FCC EMI TEST REPORT

FCC ID	:	**IHDT56ZB2**
Equipment	:	**Mobile Cellular Phone**
Brand Name	:	**Motorola**
Model Name	:	**XT2071-4**
Applicant	:	**Motorola Mobility, LLC** **222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States**
Manufacturer	:	**Motorola Mobility, LLC** **222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States**
Standard	:	**FCC 47 CFR FCC Part 15 Subpart B Class B**

The product was received on May 12, 2020 and testing was started from May 23, 2020 and completed on May 27, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FC051232	01	Initial issue of report	Jul. 29, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.107	AC Conducted Emission	Pass	Under limit 7.71 dB at 0.164 MHz
3.2	15.109	Radiated Emission	Pass	Under limit 4.44 dB at 311.200 MHz

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Dara Chiu

Report Producer: Yimin Ho

1. General Description

1.1. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2071-4
FCC ID	IHDT56ZB2
IMEI Code	**Conduction** : IMEI 1: 351648110009132 IMEI 2: 351648110009140 **Radiation** : IMEI 1: 351648110009132 IMEI 2: 351648110009140
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/ GNSS/NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	DVT2
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

Accessory List	
AC Adapter 1 (US)	Brand Name : Motorola
	Model Name : SC-51
	Manufacturer : Chenyang
AC Adapter 1 (EU)	Brand Name : Motorola
	Model Name : SC-52
	Manufacturer : Chenyang
AC Adapter 1 (UK)	Brand Name : Motorola
	Model Name : SC-53UK
	Manufacturer : Chenyang
AC Adapter 1 (AR)	Brand Name : Motorola
	Model Name : SC-56
	Manufacturer : Chenyang
AC Adapter 1 (AU)	Brand Name : Motorola
	Model Name : SC-55AU
	Manufacturer : Chenyang
AC Adapter 2 (US)	Brand Name : Motorola
	Model Name : SC-51
	Manufacturer : Acbel
AC Adapter 2 (EU)	Brand Name : Motorola
	Model Name : SC-52
	Manufacturer : Acbel
AC Adapter 2 (AR)	Brand Name : Motorola
	Model Name : SC-56
	Manufacturer : Acbel
AC Adapter 3 (IN)	Brand Name : Motorola
	Model Name : SC-54
	Manufacturer : Salom
Battery 1	Brand Name : Motorola
	Model Name : LS30
	Manufacturer : ATL
Battery 2	Brand Name : Motorola
	Model Name : LS40
	Manufacturer : ATL
Standard 3.5mm Headset 1	Brand Name : Motorola
	Model Name : SH38C37773
	Manufacturer : Lianyun
Standard 3.5mm Headset 2	Brand Name : Motorola
	Model Name : SH38C44959
	Manufacturer : Lianyun
USB-C to 3.5mm headset adaptor 1	Brand Name : Motorola
	Model Name : SC18C27844
USB-C to 3.5mm headset adaptor 2	Brand Name : Motorola
	Model Name : SC18C27845
USB Cable 1	Brand Name : Motorola
	Model Name : SC18C24367
	Manufacturer : Saibao
USB Cable 2	Brand Name : Motorola
	Model Name : SC18C24368
	Manufacturer : Luxshare

1.2. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz 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 CDMA2000 BC0: 824.70 MHz ~ 848.31 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 26 : 824.7 MHz ~ 848.3 MHz LTE Band 38 : 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 MHz 5G NR n5: 826.5 ~ 846.5MHz 5G NR n41: 2506.02MHz ~ 2679.99MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz

Standards-related Product Specification	
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 CDMA 2000 BC0: 869.70 MHz ~ 893.31 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 17 : 736.5 MHz ~ 743.5 MHz LTE Band 26 : 869.7 MHz ~ 893.3 MHz LTE Band 38 : 2572.5 MHz ~ 2617.5 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 2110.7 MHz ~ 2199.3 MHz LTE Band 71: 619.5 MHz ~ 649.5 MHz 5G NR Band n5: 826.5 ~ 846.5MHz 5G NR Band n41: 2506.02MHz ~ 2679.99MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS : 1559 ~ 1610 MHz (GPS/Glonass/Galileo/BDS) NFC : 13.56 MHz

Standards-related Product Specification	
Antenna Type	WWAN: **<Ant. 1>:** Fixed Internal Antenna **<Ant. 2>:** Fixed Internal Antenna WLAN: **<Ant. 4>:** Slot Antenna **<Ant. 3>:** ILA Antenna Bluetooth: Slot Antenna GPS/Glonass/Galileo/BDS: PIFA Antenna NFC: Flex antenna with winding coil pattern
Type of Modulation	GSM / GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA : QPSK (Uplink) CDMA2000: QPSK LTE: QPSK / 16QAM / 64QAM 5G NR: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) Bluetooth LE: GFSK Bluetooth (1Mbps): GFSK Bluetooth (2Mbps): π /4-DQPSK Bluetooth (3Mbps): 8-DPSK GPS/Glonass/Galileo/BDS: BPSK NFC: ASK

