Test Lab
Cert 2951.01

EMC TEST REPORT

Applicant:	ZTE Corporation
Address:	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China

Manufacturer or Supplier	ZTE Corporation
Address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China
Product	Industry Wireless Router
Brand Name	ZTE
Model Name	R800
FCC ID	SRQ-R800
Date of tests	Feb. 08, 2017 ~ Mar. 06, 2017

The submitted sample of the above equipment has been tested for according to the requirements of the following standards:

☒ **FCC Part 15, Subpart B, Class B**
☒ **ANSI C63.4:2014**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Issued by Harry Li Engineer / Mobile Department	Approved by Sam Tung Manager / Mobile Department
 Date: Mar. 08, 2017	 Date: Mar. 08, 2017

Table of Contents

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FV170123W004	Original release	Mar. 08, 2017

1 GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Industry Wireless Router	
BRAND NAME	ZTE	
MODEL NAME	R800	
NOMINAL VOLTAGE	12Vdc (from adapter)	
MODULATION TYPE	**WLAN**	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
	WCDMA	BPSK/QPSK
	LTE	QPSK/16QAM
OPERATING FREQUENCY	**WLAN**	2412 ~ 2462MHz for 11b/g/n(HT20) 2422 ~ 2452MHz for 11n(HT40)
	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA Band 2) 826.4MHz ~ 846.6MHz (FOR WCDMA Band 5)
	LTE	1850.7MHz ~ 1909.3MHz (FOR LTE Band2) 1710.7MHz ~ 1754.3MHz (FOR LTE Band4) 824.7MHz ~ 848.3MHz (FOR LTE Band5) 699.7MHz ~ 715.3MHz (FOR LTE Band12) 706.5MHz ~ 713.5MHz (FOR LTE Band17)
HW VERSION	R800X-V1.1	
SW VERSION	V1.8.8	
I/O PORTS	Refer to user's manual	
CABLE	N/A	
ACCESSORY DEVICES	Refer to note as below	

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT was powered by the following adapter:

ADAPTER	
BRAND:	ZTE
MODEL:	MAU-120100X-D-16
INPUT:	AC 100-240V, 700mA
OUTPUT:	DC 12V, 1000mA

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

1.2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart B			
Standard Section	**Test Item**	**Result**	**Remark**
FCC Part 15, Subpart B, Class B ANSI C63.4:2014	Conducted Test	PASS	Meets limits minimum passing margin is -22.81dB at 0.150000MHz.
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -3.44dB at 58.13MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -15.76dB at 3924MHz

1.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz ~ 30MHz	+/-2.70dB
Radiated emissions	30MHz ~ 1GHz	+/-4.06dB
	1GHz ~ 18GHz	+/-4.58dB

