

Variant FCC RF Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : CDMA 1X-EVDO Digital Mobile Phone
BRAND NAME : ZTE
MODEL NAME : ZTE N861
FCC ID : Q78-ZTEN861
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 Sep. 17, 2012 and completely tested on Sep. 20, 2012. 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.

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REVISION HISTORY

[illegible]

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
2.6	15.247(d)	A8.5	Radiated Band Edges	15.209(a) & 15.247(d)	Pass	-
			Radiated Spurious Emission		Pass	Under limit 4.91 dB at 824.597 MHz
2.7	15.207	Gen 7.2.4	AC Conducted Emission	15.207(a)	Pass	Under limit 8.55 dB at 0.380 MHz
2.8	15.203 & 15.247(b)	A8.4	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 Feature of Equipment Under Test

Product Feature	
Equipment	CDMA 1X-EVDO Digital Mobile Phone
Brand Name	ZTE
Model Name	ZTE N861
FCC ID	Q78-ZTEN861
EUT supports Radios application	CDMA/EV-DO/WLAN 11bgn/Bluetooth 2.0 EDR/Bluetooth4.0 – LE
HW Version	c7xB
SW Version	N861V1.0.0B05
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.

Product Specification subjective to this standard	
Tx/Rx Frequency Range	2412 MHz ~ 2462 MHz
Number of Channels	11
Carrier Frequency of Each Channel	2412+(n-1)*5 MHz; n=1~11
Maximum Output Power to Antenna	802.11b : 17.49 dBm (0.0561 W) 802.11g : 21.73 dBm (0.1489 W) 802.11n HT20 : 21.78 dBm (0.1507 W)
Antenna Type	PIFA Antenna with gain -1.50 dBi
Type of Modulation	802.11b : DSSS (BPSK / QPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.4 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.
	CO01-KS	03CH01-KS	149928/4086E-1

1.5 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
- FCC TCB Workshop 2012, April
- ANSI C63.4-2003 and ANSI C63.10-2009
- IC RSS-210 Issue 8
- IC RSS-Gen Issue 3

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.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
3.	Bluetooth Earphone	Nokia	BH-106	QTLBH-106	N/A	N/A
4.	Notebook	P08S	QDS-BRCM1030	N/A	N/A	AC I/P: Unshielded, 0.9 m DC O/P: Shielded, 1.8 m

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: conducted emission (150 KHz to 30 MHz) and 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 plane) were recorded in this report.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

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 2.3.

2.1 Carrier Frequency 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 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and antenna configurations as following table and the highest power data rates were chosen for full test in the following tables. Final Output Power equals to Measured Output Power adds the duty factor.

Channel	Frequency	2.4GHz 802.11b RF Power (dBm)			
		DSSS Data Rate			
		1 Mbps	2 Mbps	5.5 Mbps	11 Mbps
CH 01	2412 MHz	17.38	17.18	17.09	17.37
CH 06	2437 MHz	17.49	17.47	17.45	17.34
CH 11	2462 MHz	17.35	17.31	17.15	17.33

Channel	Frequency	2.4GHz 802.11g RF Power (dBm)							
		OFDM Data Rate							
		6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 01	2412 MHz	21.49	21.47	21.32	21.35	21.32	21.26	21.29	21.41
CH 06	2437 MHz	21.73	21.41	21.51	21.13	20.98	21.48	21.37	21.03
CH 11	2462 MHz	21.62	21.14	20.95	21.12	21.18	20.98	21.21	21.07

Channel	Frequency	2.4GHz 802.11n HT20 RF Power (dBm)							
		OFDM Data Rate							
		MCS=0	MCS=1	MCS=2	MCS=3	MCS=4	MCS=5	MCS=6	MCS=7
CH 01	2412 MHz	21.17	21.02	20.98	20.92	21.01	20.92	20.78	21.01
CH 06	2437 MHz	21.78	21.75	21.29	20.86	21.17	20.25	21.02	21.45
CH 11	2462 MHz	21.56	21.19	21.36	21.22	20.93	21.34	21.17	20.88

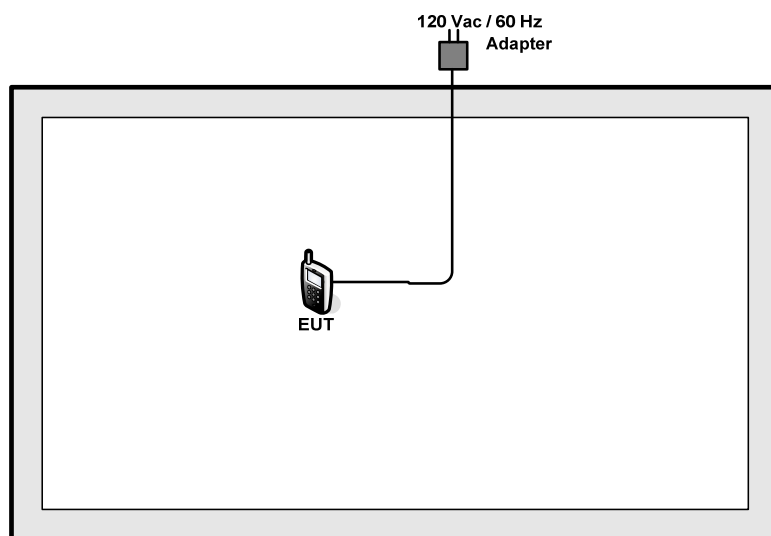
2.3 Test Mode

Final results of test modes, data rates and test channels are shown as following table.