1.3. Modification of EUT

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

1.4. Test Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	CO05-HY	03CH06-HY

FCC designation No.: TW1093

1.5. Applicable Standards

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

- FCC 47 CFR FCC Part 15 Subpart B Class 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: LTE Band 12 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + MPEG4 + USB Cable 1 (Charging from Adapter 1) + SIM 2 for Open Mode Mode 2: LTE Band 13 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + USB Cable 2 (Charging from Adapter 2) + SIM 2 for Open Mode Mode 3: LTE Band 26 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + USB Cable 1 (Charging from Adapter 3) + SIM 2 for Open Mode Mode 4: LTE Band 71 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + NFC On + USB Cable 2 (Data Link with Notebook) + SIM 2 for Open Mode Mode 5: 5G NR n5 Idle (Middle Channel) + Bluetooth Idle + WLAN Idle + GPS Rx + USB Cable 1 (Data Link with Notebook) + SIM 2 for Open Mode Mode 6: LTE Band 26 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + USB Cable 1 (Charging from Adapter 3) + SIM 1 for Close Mode Mode 7: LTE Band 71 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + NFC On + USB Cable 2 (Data Link with Notebook) + SIM 1 for Close Mode

Test Items	Function Type
Radiated Emissions	Mode 1 : GSM850 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone 1 + USB-C to 3.5mm headset adaptor 1 + SIM 2 for Open Mode Mode 2 : WCDMA Band V (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + GPS Rx + Earphone 2 + USB-C to 3.5mm headset adaptor 2 + SIM 2 for Open Mode Mode 3 : LTE Band 12 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + Camera (Front) + USB Cable 1 (Charging from Adapter 1) + SIM 2 for Open Mode Mode 4 : LTE Band 13 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + Camera (Rear) + USB Cable 2 (Charging from Adapter 2) + SIM 2 for Open Mode Mode 5 : LTE Band 26 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + NFC On + USB Cable 1 (Charging from Adapter 3) + SIM 2 for Open Mode Mode 6 : LTE Band 71 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + GPS Rx + USB Cable 2 (Data Link with Notebook) + SIM 2 for Open Mode Mode 7 : 5G NR n5 Idle (Middle Channel) + Bluetooth Idle + WLAN Idle + GPS Rx + USB Cable 1 (Data Link with Notebook) + SIM 2 for Open Mode Mode 8 : GSM850 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + MPEG4 + Earphone 1 + USB-C to 3.5mm headset adaptor 1 + SIM 1 for Close Mode Mode 9 : LTE Band 13 (Middle Channel) Idle + Bluetooth Idle + WLAN Idle + Camera (Rear) + USB Cable 2 (Charging from Adapter 2) + SIM 1 for Close Mode Mode 10 :5G NR n5 Idle (Middle Channel) + Bluetooth Idle + WLAN Idle + GPS Rx + USB Cable 1 (Data Link with Notebook) + SIM 1 for Close Mode

Remark:

1. The worst case of AC is mode 4; only the test data of this mode was reported.

2. The worst case of RE is mode 7; only the test data of this mode was reported.

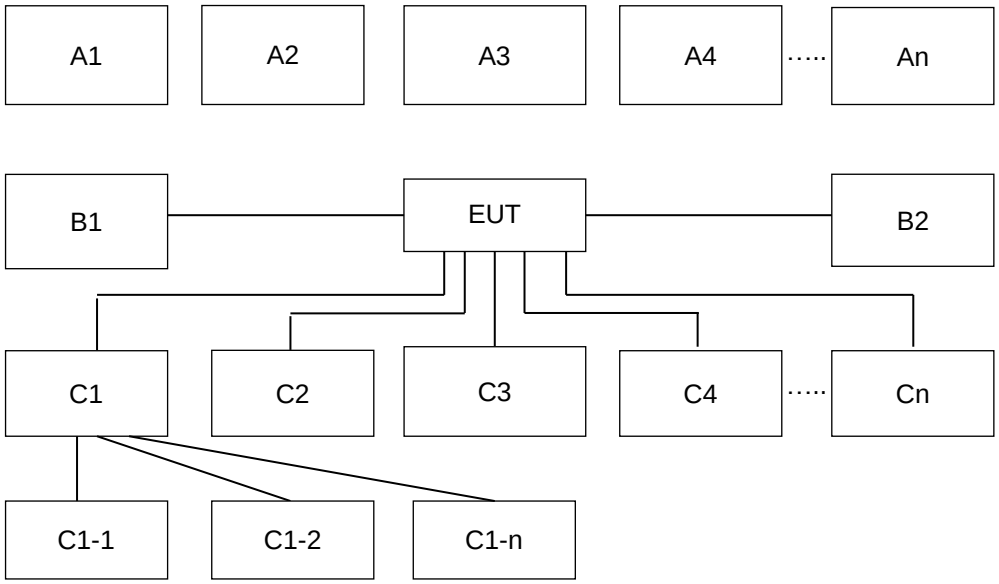
3. For radiation emission after pre-scanned the cellular band between 30MHz ~ 960MHz (GSM850/WCDMA Band V/LTE Band 12/13/71/26/5G NR n5); only the worst case for cellular band test data of this mode was reported.

4. Data Link with Notebook means data application transferred mode between EUT and Notebook.

5. All test items were performed with Adapter 1 (US), Adapter 2 (US), and Adapter 3 (IN).

6. For 5G NR test combination is EN-DC 7-n5.

2.2. Connection Diagram of Test System



Conduction Test Setup									
No.	**Wireless Station**	**Connection Type**	**Test Mode**						
			1	**2**	**3**	**4**	**5**	**6**	**7**
A1	BT Earphone	Bluetooth	X	X	X	X	X	X	X
A2	System Simulator	LTE/5G NR	X	X	X	X	X	X	X
A3	GPS Station	GPS	-	-	-	-	X	-	-
A4	AP router	WiFi	X	X	X	X	X	X	X
No.	**Power Source**	**Connection Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
B1	AC : 120V/60Hz	AC Power Cable	X	X	X	-	-	X	-
B2	From System	AC Power Cable	-	-	-	X	X	-	X
No.	**Setup Peripherals**	**Connection Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
C1	Notebook	USB Cable	-	-	-	X	X	-	X
C1-1	IPod	USB Cable to C1	-	-	-	X	X	-	X
C1-2	AP router	RJ-45 Cable to C1	-	-	-	X	X	-	X

Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	4	5	6	7
A1	BT Earphone	Bluetooth	X	X	X	X	X	X	X
A2	System Simulator	GSM/WCDMA/LTE/5G NR	X	X	X	X	X	X	X
A3	GPS Station	GPS	-	X	-	-	-	X	X
A4	AP router	WiFi	X	X	X	X	X	X	X
No.	**Power Source**	**Connection Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
B1	AC : 120V/60Hz	AC Power Cable	-	-	X	X	X	-	-
B2	From System	USB Cable	-	-	-	-	-	X	X
No.	**Setup Peripherals**	**Connection Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
C1	Notebook	USB Cable	-	-	-	-	-	X	X
C1-1	IPod	USB Cable to C1	-	-	-	-	-	X	X
C1-2	AP router	RJ-45 Cable to C1	-	-	-	-	-	X	X
C2	Earphone	Earphone jack	X	X	-	-	-	-	-

Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			8	9	10	-	-	-	-
A1	BT Earphone	Bluetooth	X	X	X				
A2	System Simulator	GSM/WCDMA/LTE/5G NR	X	X	X				
A3	GPS Station	GPS	-	-	X				
A4	AP router	WiFi	X	X	X				
No.	**Power Source**	**Connection Type**	**8**	**9**	**10**	**-**	**-**	**-**	**-**
B1	AC : 120V/60Hz	AC Power Cable	-	X	-				
B2	From System	USB Cable	-	-	X				
No.	**Setup Peripherals**	**Connection Type**	**8**	**9**	**10**	**-**	**-**	**-**	**-**
C1	Notebook	USB Cable	-	-	X				
C1-1	IPod	USB Cable to C1	-	-	X				
C1-2	AP router	RJ-45 Cable to C1	-	-	X				
C2	Earphone	Earphone jack	X	-	-				

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	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	5G Wireless Test Platform	Keysight	E7515B	N/A	N/A	Unshielded,1.8m
4.	5G Wireless Test Platform	Anritsu	MT8000A	N/A	N/A	Unshielded,1.8m
5.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
6.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
7.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
8.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
9.	Notebook	DELL	Latitude E3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
10.	Notebook	ASUS	P2430U	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA or LTE or 5G NR idle mode during the testing. The EUT was synchronized with the BCCH, and had been continuous receiving mode by setting paging reorganization of the system simulator.

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 Laptop and EUT via USB cable.
2. Execute “GPS Test” to make the EUT receive continuous signals from GPS station.
3. Execute “Video player” to play MPEG4 files.
4. Turn on camera to capture images.
5. 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>

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.

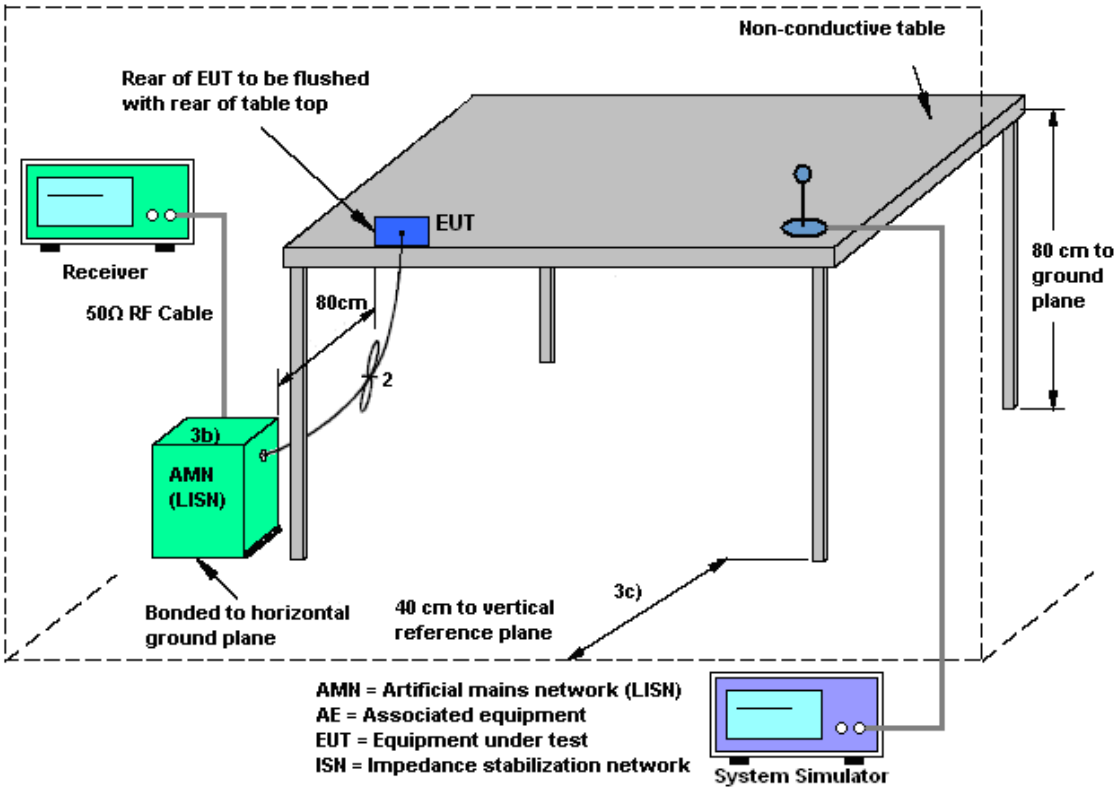
3.1.2. Measuring Instruments

Refer a test equipment and calibration data table in 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

Please refer to Appendix A.

