FCC TEST REPORT

FCC ID	:	**IHDT56XM1**
Equipment	:	**Mobile Cellular Phone**
Brand Name	:	**Motorola**
Model Name	:	**XT2000-1**
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**

The product was received on Jan. 24, 2019 and testing was started from Feb. 12, 2019 and completed on Mar. 14, 2019. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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.

Jones Tsai

Approved by: Jones Tsai

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

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Appendix A. AC Conducted Emission Test Result

Appendix B. Radiated Emission Test Result

History of this test report

Report No.	Version	Description	Issued Date
FC912419	01	Initial issue of report	Mar. 25, 2019
FC912419	02	Remove watermark.	Mar. 29, 2019

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 11.78 dB at 0.159 MHz
3.2	15.109	Radiated Emission	Pass	Under limit 6.19 dB at 47.280 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: Louis Wu

Report Producer: Wii Chang

1. General Description

1.1. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2000-1
FCC ID	IHDT56XM1
IMEI Code	IMEI: 355573090013654
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/GNSS/ NFC WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	DVT3
EUT Stage	Identical Prototype

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

Accessory List	
AC Adapter	Brand Name : Motorola
	Model Name : SA18C45883
	Manufacturer : Salom
Battery 1	Brand Name : Motorola
	Model Name : KV40
	Manufacturer : Amperex
Battery 2	Brand Name : Motorola
	Model Name : KV30
	Manufacturer : Amperex
Headset Jack Adaptor	Brand Name : Motorola
	Model Name : SC18C45885
	Manufacturer : Luxshare
USB-C Data Cable	Brand Name : Motorola
	Model Name : SC18C45884
	Manufacturer : Luxshare
USB-C Headset 2	Brand Name : Motorola
	Model Name : SH38C48284
	Manufacturer : Grandsun

Supported Unit Used in Test Configuration and System	
USB-C Headset 1	Brand Name : Google
	Model Name : G019A
	Manufacturer : Grandsun

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 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 13: 779.5 MHz ~ 784.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz CDMA2000 BC0: 824.70 MHz ~ 848.31 MHz CDMA2000 BC1: 1851.25 MHz ~ 1908.75 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz ; 5745 MHz ~ 5825 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 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 13: 748.5 MHz ~ 753.5 MHz LTE Band 66: 2110.7 MHz ~ 2199.3 MHz CDMA2000 BC0: 869.70 MHz ~ 893.31 MHz CDMA2000 BC1: 1931.25 MHz ~ 1988.75 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz ; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS : 1559 MHz ~ 1610 MHz (GPS) NFC: 13.56 MHz
Antenna Type	WWAN : Main: Fixed Internal Antenna and Dynamic Antenna Aux.: Fixed Internal Antenna and Dipole Antenna WLAN : Fixed Internal Antenna Bluetooth : Loop Antenna GPS: Internal Antenna NFC: Internal Fixed with flex pattern Antenna

Standards-related Product Specification	
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM / 64QAM CDMA2000 : QPSK CDMA2000 1xEV-DO : 8PSK 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) : π /4-DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : 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.	
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
- 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 Link + Bluetooth Link + WLAN Link + MPEG4 + USB-C Data Cable (Charging from Adapter) + Battery < 10% for Open Mode Mode 2 : WCDMA Band V Link + Bluetooth Link + WLAN Link + NFC On + USB-C Data Cable (Charging from Adapter) + Battery 50% for Open Mode Mode 3 : LTE Band 5 Link + Bluetooth Link + WLAN Link + Camera (Front) + USB-C Data Cable (Charging from Adapter) + Battery > 90% for Open Mode Mode 4 : GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera (Back) + USB-C Data Cable (Charging from Adapter) + Battery < 10% for Open Mode Mode 5 : WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + GPS Rx + USB-C Data Cable (Charging from Adapter) + Battery 50% for Open Mode Mode 6 : LTE Band 2 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + USB-C Data Cable (Data Link with Notebook) + Battery > 90% for Open Mode Mode 7 : LTE Band 2 Idle + Bluetooth Idle + WLAN Idle + NFC On + USB-C Data Cable (Data Link with Notebook) + Battery > 90% for Close Mode Mode 8 : LTE Band 13 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + USB-C Data Cable (Data Link with Notebook) + Battery > 90% for Open Mode