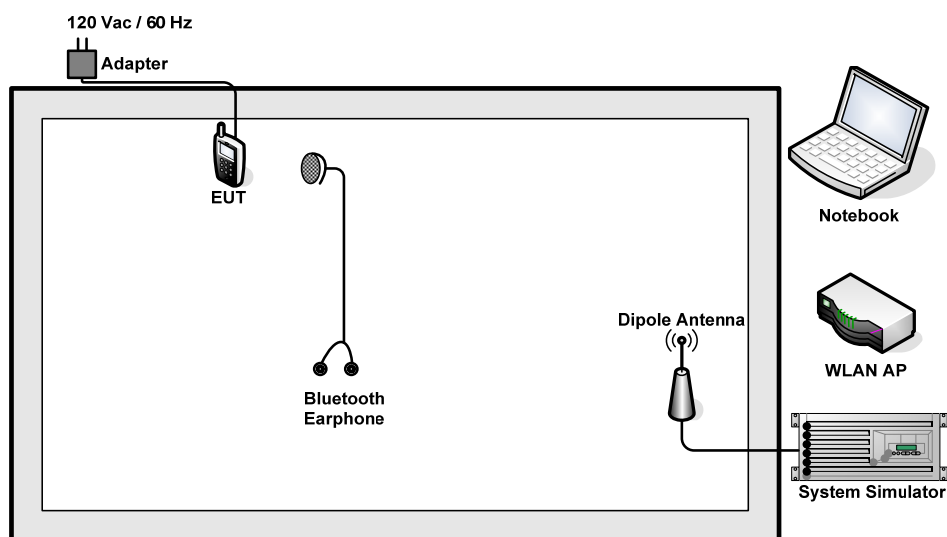
Test Cases				
Radiated TCs	Radiated Band EDGE	802.11b	1 Mbps	1/11
		802.11g	6 Mbps	1/11
		802.11n HT20	6.5 Mbps	1/11
	Radiated Spurious Emission	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT20	6.5 Mbps	1/6/11
AC Conducted Emission	Mode 1 : CDMA2000 BC1 Idle + Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter)			

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 RF Utility

For WLAN function, the EUT was connected with PC. Then, the EUT will get into the USB debugging modes to contact with WLAN AP for continuous transmitting and receiving signals.

2.6 Radiated Emission Measurement

2.6.1 Limit of Radiated 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

2.6.2 Measuring Instruments

See list of measuring instruments of this test report.

2.6.3 Test Procedures

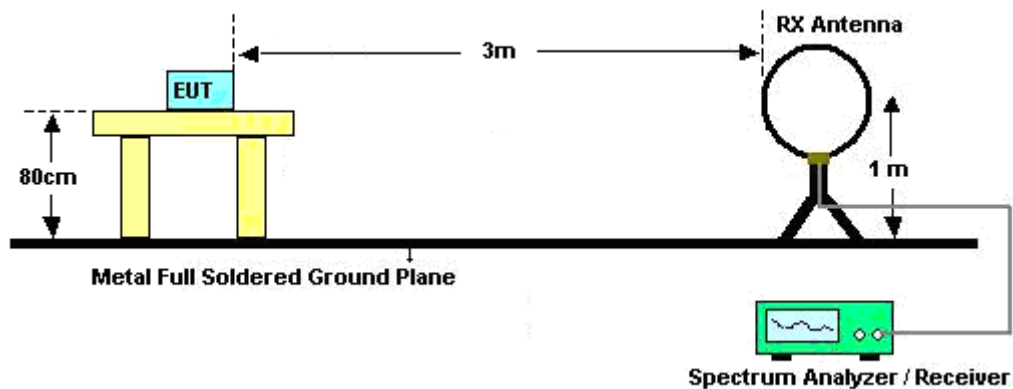
1. The testing follows TCB Workshop 2012, April and fulfills ANSI C63.4-2003 and the guidelines in ANSI C63.10-2009 test site requirement. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) 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 to comply with the guidelines.
2. The EUT was placed on a turntable with 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving Antenna, which was mounted on the top of a variable height Antenna tower.
4. Set to the maximum power setting and enable the EUT transmit continuously.
5. 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:
 - $VBW = 10$ Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent while maintaining all of the other instrument settings for Average measurement.

Band	Duty Cycle(%)	T(us)	1/T(KHz)	VBW Setting
802.11b	99.06	-	-	10Hz
802.11g	92.72	1.40	0.71	1Khz
2.4G 802.11n HT20	92.68	1.32	0.76	1Khz

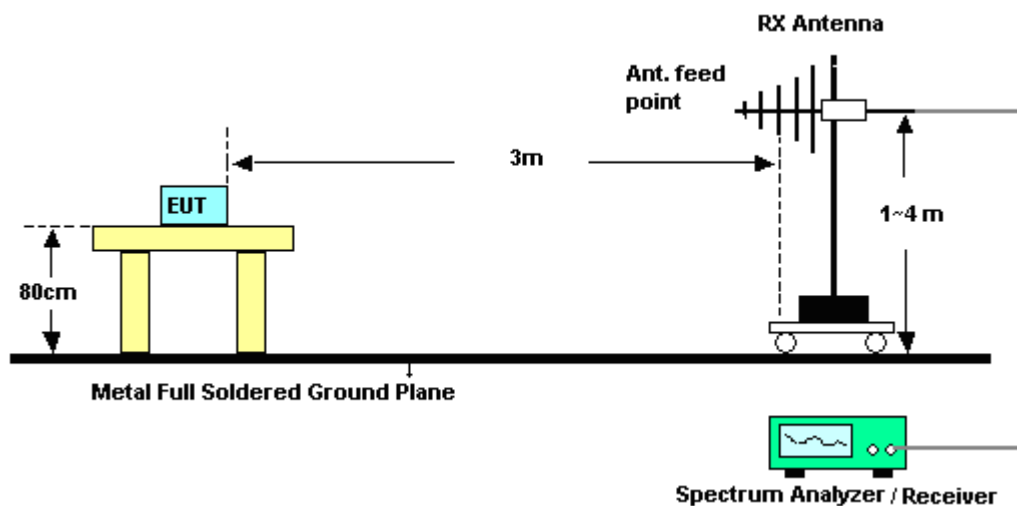
6. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
7. If the emission level of the EUT measured by the peak detector is more than 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be reported by using the quasi-peak detector.

