

FCC Test Report

APPLICANT	: Motorola Mobility LLC
EQUIPMENT	: Mobile Cellular Phone
BRAND NAME	: Motorola
FCC ID	: IHDT56XE1
STANDARD	: FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	: Certification

This is a variant report. The product was received on Mar. 07, 2018 and testing was completed on Mar. 24, 2018. We, SPORTON INTERNATIONAL 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 INC., the test report shall not be reproduced except in full.

Louis Wu

Reviewed by: Louis Wu / Manager

Approved by: Jones Tsai / Manager



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC811821-09	Rev. 01	Initial issue of report	Apr. 23, 2018



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
					Under limit
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	9.98 dB at 52.140 MHz



1. General Description

1.1. Applicant

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.2. Manufacturer

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.3. Product Feature of Equipment Under Test

Product Feature			
Equipment	Mobile Cellular Phone		
Brand Name	Motorola		
FCC ID	IHDT56XE1		
IMEI Code	351886090018703		
	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/GNSS/NFC		
	WLAN 11b/g/n HT20		
EUT supports Radios application	WLAN 11a/n HT20/HT40		
	WLAN 11ac VHT20/VHT40/VHT80		
	Bluetooth BR/EDR/LE		
HW Version	DVT2		
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. This is a variant report by adding WPC Back Cover. All the test cases were performed on original report which can be referred to Sporton Report Number FV811821. Based on the original report, the test cases were verified.

Accessory List			
	Brand Name : Motorola		
	Model Name : MD100W		



1.4. Product Specification of Equipment Under Test

Standards-related Product Specification			
	GSM850: 824.2 MHz ~ 848.8 MHz		
	GSM1900: 1850.2 MHz ~ 1909.8MHz		
	CDMA2000 BC0: 824.70 MHz ~ 848.31 MHz		
	CDMA2000 BC1: 1851.25 MHz ~ 1908.75 MHz		
	CDMA2000 BC10: 817.9 MHz ~ 823.1 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		
	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		
Tx Frequency	LTE Band 14: 790.5 MHz ~ 795.5 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: 2305 MHz ~ 2315 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		
	802.11b/g/n: 2412 MHz ~ 2462 MHz		
	802.11a/n/ac:		
	5180 MHz ~ 5240 MHz;		
	5260 MHz ~ 5320 MHz;		
	5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz;		
	5745 MHz ~ 5825 MHz		
	Bluetooth: 2402 MHz ~ 2480 MHz		
	NFC : 13.56 MHz		



Standards-related Product Specification			
	GSM850: 869.2 MHz ~ 893.8 MHz		
	GSM1900: 1930.2 MHz ~ 1989.8 MHz		
	CDMA2000 BC0: 869.70 MHz ~ 893.31 MHz		
	CDMA2000 BC1: 1931.25 MHz ~ 1988.75 MHz		
	CDMA2000 BC10: 862.9 MHz ~ 868.1 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 14: 760.5 MHz ~ 765.5 MHz		
Rx Frequency	LTE Band 17: 736.5 MHz ~ 743.5 MHz		
	LTE Band 25: 1930.7 MHz ~ 1994.3 MHz		
	LTE Band 26: 869.7 MHz ~ 893.3 MHz		
	LTE Band 30: 2350 MHz ~ 2360 MHz		
	LTE Band 38: 2572.5 MHz ~ 2617.5 MHz		
	LIE Band 41: 2498.5 MHz ~ 2687.5 MHz		
	LTE Band 66: 2110.7 MHz ~ 2199.3 MHz		
	LIE Band /1: 619.5 MHz ~ 649.5 MHz		
	802.11b/g/n: 2412 MHz ~ 2462 MHz		
	802.11a/n/ac:		
	5180 MHZ ~ 5240 MHZ;		
	5200 MHZ ~ 5320 MHZ;		
	5500 MHZ ~ 5580 MHZ and 5660 MHZ ~ 5700 MHZ;		
	0740 WITZ ~ 3020 WITZ		
	CDS - 1 575/2 CH7		
	$G_{\text{lonass}} : 1602 \text{ MHz} + \text{nx} = 0.5625 \text{ MHz} (\text{n}=-7, -6, -5, 0, -6)$		