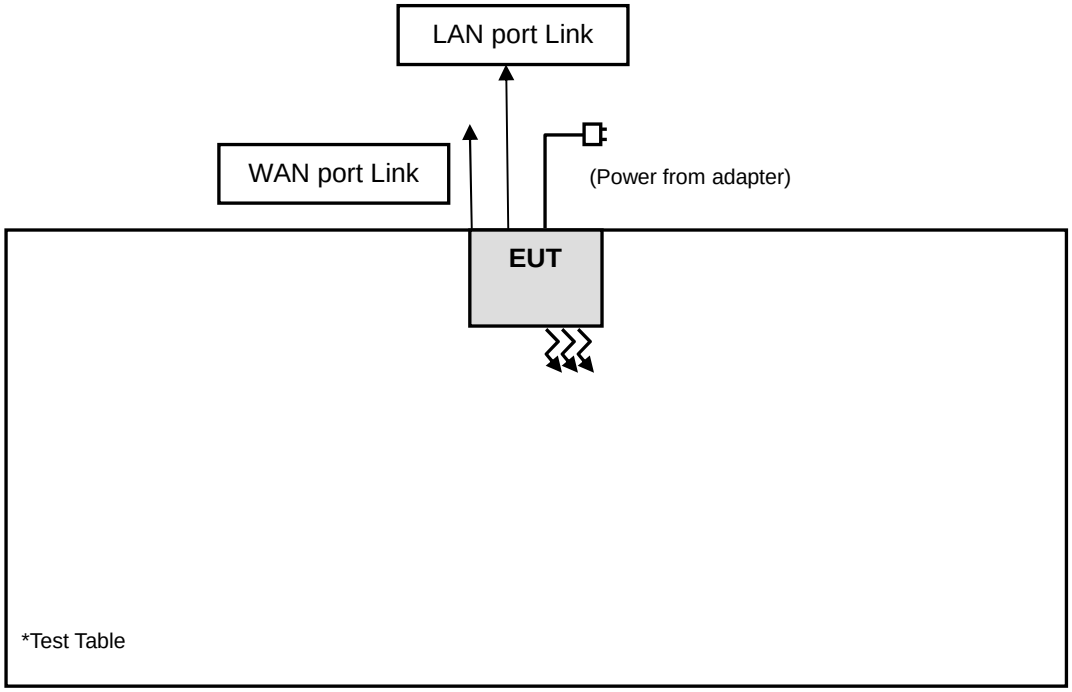
1.4 DESCRIPTION OF TEST MODES

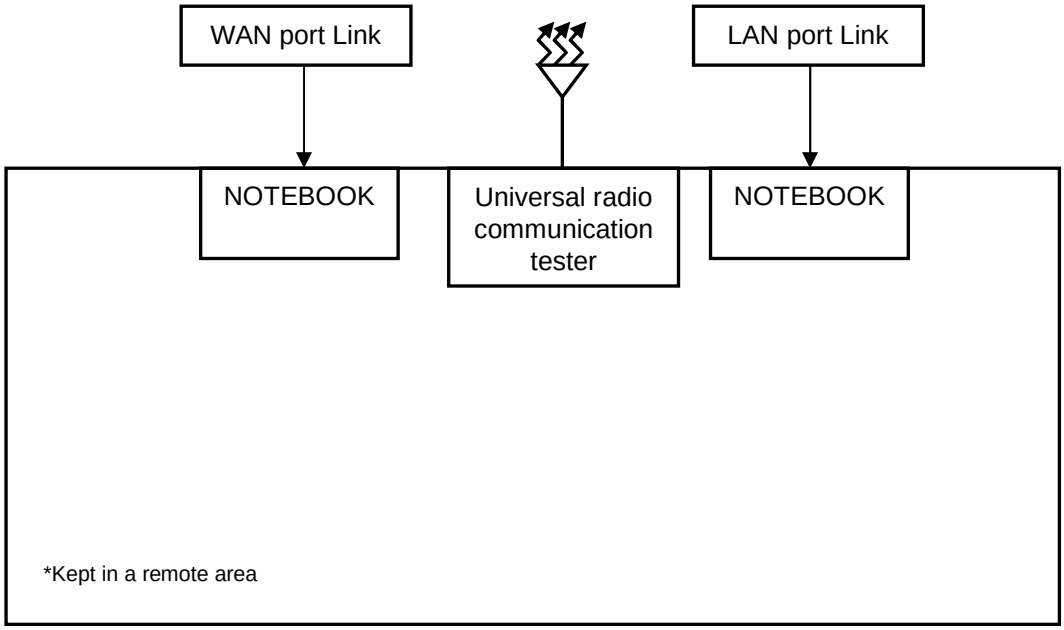
Test Mode	Test Condition
Radiated emission test	
1	WCDMA850 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
2	WCDMA1900 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
3	LTE B2 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
4	LTE B4 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
5	LTE B5 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
6	LTE B12 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
7	LTE B17 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
Conducted emission test	
1	WCDMA850 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
2	WCDMA1900 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
3	LTE B2 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
4	LTE B4 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
5	LTE B5 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
6	LTE B12 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)
7	LTE B17 Idle+Adapter+LAN1 port Link+WAN port Link+WIFI Idle(2.4G)

NOTE:

1. For conducted emission test, test mode 4 was the worst case and only this mode was presented in this report.
2. For radiated emission test, test mode 6 was the worst case and only this mode was presented in this report.

1.5 CONFIGURATION OF SYSTEM UNDER TEST





2 EMISSION TEST

2.1 CONDUCTED EMISSION MEASUREMENT

2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart B (Section: 15.107)

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1.The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

2.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Apr. 05,16	Apr. 04,17
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	Feb. 18, 17	Feb. 17, 18
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	Apr. 05,16	Apr. 04,17
Voltage probe	SCHWARZBECK	TK 9421	TK 9421-176	Jan. 04, 17	Jan. 03, 18
Test software	ADT	ADT_Cond_ V7.3.7	N/A	N/A	N/A

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in Dongguan Shielded Room 553.

