



FCC Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : LTE/Multi-Mode Digital Mobile Phone
BRAND NAME : ZTE
MODEL NAME : ZTE A2020U Pro
FCC ID : SRQ-A2020UPRO
STANDARD : 47 CFR Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on Jun. 10, 2019 and testing was completed on Jul. 25, 2019. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 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.

Jason Jia

Reviewed by: Jason Jia / Supervisor

James Huang

Approved by: James Huang / Manager



Sporton International (Kunshan) Inc.

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China



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 of Equipment Under Test 6

 1.5. Modification of EUT 7

 1.6. Test Location 8

 1.7. Applicable Standards 8

2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST 9

 2.1. Test Mode 9

 2.2. Connection Diagram of Test System 11

 2.3. Support Unit used in test configuration and system 12

 2.4. EUT Operation Test Setup 12

3. TEST RESULT 13

 3.1. Test of AC Conducted Emission Measurement 13

 3.2. Test of Radiated Emission Measurement 17

4. LIST OF MEASURING EQUIPMENT 21

5. UNCERTAINTY OF EVALUATION 22

APPENDIX A. SETUP PHOTOGRAPHS



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC961010	Rev. 01	Initial issue of report	Aug. 13, 2019



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 4.33 dB at 0.154 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 3.04 dB at 51.340 MHz for Quasi-Peak



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	LTE/Multi-Mode Digital Mobile Phone
Brand Name	ZTE
Model Name	ZTE A2020U Pro
FCC ID	SRQ-A2020UPRO
EUT supports Radios application	GSM/WCDMA/LTE/NFC WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11 a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE FM Receiver /GNSS
IMEI Code	Conduction: 866550040000025 for Sample 1 866550040006964/866550040007467 for Sample 2 Radiation: 866550040000058 for Sample 1 866550040000033 for Sample 1 866550040006949/866550040007442 for Sample 2
HW Version	twfB
SW Version	GEN_NA_A2020U_PROV1.0
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two types of EUT sample 1 and sample 2, the differences between two samples are only for SIM slot and memory, sample 1 is single SIM slot, sample 2 is dual SIM slot. After pre-scan two types of EUT, we found test result of the sample 1 was the worst, so we chose sample 1 for full tests, sample 2 verify the worst mode of sample 1.



1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 25 : 1850.7 MHz ~ 1914.3 MHz LTE Band 26 : 814.7 MHz ~ 848.3 MHz LTE Band 30 : 2307.5 MHz ~ 2312.5 MHz LTE Band 38 : 2572.5 MHz ~ 2617.5 MHz LTE Band 41 : 2537.5 MHz ~ 2652.5 MHz LTE Band 66 : 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Rx Frequency	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band IV : 2112.4 MHz ~ 2152.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5 MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 25 : 1930.7 MHz ~ 1994.3 MHz LTE Band 26 : 859.7 MHz ~ 893.3 MHz LTE Band 29 : 718.5 MHz ~ 726.5 MHz LTE Band 30 : 2352.5 MHz ~ 2357.5 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41 : 2537.5 MHz ~ 2652.5 MHz LTE Band 66 : 2110.7 MHz~ 2199.3 MHz LTE Band 71: 619.5 MHz ~ 649.5MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS : 1559 MHz ~ 1610 MHz



	NFC : 13.56 MHz
Antenna Type	WWAN : PIFA Antenna WLAN : IFA Antenna Bluetooth : IFA Antenna GNSS: PIFA Antenna NFC : Loop Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA : BPSK (Uplink) HSDPA/DC-HSDPA : QPSK (Uplink) HSUPA : QPSK (Uplink) HSPA+ : 16QAM (16QAM uplink is not supported) DC-HSDPA : 64QAM LTE: QPSK / 16QAM / 64QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n/ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : BPSK NFC: ASK