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>

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

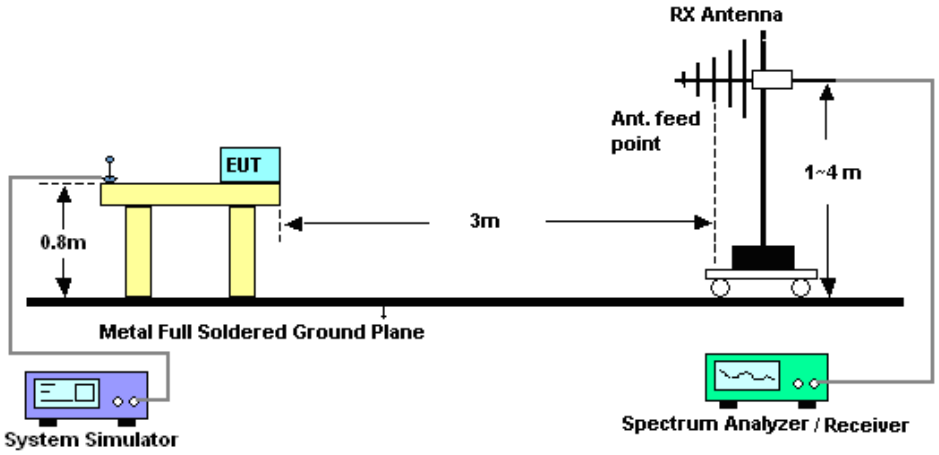
Refer a test equipment and calibration data table in this test report.

3.2.3. Test Procedures

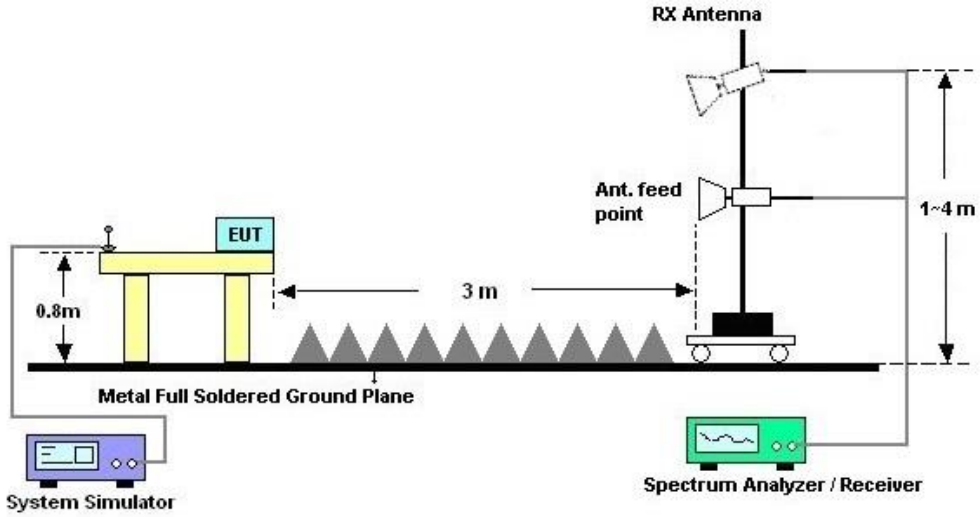
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

Please refer to Appendix B.

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Amplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 30, 2020	May 25, 2020~ May 27, 2020	Apr. 29, 2021	Radiation (03CH06-HY)
Bilog Antenna	Schaffner	CBL 6111C & N-6-06	2725 & AT-N0601	30MHz~1GHz	Jan. 09, 2020	May 25, 2020~ May 27, 2020	Jan. 08, 2021	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 10, 2020	May 25, 2020~ May 27, 2020	Jan. 09, 2021	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 30, 2019	May 25, 2020~ May 27, 2020	Aug. 29, 2020	Radiation (03CH06-HY)
Preamplifier	MITEQ	00101800-30-10P	1850117	1GHz~18GHz	Sep. 03, 2019	May 25, 2020~ May 27, 2020	Sep. 02, 2020	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104 / STORM/LL142	MY24966/4 / 00100A1O2A178T	30MHz~26GHz	Nov. 21, 2019	May 25, 2020~ May 27, 2020	Nov. 20, 2020	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	May 25, 2020~ May 27, 2020	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	May 25, 2020~ May 27, 2020	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	May 25, 2020~ May 27, 2020	N/A	Radiation (03CH06-HY)
Software	Audix	E3 6.2009-8-24 (k5)	N/A	N/A	N/A	May 25, 2020~ May 27, 2020	N/A	Radiation (03CH06-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 23, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	May 23, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 07, 2019	May 23, 2020	Nov. 06, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 20, 2019	May 23, 2020	Nov. 19, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 15, 2019	May 23, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	May 23, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	May 23, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	May 23, 2020	Jan. 01, 2021	Conduction (CO05-HY)

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))	**2.3**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.3**

