

Variant FCC RF Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : Rogers HSPA/LTE CPE
BRAND NAME : ZTE
MODEL NAME : MF275R
FCC ID : SRQ-MF275R
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 Jul. 18, 2016 and testing was completed on Aug. 30, 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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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 Product Feature of Equipment Under Test	5
1.4 Product Specification subjective to this standard	6
1.5 Modification of EUT	7
1.6 Testing Location	7
1.7 Applicable Standards	7
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	8
2.1 Carrier Frequency and Channel	8
2.2 Test Mode	9
2.3 Connection Diagram of Test System	10
2.4 EUT Operation Test Setup	10
3 TEST RESULT	11
3.1 Radiated Band Edges and Spurious Emission Measurement	11
4 LIST OF MEASURING EQUIPMENT	15
5 UNCERTAINTY OF EVALUATION	16
APPENDIX A. RADIATED TEST RESULTS	
APPENDIX B. SETUP PHOTOGRAPHS	
APPENDIX C. PRODUCT EQUALITY DECLARATION	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR560506-01A	Rev. 01	This is a variant report for MF275R. The product equality declaration could be referred to Appendix C. Based on the similarity between two models, only worse cases of Radiated Spurious Emission from original test report (Sporton Report Number FR560506A) were verified for the differences.	Aug. 31, 2016



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(d)	RSS-247 5.5	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 4.46 dB at 2483.760 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 Product Feature of Equipment Under Test

Product Feature	
Equipment	Rogers HSPA/LTE CPE
Brand Name	ZTE
Model Name	MF275R
FCC ID	SRQ-MF275R
EUT supports Radios application	WCDMA/HSPA/HSPA+(16QAM uplink is not supported)/DC-HSDPA/LTE/ WLAN2.4GHz 802.11b/g/n HT20/HT40/ WLAN5GHz 802.11a/n HT20/HT40
IMEI Code	Radiation: 862425030001164
HW Version	dgpB
SW Version	MF275R1.2.3
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 subjective to this standard

Product Specification subjective to this standard			
Tx/Rx Channel Frequency Range	802.11b/g/n : 2412 MHz ~ 2462 MHz		
Antenna Type	WLAN for Chain Port 1: Monopole Antenna with gain 2.68 dBi WLAN for Chain Port 2: Monopole Antenna with gain 4.51 dBi		
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)		
Antenna Function for Transmitter		Chain Port 1	Chain Port 2
	802.11 b	V	V
	802.11 g	V	V
	802.11 n SISO	V	V
	802.11 n MIMO	V	V

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/IC Registration No.
	03CH02-KS	418269/4086E

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
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- 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

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: radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X,Y plane) were recorded in this report.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.2.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		



2.2 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates as below table.