Note: GNSS = GLONASS + GPS

1.5. Modification of EUT

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



1.6. Test Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-KS 03CH06-KS	CN1257	314309

1.7. Applicable Standards

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

- ♦ 47 CFR Part 15 Subpart B
- ♦ ANSI C63.4-2014

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

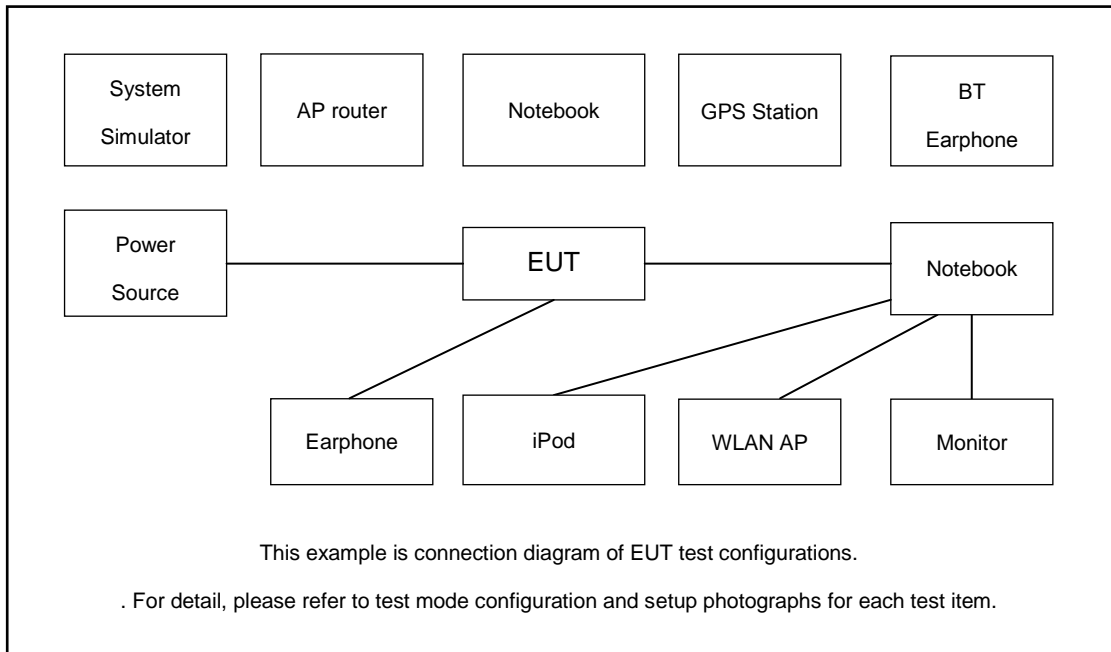
Test Items	Function Type
AC Conducted Emission	Mode 1: GSM850 Rx(Middle) + Bluetooth Idle + WLAN Idle(2.4G) + Camera(Rear) + USB Cable 1(Charging from Adapter) for Sample 1
	Mode 2: PCS 1900 Rx + Bluetooth Idle + WLAN Idle(5G) + Camera(Front) + USB Cable 2(Charging from Adapter) for Sample 1
	Mode 3: LTE Band 13 Rx(High) + Bluetooth Idle + WLAN Idle(2.4G) + MPEG4 + USB Cable 1(Charging from Adapter) for Sample 1
	Mode 4: LTE Band 14 Rx(High) + Bluetooth Idle + WLAN Idle(5G) + NFC On + USB Cable 1(Charging from Adapter) for Sample 1
	Mode 5: LTE Band 26 Rx(Low) + Bluetooth Idle + WLAN Idle(2.4G) + GNSS Rx + USB Cable 1(Data Link with Notebook) for Sample 1
	Mode 6: LTE Band 12 Rx(Middle) + Bluetooth Idle + WLAN Idle(5G) + GNSS Rx + USB Cable 2(Data Link with Notebook) for Sample 1
	Mode 7: LTE Band 71 Rx(Middle) + Bluetooth Idle + WLAN Idle(2.4G) + Camera(Rear) + USB Cable 1(Charging from Adapter) for Sample 1
	Mode 8: LTE Band 12 Rx(Middle) + Bluetooth Idle + WLAN Idle(5G) + GNSS Rx + USB Cable 2(Data Link with Notebook) for Sample 2
Radiated Emissions	Mode 1: GSM850 Rx(Middle) + Bluetooth Idle + WLAN Idle(2.4G) + Camera(Rear) + USB Cable 1(Charging from Adapter) for Sample 1
	Mode 2: PCS 1900 Rx + Bluetooth Idle + WLAN Idle(5G) + Camera(Front) + Type-c cable + Earphone 1 for Sample 1
	Mode 3: LTE Band 13 Rx(High) + Bluetooth Idle + WLAN Idle(2.4G) + MPEG4 + Type-c cable + Earphone 2 for Sample 1
	Mode 4: LTE Band 17 Rx(High) + Bluetooth Idle + WLAN Idle(5G) + NFC On + USB Cable 2(Charging from Adapter) for Sample 1
	Mode 5: LTE Band 26 Rx(Low) + Bluetooth Idle + WLAN Idle(2.4G) + GNSS Rx + USB Cable 1(Data Link with Notebook) for Sample 1
	Mode 6: LTE Band 12 Rx(Middle) + Bluetooth Idle + WLAN Idle(5G) + GNSS Rx + USB Cable 2(Data Link with Notebook) for Sample 1
	Mode 7: LTE Band 71 Rx(Middle) + Bluetooth Idle + WLAN Idle(2.4G) + NFC On + USB Cable 2(Charging from Adapter) for Sample 1
	Mode 8: LTE Band 26 Rx(Low) + Bluetooth Idle + WLAN Idle(5G) + GNSS Rx + USB Cable 1(Data Link with Notebook) for Sample 2