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

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

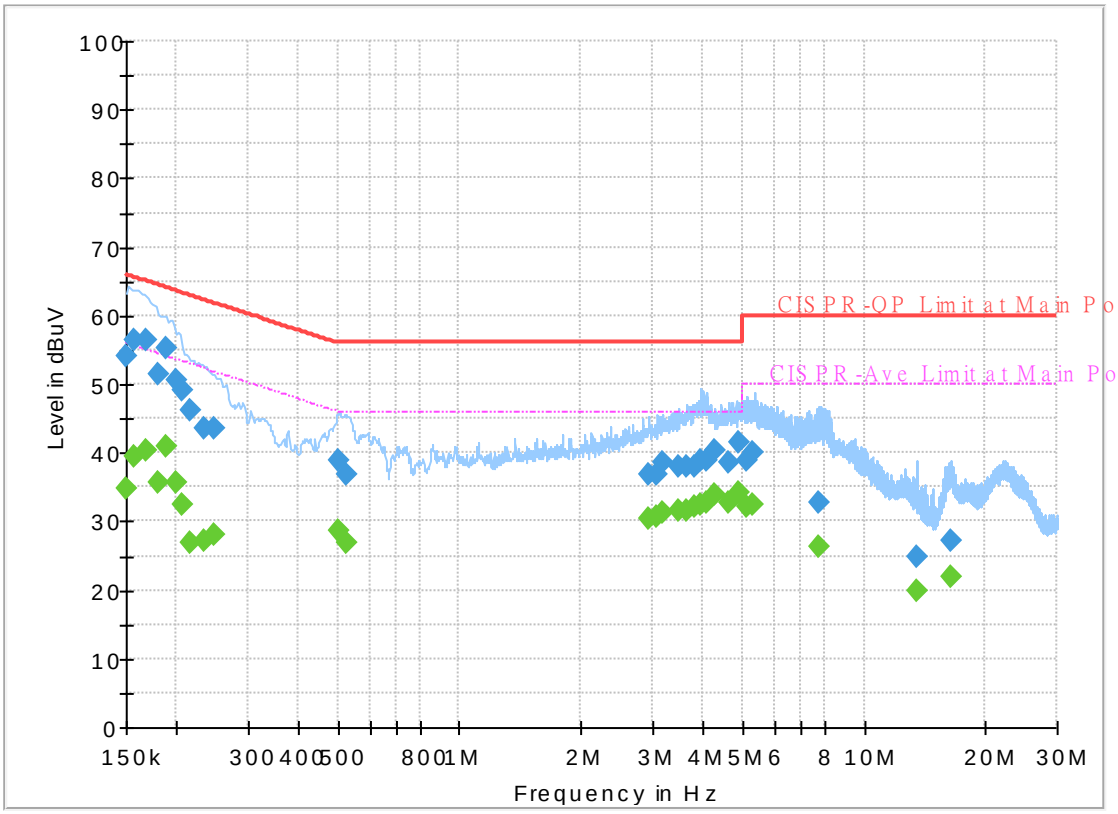
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	**Temperature :**	21~24℃
		Relative Humidity :	42~50%

EUT Information

Report NO :	051232
Test Mode :	Mode 4
Test Voltage :	Power From System
Phase :	Line

Full Spectrum



Final_Result

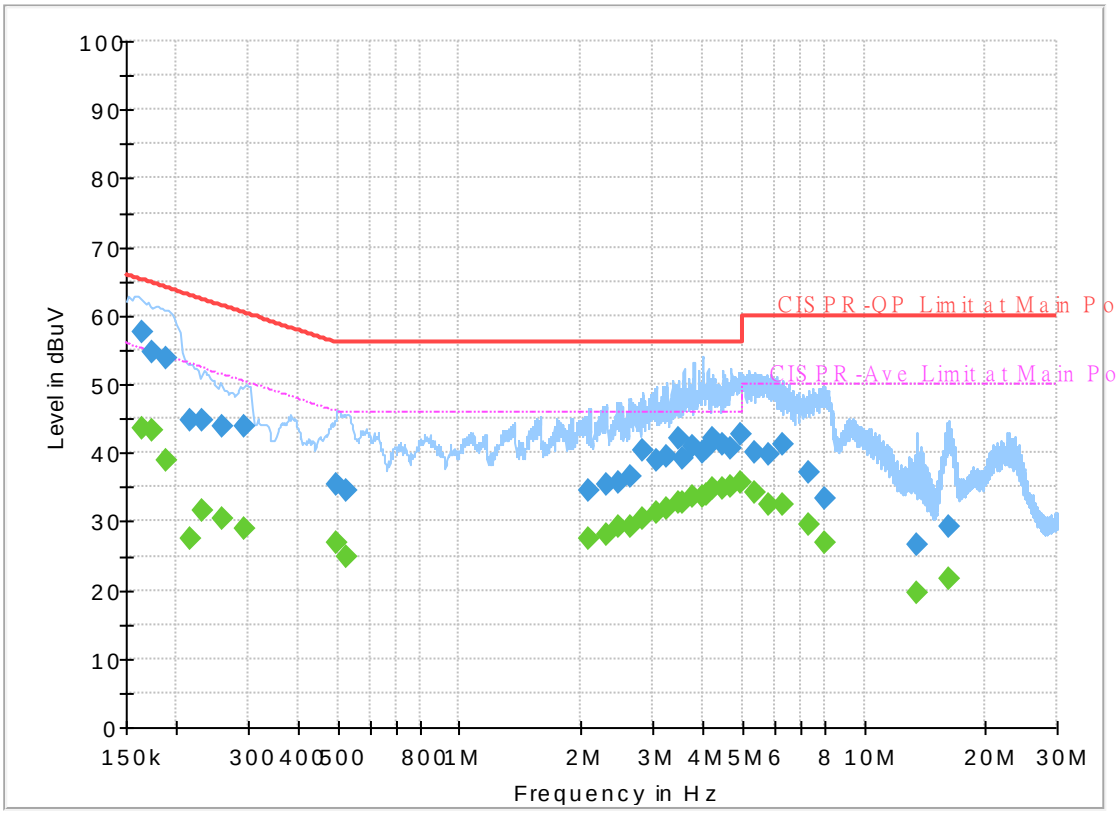
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150608	---	34.69	55.97	21.28	L1	OFF	19.5
0.150608	54.13	---	65.97	11.84	L1	OFF	19.5
0.156750	---	39.35	55.63	16.28	L1	OFF	19.5
0.156750	56.30	---	65.63	9.33	L1	OFF	19.5
0.168000	---	40.27	55.06	14.79	L1	OFF	19.5
0.168000	56.35	---	65.06	8.71	L1	OFF	19.5
0.179250	---	35.58	54.52	18.94	L1	OFF	19.5
0.179250	51.37	---	64.52	13.15	L1	OFF	19.5
0.188520	---	40.81	54.10	13.29	L1	OFF	19.5
0.188520	55.33	---	64.10	8.77	L1	OFF	19.5
0.199500	---	35.60	53.63	18.03	L1	OFF	19.5
0.199500	50.47	---	63.63	13.16	L1	OFF	19.5
0.206250	---	32.53	53.36	20.83	L1	OFF	19.5
0.206250	49.09	---	63.36	14.27	L1	OFF	19.5
0.215250	---	26.88	53.00	26.12	L1	OFF	19.5
0.215250	46.16	---	63.00	16.84	L1	OFF	19.5
0.233250	---	27.27	52.33	25.06	L1	OFF	19.5
0.233250	43.66	---	62.33	18.67	L1	OFF	19.5
0.249000	---	27.93	51.79	23.86	L1	OFF	19.5
0.249000	43.59	---	61.79	18.20	L1	OFF	19.5
0.501000	---	28.78	46.00	17.22	L1	OFF	19.5

