



FCC Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2025-1
FCC ID : IHDT56YE1
STANDARD : 47 CFR Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on May 14, 2019 and testing was completed on May 31, 2019. We, Sporton International (ShenZhen) 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 (ShenZhen) Inc., the test report shall not be reproduced except in full.

Derreck Chen

Reviewed by: Derreck Chen / Supervisor

Eric Shih

Approved by: Eric Shih / Manager



Sporton International (ShenZhen) Inc.

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People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC951427	Rev. 01	Initial issue of report	Jun. 21, 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 6.11 dB at 0.490 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 4.62 dB at 345.250 MHz



1. General Description

1.1. Applicant

Motorola Mobility LLC

222 W,Merchandise Mart Plaza,Chicago,IL60654 USA

1.2. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2025-1
FCC ID	IHDT56YE1
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/ HSPA+(16QAM uplink is not supported)/LTE WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth BR/EDR/LE FM Receiver/GNSS
IMEI Code	Conduction: 354170100019630/354170100024689 Radiation: 354170100019572/354170100024622 for sample1 354171100007617 for sample2 354171100005819 for sample3 354170100032690/354170100034696 for sample4
HW Version	V1.2
SW Version	PTA29.29
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 four types of EUT, the differences between them are for memory, sample 1/2 is 2+32GB capacity and sample 3/4 is 4+64GB capacity. And sample 1/4 is dual SIM card, sample 2/3 is single SIM card. According to the difference, we choose sample 1 to perform full tests and sample 2/3/4 is verified difference with the sample 1 for Radiation.

1.3. 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 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 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 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS : 1559 MHz ~ 1610 MHz
Antenna Type	WWAN : LOOP Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna GNSS: PIFA Antenna FM : External Handset 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 (uplink is not supported) DC-HSDPA : 64QAM LTE: QPSK / 16QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : BPSK FM

GNSS = Galileo + GLONASS + GPS



1.4. Modification of EUT

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

1.5. Test Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan Shenzhen, 518055 People's Republic of China TEL: +86-755-33202398		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH03-SZ	CN1256	421272

1.6. 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.

1.7. Specification of Accessory

Specification of Accessory			
AC Adapter 1(US)	Brand Name	Motorola(Achel)	Model Name SC-61
	Power Rating	I/P: 100-240 Vac, 130mA, O/P: 5Vdc, 1000mA	
AC Adapter 1(AR)	Brand Name	Motorola(Achel)	Model Name SC-64
	Power Rating	I/P: 100-240 Vac, 130mA, O/P: 5Vdc, 1000mA	
AC Adapter 1(Chile)	Brand Name	Motorola(Achel)	Model Name SC-62
	Power Rating	I/P: 100-240 Vac, 130mA, O/P: 5Vdc, 1000mA	
AC Adapter 2(US)	Brand Name	Motorola(Chenyang)	Model Name SC-61
	Power Rating	I/P: 100-240 Vac, 130mA, O/P: 5Vdc, 1000mA	
AC Adapter 2(AR)	Brand Name	Motorola(Chenyang)	Model Name SC-64
	Power Rating	I/P: 100-240 Vac, 130mA, O/P: 5Vdc, 1000mA	
AC Adapter 3(BR)	Brand Name	Motorola(Tenpao)	Model Name SC-47
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5Vdc, 2000mA	
AC Adapter 4(BR)	Brand Name	Motorola(Salom)	Model Name SC-47
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5Vdc, 2000mA	
AC Adapter 4(BR)	Brand Name	Motorola(Salom/Flex)	Model Name SC-47
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5Vdc, 2000mA	
Battery	Brand Name	Motorola(SCUD)	Model Name KC40
	Power Rating	3.8Vdc,3000mAh	Type Li-ion
Earphone	Brand Name	Motorola(JUWEI)	Model Name EL09-IN
	Signal Line Type	1.2 meter, non-shielded cable, without ferrite core	
USB Cable 1	Brand Name	Motorola(SUNTOPS)	Model Name I-CE
	Signal Line Type	1.0 meter, non-shielded cable, without ferrite core	
USB Cable 2	Brand Name	Motorola(Saibao)	Model Name I-CE
	Signal Line Type	1.0 meter, non-shielded cable, without ferrite core	
USB Cable 3	Brand Name	Motorola(I SHENG)	Model Name SKN6472A
	Signal Line Type	1.0 meter, non-shielded cable, without ferrite core	



