH 4G LTE
FCC ID : Q78-ZTEN9500
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System

The product was received on Nov. 01, 2012 and completely tested on Jan. 11, 2013. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown the 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.

Reviewed by:



Jones Tsai / Manager



SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.



TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION.....	5
1.1 Applicant.....	5
1.2 Manufacturer.....	5
1.3 Feature of Equipment Under Test.....	5
1.4 Product Specification of Equipment Under Test.....	5
1.5 Testing Site.....	6
1.6 Applied Standards	6
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST.....	7
2.1 Descriptions of Test Mode.....	7
2.2 Test Mode.....	8
2.3 Connection Diagram of Test System.....	9
2.4 Support Unit used in test configuration and system	9
2.5 Description of RF Function Operation Test Setup.....	9
2.6 Measurement Results Explanation Example.....	10
3 TEST RESULT	11
3.1 Radiated Band Edges and Spurious Emission Measurement	11
4 LIST OF MEASURING EQUIPMENT.....	24
5 UNCERTAINTY OF EVALUATION.....	25
APPENDIX A. PHOTOGRAPHS OF EUT	
APPENDIX B. SETUP PHOTOGRAPHS	
APPENDIX C. PRODUCT EQUALITY DECLARATION	

[illegible]



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(d)	RSS-210 A8.5	Radiated Band Edges and Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 3.86 dB at 2483.500 MHz

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 Feature of Equipment Under Test

Product Feature	
Equipment	CDMA/LTE Digital Mobile Handset
Brand Name	ZTE
Model Name	ZTE FLASH 4G LTE
FCC ID	Q78-ZTEN9500
EUT supports Radios application	CDMA/EV-DO/LTE/WLAN 11bgn/Bluetooth/ Bluetooth4.0 – LE/NFC
HW Version	c7zB
SW Version	N9500V1.0.0B13
EUT Stage	Identical Prototype

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

Product Specification subjective to this standard	
Tx/Rx Frequency Range	2402 MHz ~ 2480 MHz
Number of Channels	40
Carrier Frequency of Each Channel	2402+n*2 MHz; n=0~39
Maximum Output Power to Antenna	Bluetooth v4.0 - LE : 1.94 dBm (0.0016 W)
Antenna Type	PIFA Antenna with gain 0 dBi
Type of Modulation	Bluetooth v4.0 - LE : GFSK

1.5 Testing Site

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.		
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	TH01-KS	03CH01-KS	149928/4086E-1

1.6 Applied 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 v02
- ANSI C63.4-2003 and ANSI C63.10-2009
- IC RSS-210 Issue 8
- IC RSS-Gen Issue 3
- NOTICE 2012-DRS0126

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.
3. Per the section 2.2.3 of Notice of 2012-DRS0126, "Receivers Excluded from Industry Canada Requirements", only radio communication receivers operating in stand-alone mode within the band 30-960 MHz and scanner receivers are subject to Industry Canada requirements.

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 4.0 – LE RF Output Power
		Data Rate / Modulation
		GFSK
		1Mbps
Ch00	2402MHz	1.94 dBm
Ch19	2440MHz	1.64 dBm
Ch39	2480MHz	1.69 dBm