Remark:

1. The worst case of AC is mode 1; only the test data of this mode is reported.
2. The worst case of RE is mode 4; only the test data of this mode is reported.
3. Data Link with Notebook means data application transferred mode between EUT and Notebook.
4. Pre-scanned Low/Middle/High channel for GSM850/LTE Band 12/13/14/17/26/71, FM Rx, the worst channel was recorded in this report.

2.2.Connection Diagram of Test System



2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritus	MT8820C	N/A	N/A	Unshielded, 1.8m
3.	Signal Generator	R&S	SMBV100A	258305	N/A	Unshielded, 1.8m
4.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
5.	WLAN AP	ASUS	AC66U	N/A	N/A	Unshielded, 1.8m
6.	WLAN AP	TP-Link	TL-WDR5600	N/A	N/A	Unshielded, 1.8m
7.	Notebook	Lenovo	G480	PRC4	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
8.	Notebook	Thimnkpapad	PF034R7N	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
9.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
10.	Bluetooth Earphone	Xiaomi	LYEJ02LM	N/A	N/A	N/A
11.	iPod	Apple	A1199	Fcc DoC	Shielded, 1.2m	N/A
12.	SD Card	Kingston	SDC4/4GB	N/A	N/A	N/A
13.	SD Card	SanDisk	Uitra	N/A	N/A	N/A
14.						

2.4. EUT Operation Test Setup

The EUT was in GSM or LTE idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between notebook and EUT via USB cable.
2. Turn on GNSS function to make the EUT receive continuous signals from GNSS station.
3. Turn on MPEG4 function.
4. Turn on camera to capture images.
5. Turn on FM function to make the EUT receive continuous signals from FM Generator.
6. Turn on NFC function.



3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits 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.

<Class B Limit>

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.