0.501000	38.85	---	56.00	17.15	L1	OFF	19.5
0.525750	---	26.90	46.00	19.10	L1	OFF	19.5
0.525750	36.82	---	56.00	19.18	L1	OFF	19.5
2.933250	---	30.53	46.00	15.47	L1	OFF	19.6
2.933250	36.85	---	56.00	19.15	L1	OFF	19.6
3.088860	---	30.77	46.00	15.23	L1	OFF	19.6
3.088860	36.98	---	56.00	19.02	L1	OFF	19.6
3.181470	---	31.30	46.00	14.70	L1	OFF	19.6
3.181470	38.68	---	56.00	17.32	L1	OFF	19.6
3.482970	---	31.46	46.00	14.54	L1	OFF	19.6
3.482970	38.13	---	56.00	17.87	L1	OFF	19.6
3.657750	---	31.57	46.00	14.43	L1	OFF	19.6
3.657750	37.98	---	56.00	18.02	L1	OFF	19.6
3.824070	---	32.02	46.00	13.98	L1	OFF	19.6
3.824070	38.05	---	56.00	17.95	L1	OFF	19.6
3.932250	---	32.37	46.00	13.63	L1	OFF	19.6
3.932250	38.83	---	56.00	17.17	L1	OFF	19.6
4.102980	---	32.69	46.00	13.31	L1	OFF	19.6
4.102980	38.75	---	56.00	17.25	L1	OFF	19.6
4.287930	---	33.81	46.00	12.19	L1	OFF	19.6
4.287930	40.29	---	56.00	15.71	L1	OFF	19.6
4.616250	---	32.76	46.00	13.24	L1	OFF	19.6
4.616250	38.59	---	56.00	17.41	L1	OFF	19.6
4.875000	---	34.23	46.00	11.77	L1	OFF	19.6
4.875000	41.43	---	56.00	14.57	L1	OFF	19.6
5.136810	---	32.13	50.00	17.87	L1	OFF	19.6
5.136810	38.78	---	60.00	21.22	L1	OFF	19.6
5.338500	---	32.35	50.00	17.65	L1	OFF	19.6
5.338500	40.02	---	60.00	19.98	L1	OFF	19.6
7.715670	---	26.29	50.00	23.71	L1	OFF	19.7
7.715670	32.76	---	60.00	27.24	L1	OFF	19.7
13.560000	---	19.96	50.00	30.04	L1	OFF	19.8
13.560000	24.91	---	60.00	35.09	L1	OFF	19.8
16.487250	---	21.83	50.00	28.17	L1	OFF	19.8
16.487250	27.21	---	60.00	32.79	L1	OFF	19.8

EUT Information

Report NO :	051232
Test Mode :	Mode 4
Test Voltage :	Power From System
Phase :	Neutral