2.6.4 Test Setup

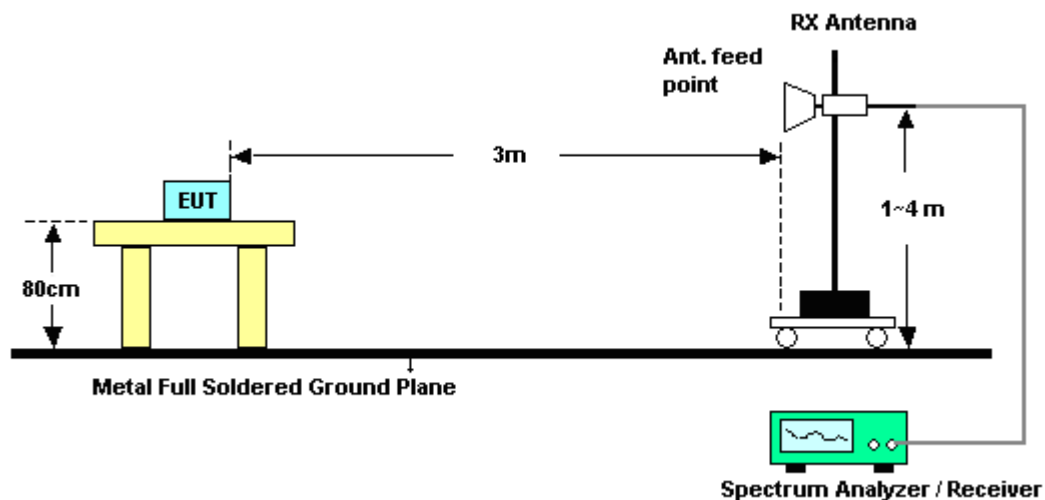
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.6.5 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.

2.6.6 Test Result of Radiated Band Edges

Test Mode :	802.11b	Temperature :	18~20℃
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.74	55.82	-18.18	74	47.81	32.86	4.23	29.08	130	355	Peak
2390	43.68	-10.32	54	35.67	32.86	4.23	29.08	122	360	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.2	53.51	-20.49	74	45.5	32.86	4.23	29.08	200	33	Peak
2390	41.02	-12.98	54	33.01	32.86	4.23	29.08	200	40	Average

Test Mode :	802.11b	Temperature :	18~20℃
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2496.54	55.08	-18.92	74	46.72	33.05	4.3	28.99	100	318	Peak
2499.34	42.19	-11.81	54	33.82	33.05	4.31	28.99	150	359	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2497.64	53.44	-20.56	74	45.08	33.05	4.3	28.99	197	217	Peak
2499.34	39.52	-14.48	54	31.15	33.05	4.31	28.99	200	41	Average



Test Mode :	802.11g	Temperature :	18~20°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.74	59.72	-14.28	74	51.71	32.86	4.23	29.08	191	29	Peak
2390	44.72	-9.28	54	36.71	32.86	4.23	29.08	187	358	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2387.76	56.21	-17.79	74	48.2	32.86	4.23	29.08	200	44	Peak
2390	42.52	-11.48	54	34.51	32.86	4.23	29.08	200	36	Average

Test Mode :	802.11g	Temperature :	18~20°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2485.84	60	-14	74	51.7	33.01	4.29	29	155	360	Peak
2483.66	43.15	-10.85	54	34.85	33.01	4.29	29	143	355	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.72	55.34	-18.66	74	47.04	33.01	4.29	29	102	37	Peak
2483.5	41.23	-12.77	54	32.93	33.01	4.29	29	128	297	Average



Test Mode :	802.11n HT20	Temperature :	18~20°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2385.42	63.55	-10.45	74	55.58	32.83	4.22	29.08	200	14	Peak
2390	46.51	-7.49	54	38.5	32.86	4.23	29.08	188	0	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.75	57.32	-16.68	74	49.31	32.86	4.23	29.08	100	357	Peak
2390	43.4	-10.6	54	35.39	32.86	4.23	29.08	200	40	Average

Test Mode :	802.11n HT20	Temperature :	18~20°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.5	62.65	-11.35	74	54.35	33.01	4.29	29	152	2	Peak
2483.5	43.08	-10.92	54	34.78	33.01	4.29	29	154	0	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2487.52	53.78	-20.22	74	45.44	33.05	4.29	29	200	41	Peak
2483.5	40.55	-13.45	54	32.25	33.01	4.29	29	187	360	Average