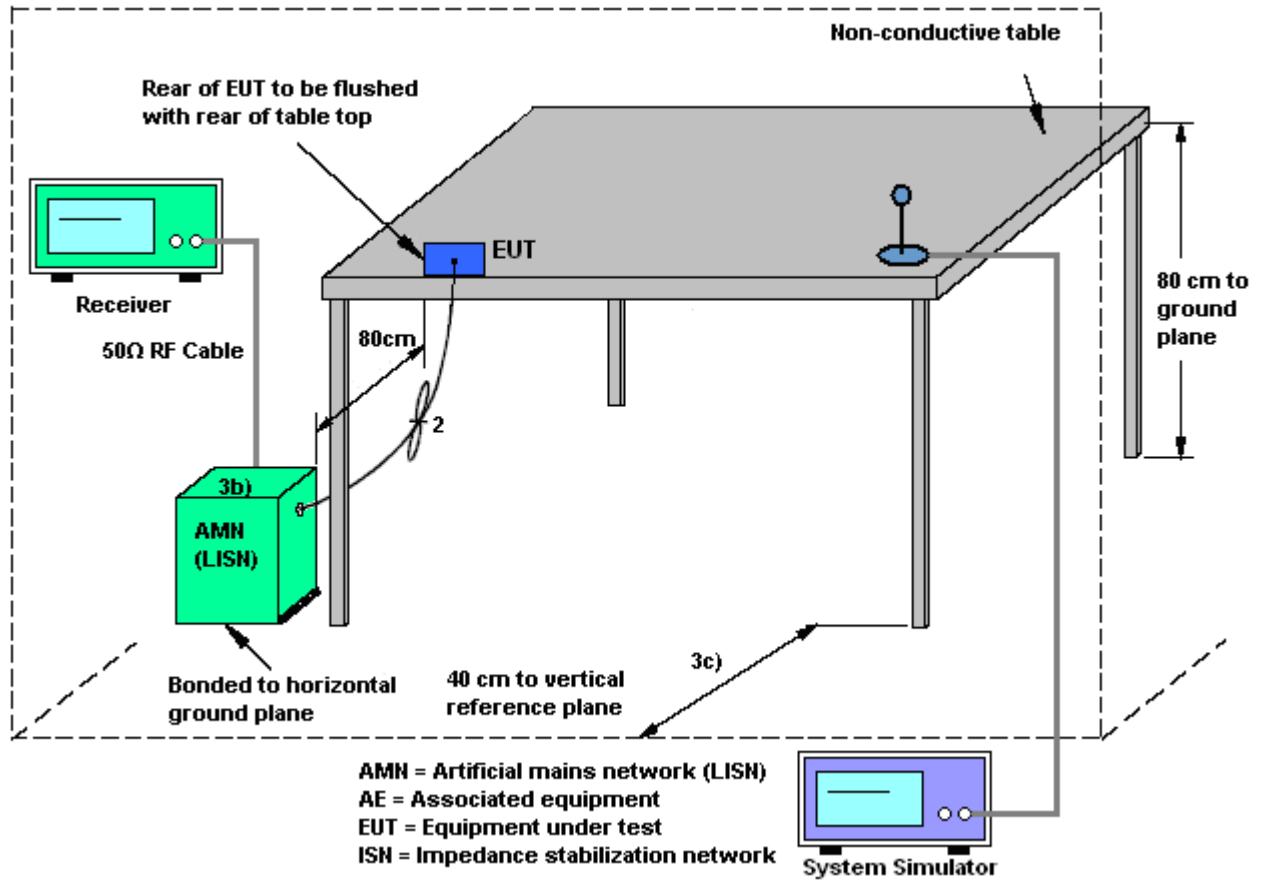
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