Standards-related Product Specification			
	WWAN : Monopole Antenna		
	LTE : Monopole Antenna		
Antenna Type	WLAN : Loop Antenna		
Antenna Type	Bluetooth : Internal Antenna		
	NFC : Loop Antenna		
	GPS / Glonass : Internal Loop Antenna		
	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		
Type of Modulation	CDMA2000 1xEV-DO : 8PSK		
Type of modulation	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		
	NFC: ASK		
	GPS/Glonass : BPSK		



1.5. Modification of EUT

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

1.6. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1093 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park,		
	Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.		
	TEL: +886-3-327-3456		
	FAX: +886-3-328-4978		
Toot Site No	Sporton	Site No.	
	CO05-HY 03CH06-HY		



1.7. 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:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. For FCC 15 Subpart B Unintentional Radiators, receivers contained within a transceiver shall be authorized under the verification procedure per the Section 15.101 (b).
- 3. For other Unintentional Radiators features of this EUT, test reports are be issued separately. Per the Note of the Section 15.101, when device supports features (USB, FM Radio, digital devices...etc) more than one category of authorization, type of authorization shall be appropriately chosen for FCC 15B compliance rule, and the Section 15.101 (b), only those receivers that operate (tune) within the frequency range of 30-960 MHz, CB receivers and radar detectors are subject to the authorizations shown in paragraph (a) of the Section 15.101. However, receivers indicated as being subject to Declaration of Conformity that are contained within a transceiver, the transmitter portion of which is subject to certification, shall be authorized under the verification procedure.
- 4. Receivers operating above 960 MHz or below 30 MHz, except for radar detectors and CB receivers, are exempt from complying with the technical provisions of this part but are subject to § 15.5.



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	Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera + WPC Back Cover + Battery + LG Charging Pad + USB Cable (Charging from Adapter)				
Emission	Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter				
Radiated	Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Camera + WPC Back Cover + Battery + LG Charging Pad + USB Cable (Charging from Adapter)				
Emissions	Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + NFC on + WPC Back Cover + Battery + PMA Charging Pad + Adapter				
Remark:					
1. The worst	case of AC is mode 2; only the test data of this mode was reported.				
2. The worst	2. The worst case of RE is mode 1; only the test data of this mode was reported.				



2.2.Connection Diagram of Test System



Test Setup									
No	Windless Station	Connection Trees	Test Mode						
NO.	Wireless Station	Connection Type	1	2	-	-	-	-	-
A1	BT Earphone	Bluetooth	Х	Х					
A2	System Simulator	GSM/UMTS/CDMA/ WCDMA/LTE	х	х					
A3	AP router	WiFi	Х	Х					
A4	WPC pad	WPC	Х						
A5	PMA pad	PMA		Х					
No.	Power Source	Connection Type	1	2	-	-	-	-	-
B1	AC : 120V/60Hz	AC Power Cable	Х	Х					
No.	Setup Peripherals	Connection Type	1	2	-	-	-	-	-
C1	SD card	SD I/O interface without Cable	х	х					



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.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,1.8m
3.	Bluetooth Earphone	Lenovo	LBH 301	FCC DoC	N/A	N/A
4.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
5.	Adapter	N/A	N/A	N/A	N/A	N/A
6.	USB Cable	N/A	N/A	N/A	N/A	N/A
7.	LG Charging Pad	LG	WCD-110	FCC DoC	N/A	N/A
8.	PMA Charging Pad	Motorola	kinxie	FCC DoC	N/A	Shielded,1.8m

2.3. Support Unit used in test configuration and system

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA 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. Turn on camera to capture images.
- 2. Turn on the 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.