Test Items	Function Type
Radiated Emissions	Mode 1 :GSM850 Link + Bluetooth Link + WLAN Link + MPEG4 + Earphone + Headset Jack Adaptor + Battery < 10% for Open Mode Mode 2 :WCDMA Band V Link + Bluetooth Link + WLAN Link + NFC On + USB-C Data Cable (Charging from Adapter) + Battery 50% for Open Mode Mode 3 :LTE Band 5 Link + Bluetooth Link + WLAN Link + Camera (Front) + USB-C Data Cable (Charging from Adapter) + Battery > 90% for Open Mode Mode 4 :GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera (Back) + USB-C Data Cable (Charging from Adapter) + Battery < 10% for Open Mode Mode 5 :WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + GPS Rx + USB-C Data Cable (Charging from Adapter) + Battery 50% for Open Mode Mode 6 :LTE Band 2 Idle + Bluetooth Idle + WLAN Idle + MPEG4 + USB-C Data Cable (Data Link with Notebook) + Battery > 90% for Open Mode Mode 7 :GSM1900 Idle + Bluetooth Idle + WLAN Idle + NFC On + USB-C Data Cable (Charging from Adapter) + Battery < 10% for Close Mode Mode 8 :GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera (Back) + USB-C Headset 1 + Headset Jack Adaptor + Battery < 10% for Open Mode Mode 9 :LTE Band 13 Idle + Bluetooth Idle + WLAN Idle + Camera (Back) + USB-C Data Cable (Charging from Adapter) + Battery < 10% for Open Mode Mode 10 :GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera (Back) + USB-C Headset 2 + Headset Jack Adaptor + Battery < 10% for Open Mode

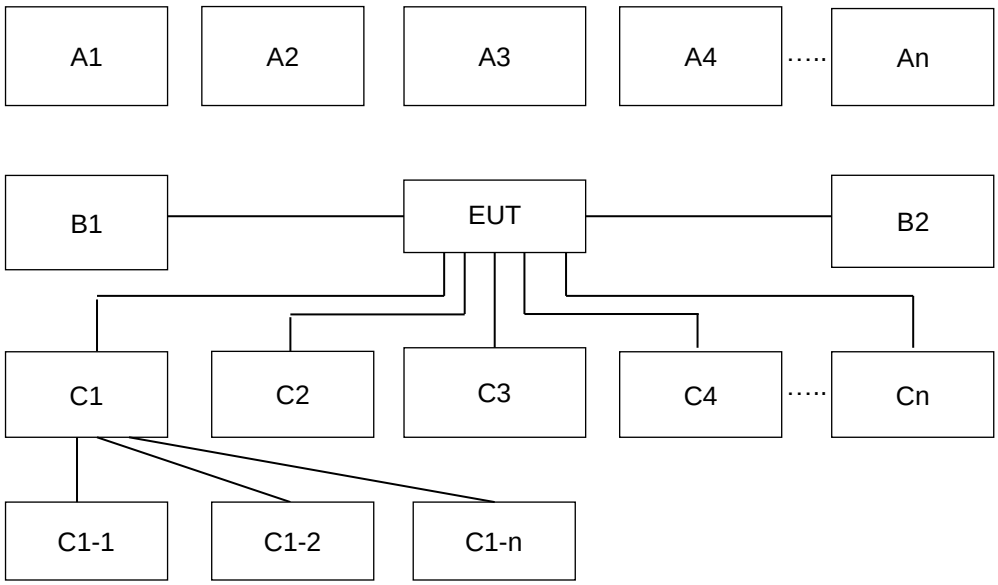
Remark:

1. The worst case of AC is mode 6; only the test data of this mode was reported.

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

3. Data Linking with Notebook means data application transferred mode between EUT and Notebook.

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	GSM/UMTS/CDMA/ WCDMA/LTE	X	X	X	X	X	X	X
A3	GPS Station	GPS					X		
A4	AP router	WiFi	X	X	X	X	X	X	X
A5	Notebook	WiFi	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	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