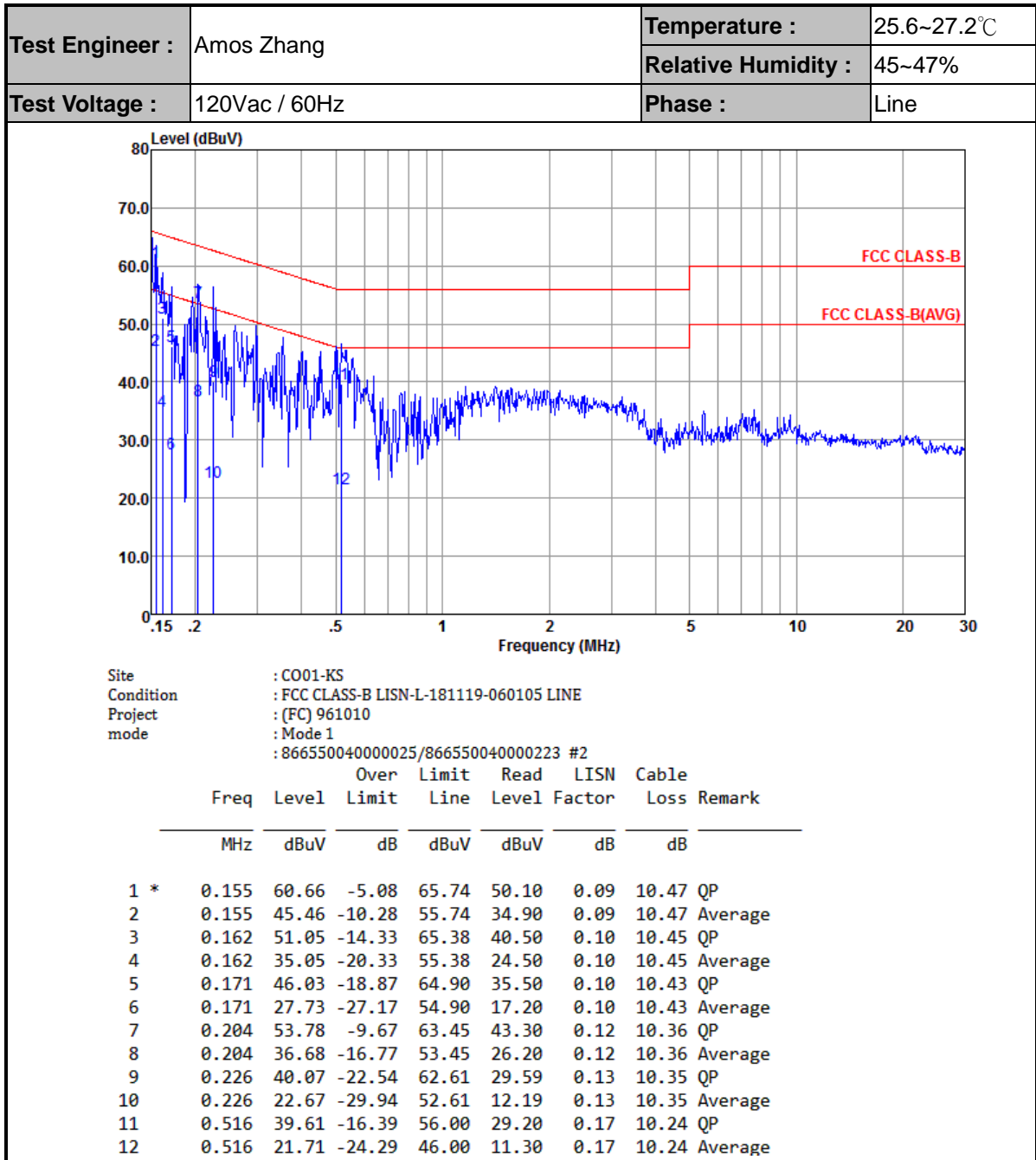
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.1.4 Test Setup



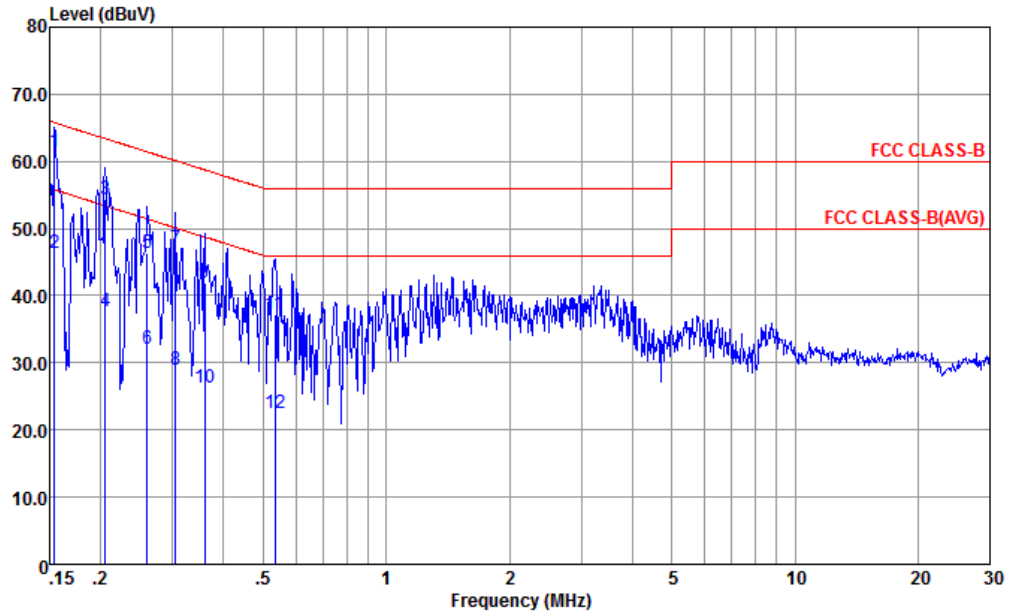


3.1.5 Test Result of AC Conducted Emission





Test Engineer :	Amos Zhang	Temperature :	25.6~27.2°C
		Relative Humidity :	45~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-KS
 Condition : FCC CLASS-B LISN-N-181119-060105 NEUTRAL
 Project : (FC) 961010
 mode : Mode 1
 : 866550040000025/866550040000223 #2