Frequency of emission	Conducted limit (dBuV)				
(MHz)	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.
- 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





Toot Engineer .	Dius Lon				Temp	erature :	23~26 ℃
rest Engineer :						ve Humic	lity : 53~56%
Test Voltage :	120Vac / 60H	łz			Phase	e :	Line
Level in dBµV	100 90 80 70 60 50 40 30 20 10 150k 3004	00500 800	DIM 2 Frequ	M 3M 4M ency in Hz	CISPI CISPI CISPI SM6 8	Avelimita	<u>I Main Ports</u> <u>t Main Ports</u>
FINAI Rest	JIT : v Quasi-Peak	Average	Limit	Margin			Corr.
(MHz)	(dBµV)	(dBµV)	(dBµV)	(dB)	Line	Filter	(dB)
0.161250		35.20	55.40	20.20	L1	OFF	19.5
0.161250	53.66		65.40	11.74	L1	OFF	19.5
0.213000		27.58	53.09	25.51	L1	OFF	19.5
0.213000	44.79		63.09	18.30	L1	OFF	19.5
0.267000		24.91	51.21	26.30	L1	OFF	19.5
0.267000	38.39		61.21	22.82	L1	OFF	19.5
0.318750		23.67	49.74	26.07	L1	OFF	19.5
0.318750	34.27		59.74	25.47	L1	OFF	19.5
0.400500		25.03	41.12 57.72	22.09		OFF	19.5
0.400000	33.10	35.62	46.00	10 38		OFF	19.5
0.730500	37 48		56.00	18 52		OFF	19.5
2 190750		36.01	46.00	9,99		OFF	19.4
2.190750	37.71		56.00	18.29	 	OFF	19.4
3.408000		35.21	46.00	10.79	L1	OFF	19.6
2 409000	1					055	
3.400000	36.91		56.00	19.09	L1	OFF	19.6
4.868250	36.91	 36.58	56.00 46.00	19.09 9.42	L1 L1	OFF	<u>19.6</u> 19.6
4.868250 4.868250	36.91 38.16	 36.58 	56.00 46.00 56.00	19.09 9.42 17.84	L1 L1 L1	OFF OFF OFF	19.6 19.6 19.6
4.868250 4.868250 13.560000	36.91 38.16)	 36.58 37.30	56.00 46.00 56.00 50.00	19.09 9.42 17.84 12.70	L1 L1 L1 L1	OFF OFF OFF OFF	19.6 19.6 19.7 19.7

3.1.5 Test Result of AC Conducted Emission







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	Field Strength	Measurement Distance		
(MHz)	(microvolts/meter)	(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.
- 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 (dB μ V/m) = 20 log Emission level (μ V/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