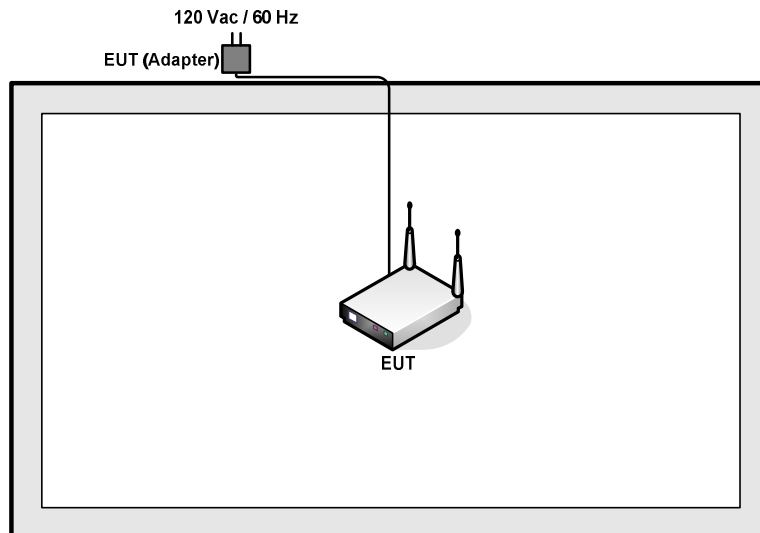
MIMO Antenna

<2.4GHz>

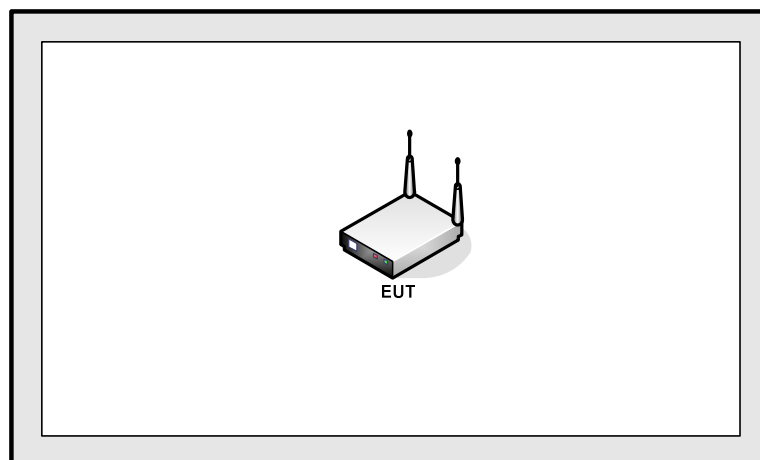
Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

2.3 Connection Diagram of Test System

<WLAN 802.11g/n HT40Tx Mode>



<WLAN 802.11b/n HT20Tx Mode>



2.4 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuously transmit/receive.

3 Test Result

3.1 Radiated Band Edges and Spurious Emission Measurement

3.1.1 Limit of Radiated band edge and Spurious Emission Measurement

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	$2400/F(\text{kHz})$	300
0.490 – 1.705	$24000/F(\text{kHz})$	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

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

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.

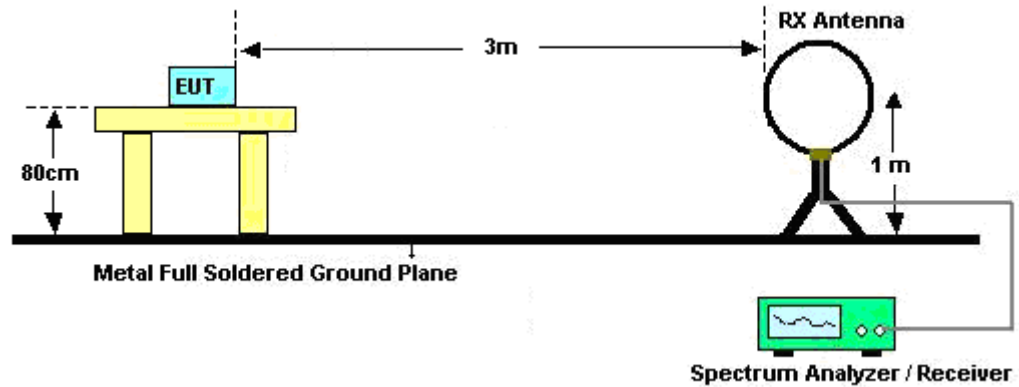
For average measurement:

 - 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.

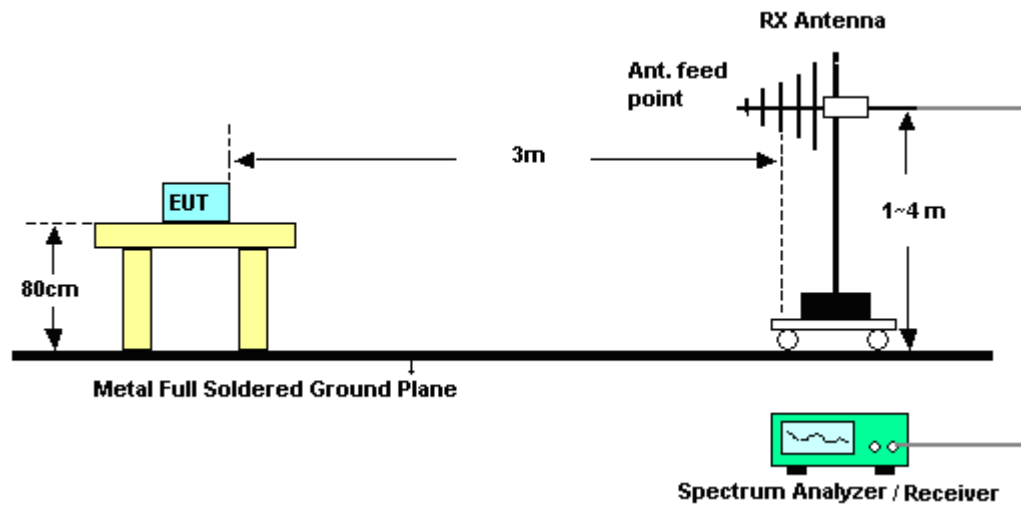
Chain Port	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1	802.11b	100	-	-	10Hz
2	802.11g	96.48	1.37	0.73	1kHz
1+2	2.4GHz 802.11n HT20	96.35	1.27	0.79	1kHz
1+2	2.4GHz 802.11n HT40	89.42	0.34	2.96	3kHz