	Freq	Level	Over Limit	Limit	Read	LISN	Cable	Loss	Remark
	MHz	dBuV		dB	dBuV	dB		dB	
1 *	0.154	61.45	-4.33	65.78	50.80	0.18	10.47	QP	
2	0.154	46.45	-9.33	55.78	35.80	0.18	10.47	Average	
3	0.205	54.33	-9.07	63.40	43.80	0.17	10.36	QP	
4	0.205	37.73	-15.67	53.40	27.20	0.17	10.36	Average	
5	0.260	46.29	-15.13	61.42	35.79	0.17	10.33	QP	
6	0.260	32.09	-19.33	51.42	21.59	0.17	10.33	Average	
7	0.305	47.07	-13.03	60.10	36.60	0.16	10.31	QP	
8	0.305	28.97	-21.13	50.10	18.50	0.16	10.31	Average	
9	0.360	41.94	-16.80	58.74	31.50	0.16	10.28	QP	
10	0.360	26.34	-22.40	48.74	15.90	0.16	10.28	Average	
11	0.535	37.18	-18.82	56.00	26.79	0.15	10.24	QP	
12	0.535	22.58	-23.42	46.00	12.19	0.15	10.24	Average	



3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B Limit>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2. Measuring Instruments

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

3.2.3. Test Procedures

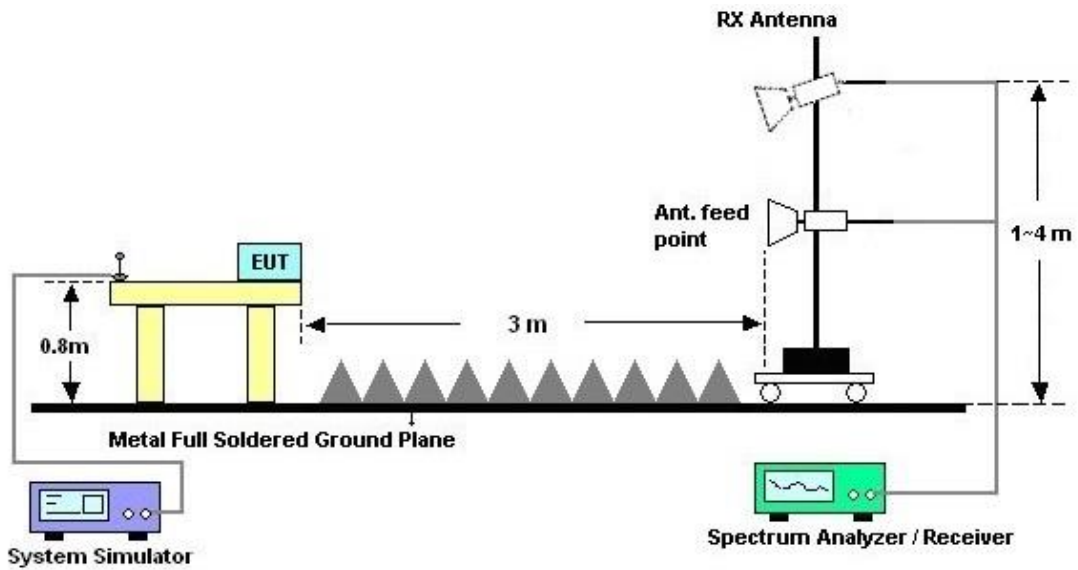
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. 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.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dBµV/m) = 20 log Emission level (µV/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