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

Test Mode :	802.11b	Temperature :	18~20℃
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
31.62	22.56	-17.44	40	35.86	16.55	0.24	30.09	-	-	Peak
92.787	24.64	-18.86	43.5	44.71	9.51	0.4	29.98	-	-	Peak
119.018	24.48	-19.02	43.5	42.2	11.8	0.45	29.97	-	-	Peak
184.49	28.4	-15.1	43.5	49.29	8.44	0.57	29.9	-	-	Peak
212.27	24.5	-19	43.5	44.28	9.6	0.61	29.99	-	-	Peak
948.761	31.13	-14.87	46	38.61	20.73	1.33	29.54	142	360	Peak
2412	105.41	-	-	97.33	32.89	4.24	29.05	128	358	Peak
2412	100.39	-	-	92.31	32.89	4.24	29.05	128	358	Average

Test Mode :	802.11b	Temperature :	18~20℃
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.105	23.06	-16.94	40	34.88	18	0.26	30.08	-	-	Peak
93.113	20.81	-22.69	43.5	40.88	9.51	0.4	29.98	-	-	Peak
184.49	19.67	-23.83	43.5	40.56	8.44	0.57	29.9	-	-	Peak
645.12	22.25	-23.75	46	31.93	18.88	1.09	29.65	-	-	Peak
884.503	24.16	-21.84	46	31.93	20.47	1.29	29.53	-	-	Peak
948.761	31.36	-14.64	46	38.84	20.73	1.33	29.54	200	224	Peak
2412	100.66	-	-	92.58	32.89	4.24	29.05	200	38	Peak
2412	95.56	-	-	87.48	32.89	4.24	29.05	200	38	Average

Test Mode :	802.11b	Temperature :	18~20℃
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.105	26.35	-13.65	40	38.17	18	0.26	30.08	100	12	Peak
38.616	24.56	-15.44	40	41.37	12.98	0.25	30.04	-	-	Peak
93.768	25.88	-17.62	43.5	45.8	9.66	0.4	29.98	-	-	Peak
184.49	27.76	-15.74	43.5	48.65	8.44	0.57	29.9	-	-	Peak
211.527	24.19	-19.31	43.5	44.04	9.54	0.6	29.99	-	-	Peak
948.761	30.46	-15.54	46	37.94	20.73	1.33	29.54	-	-	Peak
2437	109.85	-	-	101.68	32.95	4.25	29.03	126	360	Peak
2437	104.37	-	-	96.2	32.95	4.25	29.03	126	360	Average

Test Mode :	802.11b	Temperature :	18~20℃
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.424	24.25	-15.75	40	36.07	18	0.26	30.08	-	-	Peak
36.766	22.3	-17.7	40	37.94	14.19	0.24	30.07	-	-	Peak
93.113	20.28	-23.22	43.5	40.35	9.51	0.4	29.98	-	-	Peak
184.49	22.19	-21.31	43.5	43.08	8.44	0.57	29.9	-	-	Peak
875.247	24.77	-21.23	46	32.57	20.48	1.29	29.57	-	-	Peak
948.761	30.96	-15.04	46	38.44	20.73	1.33	29.54	200	110	Peak
2437	102.96	-	-	94.79	32.95	4.25	29.03	196	57	Peak
2437	97.82	-	-	89.65	32.95	4.25	29.03	196	57	Average



Test Mode :	802.11b	Temperature :	18~20℃
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.317	23.37	-16.63	40	35.19	18	0.26	30.08	-	-	Peak
92.139	23.87	-19.63	43.5	44.11	9.35	0.39	29.98	-	-	Peak
116.132	23.96	-19.54	43.5	41.69	11.8	0.44	29.97	-	-	Peak
184.49	28.07	-15.43	43.5	48.96	8.44	0.57	29.9	120	222	Peak
211.527	23.74	-19.76	43.5	43.59	9.54	0.6	29.99	-	-	Peak
948.761	30.26	-15.74	46	37.74	20.73	1.33	29.54	-	-	Peak
2462	105.46	-	-	97.22	32.98	4.27	29.01	149	358	Peak
2462	100.36	-	-	92.12	32.98	4.27	29.01	149	358	Average

Test Mode :	802.11b	Temperature :	18~20℃
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.638	26.47	-13.53	40	39.01	17.29	0.25	30.08	-	-	Peak
84.999	28.2	-11.8	40	50.14	7.7	0.37	30.01	157	246	Peak
93.113	29.36	-14.14	43.5	49.43	9.51	0.4	29.98	-	-	Peak
184.49	28.14	-15.36	43.5	49.03	8.44	0.57	29.9	-	-	Peak
229.293	25.62	-20.38	46	44.06	10.83	0.64	29.91	-	-	Peak
948.761	30.54	-15.46	46	38.02	20.73	1.33	29.54	-	-	Peak
2462	98.26	-	-	90.02	32.98	4.27	29.01	192	38	Peak
2462	93.05	-	-	84.81	32.98	4.27	29.01	192	38	Average

Test Mode :	802.11g	Temperature :	18~20℃
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.105	28.05	-11.95	40	39.87	18	0.26	30.08	100	27	Peak
38.481	26.79	-13.21	40	43.6	12.98	0.25	30.04	-	-	Peak
80.362	25.94	-14.06	40	49.03	6.6	0.35	30.04	-	-	Peak
117.36	24.39	-19.11	43.5	42.11	11.8	0.45	29.97	-	-	Peak
184.49	28	-15.5	43.5	48.89	8.44	0.57	29.9	-	-	Peak
948.761	30.87	-15.13	46	38.35	20.73	1.33	29.54	-	-	Peak
2412	104.89	-	-	96.81	32.89	4.24	29.05	126	0	Peak
2412	92.91	-	-	84.83	32.89	4.24	29.05	126	0	Average