Full Spectrum



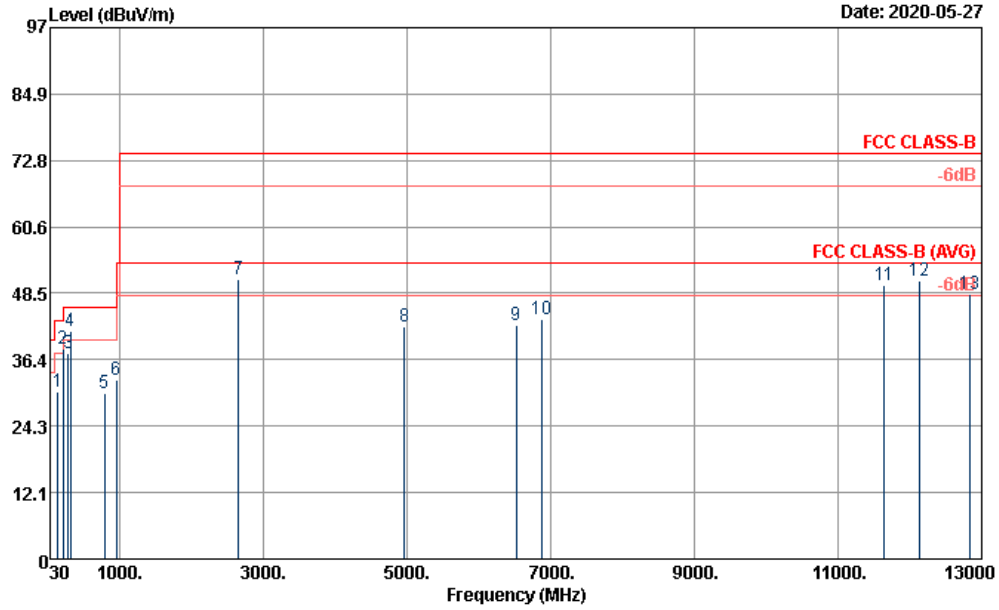
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.163500	---	43.70	55.28	11.58	N	OFF	19.5
0.163500	57.57	---	65.28	7.71	N	OFF	19.5
0.174570	---	43.21	54.74	11.53	N	OFF	19.5
0.174570	54.60	---	64.74	10.14	N	OFF	19.5
0.189150	---	38.95	54.07	15.12	N	OFF	19.5
0.189150	53.94	---	64.07	10.13	N	OFF	19.5
0.216420	---	27.42	52.96	25.54	N	OFF	19.5
0.216420	44.76	---	62.96	18.20	N	OFF	19.5
0.230820	---	31.52	52.42	20.90	N	OFF	19.5
0.230820	44.88	---	62.42	17.54	N	OFF	19.5
0.260250	---	30.35	51.42	21.07	N	OFF	19.5
0.260250	43.94	---	61.42	17.48	N	OFF	19.5
0.294000	---	28.96	50.41	21.45	N	OFF	19.5
0.294000	43.87	---	60.41	16.54	N	OFF	19.5
0.497670	---	26.78	46.04	19.26	N	OFF	19.5
0.497670	35.52	---	56.04	20.52	N	OFF	19.5
0.525750	---	24.80	46.00	21.20	N	OFF	19.5
0.525750	34.44	---	56.00	21.56	N	OFF	19.5
2.096250	---	27.58	46.00	18.42	N	OFF	19.6
2.096250	34.36	---	56.00	21.64	N	OFF	19.6
2.323140	---	28.15	46.00	17.85	N	OFF	19.6

2.323140	35.47	---	56.00	20.53	N	OFF	19.6
2.476140	---	29.29	46.00	16.71	N	OFF	19.6
2.476140	35.72	---	56.00	20.28	N	OFF	19.6
2.635710	---	29.24	46.00	16.76	N	OFF	19.6
2.635710	36.59	---	56.00	19.41	N	OFF	19.6
2.850000	---	30.30	46.00	15.70	N	OFF	19.6
2.850000	40.42	---	56.00	15.58	N	OFF	19.6
3.058260	---	31.24	46.00	14.76	N	OFF	19.6
3.058260	38.92	---	56.00	17.08	N	OFF	19.6
3.270750	---	31.77	46.00	14.23	N	OFF	19.6
3.270750	39.41	---	56.00	16.59	N	OFF	19.6
3.475230	---	32.70	46.00	13.30	N	OFF	19.6
3.475230	42.12	---	56.00	13.88	N	OFF	19.6
3.576750	---	32.75	46.00	13.25	N	OFF	19.6
3.576750	39.14	---	56.00	16.86	N	OFF	19.6
3.791940	---	33.69	46.00	12.31	N	OFF	19.6
3.791940	40.93	---	56.00	15.07	N	OFF	19.6
4.004070	---	33.58	46.00	12.42	N	OFF	19.6
4.004070	40.17	---	56.00	15.83	N	OFF	19.6
4.105500	---	34.01	46.00	11.99	N	OFF	19.6
4.105500	40.59	---	56.00	15.41	N	OFF	19.6
4.217910	---	34.80	46.00	11.20	N	OFF	19.6
4.217910	42.03	---	56.00	13.97	N	OFF	19.6
4.496370	---	34.73	46.00	11.27	N	OFF	19.6
4.496370	41.20	---	56.00	14.80	N	OFF	19.6
4.709400	---	34.95	46.00	11.05	N	OFF	19.6
4.709400	40.64	---	56.00	15.36	N	OFF	19.6
4.965900	---	35.55	46.00	10.45	N	OFF	19.7
4.965900	42.65	---	56.00	13.35	N	OFF	19.7
5.374680	---	34.18	50.00	15.82	N	OFF	19.7
5.374680	40.07	---	60.00	19.93	N	OFF	19.7
5.786250	---	32.42	50.00	17.58	N	OFF	19.7
5.786250	39.66	---	60.00	20.34	N	OFF	19.7
6.279000	---	32.55	50.00	17.45	N	OFF	19.7
6.279000	41.27	---	60.00	18.73	N	OFF	19.7
7.297170	---	29.58	50.00	20.42	N	OFF	19.8
7.297170	37.07	---	60.00	22.93	N	OFF	19.8
8.011500	---	26.93	50.00	23.07	N	OFF	19.8
8.011500	33.33	---	60.00	26.67	N	OFF	19.8
13.559550	---	19.66	50.00	30.34	N	OFF	19.9
13.559550	26.69	---	60.00	33.31	N	OFF	19.9
16.212750	---	21.54	50.00	28.46	N	OFF	19.9
16.212750	29.10	---	60.00	30.90	N	OFF	19.9