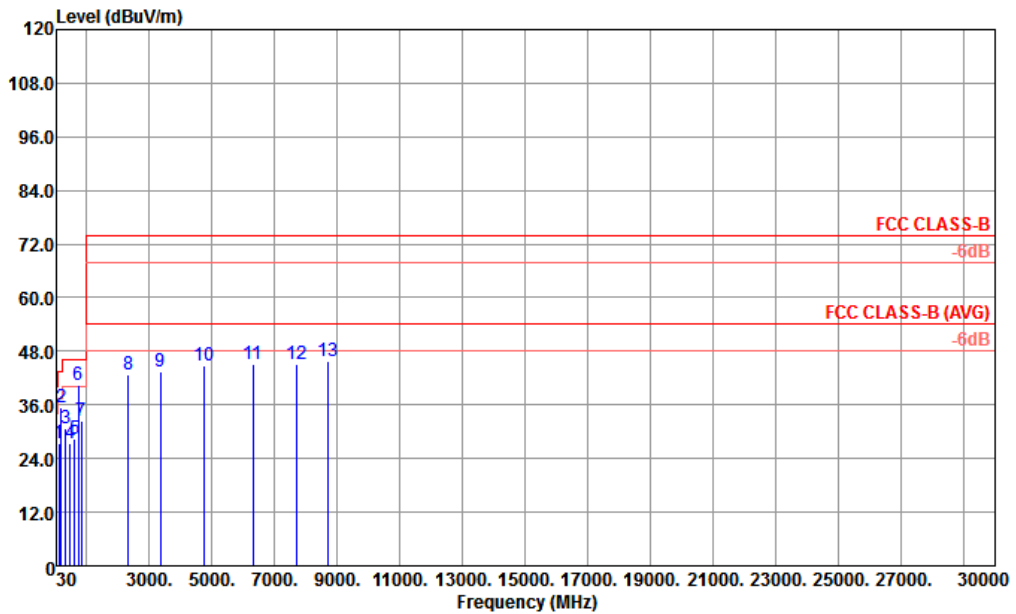
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Engineer :	Jack Guo	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#6 is system simulator signal which can be ignored.		

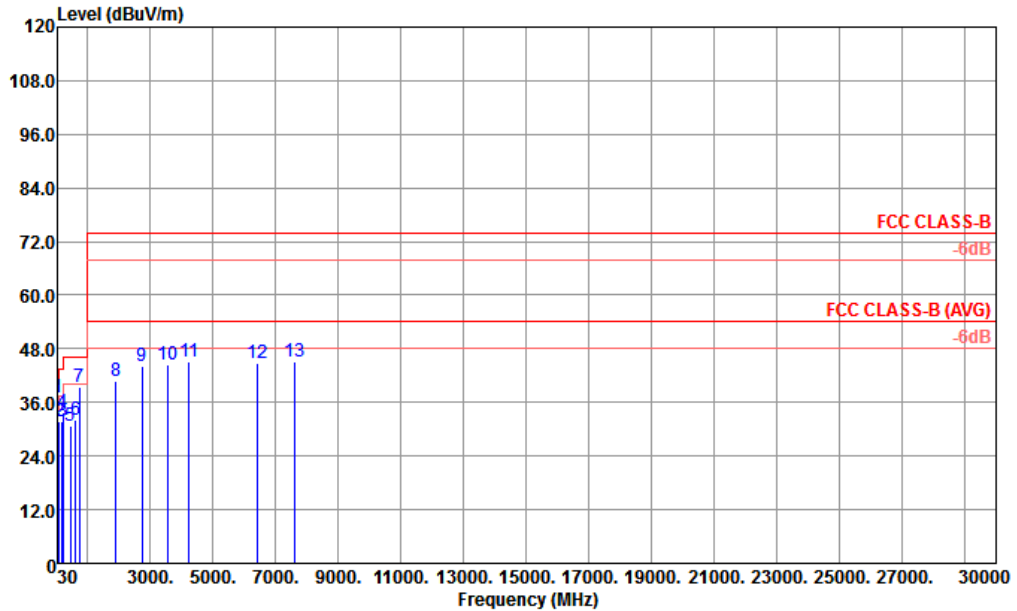


Site : 03CH06-KS
 Condition : FCC CLASS-B 3m LF 49922-3M HORIZONTAL
 Project : (FC)961010
 Mode : 4
 IMEI : 866550040000033/231 #8