3. The FCC Site Registration No. is 502831.

2.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

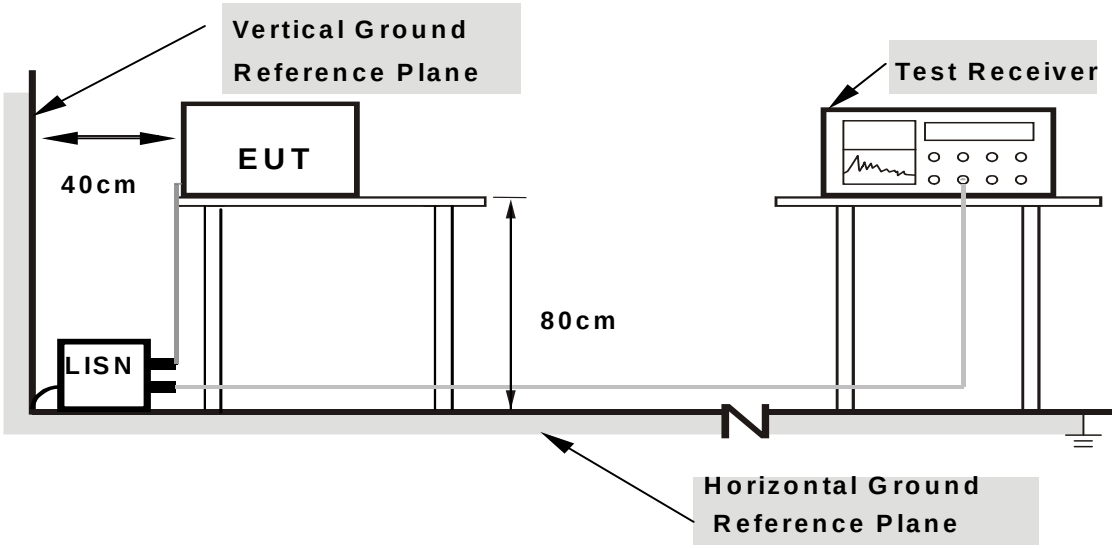
c. The frequency range from 150 kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

2.1.4 DEVIATION FROM TEST STANDARD

No deviation.

2.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

2.1.6 EUT OPERATING CONDITIONS

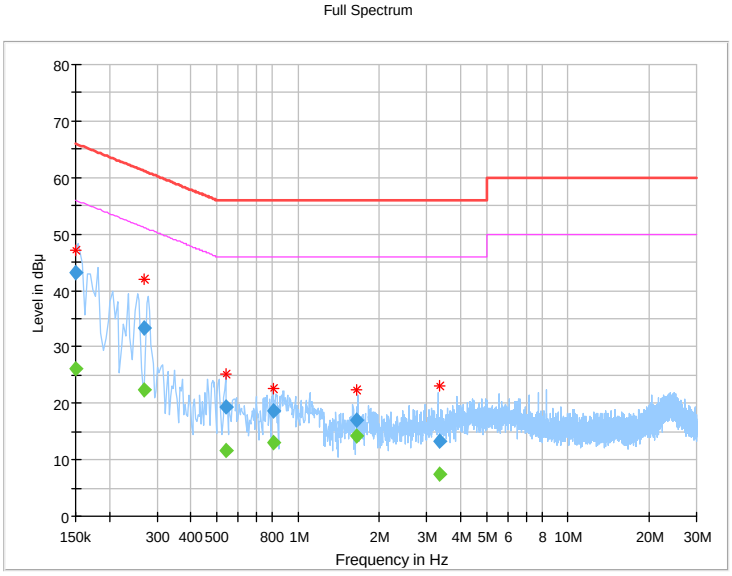
a. Turned on the power and connected of all equipment.
b. EUT was operated according to the use type described in the manufacturer's specifications or the user's manual.

2.1.7 TEST RESULTS

TEST VOLTAGE	Input 120 Vac, 60 Hz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	**TESTED BY**	Alex Chen

Frequency (MHz)	QuasiPeak (dB¦ìV)	CAverage (dB¦ìV)	Limit (dB¦ìV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	26.15	56.00	-29.85	L	ON	9.6
0.150000	**43.19**	**---**	**66.00**	**-22.81**	**L**	**ON**	**9.6**
0.268000	---	22.44	51.18	-28.74	L	ON	9.7
0.268000	33.29	---	61.18	-27.89	L	ON	9.7
0.540000	---	11.64	46.00	-34.36	L	ON	9.7
0.540000	19.39	---	56.00	-36.61	L	ON	9.7
0.812000	---	13.05	46.00	-32.95	L	ON	9.7
0.812000	18.67	---	56.00	-37.33	L	ON	9.7
1.656000	---	14.12	46.00	-31.88	L	ON	9.7
1.656000	16.92	---	56.00	-39.08	L	ON	9.7
3.344000	---	7.52	46.00	-38.48	L	ON	9.7
3.344000	13.25	---	56.00	-42.75	L	ON	9.7