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: GSM 850 Idle(Middle CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + Camera(Rear) + SD Card Load for sample1
	Mode 2: PCS 1900 Idle(Middle CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + Camera(Front) + SD Card Load for sample1
	Mode 3: WCDMA Band II Idle(Low CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + MPEG4(Colur bar) + SD Card Link for sample1
	Mode 4: WCDMA Band V Idle(Low CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + FM(98MHz)Rx + SD Card Load for sample1
	Mode 5: LTE Band 4 Idle(Middle CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + GNSS RX + SD Card Load for sample1
	Mode 6: LTE Band 5 Idle(High CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + H-Pattern + SD Card Load for sample1
	Mode 7: LTE Band 7 Idle(Middle CH) + USB Cable 1(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) + SD Card Link for sample1
	Mode 8: LTE Band 5 Idle(High CH) + USB Cable 1 (Charging from Adapter 2) + Earphone + BT Idle + WLAN Idle(2.4G) + H-Pattern + SD Card Load for sample1
	Mode 9: LTE Band 5 Idle(High CH) + USB Cable 2 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + H-Pattern + SD Card Load for sample1
	Mode 10 :LTE Band 7 Idle(Middle CH) + USB Cable 2(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) for sample1
	Mode 11 :LTE Band 5 Idle(High CH) + USB Cable (1) (Charging from Adapter 3) + Earphone + BT Idle + WLAN Idle(2.4G) + H-Pattern + SD Card Load for sample1
	Mode 12 :LTE Band 5 Idle(High CH) + USB Cable (1) (Charging from Adapter 4) + Earphone + BT Idle + WLAN Idle(2.4G) + H-Pattern + SD Card Load for sample1
	Mode 13 :LTE Band 5 Idle(High CH) + USB Cable 3(Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + H-Pattern + SD Card Load for sample1