3.1.4 Test Setup

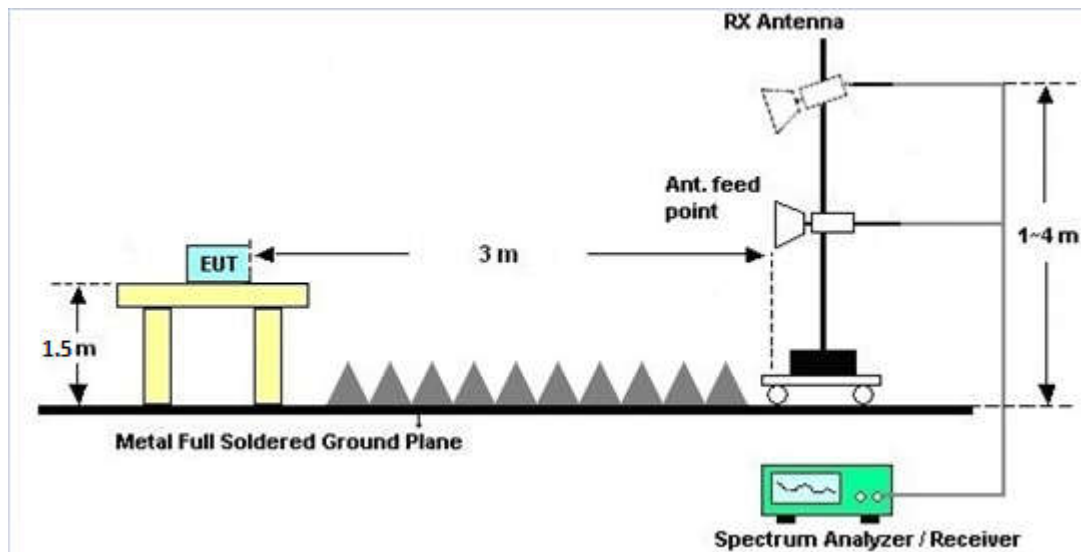
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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 Spurious at Band Edges

Please refer to Appendix A of this test report.

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

Please refer to Appendix A of this test report.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Aug. 09, 2016	Aug. 30, 2016	Aug. 08, 2017	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY551502 08	10Hz~44GHz; Max 30dB	Apr. 22, 2016	Aug. 30, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 07, 2015	Aug. 30, 2016	Nov. 06, 2016	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz~2GHz	Sep. 12, 2015	Aug. 30, 2016	Sep. 11, 2016	Radiation (03CH02-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-135 6	1GHz~18GHz	Apr. 16, 2016	Aug. 30, 2016	Apr. 15, 2017	Radiation (03CH02-KS)
SHF-EHF Horn	com-power	AH-840	101070	18GHz~40GHz	Oct. 10, 2015	Aug. 30, 2016	Oct. 09, 2016	Radiation (03CH02-KS)
Amplifier	com-power	PA-103A	161069	1kHz~1000MHz / 32 dB	Apr. 22, 2016	Aug. 30, 2016	Apr. 21, 2017	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A023 84	1GHz~26.5GHz	Oct. 24, 2015	Aug. 30, 2016	Oct. 23, 2016	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002 473	N/A	NCR	Aug. 30, 2016	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Aug. 30, 2016	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Aug. 30, 2016	NCR	Radiation (03CH02-KS)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.1dB
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Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.5dB
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Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.1dB
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Appendix A. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2345.37	49.57	-24.43	74	46.07	31.35	5.64	33.49	214	224	P	H
		2330.25	38.06	-15.94	54	34.71	31.33	5.64	33.62	214	224	A	H
	*	2413.193	102.34	-	-	98.58	31.41	5.56	33.21	214	224	P	H
	*	2413.778	89.23	-	-	85.47	31.41	5.56	33.21	214	224	A	H
		2389.11	49.63	-24.37	74	45.99	31.4	5.59	33.35	145	63	P	V
		2329.62	37.85	-16.15	54	34.5	31.33	5.64	33.62	145	63	A	V
	*	2413.193	101.09	-	-	97.33	31.41	5.56	33.21	145	63	P	V
	*	2410.938	88.06	-	-	84.3	31.41	5.56	33.21	145	63	A	V