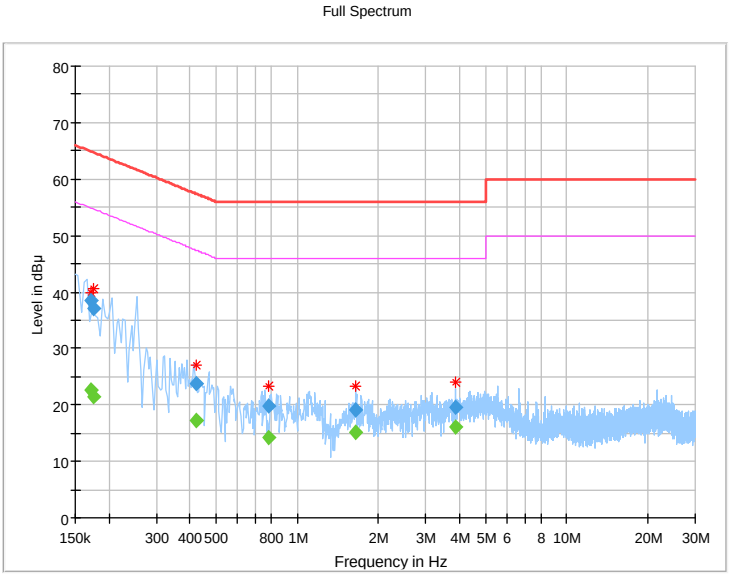
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



TEST VOLTAGE	Input 120 Vac, 60 Hz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	**TESTED BY**	Alex Chen

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.172000	---	22.53	54.86	-32.33	N	ON	10.2
0.172000	38.50	---	64.86	-26.36	N	ON	10.2
0.176000	---	21.42	54.67	-33.25	N	ON	10.2
0.176000	37.04	---	64.67	-27.63	N	ON	10.2
0.420000	---	17.27	47.45	-30.18	N	ON	10.1
0.420000	23.72	---	57.45	-33.73	N	ON	10.1
0.784000	---	14.28	46.00	-31.72	N	ON	10.0
0.784000	19.77	---	56.00	-36.23	N	ON	10.0
1.656000	---	15.09	46.00	-30.91	N	ON	9.9
1.656000	19.24	---	56.00	-36.76	N	ON	9.9
3.868000	---	16.18	46.00	-29.82	N	ON	9.8
3.868000	19.65	---	56.00	-36.35	N	ON	9.8

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



2.2 RADIATED EMISSION MEASUREMENT

2.2.1 Limits of Radiated Emission Measurement

TEST STANDARD: FCC Part 15, Subpart B (Section: 15.109)

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

Radiated Emissions Limits at 10 meters (dBμV/m)				
Frequencies (MHz)	**FCC 15B/ ICES-003, Class A**	**FCC 15B / ICES-003, Class B**	**CISPR 22, Class A**	**CISPR 22, Class B**
30-88	39	29.5	40	30
88-216	43.5	33.1		
216-230	46.4	35.6		
230-960			47	37
960-1000	49.5	43.5		
1000-3000	Avg: 49.5 Peak: 69.5	Avg: 43.5 Peak: 63.5	Not defined	Not defined
3000+			Not defined	Not defined

Radiated Emissions Limits at 3 meters (dBμV/m)				
Frequencies (MHz)	**FCC 15B / ICES-003, Class A**	**FCC 15B / ICES-003, Class B**	**CISPR 22, Class A**	**CISPR 22, Class B**
30-88	49.5	40	50.5	40.5
88-216	54	43.5		
216-230	56.9	46		
230-960			57.5	47.5
960-1000	60	54		
1000-3000	Avg: 60 Peak: 80	Avg: 54 Peak: 74	Avg: 56 Peak: 76	Avg: 50 Peak: 70
3000+			Avg: 60 Peak: 80	Avg: 54 Peak: 74

Frequency Range (For unintentional radiators)

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 40GHz, whichever is lower

NOTE: 1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
4. QP detector shall be applied if not specified.