Appendix B. Radiated Emission Test Result

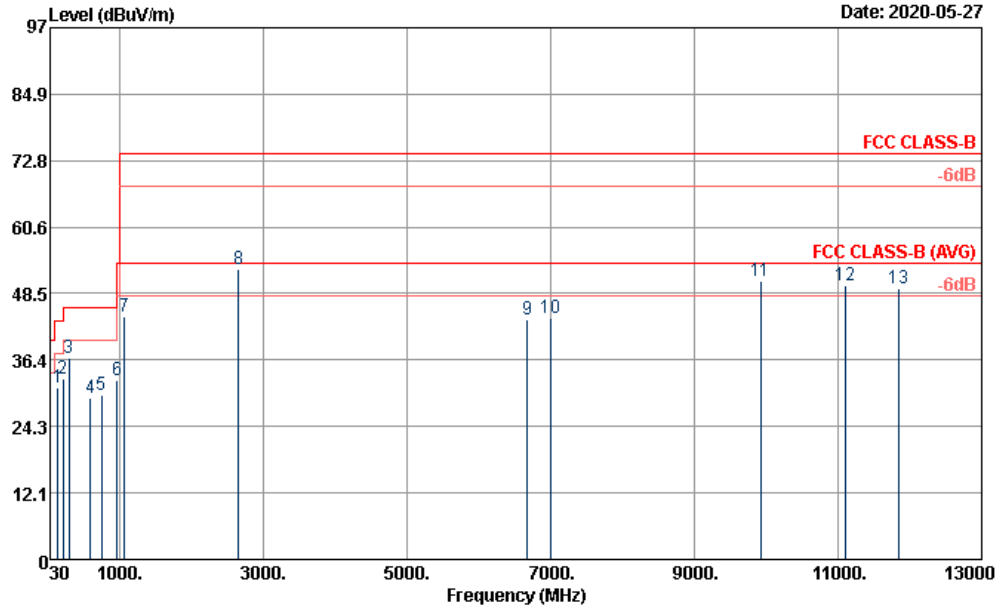
Test Engineer :	Brad Liu, Yuan Lee and You Xian Chen	**Temperature :**	24~26°C
		Relative Humidity :	37~41%
Test Distance :	3m	**Polarization :**	Horizontal
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m 9120D_1156 HORIZONTAL
Project : 051232
Power : From System
Memo : Mode 7
: NB to eMMC

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1		136.92	30.43	-13.07	43.50	43.04	17.43	1.53	31.63	---	---	Peak
2	!	209.28	38.26	-5.24	43.50	52.98	14.95	1.90	31.64	---	---	Peak
3		279.75	37.57	-8.43	46.00	48.18	18.70	2.21	31.62	---	---	Peak
4	!	311.20	41.56	-4.44	46.00	51.55	19.19	2.33	31.61	100	0	Peak
5		792.10	30.25	-15.75	46.00	30.43	27.64	3.72	31.81	---	---	Peak
6		955.90	32.57	-13.43	46.00	28.33	30.57	4.07	30.85	---	---	Peak
7		2655.00	51.10			77.71	27.60	6.91	61.12	---	---	Peak
8		4960.00	42.55	-31.45	74.00	59.44	31.43	9.80	58.12	---	---	Peak
9		6520.00	42.57	-31.43	74.00	55.56	34.15	11.45	58.59	---	---	Peak
10		6886.00	43.78	-30.22	74.00	55.18	34.83	12.22	58.45	---	---	Peak
11		11644.00	49.97	-24.03	74.00	49.31	39.80	17.18	56.32	---	---	Peak
12		12130.00	50.77	-23.23	74.00	51.24	39.23	17.59	57.29	100	20	Peak
13		12838.00	48.49	-25.51	74.00	49.93	39.07	18.31	58.82	---	---	Peak

Test Engineer :	Brad Liu, Yuan Lee and You Xian Chen	**Temperature :**	24~26°C
		Relative Humidity :	37~41%
Test Distance :	3m	**Polarization :**	Vertical
Remark :	#8 is system simulator signal which can be ignored.		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m 9120D_1156 VERTICAL
Project : 051232
Power : From System
Memo : Mode 7
: NB to eMMC

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	138.00	31.32	-12.18	43.50	43.89	17.46	1.54	31.63	---	---	Peak
2	210.36	32.92	-10.58	43.50	47.66	14.93	1.90	31.64	---	---	Peak
3	296.76	36.69	-9.31	46.00	46.81	19.11	2.28	31.61	100	0	Peak
4	589.10	29.42	-16.58	46.00	32.26	25.49	3.29	31.81	---	---	Peak
5	743.80	29.90	-16.10	46.00	30.01	27.81	3.65	31.83	---	---	Peak
6	959.40	32.77	-13.23	46.00	28.50	30.56	4.07	30.83	---	---	Peak
7	1066.00	44.27	-29.73	74.00	76.83	24.80	4.26	61.62	---	---	Peak
8	2655.00	52.97			79.58	27.60	6.91	61.12	---	---	Peak
9	6670.00	43.69	-30.31	74.00	56.13	34.43	11.66	58.53	---	---	Peak
10	7000.00	44.07	-29.93	74.00	54.33	35.40	12.74	58.40	---	---	Peak
11	9922.00	50.79	-23.21	74.00	54.01	39.15	15.75	58.12	100	305	Peak
12	11098.00	50.00	-24.00	74.00	49.51	40.10	16.73	56.34	---	---	Peak
13	11848.00	49.36	-24.64	74.00	49.62	39.05	17.35	56.66	---	---	Peak

————THE END————