Conduction Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			8						
A1	BT Earphone	Bluetooth	X						
A2	System Simulator	GSM/UMTS/CDMA/ WCDMA/LTE	X						
A3	GPS Station	GPS							
A4	AP router	WiFi	X						
A5	Notebook	WiFi							
No.	**Power Source**	**Connection Type**	**8**						
B1	AC : 120V/60Hz	AC Power Cable							
No.	**Setup Peripherals**	**Connection Type**	**8**						
C1	Notebook	USB Cable	X						
C1-1	IPod	USB Cable to C1	X						
C1-2	AP router	RJ-45 Cable to C1	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/UMTS/CDMA/ WCDMA/LTE	X	X	X	X	X	X	X
A3	GPS Station	GPS	-	-	-	-	X	-	-
A4	AP router	WiFi	X	X	X	X	X	X	X
A5	Notebook	WiFi	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	-	X
No.	**Setup Peripherals**	**Connection Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
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	Audio to Type C Cable	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/UMTS/CDMA/ WCDMA/LTE	X	X	X				
A3	GPS Station	GPS	-	-	-				
A4	AP router	WiFi	X	X	X				
A5	Notebook	WiFi	-	-	-				
No.	**Power Source**	**Connection Type**	**8**	**9**	**10**				
B1	AC : 120V/60Hz	AC Power Cable	X	X	X				
No.	**Setup Peripherals**	**Connection Type**	**8**	**9**	**10**				
C1	Notebook	USB Cable	-	-	-				
C1-1	IPod	USB Cable to C1	-	-	-				
C1-2	AP router	RJ-45 Cable to C1	-	-	-				
C2	Earphone	Earphone jack	X	-	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.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
4.	WLAN AP	ASUS	RT-AC51U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
5.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
6.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
7.	Notebook	ASUS	P2430U	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
8.	Bluetooth Earphone	Lenovo	LBH 301	FCC DoC	N/A	N/A
9.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA 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 “Video player” to play MPEG4 files.
3. Turn on camera to capture images.
4. Execute “GPS Test” to make the EUT receive continuous signals from GPS station.
5. EUT links with Notebook and executes ping.

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.

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.