2.2.2 Test Instruments

Frequency range below 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESCI	100962	Feb. 20, 17	Feb. 19, 18
EMI Test Receiver	Rohde&Schwarz	ESCI	101418	Feb. 20, 17	Feb. 19, 18
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-554	Dec. 17, 16	Dec. 16, 17
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-555	Nov. 13, 16	Nov. 12, 17
Signal Amplifier	Agilent	8447D	2944A10488	Jun. 25,16	Jun. 24, 17
Signal Amplifier	Agilent	8447D	2944A11174	Jun. 25,16	Jun. 24, 17
10m Semi-anechoic Chamber	CHANGLING	21.4m*12.1m*8.8m	NSEMC006	Mar. 12,16	Mar. 11,18
Test Software	ADT	ADT_Radiated_V8.7.x	N/A	N/A	N/A

Frequency range above 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	ETS-Lindgren	3117	00085519	Dec. 30, 15	Dec. 29, 17
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170242	Mar. 12,16	Mar. 11, 17
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101003	Apr. 05,16	Apr. 04, 17
Broadband Preamplifier	SCHWARZBECK	BBV9718	266	Mar. 22,16	Mar. 21, 17
Pre-Amplifier (100MHz-26.5GHz)	EMCI	EMC 012645	980077	May 04,16	May 03, 17
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 04,16	Nov. 03, 17

NOTE: 1. The test was performed in 10m chamber.

2. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

3. The FCC Site Registration No. is 502831.

2.2.3 Test Procedure

<Frequency Range below 1GHz>

The basic test procedure was in accordance with ANSI C63.4:2014 (section 12).

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.

NOTE:

1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
3. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
4. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
5. Margin value = Emission level – Limit value.

<Frequency Range above 1GHz>

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter fully-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. The bore sight should be used during the test above 1GHz.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz

NOTE:

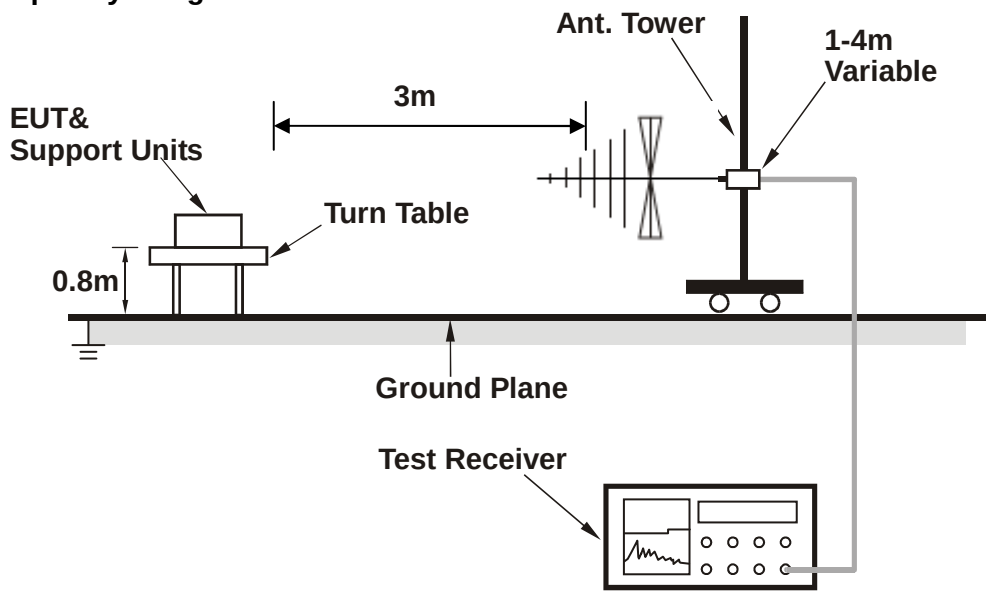
1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Average detection (AV) at frequency above 1GHz.
3. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.
4. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
5. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
6. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier)
7. Margin value = Emission level – Limit value.