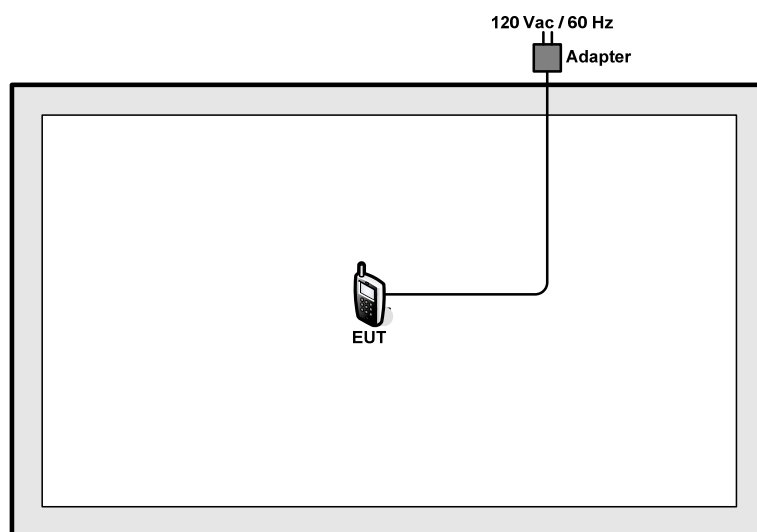
- a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction (150 KHz to 30 MHz), radiation (9 KHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). Pre-scanned tests, X, Y, Z in three orthogonal panels to determine the final configuration (Y 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 / GFSK
Conducted Power 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 CH00_2402 MHz_1Mbps

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GWINSTEK	GPS-3030D	N/A	N/A	Unshielded, 1.8 m

2.5 Description of RF Function Operation Test Setup

For Bluetooth function, programmed RF utility, "ADB" installed in the PC make the EUT provides functions like channel selection and power level for continuous transmitting and receiving signals.

2.6 Measurement Results Explanation Example

For conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and 10dB attenuator between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and 10dB attenuator factor.

Offset = RF cable loss + attenuator factor.

Following table shows an offset computation example with cable loss 4.2 dB.

Example :

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 Radiated Band Edges and Spurious Emission Measurement

3.1.1 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

3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows the guidelines in ANSI C63.10-2009 and ANSI C63.4-2003 test site requirement.
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 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.

Band	Duty Cycle(%)	T(us)	1/T(KHz)	VBW Setting
Bluetooth 4.0 - LE	66.88	0.42	2.38	3KHz

Note: For average measurement with duty cycle < 98%, use reduced VBW measurement method 4.2.3.2.3 in ANSI C63.10.

Marker-Delta method :

- (1) Set RBW = 1 MHz, VBW = 3 MHz, peak detector.

Repeat the measurement with an average detector, use RBW = 1MHz

VBW = 10 Hz, when duty cycle is no less than 98 percent.

VBW $\geq 1/T$, when duty cycle is less than 98 percent

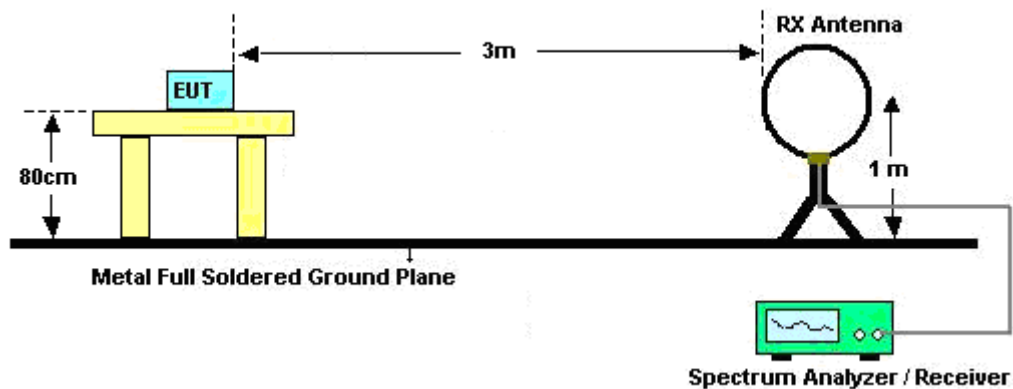
- (2) Set span = 10MHz, that encompasses both the peak of the fundamental emission and the band-edge emission under investigation. Set RBW = 100KHz, 1% of the total span. Set VBW = 100KHz $\geq$ RBW.

- (3) Subtract the delta measured in step (2) from the field strengths measured in step (1).