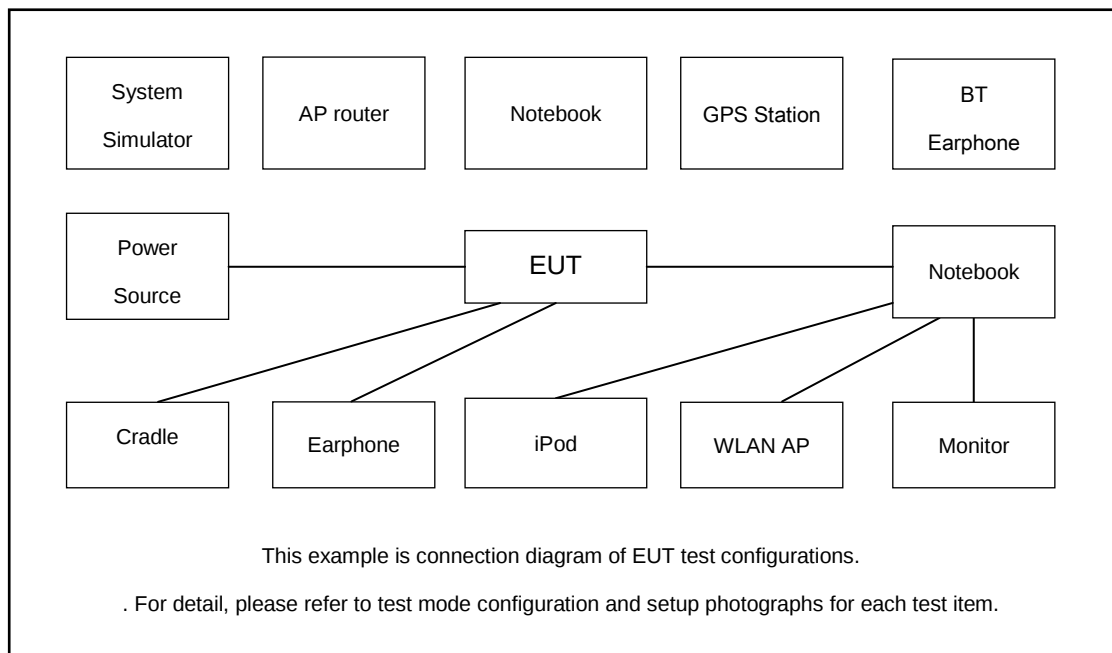


Radiated Emissions	Mode 1: GSM 850 Idle(Middle CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + Camera(Rear) + SD Card Load for sample1
	Mode 2: PCS 1900 Idle(Middle CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + Camera(Front) + SD Card Load for sample1
	Mode 3: WCDMA Band II Idle(Low CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + MPEG4(Colur bar) + SD Card Link for sample1
	Mode 4: WCDMA Band V Idle(Low CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + FM(98MHz)Rx + SD Card Load for sample1
	Mode 5: LTE Band 4 Idle(Middle CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + GNSS RX + SD Card Load for sample1
	Mode 6: LTE Band 5 Idle(High CH) + USB Cable 1 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + H-Pattern + SD Card Load for sample1
	Mode 7: LTE Band 7 Idle(Middle CH) + USB Cable 1(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) + SD Card Link for sample1
	Mode 8: GSM 850 Idle(Middle CH) + USB Cable 1 (Charging from Adapter 2) + Earphone + BT Idle + WLAN Idle(2.4G) + Camera(Rear) for sample1
	Mode 9: GSM 850 Idle(Middle CH) + USB Cable 2 (Charging from Adapter 1) + Earphone + BT Idle + WLAN Idle(2.4G) + Camera(Rear) for sample1
	Mode 10 :LTE Band 7 Idle(Middle CH) + USB Cable 2(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) + SD Card Link for sample1
	Mode 11 :LTE Band 7 Idle(Middle CH) + USB Cable (1) (Charging from Adapter 3) + Earphone + BT Idle + WLAN Idle(2.4G) + SD Card Link for sample1
	Mode 12 :LTE Band 7 Idle(Middle CH) + USB Cable (1) (Charging from Adapter 4) + Earphone + BT Idle + WLAN Idle(2.4G) + SD Card Link for sample1
	Mode 13 :LTE Band 7 Idle(Middle CH) + USB Cable 3(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) + SD Card Link for sample1
	Mode 14 :LTE Band 7 Idle(Middle CH) + USB Cable 1(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) + (SD Card Link) for sample2
	Mode 15 :LTE Band 7 Idle(Middle CH) + USB Cable 1(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) + (SD Card Link) for sample3
	Mode 16 :LTE Band 7 Idle(Middle CH) + USB Cable 1(Data Link with Notebook) + Earphone + BT Idle + WLAN Idle(2.4G) + (SD Card Link) for sample4

Remark:

1. The worst case of AC is mode 6; only the test data of this mode is reported.
2. The worst case of RE is mode 7; 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/WCDMA/LTE Band V, 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.	Bluetooth Earphone	Samsung	EO-MG900	CCAH14LP1680T5	N/A	N/A
2.	WLAN AP	D-Link	DIR-820L	KA2IR820LA1	N/A	Unshielded,1.8m
3.	WLAN AP	ASUSTek	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,2.7m with Core
4.	FM Base Station	R&S	SMB100A	Fcc DoC	N/A	Unshielded,1.8m
5.	SD Card	N/A	MicroSD HC	FCC DoC	N/A	N/A
6.	Ipod	apple	MC69029/A	N/A	N/A	N/A
7.	Notebook	Lenovo	E540	Fcc DoC	N/A	shielded cable DC O/P 1.8m Unshielded AC I/P cable 1.8m
8.	SD Card	Kingston	3300-10000-078	Fcc DoC	N/A	N/A
9.	IPod	Apple	MC525 ZP/A	Fcc DoC	Shielded, 1.0m	N/A
10.	Base Station	Anritsu	MT8820C	Fcc DoC	N/A	Unshielded,1.8m
11.	GNSS Station	RACELOGIC	RLLS03-2P	Fcc DoC	N/A	Unshielded,1.8m

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA 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 camera to capture images.
3. Turn on MPEG4 function
4. Turn on FM function to make the EUT receive continuous signals from FM station.
5. Turn on GNSS function to make the EUT receive continuous signals from GNSS station.

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.