	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	108.57	27.41	-16.09	43.50	41.77	16.37	1.20	31.93	---	---	Peak
2	174.53	35.33	-8.17	43.50	49.55	16.17	1.53	31.92	100	0	Peak
3	325.85	30.61	-15.39	46.00	40.63	19.98	2.04	32.04	---	---	Peak
4	469.41	27.49	-18.51	46.00	33.80	23.48	2.45	32.24	---	---	Peak
5	606.18	28.27	-17.73	46.00	31.85	26.07	2.75	32.40	---	---	Peak
6 !	741.01	40.54			41.51	28.18	3.12	32.27	---	---	Peak
7	834.13	32.46	-13.54	46.00	32.08	28.95	3.32	31.89	---	---	Peak
8	2328.00	42.95	-31.05	74.00	39.25	31.16	5.53	32.99	---	---	Peak
9	3360.00	43.57	-30.43	74.00	36.53	32.42	6.79	32.17	---	---	Peak
10	4736.00	44.70	-29.30	74.00	34.48	33.63	8.05	31.46	---	---	Peak
11	6312.00	45.19	-28.81	74.00	32.19	35.11	9.45	31.56	---	---	Peak
12	7704.00	44.96	-29.04	74.00	30.21	36.16	10.60	32.01	---	---	Peak
13	8712.00	45.68	-28.32	74.00	29.52	36.37	11.52	31.73	---	---	Peak



Test Engineer :	Jack Guo	Temperature :	21~22°C
		Relative Humidity :	41~42%
Test Distance :	3m	Polarization :	Vertical
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-KS
 Condition : FCC CLASS-B 3m LF 49922-3M VERTICAL
 Project : (FC)961010
 Mode : 4
 IMEI : 866550040000033/231 #8

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 !	51.34	36.96	-3.04	40.00	53.62	14.44	0.84	31.94	100	250 QP
2	97.90	31.81	-11.69	43.50	46.64	15.96	1.14	31.93	---	Peak
3	173.56	31.69	-11.81	43.50	45.87	16.21	1.53	31.92	---	Peak
4	202.66	33.61	-9.89	43.50	48.55	15.31	1.65	31.90	---	Peak
5	450.98	30.88	-15.12	46.00	37.60	23.12	2.38	32.22	---	Peak
6	607.15	32.18	-13.82	46.00	35.74	26.08	2.76	32.40	---	Peak
7	741.01	39.52			40.49	28.18	3.12	32.27	---	Peak
8	1896.00	40.86	-33.14	74.00	39.84	29.53	4.95	33.46	---	Peak
9	2744.00	44.23	-29.77	74.00	38.38	32.25	6.02	32.42	---	Peak
10	3560.00	44.30	-29.70	74.00	36.42	32.66	7.04	31.82	---	Peak
11	4224.00	45.23	-28.77	74.00	35.71	33.74	7.67	31.89	---	Peak
12	6432.00	44.86	-29.14	74.00	31.73	35.18	9.54	31.59	---	Peak
13	7624.00	45.26	-28.74	74.00	30.64	36.17	10.45	32.00	---	Peak



4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 16, 2019	Jun. 25, 2019	Apr. 15, 2020	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 12, 2018	Jun. 25, 2019	Oct. 11, 2019	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Nov. 19, 2018	Jun. 25, 2019	Nov. 18, 2019	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2018	Jun. 25, 2019	Oct. 11, 2019	Conduction (CO01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400023	3Hz~8.5GHz;M ax 30dBm	Oct. 12, 2018	Jul. 25, 2019	Oct. 11, 2019	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44GHz	Apr. 16, 2019	Jul. 25, 2019	Apr. 18, 2020	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 28, 2018	Jul. 25, 2019	Dec. 27, 2019	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 20, 2018	Jul. 25, 2019	Oct. 19, 2019	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2019	Jul. 25, 2019	Jan. 04, 2020	Radiation (03CH06-KS)
Amplifier	MITEQ	TTA1840-35-H G	2014749	18~40GHz	Jan. 14, 2019	Jul. 25, 2019	Jan. 13, 2020	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Aug. 06, 2018	Jul. 25, 2019	Aug. 05, 2019	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270203	500MHz~26.5G Hz	Apr. 15, 2019	Jul. 25, 2019	Apr. 14, 2020	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 25, 2019	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 25, 2019	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 25, 2019	NCR	Radiation (03CH06-KS)

NCR: No Calibration Required



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.9dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------