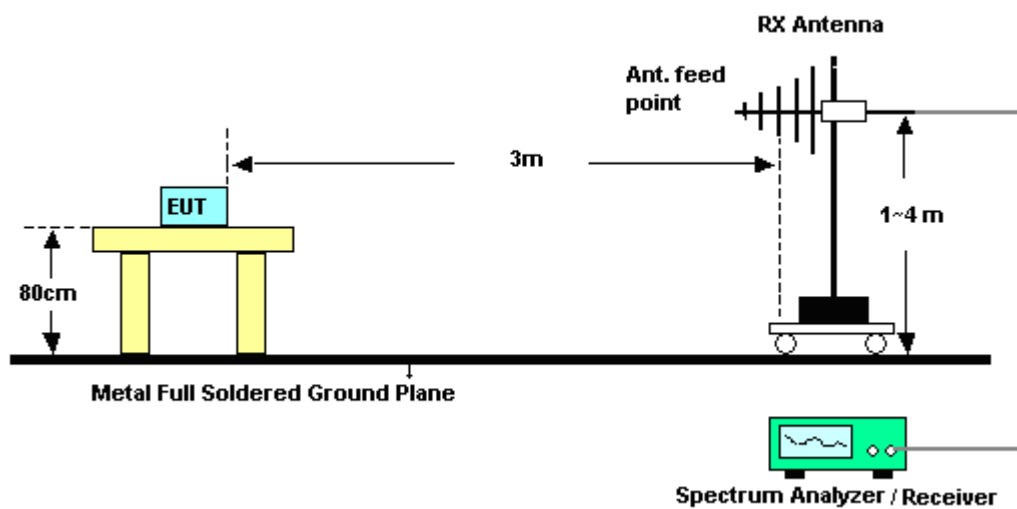
The resultant field strengths (peak/average) are then used to determine band-edge compliance as required by Section 15.205.

3.1.4 Test Setup

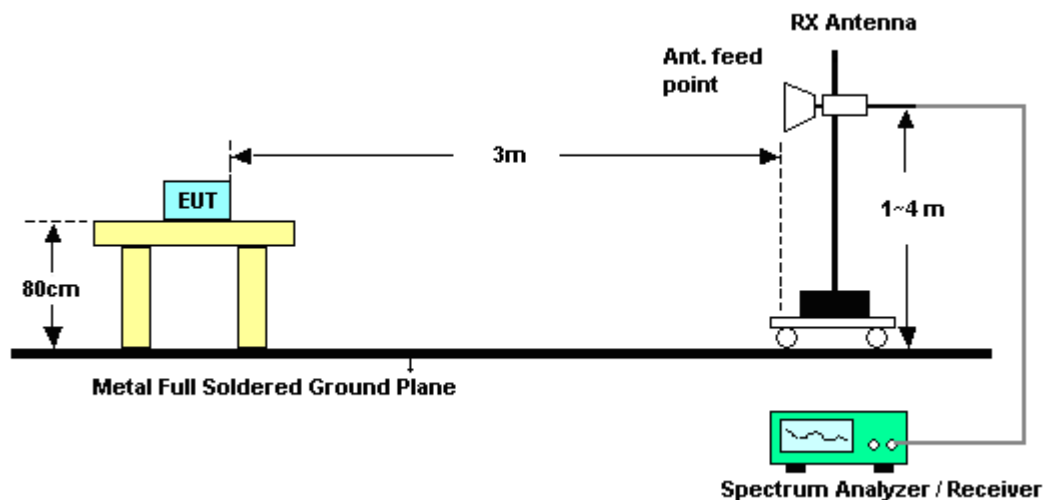
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.1.5 Test Results of Radiated 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.