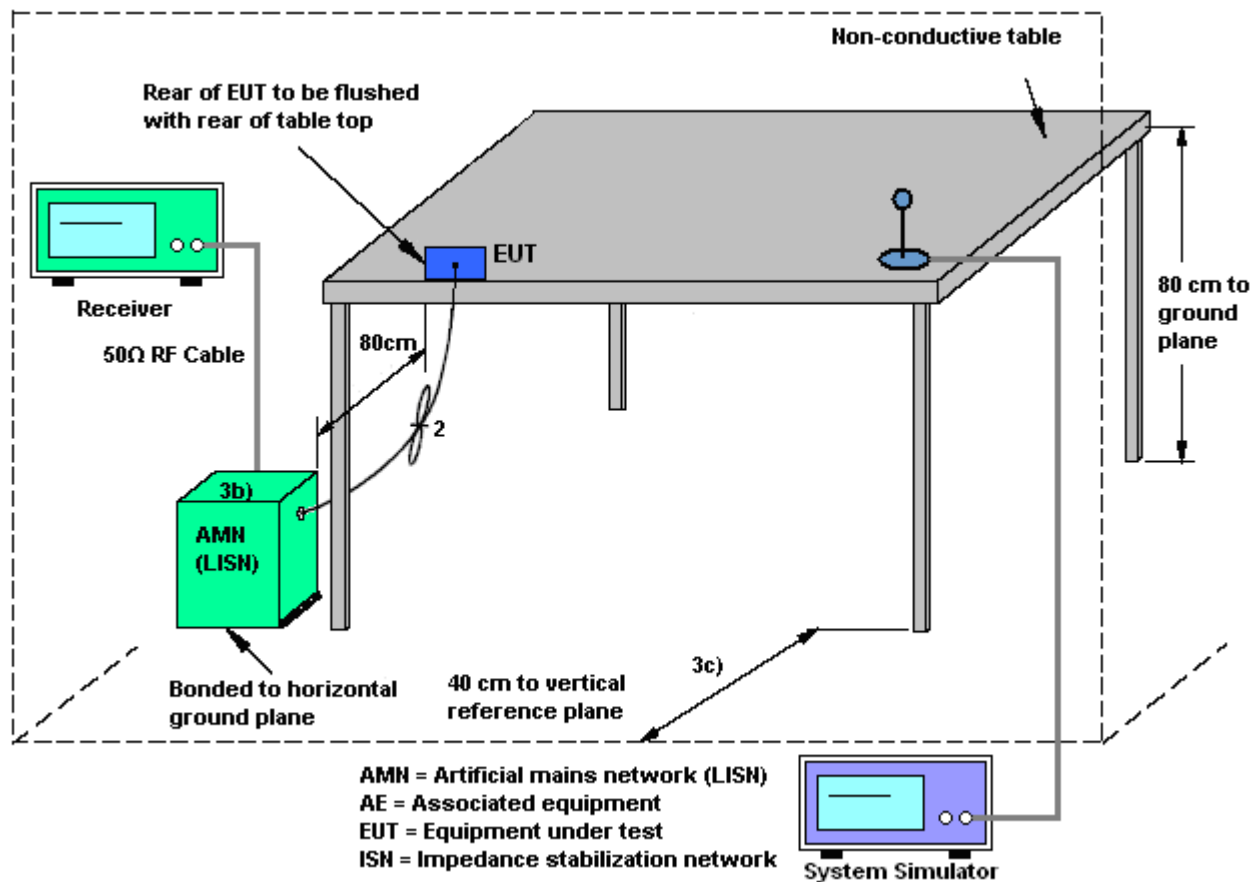
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