2.2.4 DEVIATION FROM TEST STANDARD

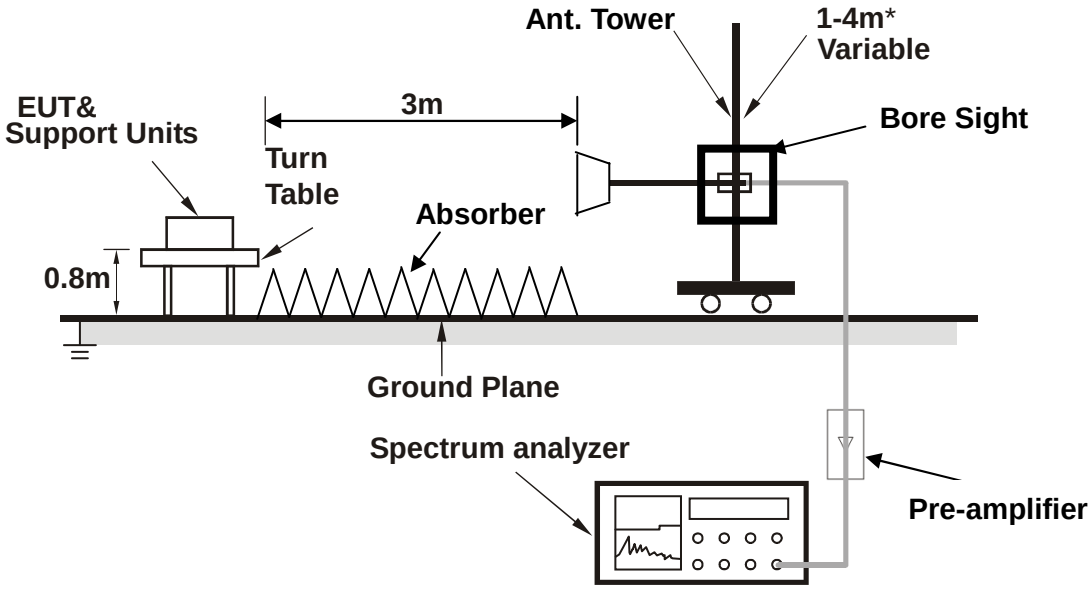
No deviation.

2.2.5 Test Setup

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



***** : depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

2.2.6 EUT OPERATING CONDITIONS

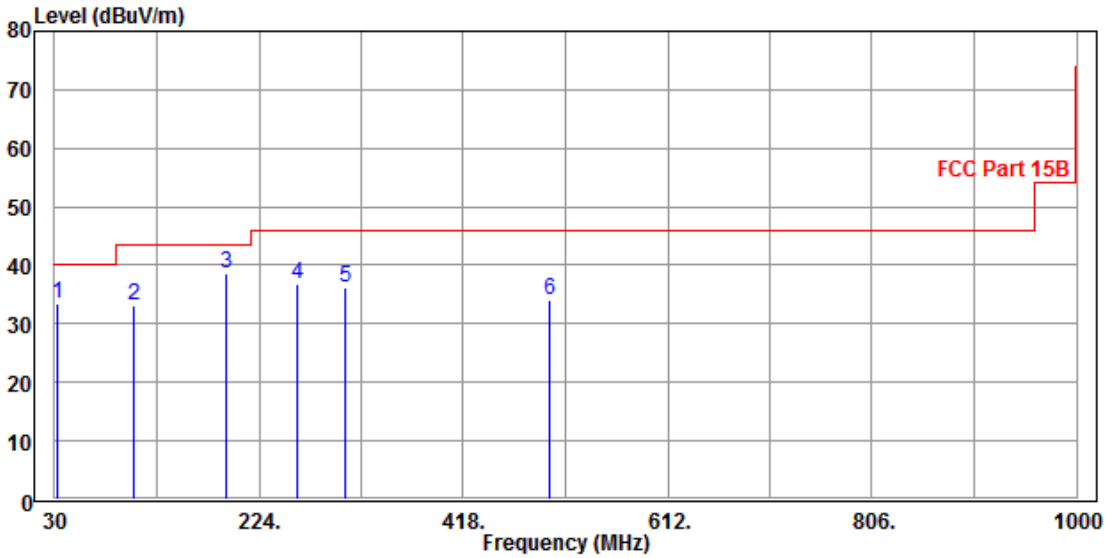
Same as item 2.1.6.

2.2.7 TEST RESULTS

TEST VOLTAGE	Input 120 Vac, 60 Hz	**FREQUENCY RANGE**	30-1000 MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	**DETECTOR FUNCTION & RESOLUTION BANDWIDTH**	Quasi-Peak , 120 kHz
TESTED BY	Tony Zou		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
31.94	33.35	54.31	40.00	-6.65	15.76	0.82	37.54	200	35	QP
104.69	33.10	60.67	43.50	-10.40	7.84	1.57	36.98	200	72	QP
192.96	38.67	63.10	43.50	-4.83	10.03	2.13	36.59	200	148	QP
259.89	36.81	58.31	46.00	-9.19	12.52	2.50	36.52	200	173	QP
306.45	36.25	56.74	46.00	-9.75	13.27	2.75	36.51	200	280	QP
500.45	34.07	49.16	46.00	-11.93	18.41	3.46	36.96	200	210	QP