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	51.4	-22.6	74	69.39	34.98	6.41	59.38	138	189	P	H
		4824	46.51	-7.49	54	64.5	34.98	6.41	59.38	138	189	A	H
		7236	50.09	-23.91	74	64.32	35.8	8.18	58.21	100	0	P	H
		9648	51.69	-22.31	74	61.48	37.54	9.7	57.03	126	270	P	H
		4824	46.88	-27.12	74	64.87	34.98	6.41	59.38	152	177	A	V
		7236	51.54	-22.46	74	65.77	35.8	8.18	58.21	152	177	P	V
		7236	45.42	-8.58	54	59.65	35.8	8.18	58.21	154	192	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 11 2462MHz	*	2465.13	107.15	-	-	104.05	31.46	4.88	33.24	282	50	P	H
	*	2463.627	99.11	-	-	96.01	31.46	4.88	33.24	282	50	A	H
		2483.52	68.27	-5.73	74	65.41	31.47	4.65	33.26	282	50	P	H
		2483.68	47.22	-6.78	54	44.36	31.47	4.65	33.26	282	50	A	H
	*	2464.629	104.39	-	-	101.29	31.46	4.88	33.24	166	0	P	V
	*	2463.376	96.4	-	-	93.3	31.46	4.88	33.24	166	0	A	V
		2483.56	62.84	-11.16	74	59.98	31.47	4.65	33.26	166	0	P	V
		2483.52	43.12	-10.88	54	40.26	31.47	4.65	33.26	166	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz****WIFI 802.11g (Harmonic @ 3m)**

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 11 2462MHz		4926	36.39	-37.61	74	53.96	34.88	6.45	58.9	100	0	P	H
		7386	35.57	-38.43	74	50.4	35.86	8.29	58.98	100	0	P	H
		4924	37.52	-36.48	74	55.09	34.88	6.45	58.9	300	360	P	V
		7386	36.46	-37.54	74	51.29	35.86	8.29	58.98	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz****WIFI 802.11n HT20 (Band Edge @ 3m)**