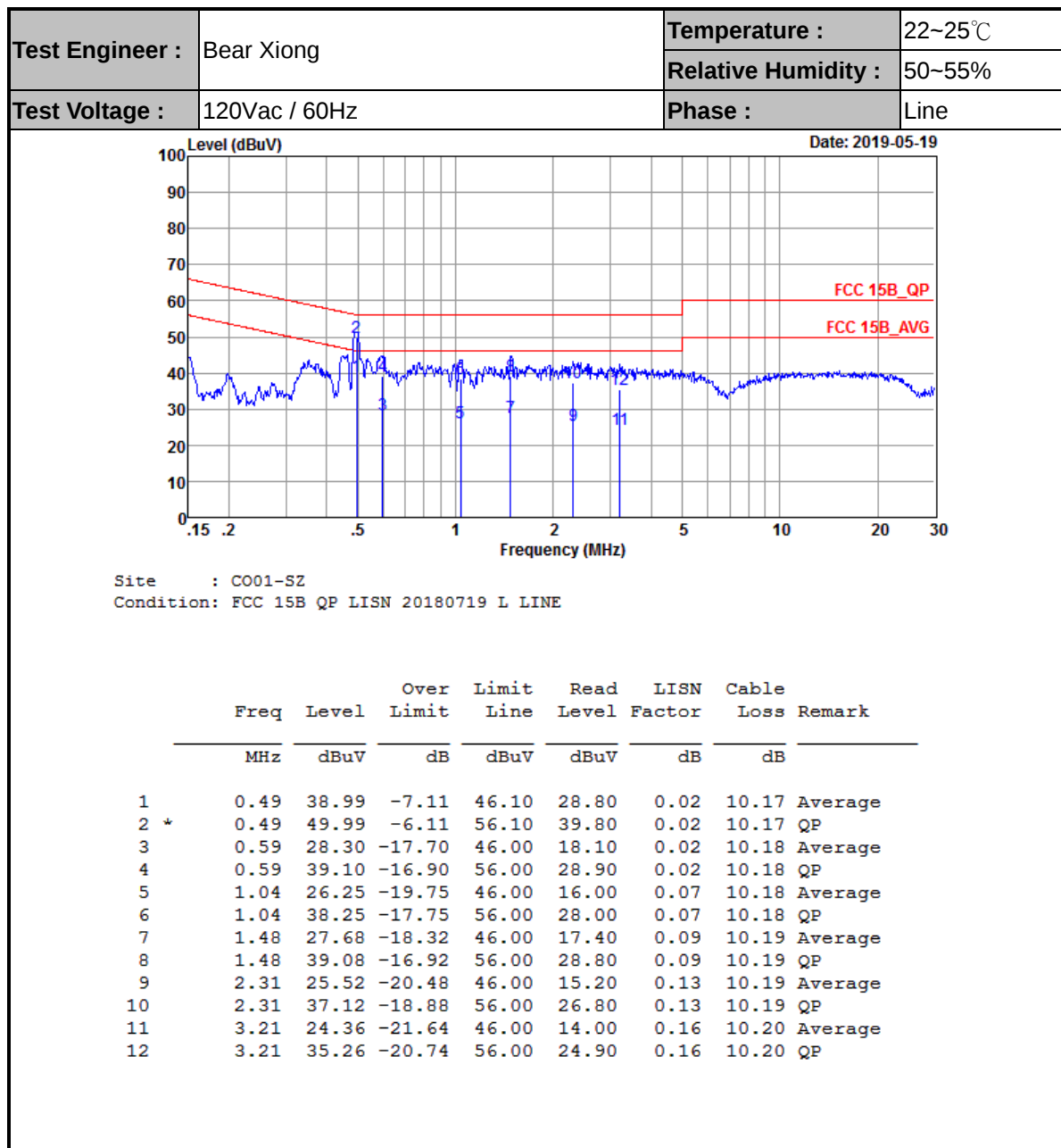
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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



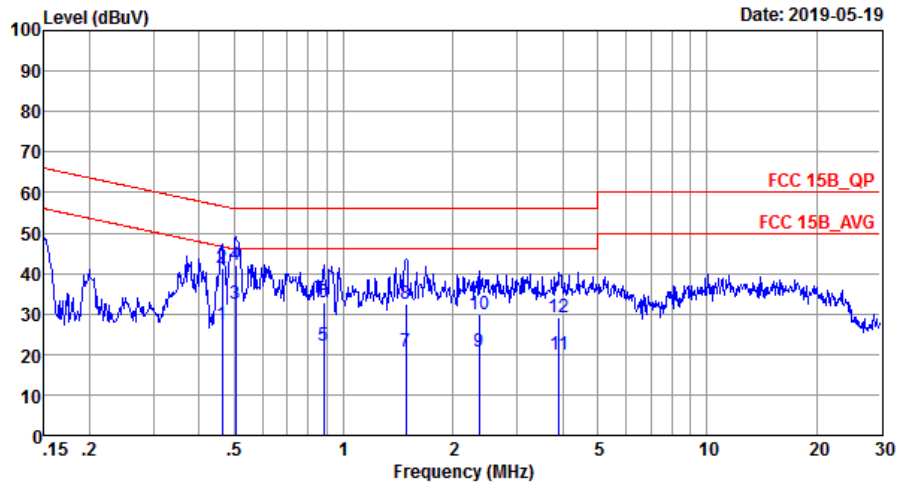


3.1.5 Test Result of AC Conducted Emission





Test Engineer :	Bear Xiong	Temperature :	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-SZ

Condition: FCC 15B_QP LISN 20180719_N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.46	27.19	-19.44	46.63	17.00	0.02	10.17	Average
2	0.46	41.19	-15.44	56.63	31.00	0.02	10.17	QP
3 *	0.50	32.49	-13.51	46.00	22.30	0.02	10.17	Average
4	0.50	42.19	-13.81	56.00	32.00	0.02	10.17	QP
5	0.88	22.32	-23.68	46.00	12.10	0.04	10.18	Average
6	0.88	32.72	-23.28	56.00	22.50	0.04	10.18	QP
7	1.49	20.64	-25.36	46.00	10.40	0.05	10.19	Average
8	1.49	32.34	-23.66	56.00	22.10	0.05	10.19	QP
9	2.36	20.73	-25.27	46.00	10.50	0.04	10.19	Average
10	2.36	29.93	-26.07	56.00	19.70	0.04	10.19	QP
11	3.92	20.05	-25.95	46.00	9.80	0.05	10.20	Average
12	3.92	29.25	-26.75	56.00	19.00	0.05	10.20	QP