Test Mode :	802.11g	Temperature :	18~20℃
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.211	24.2	-15.8	40	36.02	18	0.26	30.08	-	-	Peak
32.634	23.73	-16.27	40	37.54	16.04	0.24	30.09	-	-	Peak
92.462	19.83	-23.67	43.5	40.07	9.35	0.39	29.98	-	-	Peak
184.49	19.91	-23.59	43.5	40.8	8.44	0.57	29.9	-	-	Peak
875.247	24.31	-21.69	46	32.11	20.48	1.29	29.57	-	-	Peak
948.761	31.88	-14.12	46	39.36	20.73	1.33	29.54	113	75	Peak
2412	101.09	-	-	93.01	32.89	4.24	29.05	200	43	Peak
2412	89.28	-	-	81.2	32.89	4.24	29.05	200	43	Average

Test Mode :	802.11g	Temperature :	18~20℃
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.211	27.74	-12.26	40	39.56	18	0.26	30.08	155	304	Peak
85.898	26.82	-13.18	40	48.57	7.89	0.37	30.01	-	-	Peak
101.644	28.23	-15.27	43.5	47.04	10.74	0.41	29.96	-	-	Peak
184.49	28.53	-14.97	43.5	49.42	8.44	0.57	29.9	-	-	Peak
387.992	24.53	-21.47	46	37.83	15.71	0.84	29.85	-	-	Peak
948.761	30.92	-15.08	46	38.4	20.73	1.33	29.54	-	-	Peak
2437	104.9	-	-	96.73	32.95	4.25	29.03	100	0	Peak
2437	92.61	-	-	84.44	32.95	4.25	29.03	100	0	Average

Test Mode :	802.11g	Temperature :	18~20℃
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.211	24.32	-15.68	40	36.14	18	0.26	30.08	-	-	Peak
92.462	19.19	-24.31	43.5	39.43	9.35	0.39	29.98	-	-	Peak
216.024	21.52	-24.48	46	41.07	9.83	0.61	29.99	-	-	Peak
771.449	22.66	-23.34	46	31.13	19.88	1.21	29.56	-	-	Peak
875.247	24.97	-21.03	46	32.77	20.48	1.29	29.57	-	-	Peak
948.761	30.44	-15.56	46	37.92	20.73	1.33	29.54	200	0	Peak
2437	101.2	-	-	93.03	32.95	4.25	29.03	193	42	Peak
2437	89.19	-	-	81.02	32.95	4.25	29.03	193	42	Average

Test Mode :	802.11g	Temperature :	18~20℃
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.211	29.74	-10.26	40	41.56	18	0.26	30.08	-	-	Peak
78.689	30.51	-9.49	40	53.87	6.34	0.35	30.05	-	-	Peak
184.49	28.34	-15.16	43.5	49.23	8.44	0.57	29.9	-	-	Peak
212.27	26.08	-17.42	43.5	45.86	9.6	0.61	29.99	-	-	Peak
824.597	39.18	-6.82	46	47.38	20.16	1.26	29.62	152	177	Peak
948.761	29.97	-16.03	46	37.45	20.73	1.33	29.54	-	-	Peak
2462	103.75	-	-	95.51	32.98	4.27	29.01	150	356	Peak
2462	91.54	-	-	83.3	32.98	4.27	29.01	150	356	Average

Test Mode :	802.11g	Temperature :	18~20℃
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
36.127	26.73	-13.27	40	41.93	14.65	0.23	30.08	-	-	Peak
53.131	33.53	-6.47	40	56.57	6.8	0.29	30.13	-	-	Peak
77.051	24.75	-15.25	40	48.25	6.2	0.35	30.05	-	-	Peak
184.49	19.36	-24.14	43.5	40.25	8.44	0.57	29.9	-	-	Peak
824.597	39.93	-6.07	46	48.13	20.16	1.26	29.62	100	347	Peak
948.761	29.37	-16.63	46	36.85	20.73	1.33	29.54	-	-	Peak
2462	97.75	-	-	89.51	32.98	4.27	29.01	160	91	Peak
2462	85.94	-	-	77.7	32.98	4.27	29.01	160	91	Average

Test Mode :	802.11n-HT20	Temperature :	18~20℃
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.638	25.93	-14.07	40	38.47	17.29	0.25	30.08	-	-	Peak
84.11	26.03	-13.97	40	48.15	7.53	0.37	30.02	-	-	Peak
184.49	28.72	-14.78	43.5	49.61	8.44	0.57	29.9	-	-	Peak
390.723	24.96	-21.04	46	38.18	15.79	0.84	29.85	-	-	Peak
824.597	40.49	-5.51	46	48.69	20.16	1.26	29.62	200	117	Peak
948.761	30.46	-15.54	46	37.94	20.73	1.33	29.54	-	-	Peak
2412	107.05	-	-	98.97	32.89	4.24	29.05	128	359	Peak
2412	95.31	-	-	87.23	32.89	4.24	29.05	128	359	Average

Test Mode :	802.11n-HT20	Temperature :	18~20℃
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
39.299	30.91	-9.09	40	48.38	12.3	0.25	30.02	-	-	Peak
43.812	34.58	-5.42	40	54.39	10.03	0.27	30.11	-	-	Peak
57.191	31.03	-8.97	40	55.12	5.75	0.3	30.14	-	-	Peak
93.113	20.86	-22.64	43.5	40.93	9.51	0.4	29.98	-	-	Peak
824.597	41.09	-4.91	46	49.29	20.16	1.26	29.62	148	342	Peak
948.761	30.47	-15.53	46	37.95	20.73	1.33	29.54	-	-	Peak
2412	102.57	-	-	94.49	32.89	4.24	29.05	200	39	Peak
2412	90.69	-	-	82.61	32.89	4.24	29.05	200	39	Average