3.1.6 Test Result of Radiated Band Edges

Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	00	Relative Humidity :	42~43%
		Test Engineer :	Steven Hao

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2386.59	49	-25	74	45.54	32.86	2.11	31.51	100	112	Peak
2386.86	36.91	-17.09	54	33.45	32.86	2.11	31.51	100	98	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2385.24	49.14	-24.86	74	45.73	32.83	2.09	31.51	100	155	Peak
2388.03	37.04	-16.96	54	33.58	32.86	2.11	31.51	100	116	Average

Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	39	Relative Humidity :	42~43%
		Test Engineer :	Steven Hao

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	55.71	-18.29	74	52.05	33.01	2.16	31.51	188	49	Peak
2483.5	51.96	-2.04	54	48.3	33.01	2.16	31.51	188	49	Average
2483.5	40.31	-33.69	74	-	-	-	-	-	-	Peak
2483.5	39.34	-14.66	54	-	-	-	-	-	-	Average

Summary results of marker-delta method:

Test mode	Maximum field strength of the fundamental emission (dBμV/m)	Delta Result (dB)	Measurement Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
Peak	95.78	55.47	40.31	74	-33.69	Pass
Average	94.81	55.47	39.34	54	-14.66	Pass

Note: Measurement result = Maximum field strength – Delta result

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	54.63	-19.37	74	50.97	33.01	2.16	31.51	192	76	Peak
2483.5	50.14	-3.86	54	46.48	33.01	2.16	31.51	192	76	Average

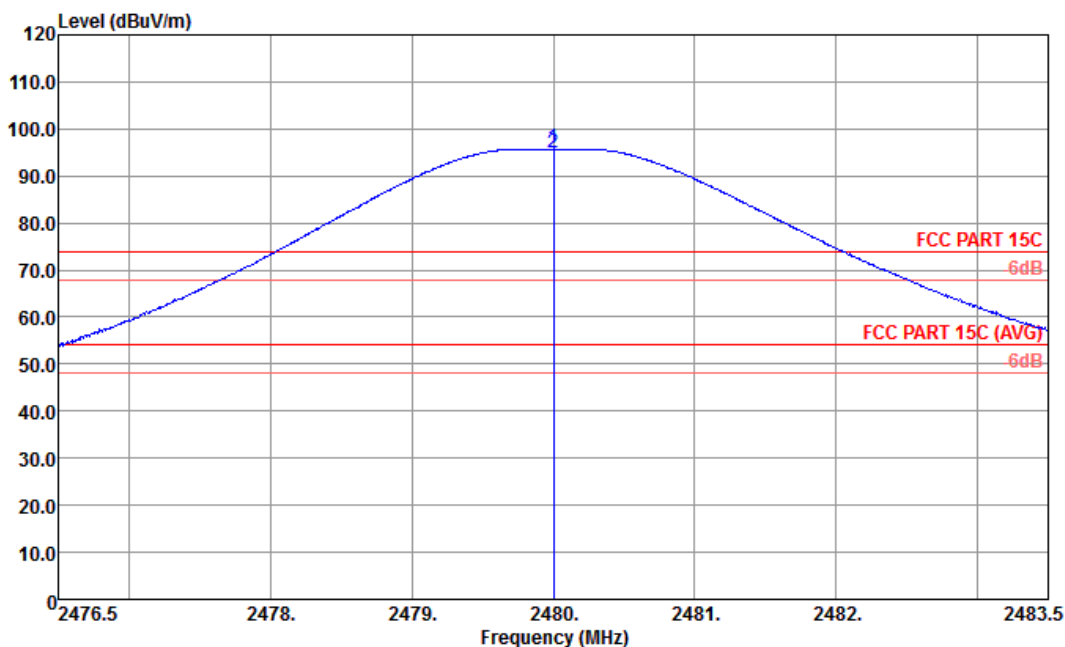
Summary results of marker-delta method:



Variant FCC RF Test Report

Report No. : FR270201-03C

Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	39	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Horizontal