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

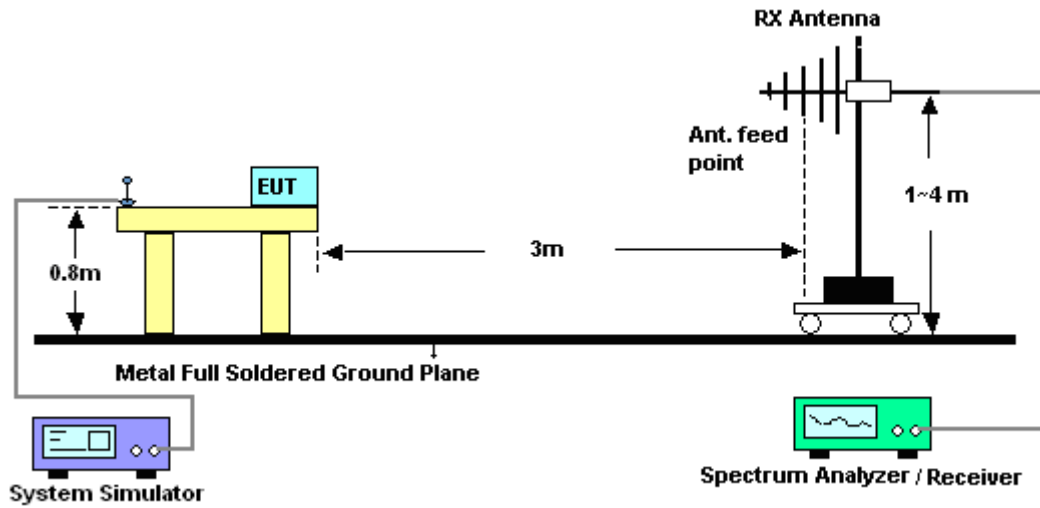
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

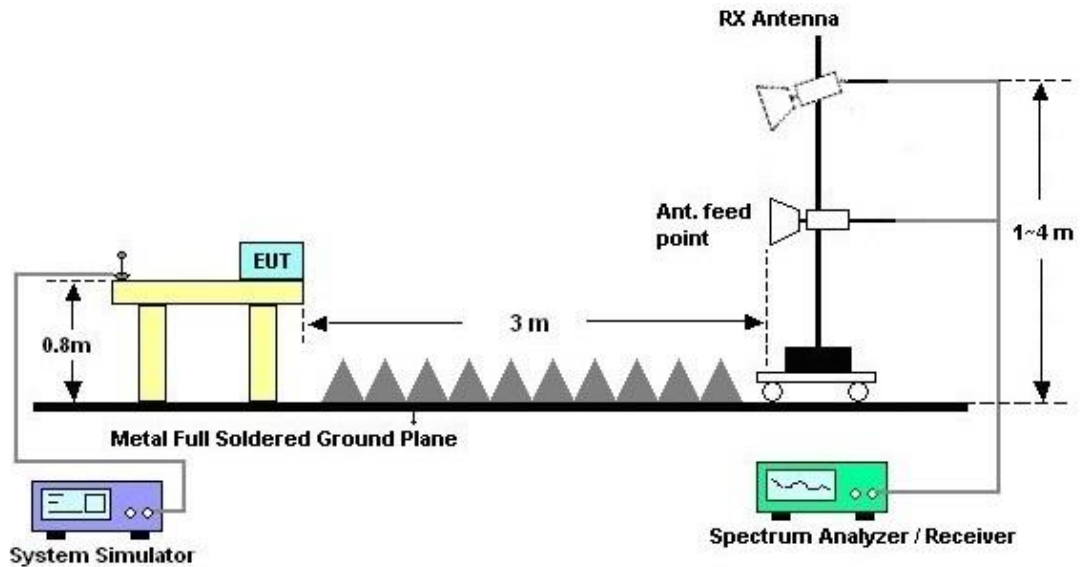
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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