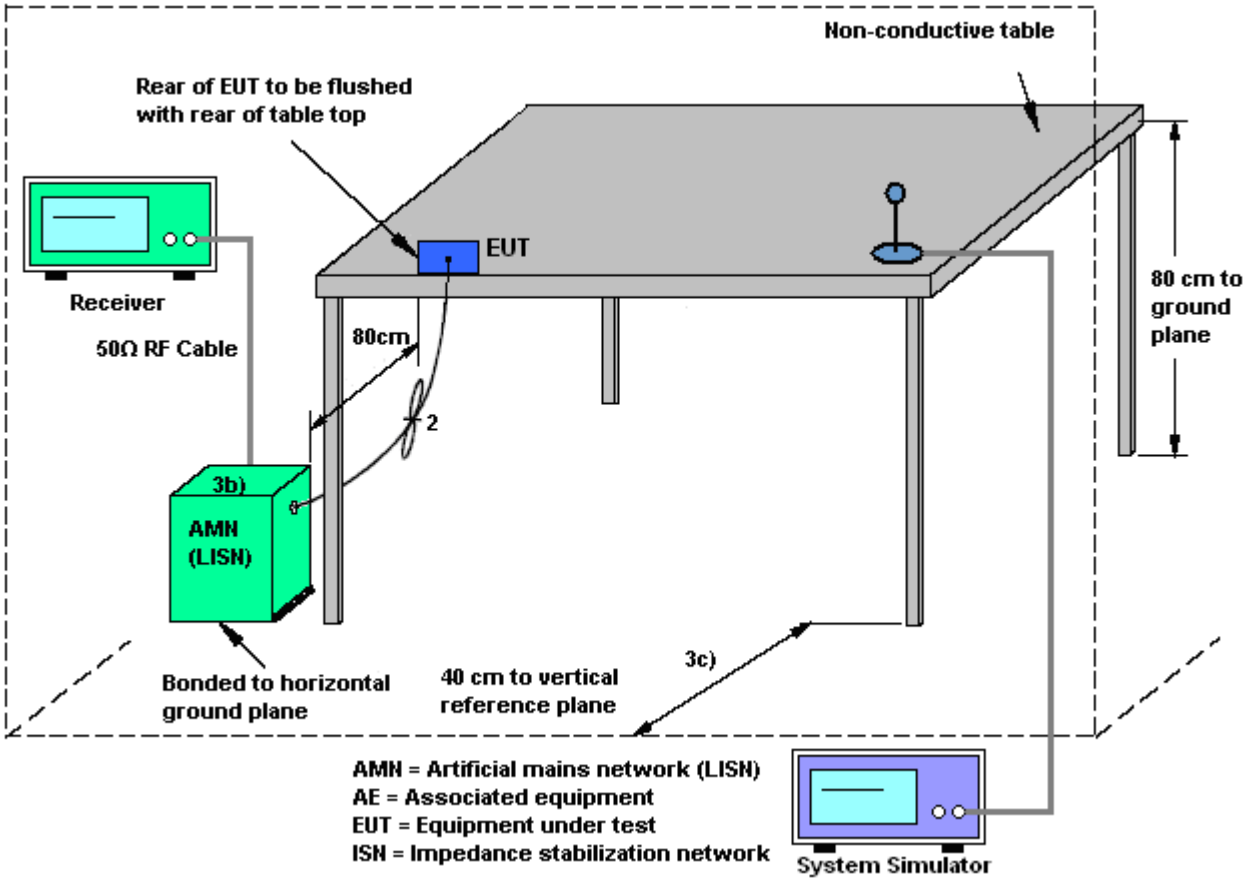
3.1.2 Measuring Instruments

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:

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

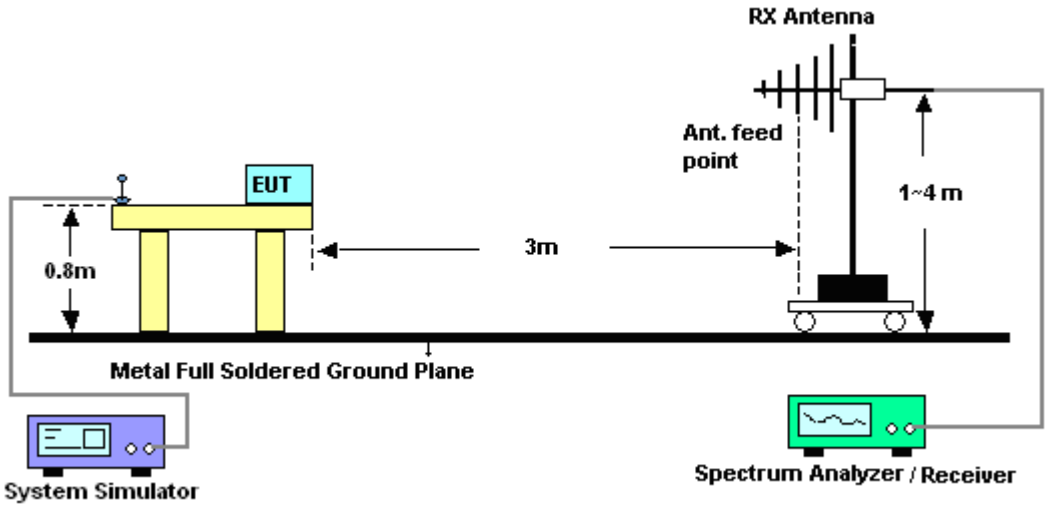
Refer a test equipment and calibration data table in this test report.