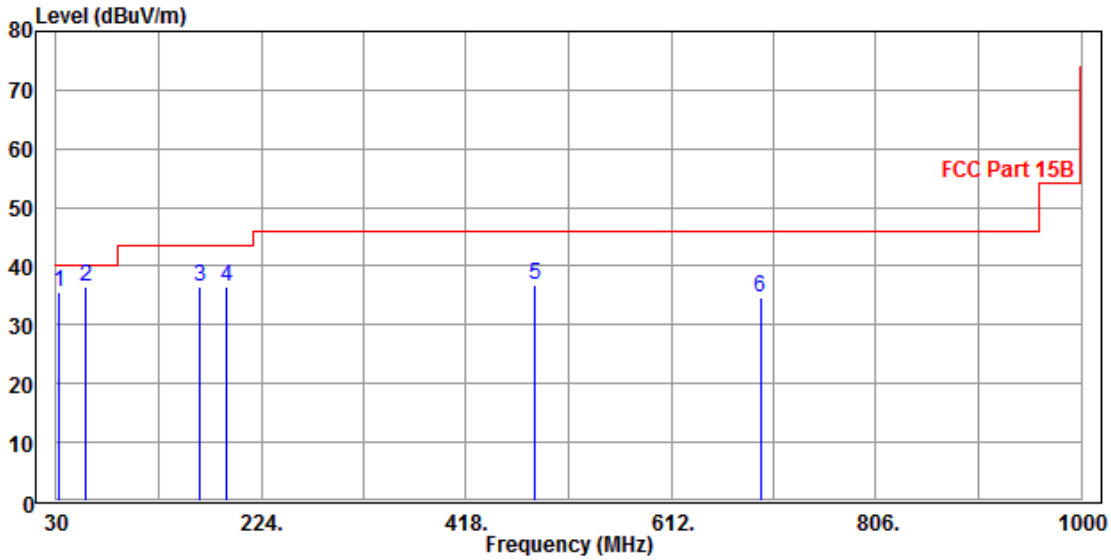
REMARKS:
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30MHz to 1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



TEST VOLTAGE	Input 120 Vac, 60 Hz	**FREQUENCY RANGE**	30-1000 MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	**DETECTOR FUNCTION & RESOLUTION BANDWIDTH**	Quasi-Peak , 120 kHz
TESTED BY	Tony Zou		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
31.94	35.62	56.58	40.00	-4.38	15.76	0.82	37.54	100	32	QP
58.13	**36.56**	**66.31**	**40.00**	**-3.44**	**6.42**	**1.16**	**37.33**	**100**	**49**	QP
165.8	36.54	61.19	43.50	-6.96	10.11	1.97	36.73	100	124	QP
191.02	36.43	60.91	43.50	-7.07	10.01	2.12	36.61	100	196	QP
482.99	36.84	52.15	46.00	-9.16	18.20	3.41	36.92	100	248	QP
696.39	34.75	44.84	46.00	-11.25	23.00	4.27	37.36	100	63	QP

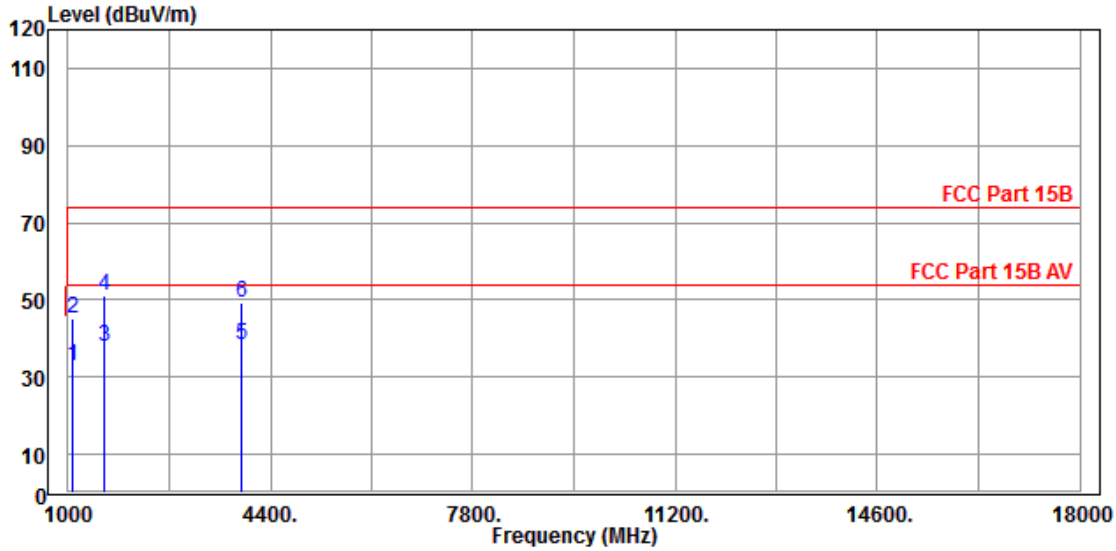
REMARKS:
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30MHz to 1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