Test Mode :	802.11n-HT20	Temperature :	18~20℃
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
93.113	25.18	-18.32	43.5	45.25	9.51	0.4	29.98	-	-	Peak
184.49	28.21	-15.29	43.5	49.1	8.44	0.57	29.9	-	-	Peak
210.786	25.99	-17.51	43.5	45.9	9.49	0.6	30	-	-	Peak
387.992	24.24	-21.76	46	37.54	15.71	0.84	29.85	-	-	Peak
824.597	39.58	-6.42	46	47.78	20.16	1.26	29.62	175	218	Peak
948.761	29.98	-16.02	46	37.46	20.73	1.33	29.54	-	-	Peak
2437	104.55	-	-	96.38	32.95	4.25	29.03	151	0	Peak
2437	92.39	-	-	84.22	32.95	4.25	29.03	151	0	Average

Test Mode :	802.11n-HT20	Temperature :	18~20℃
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.211	22.28	-17.72	40	34.1	18	0.26	30.08	-	-	Peak
40.702	20.07	-19.93	40	38.23	11.64	0.25	30.05	-	-	Peak
88.964	20.45	-23.05	43.5	41.44	8.61	0.39	29.99	-	-	Peak
588.905	22.22	-23.78	46	32.21	18.58	1.06	29.63	-	-	Peak
824.597	39.37	-6.63	46	47.57	20.16	1.26	29.62	110	35	Peak
948.761	30.09	-15.91	46	37.57	20.73	1.33	29.54	-	-	Peak
2437	100.37	-	-	92.2	32.95	4.25	29.03	193	30	Peak
2437	87.77	-	-	79.6	32.95	4.25	29.03	193	30	Average

Test Mode :	802.11n-HT20	Temperature :	18~20℃
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.211	23.7	-16.3	40	35.52	18	0.26	30.08	-	-	Peak
50.409	27.93	-12.07	40	50.38	7.4	0.28	30.13	-	-	Peak
60.069	25.16	-14.84	40	49.69	5.3	0.31	30.14	-	-	Peak
91.816	25	-18.5	43.5	45.24	9.35	0.39	29.98	-	-	Peak
184.49	27.58	-15.92	43.5	48.47	8.44	0.57	29.9	-	-	Peak
824.597	40.38	-5.62	46	48.58	20.16	1.26	29.62	100	0	Peak
2462	103.53	-	-	95.29	32.98	4.27	29.01	150	0	Peak
2462	91.66	-	-	83.42	32.98	4.27	29.01	150	0	Average

Test Mode :	802.11n-HT20	Temperature :	18~20℃
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
36.509	31.02	-8.98	40	46.66	14.19	0.24	30.07	-	-	Peak
46.34	29.51	-10.49	40	50.49	8.88	0.27	30.13	-	-	Peak
49.533	28.76	-11.24	40	50.86	7.75	0.28	30.13	-	-	Peak
104.903	31.38	-12.12	43.5	49.77	11.15	0.42	29.96	-	-	Peak
824.597	39.86	-6.14	46	48.06	20.16	1.26	29.62	112	24	Peak
948.761	31.15	-14.85	46	38.63	20.73	1.33	29.54	-	-	Peak
2462	96.83	-	-	88.59	32.98	4.27	29.01	200	37	Peak
2462	84.97	-	-	76.73	32.98	4.27	29.01	200	37	Average

2.7 AC Conducted Emission Measurement

2.7.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 KHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