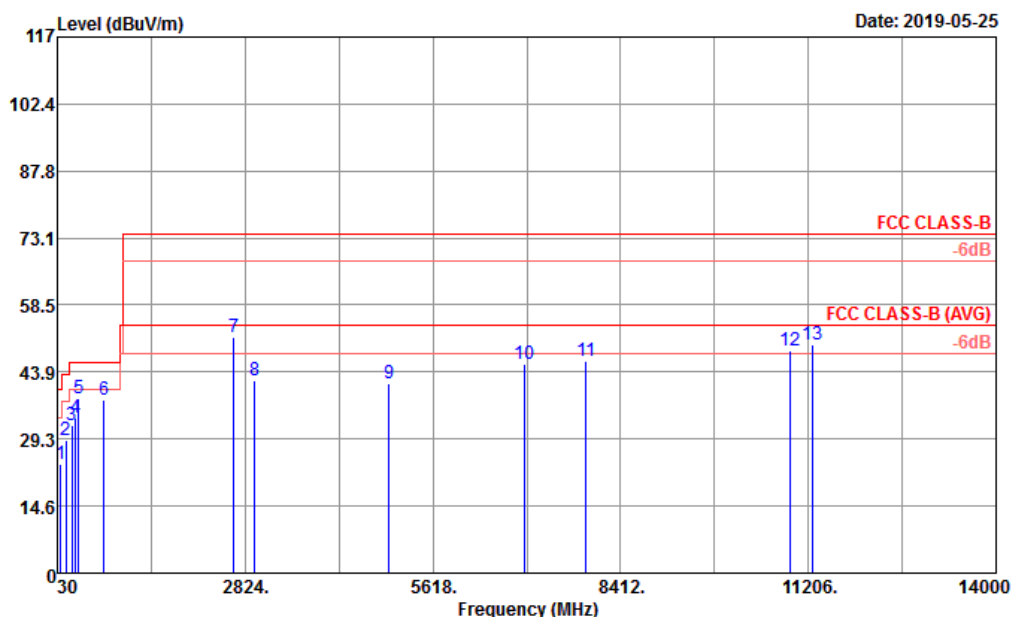
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Engineer :	Zhongmin Zhang	Temperature :	24~25°C
		Relative Humidity :	48~49%
Test Distance :	3m	Polarization :	Horizontal
Remark :	#7 is system simulator signal which can be ignored.		