3.2.3. Test Procedures

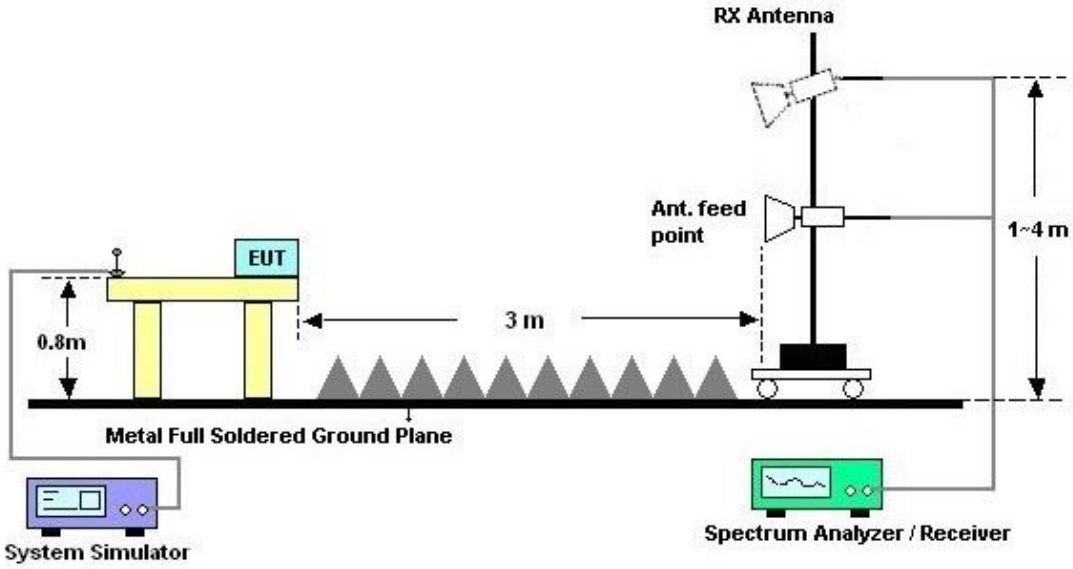
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Feb. 17, 2019~ Mar. 04, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Feb. 17, 2019~ Mar. 04, 2019	Nov. 11, 2019	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Mar. 06, 2018	Feb. 17, 2019~ Mar. 04, 2019	Mar. 05, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Feb. 17, 2019~ Mar. 04, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Feb. 17, 2019~ Mar. 04, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Feb. 17, 2019~ Mar. 04, 2019	N/A	Conduction (CO05-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Sep. 14, 2018	Feb. 17, 2019~ Mar. 04, 2019	Sep. 13, 2019	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Nov. 08, 2018	Feb. 17, 2019~ Mar. 04, 2019	Nov. 07, 2019	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N-6-06	2725&AT-N0601	30MHz~1GHz	Oct. 13, 2018	Feb. 12, 2019~ Mar. 14, 2019	Oct. 12, 2019	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 08, 2019	Feb. 12, 2019~ Mar. 14, 2019	Jan. 07, 2020	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 24, 2018	Feb. 12, 2019~ Mar. 14, 2019	Aug. 23, 2019	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	May 02, 2018	Feb. 12, 2019~ Mar. 14, 2019	May 01, 2019	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1850117	1GHz ~ 18GHz	May 24, 2018	Feb. 12, 2019~ Mar. 14, 2019	May 23, 2019	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Feb. 12, 2019~ Mar. 14, 2019	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Feb. 12, 2019~ Mar. 14, 2019	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Feb. 12, 2019~ Mar. 14, 2019	N/A	Radiation (03CH06-HY)
Test Software	AUDIX	e3	6.2009-8-24 (k5)	N/A	N/A	Feb. 12, 2019~ Mar. 14, 2019	N/A	Radiation (03CH06-HY)
Hygrometer	WISEWIND	410	BU5004	N/A	Mar. 06, 2018	Feb. 12, 2019~ Feb. 19, 2019	Mar. 05, 2019	Radiation (03CH06-HY)
Hygrometer	WISEWIND	410	BU5004	N/A	Mar. 05, 2019	Mar. 08, 2019~ Mar. 14, 2019	Mar. 04, 2020	Radiation (03CH06-HY)
RF Cable	HUBER+SUHNER/WOKEN/HARBOUR INDUSTRIES	SUCOFLEX 104 /STORM/LL142	MY24966/4/00100A1O2A178T/CA3601-3601-1000	30MHz-26GHz	Nov. 22, 2018	Feb. 12, 2019~ Mar. 14, 2019	Nov. 21, 2019	Radiation (03CH06-HY)
Filter	Microwave	H1G013G1	SN477215	1.0G High Pass	Nov. 02, 2018	Feb. 12, 2019~ Mar. 14, 2019	Nov. 01, 2019	Radiation (03CH06-HY)
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 02, 2018	Feb. 12, 2019~ Mar. 14, 2019	Nov. 01, 2019	Radiation (03CH06-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))	2.20