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)
802.11n HT20 CH 11 2462MHz	*	2463.126	108.17	-	-	105.07	31.46	4.88	33.24	165	23	P	H
	*	2464.044	100.46	-	-	97.36	31.46	4.88	33.24	165	23	A	H
		2483.8	65.11	-8.89	74	62.25	31.47	4.65	33.26	165	23	P	H
		2483.76	45.65	-8.35	54	42.79	31.47	4.65	33.26	165	23	A	H
	*	2462.708	108.43	-	-	105.33	31.46	4.88	33.24	252	0	P	V
	*	2463.126	99.15	-	-	96.05	31.46	4.88	33.24	252	0	A	V
		2483.64	67.81	-6.19	74	64.95	31.47	4.65	33.26	252	0	P	V
		2483.76	49.54	-4.46	54	46.68	31.47	4.65	33.26	252	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 11 2462MHz		4926	41.4	-32.6	74	58.97	34.88	6.45	58.9	100	0	P	H
		7386	46.16	-27.84	74	60.99	35.86	8.29	58.98	100	0	P	H
		4924	43.85	-30.15	74	61.42	34.88	6.45	58.9	300	360	P	V
		7386	45.89	-28.11	74	60.72	35.86	8.29	58.98	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 09 2452MHz		2390	49.65	-24.35	74	45.87	31.4	5.59	33.21	142	241	P	H
		2332.59	38.94	-15.06	54	35.59	31.33	5.64	33.62	142	241	A	H
	*	2449.014	105.92	-	-	102.61	31.44	5.11	33.24	142	241	P	H
	*	2448.764	98.06	-	-	94.75	31.44	5.11	33.24	142	241	A	H
		2485.04	65.83	-8.17	74	62.97	31.47	4.65	33.26	142	241	P	H
		2491.2	37.68	-16.32	54	34.8	31.49	4.65	33.26	142	241	A	H
		2317.2	48.9	-25.1	74	45.54	31.31	5.67	33.62	224	96	P	V
		2389.83	39	-15	54	35.22	31.4	5.59	33.21	224	96	A	V
	*	2448.263	103.2	-	-	99.89	31.44	5.11	33.24	224	96	P	V
	*	2449.599	94.66	-	-	91.35	31.44	5.11	33.24	224	96	A	V
		2483.96	65.33	-8.67	74	62.47	31.47	4.65	33.26	224	96	P	V
		2484.72	48.43	-5.57	54	45.57	31.47	4.65	33.26	224	96	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 09 2452MHz		4902	42.13	-31.87	74	59.77	34.9	6.44	58.98	150	360	P	H
		7356	43.39	-30.61	74	58.1	35.84	8.26	58.81	150	360	P	H
		4902	39.57	-34.43	74	57.21	34.9	6.44	58.98	150	360	P	V
		7356	42.06	-31.94	74	56.77	35.84	8.26	58.81	150	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

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)
2.4GHz 802.11n HT20 LF		45.52	18.73	-21.27	40	38.28	12.22	0.83	32.6	-	-	P	H
		95.96	20.38	-23.12	43.5	38.82	12.7	1.18	32.32	-	-	P	H
		103.72	20.14	-23.36	43.5	38.06	13.15	1.23	32.3	-	-	P	H
		147.37	21.64	-21.86	43.5	38.85	13.76	1.47	32.44	-	-	P	H
		174.53	22.47	-21.03	43.5	41.07	12.28	1.6	32.48	100	0	P	H
		323.91	23.47	-22.53	46	38.17	15.33	2.21	32.24	-	-	P	H
		34.85	24.35	-15.65	40	38.2	17.9	0.71	32.46	100	360	P	V
		53.28	22.73	-17.27	40	46.12	8.28	0.88	32.55	-	-	P	V
		98.87	25.3	-18.2	43.5	43.41	13	1.2	32.31	-	-	P	V
		113.42	26.46	-17.04	43.5	44.22	13.29	1.28	32.33	-	-	P	V
		305.48	23.93	-22.07	46	39.08	15	2.15	32.3	-	-	P	V
		470.38	23.78	-22.22	46	35.5	17.76	2.71	32.19	-	-	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	P eak or A verage
H/V	H orizontal or V ertical



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		(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

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. 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)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. 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)

2. 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 C. Product Equality Declaration

ZTE CORPORATION**Product Change Description**

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

[MF275R]

[ZTE Corporation]

is the variant of the initial certified product,

[MF275R]

[ZTE Corporation]

SOFTWARE MODIFICATIONS:

Protocol Stack changes: NO

MMS/STK changes: NO

JAVA changes: NO

Other changes detailed: 1)change SSID name

2)change APN

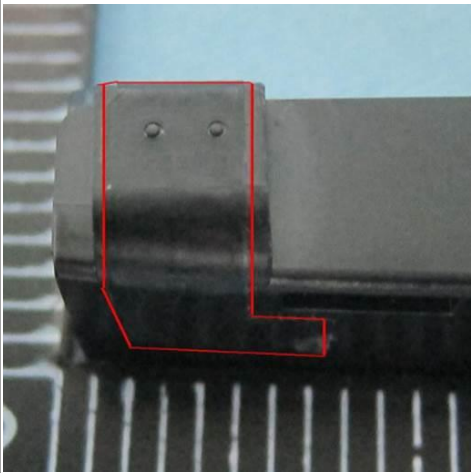
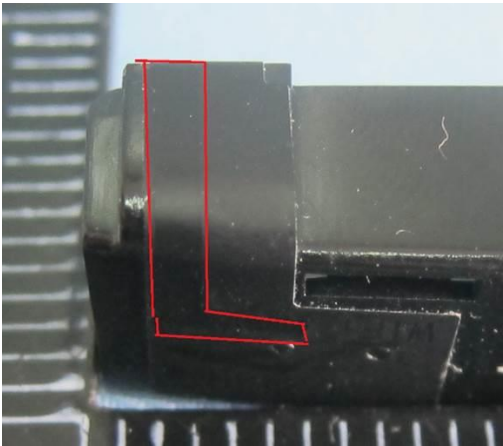
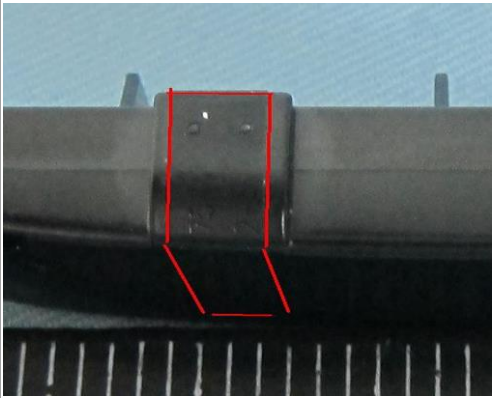
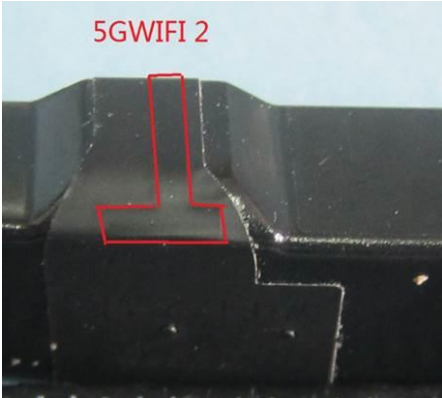
3)added the LTE Band V(Changed the VN)

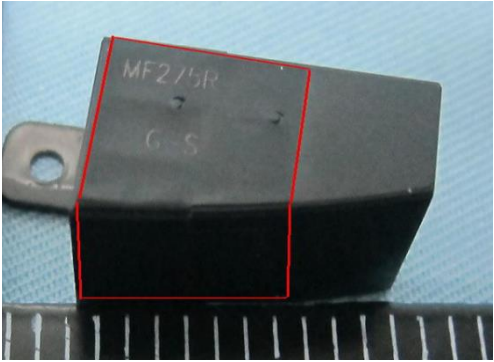
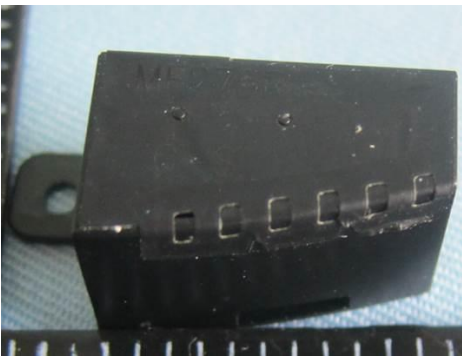
HARDWARE MODIFICATION:

Band changes: NO

Power Amplifier changes: NO

Antenna changes: yes, Wifi and GPS antenna change

Original Wifi 2 Ant	Variant
	
Original 5G Wifi 2	Variant
	
Original 5G Wifi main	Variant
	

Original GPS Ant	Variant
	

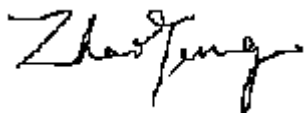
PCB Layout changes: NO
Components on PCB changes: NO
LCD changes: NO
Speaker changes: NO
Camera changes: NO
Vibrator changes: NO
Bluetooth changes: NO
FM changes: NO
Other changes:

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



APPROVED BY: zhaoyang

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