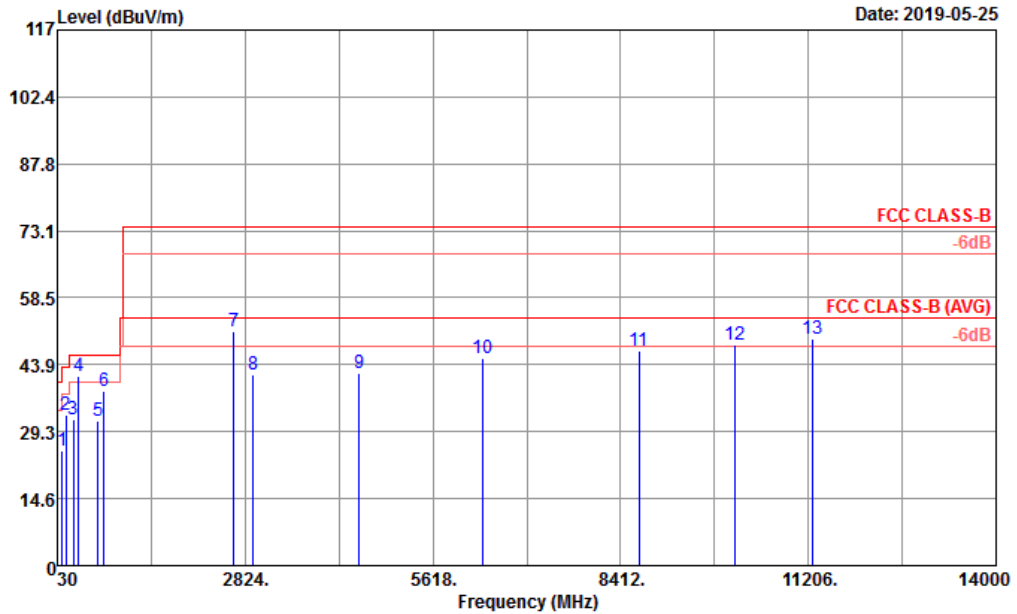


Site : 03CH03-SZ
Condition : FCC CLASS-B 3m LF35407_CBL6112D_6 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Preamp A/Pos T/Pos	Loss Factor			Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	81.41	23.95	-16.05	40.00	42.41	12.80	0.94	32.20	---	---	Peak
2	155.13	28.94	-14.56	43.50	43.20	16.33	1.30	31.89	---	---	Peak
3	246.31	32.23	-13.77	46.00	44.05	18.33	1.65	31.80	---	---	Peak
4	298.69	34.02	-11.98	46.00	45.00	19.19	1.82	31.99	---	---	Peak
5	343.31	38.11	-7.89	46.00	47.70	20.29	1.96	31.84	181	20	Peak
6	720.64	37.72	-8.28	46.00	41.58	25.32	2.91	32.09	---	---	Peak
7	2655.00	51.52			75.83	27.84	5.40	57.55	---	---	Peak
8	2966.00	41.90	-32.10	74.00	64.36	28.52	6.34	57.32	---	---	Peak
9	4966.00	41.39	-32.61	74.00	59.07	31.25	8.65	57.58	---	---	Peak
10	6984.00	45.73	-28.27	74.00	59.39	35.04	10.08	58.78	---	---	Peak
11	7896.00	46.29	-27.71	74.00	57.33	37.56	10.56	59.16	---	---	Peak
12	10928.00	48.42	-25.58	74.00	54.44	40.51	11.84	58.37	---	---	Peak
13	11266.00	49.78	-24.22	74.00	54.90	40.92	11.96	58.00	115	66	Peak



Test Engineer :	Zhongmin Zhang	Temperature :	24~25°C
		Relative Humidity :	48~49%
Test Distance :	3m	Polarization :	Vertical
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH03-SZ
Condition : FCC CLASS-B 3m LF35407 CBL6112D_6 VERTICAL

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Preamp A/Pos T/Pos	Loss Factor	Remark			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	99.84	25.15	-18.35	43.50	39.22	16.80	1.03	31.90	---	---	Peak
2	155.13	32.84	-10.66	43.50	47.10	16.33	1.30	31.89	---	---	Peak
3	269.59	31.94	-14.06	46.00	42.62	19.48	1.72	31.88	---	---	Peak
4	345.25	41.38	-4.62	46.00	50.90	20.34	1.96	31.82	157	29	Peak
5	638.19	31.68	-14.32	46.00	36.07	24.85	2.75	31.99	---	---	Peak
6	722.58	38.10	-7.90	46.00	41.93	25.35	2.91	32.09	---	---	Peak
7	2655.00	51.28			75.59	27.84	5.40	57.55	---	---	Peak
8	2942.00	41.82	-32.18	74.00	64.40	28.43	6.34	57.35	---	---	Peak
9	4522.00	41.97	-32.03	74.00	60.18	30.82	8.24	57.27	---	---	Peak
10	6352.00	45.38	-28.62	74.00	60.34	33.35	9.72	58.03	---	---	Peak
11	8688.00	47.04	-26.96	74.00	57.53	37.72	10.85	59.06	---	---	Peak
12	10108.00	48.13	-25.87	74.00	56.32	39.54	11.54	59.27	---	---	Peak
13	11276.00	49.52	-24.48	74.00	54.64	40.92	11.96	58.00	110	78	Peak



4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 23, 2018	May 19, 2019~ May 23, 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Oct. 18, 2018	May 19, 2019~ May 23, 2019	Oct. 17, 2019	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Dec. 23, 2018	May 19, 2019~ May 23, 2019	Dec. 22, 2019	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000089 1	100Vac~250Vac	Jul. 18, 2018	May 19, 2019~ May 23, 2019	Jul. 17, 2019	Conduction (CO01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 18, 2019	May 25, 2019~ May 31, 2019	Apr. 17, 2020	Radiation (03CH03-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 18, 2019	May 25, 2019~ May 31, 2019	Apr. 17, 2020	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz~2GHz	Apr. 19, 2019	May 25, 2019~ May 31, 2019	Apr. 18, 2020	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBE CK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 01, 2019	May 25, 2019~ May 31, 2019	Mar. 31, 2020	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Mar. 30, 2019	May 25, 2019~ May 31, 2019	Mar. 29, 2020	Radiation (03CH03-SZ)
LF Amplifier	Burgeon	BPA-530	102210	0.01Hz ~3000MHz	Oct. 18, 2018	May 25, 2019~ May 31, 2019	Oct. 17, 2019	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	AMF-7D-0010 1800-30-10P- R	1943528	1GHz~18GHz	Oct. 18, 2018	May 25, 2019~ May 31, 2019	Oct. 17, 2019	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-H G	1871923	18GHz~40GHz	Jul. 30, 2018	May 25, 2019~ May 31, 2019	Jul. 29, 2019	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	61601000198 5	N/A	NCR	May 25, 2019~ May 31, 2019	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 25, 2019~ May 31, 2019	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 25, 2019~ May 31, 2019	NCR	Radiation (03CH03-SZ)

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% ($U = 2Uc(y)$)	2.6dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.8dB
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