Site : 03CH01-KS

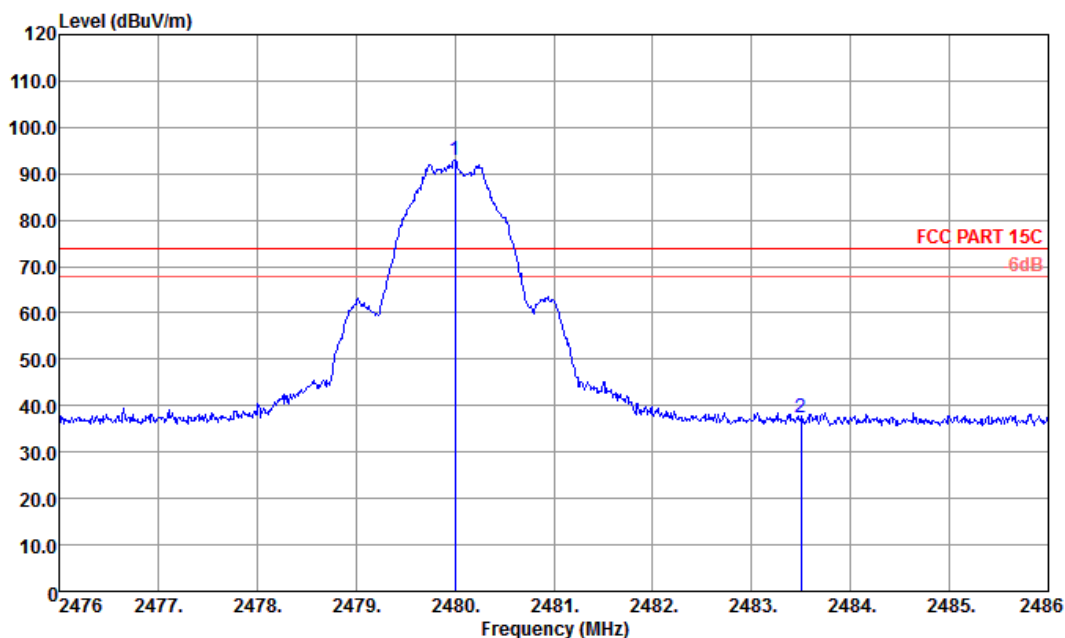
Condition : FCC PART 15C 3m HF ANT-100803 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 *	2480.00	95.78	21.78	74.00	92.12	33.01	2.16	31.51	189	49 Peak
2 *	2480.00	94.81	40.81	54.00	91.15	33.01	2.16	31.51	189	49 Average

* Maximum field strength of the fundamental emission



Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	39	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Horizontal



Site : 03CH01-KS
Condition : FCC PART 15C 3m HF ANT-100803 HORIZONTAL

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	I/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 *	2480.00	93.05	19.05	74.00	89.39	33.01	2.16	31.51	187	356 Peak
2	2483.50	37.58	-36.42	74.00	33.92	33.01	2.16	31.51	187	356 Peak

* Marker-Delta Method (RBW/VBW=100KHz): 55.47 dB , single carrier Mode

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

Note: Below 1GHz for radiated emission measurement, pre-scanned all test modes and only choose the worst case mode was recorded in the report.

Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	00	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Horizontal
Remark :	1. 2402 MHz is fundamental signal which can be ignored. 2. 2399 MHz and 7206 MHz are not within a restricted band, and their limit lines are 20dB below the highest emission level. For example, 94.01 dBuV/m - 20dB = 70.01 dBuV/m. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
33.211	22.39	-17.61	40	39.94	16.04	0	33.59	-	-	Peak
129.015	23.76	-19.74	43.5	45.64	11.71	0	33.59	-	-	Peak
357.929	24.75	-21.25	46	43.43	14.67	0	33.35	-	-	Peak
423.54	25.3	-20.7	46	42.42	16.14	0	33.26	-	-	Peak
875.247	33.28	-12.72	46	45.38	20.48	0	32.58	-	-	Peak
955.438	35.15	-10.85	46	46.83	20.76	0	32.44	100	22	Peak
2399	57.74	-16.27	74.01	54.28	32.86	2.11	31.51	100	115	Peak
2402	94.01	-	-	90.55	32.86	2.11	31.51	100	115	Peak
2402	91.72	-	-	88.26	32.86	2.11	31.51	100	115	Average
4804	49.87	-24.13	74	43.16	35.17	3.08	31.54	100	264	Peak
7206	49.78	-24.23	74.01	41.34	36.16	3.24	30.96	120	168	Peak

Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	00	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Vertical
Remark :	1. 2402 MHz is fundamental signal which can be ignored. 2. 2399 MHz and 7206 MHz are not within a restricted band, and their limit lines are 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
37.155	27.8	-12.2	40	47.23	14.19	0	33.62	-	-	Peak
97.115	23.15	-20.35	43.5	46.74	10.03	0	33.62	-	-	Peak
129.015	25.18	-18.32	43.5	47.06	11.71	0	33.59	-	-	Peak
460.727	26.29	-19.71	46	43.03	16.45	0	33.19	-	-	Peak
878.322	34.98	-11.02	46	47.06	20.47	0	32.55	-	-	Peak
952.094	36.22	-9.78	46	47.92	20.74	0	32.44	125	0	Peak
2399	56.08	-16.33	72.41	52.62	32.86	2.11	31.51	100	0	Peak
2402	92.41	-	-	88.95	32.86	2.11	31.51	100	0	Peak
2402	90.01	-	-	86.55	32.86	2.11	31.51	100	0	Average
4804	49.4	-24.6	74	42.69	35.17	3.08	31.54	100	236	Peak
7206	50.52	-21.89	72.41	42.08	36.16	3.24	30.96	100	236	Peak

Test Mode :	Mode 2	Temperature :	23~25°C
Test Channel :	19	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Horizontal
Remark :	1. 2440 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2440	95.9	-	-	92.32	32.95	2.14	31.51	162	26	Peak
2440	94.99	-	-	91.41	32.95	2.14	31.51	162	26	Average
4880	48.52	-25.48	74	41.74	35.18	3.12	31.52	112	154	Peak
7320	50.48	-23.52	74	42	36.21	3.21	30.94	100	360	Peak

Test Mode :	Mode 2	Temperature :	23~25°C
Test Channel :	19	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Vertical
Remark :	1. 2440 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2440	93.5	-	-	89.92	32.95	2.14	31.51	133	80	Peak
2440	92.57	-	-	88.99	32.95	2.14	31.51	133	80	Average
4880	48.71	-25.29	74	41.93	35.18	3.12	31.52	154	78	Peak
7320	49.98	-24.02	74	41.5	36.21	3.21	30.94	125	48	Peak

Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	39	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Horizontal
Remark :	1. 2480 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2480	95.65	-	-	91.99	33.01	2.16	31.51	191	24	Peak
2480	94.65	-	-	90.99	33.01	2.16	31.51	191	24	Average
4960	37.34	-36.66	74	30.49	35.2	3.16	31.51	100	0	Peak
7440	39.85	-34.15	74	31.32	36.27	3.18	30.92	124	58	Peak

Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	39	Relative Humidity :	42~43%
Test Engineer :	Steven Hao	Polarization :	Vertical
Remark :	1. 2480 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2480	93.17	-	-	89.51	33.01	2.16	31.51	128	46	Peak
2480	92.43	-	-	88.77	33.01	2.16	31.51	128	46	Average
4960	37.16	-36.84	74	30.31	35.2	3.16	31.51	102	324	Peak
7440	40.53	-33.47	74	32	36.27	3.18	30.92	145	25	Peak