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

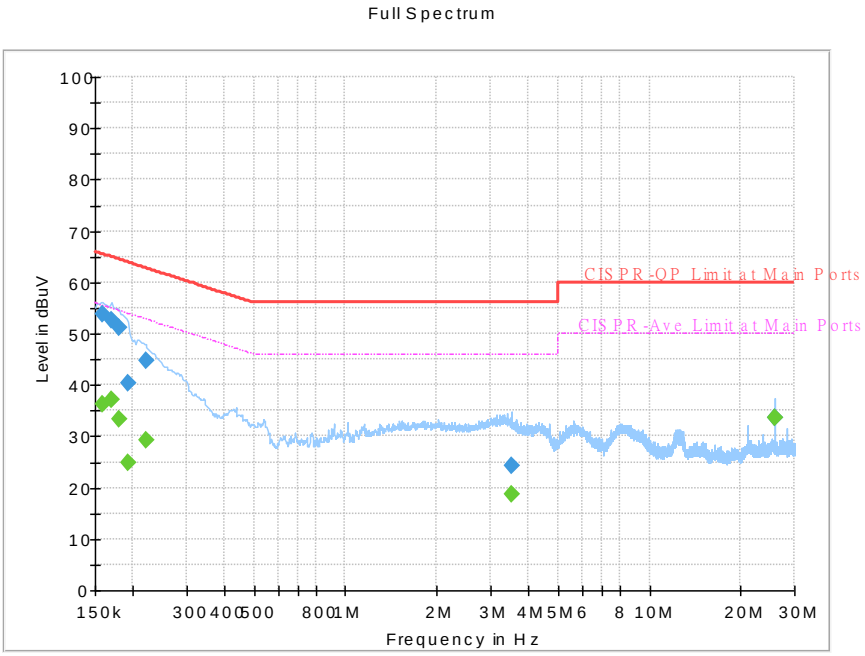
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.07

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.44

Appendix A. AC Conducted Emission Test Results

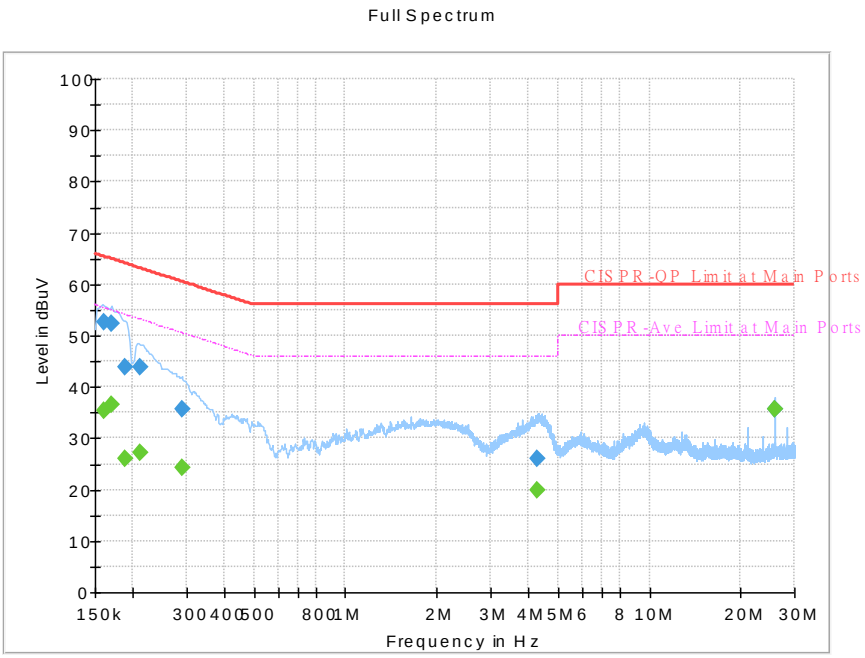
Test Engineer :	Eric Jeng	**Temperature :**	22~25℃
		Relative Humidity :	52~55%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result :

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	36.39	55.52	19.13	L1	OFF	19.5
0.159000	53.74	---	65.52	11.78	L1	OFF	19.5
0.170250	---	37.00	54.95	17.95	L1	OFF	19.5
0.170250	52.76	---	64.95	12.19	L1	OFF	19.5
0.179250	---	33.39	54.52	21.13	L1	OFF	19.5
0.179250	51.27	---	64.52	13.25	L1	OFF	19.5
0.192750	---	24.94	53.92	28.98	L1	OFF	19.5
0.192750	40.37	---	63.92	23.55	L1	OFF	19.5
0.219750	---	29.31	52.83	23.52	L1	OFF	19.5
0.219750	44.60	---	62.83	18.23	L1	OFF	19.5
3.520500	---	18.60	46.00	27.40	L1	OFF	19.6
3.520500	24.17	---	56.00	31.83	L1	OFF	19.6
25.869750	---	33.64	50.00	16.36	L1	OFF	19.8
25.869750	33.72	---	60.00	26.28	L1	OFF	19.8