TEST VOLTAGE	Input 120 Vac, 60 Hz	**FREQUENCY RANGE**	1-18 GHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	**DETECTOR FUNCTION & RESOLUTION BANDWIDTH**	Peak/Average, 1 MHz
TESTED BY	Tony Zou		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
1068	32.78	46.70	54.00	-21.22	29.13	5.31	48.36	100	48	Average
1068	44.95	58.87	74.00	-29.05	29.13	5.31	48.36	100	48	Peak
1595	37.95	50.47	54.00	-16.05	29.31	6.53	48.36	100	100	Average
1595	51.30	63.82	74.00	-22.70	29.31	6.53	48.36	100	100	Peak
3924	**38.24**	**42.43**	**54.00**	**-15.76**	**33.68**	**10.68**	**48.55**	**100**	**176**	Average
3924	49.09	53.28	74.00	-24.91	33.68	10.68	48.55	100	176	Peak

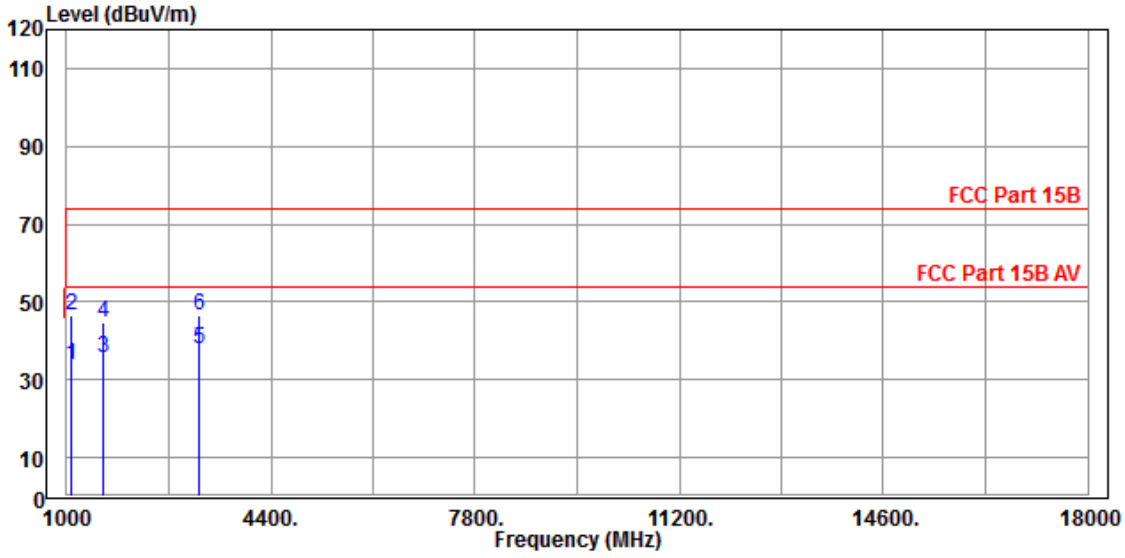
REMARKS:
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 1GHz to 18GHz.
4. Only emissions significantly above equipment noise floor are reported.



TEST VOLTAGE	Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Tony Zou		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
1068	33.68	47.60	54.00	-20.32	29.13	5.31	48.36	100	30	Average
1068	46.60	60.52	74.00	-27.40	29.13	5.31	48.36	100	30	Peak
1595	35.78	48.30	54.00	-18.22	29.31	6.53	48.36	100	125	Average
1595	44.75	57.27	74.00	-29.25	29.31	6.53	48.36	100	125	Peak
3193	37.68	43.60	54.00	-16.32	32.94	9.50	48.36	100	256	Average
3193	46.37	52.29	74.00	-27.63	32.94	9.50	48.36	100	256	Peak

REMARKS:
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 1GHz to 18GHz.
4. Only emissions significantly above equipment noise floor are reported.



3 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications were made to the EUT by the lab during the test.

---END---