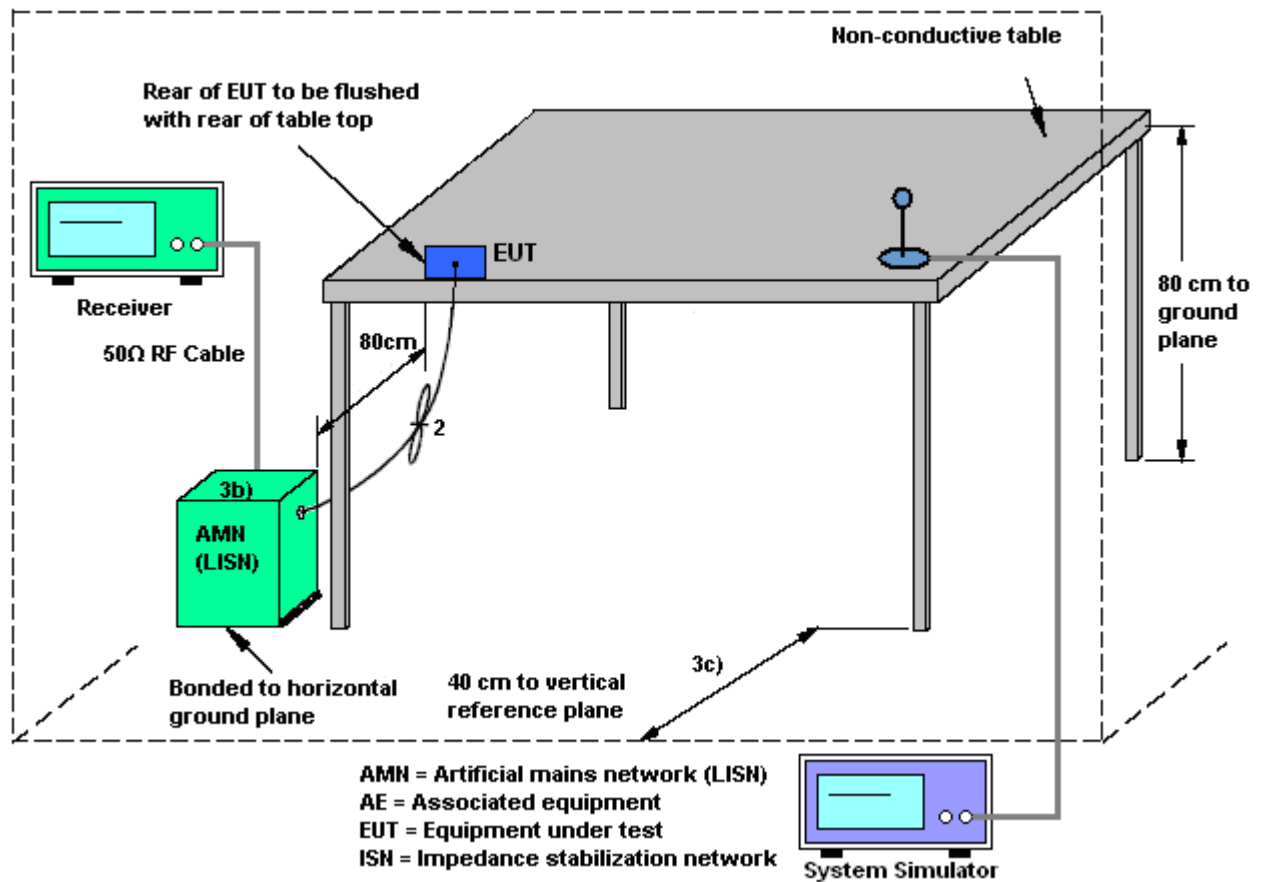
2.7.2 Measuring Instruments

See list of measuring instruments of this test report.

2.7.3 Test Procedures

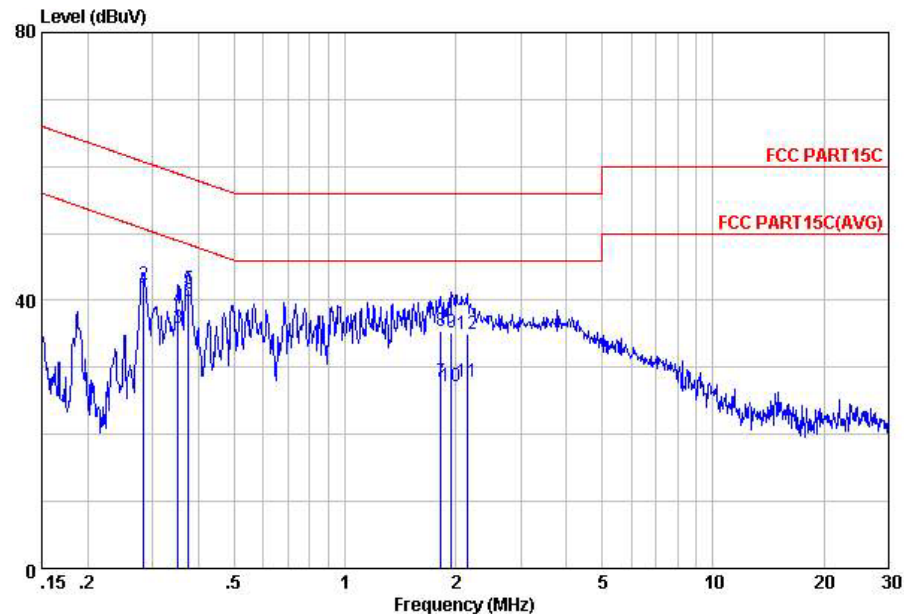
1. The testing follows the guidelines in ANSI C63.4-2003 and ANSI C63.10-2009.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 KHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

2.7.4 Test Setup



2.7.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	19~20°C
Test Engineer :	Tom Wang	Relative Humidity :	39~40%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	CDMA2000 BC1 Idle + Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter)		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