Test Engineer :	Eric Jeng	**Temperature :**	22~25℃
		Relative Humidity :	52~55%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

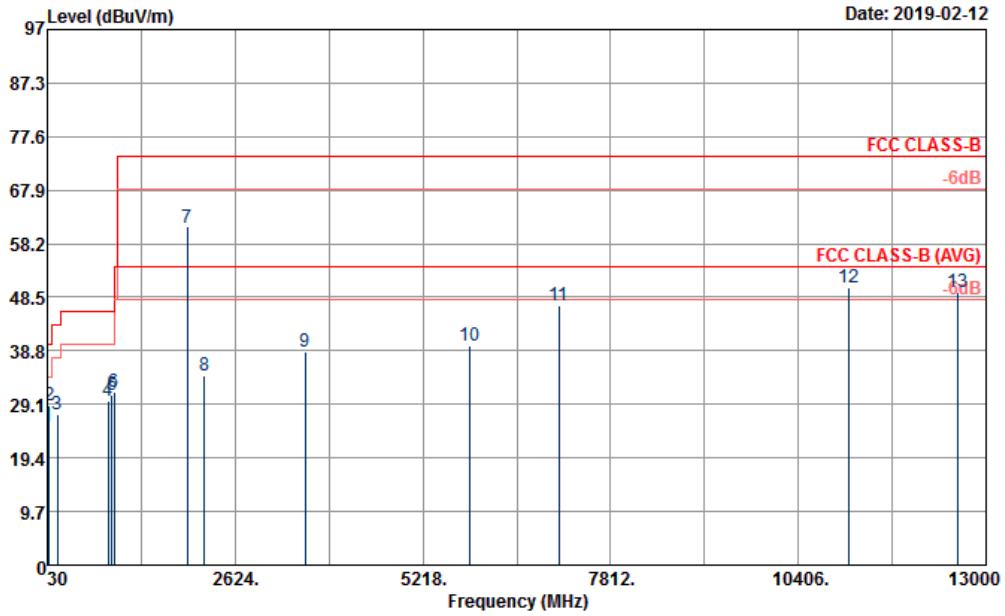


Final Result :

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	35.27	55.40	20.13	N	OFF	19.5
0.161250	52.73	---	65.40	12.67	N	OFF	19.5
0.170250	---	36.65	54.95	18.30	N	OFF	19.5
0.170250	52.30	---	64.95	12.65	N	OFF	19.5
0.188250	---	26.14	54.11	27.97	N	OFF	19.5
0.188250	43.99	---	64.11	20.12	N	OFF	19.5
0.210750	---	27.26	53.18	25.92	N	OFF	19.5
0.210750	43.86	---	63.18	19.32	N	OFF	19.5
0.289500	---	24.36	50.54	26.18	N	OFF	19.5
0.289500	35.58	---	60.54	24.96	N	OFF	19.5
4.294500	---	19.99	46.00	26.01	N	OFF	19.6
4.294500	26.11	---	56.00	29.89	N	OFF	19.6
25.872000	---	35.60	50.00	14.40	N	OFF	20.0
25.872000	35.56	---	60.00	24.44	N	OFF	20.0