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 29, 2012	Dec. 31, 2012	Dec. 28, 2013	Conducted (TH01-KS)
Power Meter	Agilent	E4416A	MY45101555	N/A	Aug. 22, 2012	Dec. 31, 2012	Aug. 21, 2013	Conducted (TH01-KS)
Power Sensor	Agilent	E9327A	MY44421198	N/A	Aug. 22, 2012	Dec. 31, 2012	Aug. 21, 2013	Conducted (TH01-KS)
DC Power Supply	GWINSTEK	GPS-3030D	E1884515	N/A	Aug. 22, 2012	Dec. 31, 2012	Aug. 21, 2013	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	N/A	Dec. 29, 2012	Dec. 31, 2012	Dec. 28, 2013	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 08, 2012	Jan. 11, 2013	Nov. 07, 2013	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	100400	9kHz~30GHz	Jun. 01, 2012	Jan. 11, 2013	May 31, 2013	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 07, 2012	Jan. 11, 2013	Dec. 06, 2013	Radiation (03CH01-KS)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz~30 MHz	Jul. 03, 2012	Jan. 11, 2013	Jul. 02, 2014	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 06, 2013	Jan. 11, 2013	Jan. 05, 2014	Radiation (03CH01-KS)
Amplifier	com-power	PA-103A	161069	1MHz~1GHz	Jun. 01, 2012	Jan. 11, 2013	May 31, 2013	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 29, 2012	Jan. 11, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701023	1GHz~18GHz	Nov. 07, 2012	Jan. 11, 2013	Nov. 06, 2013	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	9170249	15GHz~40GHz	Nov. 23, 2012	Jan. 11, 2013	Nov. 22, 2013	Radiation (03CH01-KS)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.54
--	------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.72
--	------



Appendix A. Photographs of EUT

Please refer to Sporton report number EP270201-03 as below.



Appendix C. Product Equality Declaration

ZTE CORPORATION**Product Change Description**

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

[ZTE N9500]
[ZTE Corporation]

is the variant of the initial certified product,

[ZTE N9500]
[ZTE Corporation]
[Project Number:12ZTE132]
FCC ID: Q78-ZTEN9500

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: YES, new WIFI/Bluetooth antenna with higher gain (1dB up).
PCB Layout changes: NO
Components on PCB changes: Yes

A: Optimize PDN and change below filter capacitances from top layer to bottom.

VREG_S6_1P05: C271
VREG_L27_1P05: C238
VREG_L26_1P05: C279
VREG_L28_1P05: C242

B: Delete redundant components:

S4200, C4221, C4220, L4215, L4210, L4216, L4208, L5121, L5120, L5119, C5121, C5122, S5100, C5118.

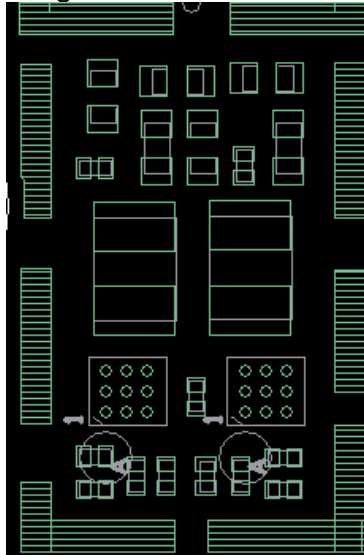
C: Component packaging updated:

L5101 now be packaged with 0402 instead of 0201.

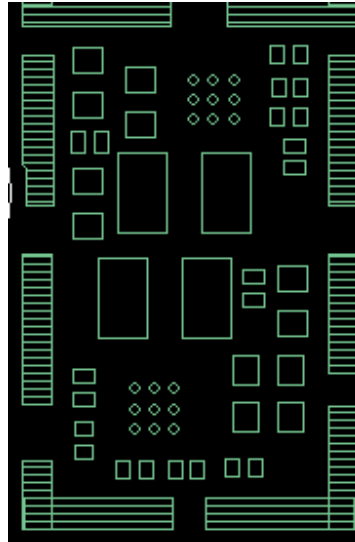
D: Optimize ADP components layout.

Please notice that only change components layout but PCB layout is same.

Original:



Now:



LCD changes: NO

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

Min Zhang

APPROVED BY: Min Zhang

Project Manager: Yongliang Zhang

Date:2013-1-10

Company: ZTE Corporation

Address: B109, #889, Bibo Rd, Zhangjiang Hi-Tech Park, Shanghai,China

Tel: +86-21-68896840

Fax: +86-21-68896835