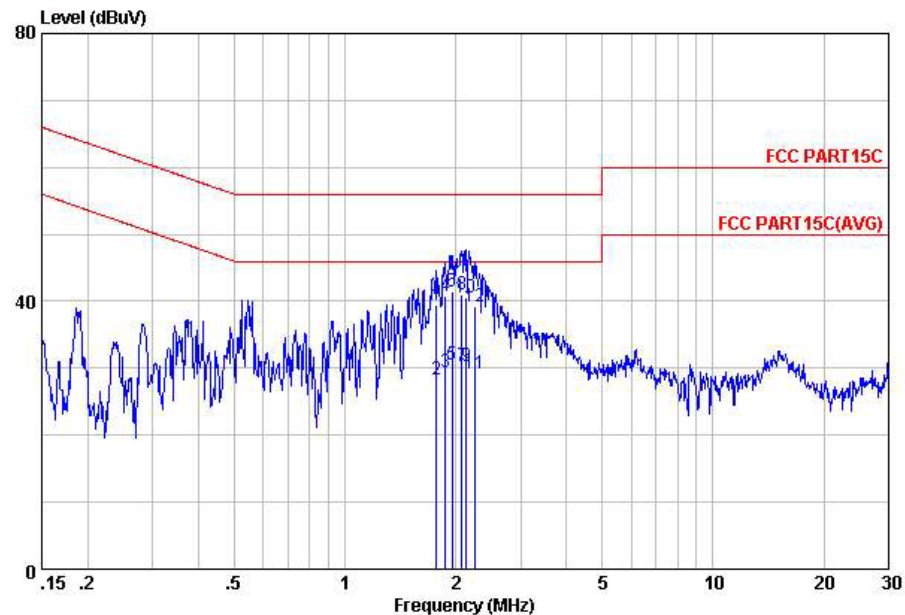


Site : C001-KS
Condition: FCC PART15C LISN-111230 LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.28	40.29	-10.43	50.72	29.80	-0.07	10.56	Average
2	0.28	42.39	-18.33	60.72	31.90	-0.07	10.56	QP
3	0.35	35.83	-13.08	48.91	25.30	-0.08	10.61	Average
4	0.35	38.73	-20.18	58.91	28.20	-0.08	10.61	QP
5	0.38	41.64	-16.75	58.39	31.11	-0.08	10.61	QP
6	0.38	39.84	-8.55	48.39	29.31	-0.08	10.61	Average
7	1.82	27.89	-18.11	46.00	17.30	-0.11	10.70	Average
8	1.82	35.39	-20.61	56.00	24.80	-0.11	10.70	QP
9	1.95	35.19	-20.81	56.00	24.60	-0.11	10.70	QP
10	1.95	27.29	-18.71	46.00	16.70	-0.11	10.70	Average
11	2.14	27.90	-18.10	46.00	17.30	-0.11	10.71	Average
12	2.14	34.90	-21.10	56.00	24.30	-0.11	10.71	QP



Test Mode :	Mode 1	Temperature :	19~20°C
Test Engineer :	Tom Wang	Relative Humidity :	39~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA2000 BC1 Idle + Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter)		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : C001-KS
Condition: FCC PART15C LISN-111230 NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	1.77	39.49	-16.51	56.00	28.91	-0.11	10.69	QP
2	1.77	28.39	-17.61	46.00	17.81	-0.11	10.69	Average
3	1.88	29.39	-16.61	46.00	18.80	-0.11	10.70	Average
4	1.88	40.69	-15.31	56.00	30.10	-0.11	10.70	QP
5	1.96	30.59	-15.41	46.00	20.00	-0.11	10.70	Average
6	1.96	41.49	-14.51	56.00	30.90	-0.11	10.70	QP
7	2.08	30.39	-15.61	46.00	19.80	-0.11	10.70	Average
8	2.08	40.99	-15.01	56.00	30.40	-0.11	10.70	QP
9	2.13	30.30	-15.70	46.00	19.70	-0.11	10.71	Average
10	2.13	40.60	-15.40	56.00	30.00	-0.11	10.71	QP
11	2.25	29.10	-16.90	46.00	18.50	-0.11	10.71	Average
12	2.25	39.20	-16.80	56.00	28.60	-0.11	10.71	QP

2.8 Antenna Requirements

2.8.1 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. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. 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.

2.8.2 Antenna Connected Construction

Non-standard connector used.

2.8.3 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.

3 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 09, 2011	Sep. 20, 2012	Nov. 08, 2012	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 30, 2011	Sep. 20, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 08, 2011	Sep. 20, 2012	Dec. 07, 2012	Radiation (03CH01-KS)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz~30 MHz	Jul. 03, 2012	Sep. 20, 2012	Jul. 02, 2014	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 06, 2012	Sep. 20, 2012	Jan. 05, 2013	Radiation (03CH01-KS)
Amplifier	Wireless	FPA-6592G	060004	30MHz~2GHz	Dec. 30, 2011	Sep. 20, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 30, 2011	Sep. 20, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701023	1GHz~18GHz	Nov. 07, 2011	Sep. 20, 2012	Nov. 06, 2012	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Oct. 11, 2011	Sep. 20, 2012	Oct.10, 2012	Radiation (03CH01-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz	Jun. 01, 2012	Sep. 19, 2012	May 31, 2013	Conduction (CO01-KS)
LISN	MessTec	AN3016	60103	9kHz~30MHz	Dec. 30, 2011	Sep. 19, 2012	Dec. 29, 2012	Conduction (CO01-KS)
LISN	MessTec	AN3016	60105	9kHz~30MHz	Dec. 30, 2011	Sep. 19, 2012	Dec. 29, 2012	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	N/A	Nov. 16, 2011	Sep. 19, 2012	Nov. 15, 2012	Conduction (CO01-KS)
System Simulator	R&S	CMU200	837587/066	2G Full-Band	Dec. 30, 2011	Sep. 19, 2012	Dec. 29, 2012	Conduction (CO01-KS)

4 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.26
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.54
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.72
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Appendix A. Photographs of EUT

Please refer to Sporton report number EP251502-04 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 N861]
[ZTE Corporation]
FDD ID: Q78-ZTEN861

is the variant of the initial certified product,

[ZTE N861]
[ZTE Corporation]
FDD ID: Q78-ZTEN861
[Project Number:12ZTE032]

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: No, but N861 cut glue from the bottom of the antenna as below screen snap, in order to improve MP efficiency.



PCB Layout changes: NO

Components on PCB changes: NO

LCD changes: NO

Speaker changes: NO

Camera changes: YES, new camera vendor.

Vibrator changes: NO

Bluetooth changes: NO

FM changes: NO

Other changes: New LCD FPC chipset.

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: Min Zhang

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