Appendix B. Radiated Emission Test Result

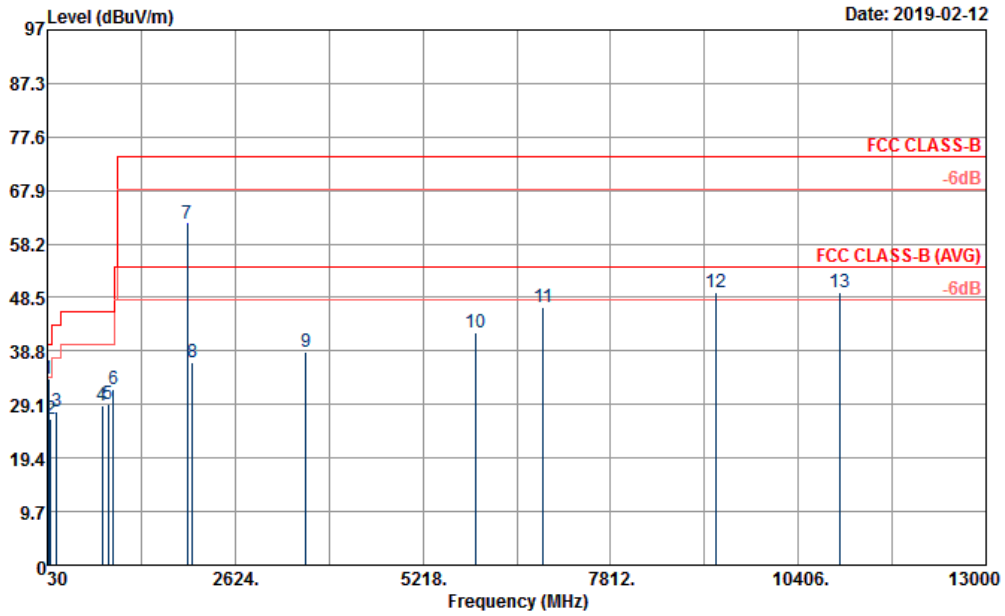
Test Engineer :	Donny Tang and Eric Jeng	**Temperature :**	22~25°C
		Relative Humidity :	52~55%
Test Distance :	3m	**Polarization :**	Horizontal
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m 9120D_1156_180824 HORIZONTAL
Project : 912419
Power : 120Vac/60Hz
Memo : Mode 4

	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	46.74	25.20	-14.80	40.00	40.23	15.89	0.84	31.76	---	---	Peak
2	57.27	29.00	-11.00	40.00	47.80	12.12	0.84	31.76	100	0	Peak
3	167.97	27.23	-16.27	43.50	41.76	15.76	1.43	31.72	---	---	Peak
4	869.80	29.61	-16.39	46.00	28.60	28.97	3.61	31.57	---	---	Peak
5	923.00	30.93	-15.07	46.00	29.16	29.27	3.74	31.24	---	---	Peak
6	955.20	31.33	-14.67	46.00	27.67	30.64	3.98	30.96	---	---	Peak
7	1960.00	61.00			89.91	26.00	5.78	61.10	---	---	Peak
8	2200.00	34.22	-39.78	74.00	60.43	28.20	6.27	61.10	---	---	Peak
9	3595.00	38.71	-35.29	74.00	62.18	29.20	8.36	61.60	---	---	Peak
10	5870.00	39.78	-34.22	74.00	53.73	32.33	11.06	57.97	---	---	Peak
11	7099.00	46.88	-27.12	74.00	55.32	35.90	13.32	58.62	---	---	Peak
12	11110.00	50.30	-23.70	74.00	50.23	40.05	15.24	56.41	100	23	Peak
13	12615.00	49.40	-24.60	74.00	51.62	38.62	16.54	58.53	---	---	Peak

Test Engineer :	Donny Tang and Eric Jeng	**Temperature :**	22~25˚C
		Relative Humidity :	52~55%
Test Distance :	3m	**Polarization :**	Vertical
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m 9120D_1156_180824 VERTICAL
Project : 912419
Power : 120Vac/60Hz
Memo : Mode 4

	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	47.28	33.81	-6.19	40.00	49.25	15.48	0.84	31.76	100	41	Peak
2	78.60	26.56	-13.44	40.00	44.17	13.10	1.03	31.74	---	---	Peak
3	157.17	27.90	-15.60	43.50	41.48	16.71	1.43	31.72	---	---	Peak
4	783.00	28.98	-17.02	46.00	29.47	27.98	3.43	31.90	---	---	Peak
5	870.50	29.25	-16.75	46.00	28.24	28.97	3.61	31.57	---	---	Peak
6	947.50	31.99	-14.01	46.00	29.00	30.23	3.79	31.03	---	---	Peak
7	1960.00	62.00			90.91	26.00	5.78	61.10	---	---	Peak
8	2040.00	36.70	-37.30	74.00	64.89	26.60	5.89	61.10	---	---	Peak
9	3605.00	38.75	-35.25	74.00	62.20	29.20	8.38	61.60	---	---	Peak
10	5950.00	42.13	-31.87	74.00	55.75	32.60	11.19	58.12	---	---	Peak
11	6882.00	46.82	-27.18	74.00	55.79	34.90	13.84	58.62	---	---	Peak
12	9262.00	49.48	-24.52	74.00	53.31	38.73	14.02	58.11	---	---	Peak
13	10970.00	49.55	-24.45	74.00	49.30	40.47	15.14	56.56	100	21	Peak

THE END