	D	. .			Temperature :			23~2	5°C			
est Engineer :	Donny lang				Relative Humidity :			50~5	50~52%			
est Distance :	3m				Polarization :			Horiz	Horizontal			
emark :	#7 is s	ystem :	simulate	or signa	al which	n can be	e ignor	ed.				
97	el (dBuV/m))								Date: 201	8-03-24	
84.9												
										ECC CI	ASSB	
72.8							_				-6dB	
											oub	
60.6												
		7							FCC	12	B (AVG)	
48.5						10 11		12			-UUD	
۲ _– –		8		9								
36.4	5											
3	-											
24.3												
12.1												
0 <mark>30</mark>		2624	L	52	18.		7812.		10406.		13000	
030		2624		52	18. Freque	ncy (MHz)	7812.		10406.		13000	
0 ₃₀		2624 03CH06	5-HY	52'	18. Freque	ncy (MHz)	7812.		10406.		13000	
0 ₃₀ Site Conditio		2624 03CH06 FCC CL/	6-HY ASS-B 31	52' m 9120D	18. Freque	ncy (MHz) 70915 F	7812. HORIZO	DNTAL	10406.		13000	
0 ₃₀ Site Conditio Project Bower	n :	2624 03CH06 FCC CL/ 811821- 120Vac	6-HY ASS-B 31 -09	52' m 9120D	18. Freque _1156_1	ncy (MHz) 70915 F	7812. HORIZO		10406.		13000	
0 <mark>30</mark> Site Conditio Project Power Memo	n :	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1	6-HY ASS-B 31 -09 /60Hz	52' m 9120D	18. Freque _1156_1	ncy (MHz) 70915 ŀ	7812.	DNTAL	10406.		13000	
Site Conditio Project Power Memo	n : :	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1	6-HY ASS-B 31 -09 /60Hz 0ver	52' m 9120D	18. Freque 1156_1 ReadA	ncy (MHz) 70915 F	7812. HORIZC Cable	DNTAL Preamp	10406.	T/Pos	13000	
Site Conditio Project Power Memo	n : : : : : : :	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level	5-HY ASS-B31 -09 /60Hz Over Limit	52' m 9120D Limit Line	18. Freque _1156_1 ReadA Level	ncy (MHz) 70915 F ntenna Factor	HORIZO Cable Loss	DNTAL Preamp Factor	10406. A/Pos	T/Pos	13000	
Site Conditio Project Power Memo		2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m	6-HY ASS-B31 -09 /60Hz Over Limit 	52 m 9120D Limit Line dBuV/m	18. Freque _1156_1 ReadA Leve1 	ncy (MHz) 70915 F ntenna Factor dB/m	IORIZC Cable Loss	DNTAL Preamp Factor dB	10406. A/Pos	T/Pos	13000	
Site Conditio Project Power Memo		2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m	5-HY ASS-B 31 -09 /60Hz Over Limit 	52° m 9120D Limit Line dBuV/m	18. Freque 1156_1 ReadA Leve1 	ncy (MHz) 70915 F ntenna Factor dB/m	HORIZC Cable Loss dB	DNTAL Preamp Factor dB	10406. A/Pos	T/Pos deg	Remark	
0 ₃₀ Site Conditio Project Power Memo		2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22	6-HY ASS-B 31 -09 /60Hz Over Limit 	52' m 9120D Limit Line dBuV/m 40.00	18. Freque 1156_1 	ncy (MHz) 70915 F ntenna Factor dB/m 13.57	HORIZC Cable Loss dB 1.21	DNTAL Preamp Factor dB 31.82 31 80	10406. A/Pos	T/Pos deg	Remark	
0 ₃₀ Site Conditio Project Power Memo	: : : : : Freq MHz 82.92 132.33 283.26	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19	6-HY ASS-B 31 -09 /60Hz Over Limit 	52" m 9120D Limit Line dBuV/m 40.00 43.50 46.00	18. Freque 1156_1 	ncy (MHz) 70915 F ntenna Factor dB/m 13.57 17.46 18.71	/7812. HORIZC Cable Loss dB 1.21 1.49 2.10	DNTAL Preamp Factor dB 31.82 31.80 31.75	10406. A/Pos	T/Pos deg	Remark Peak Peak Peak	
0 ₃₀ Site Conditio Project Power Memo	rn : : : : : : : : : : : : : : : : : : :	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19 29.69	6-HY ASS-B 31 -09 /60Hz Over Limit -16.49 -22.28 -18.81 -16.31	52' m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00	18. Freque 	ncy (MHz) 70915 F ntenna Factor dB/m 13.57 17.46 18.71 29.05	/7812. HORIZC Cable Loss dB 1.21 1.49 2.10 3.65	DNTAL Preamp Factor dB 31.82 31.80 31.75 31.60	A/Pos	T/Pos deg	Remark Peak Peak Peak Peak	
Site Conditio Project Power Memo 1 2 3 4 5	rn : : : : : : : : : : : : : : : : : : :	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19 29.69 32.46	6-HY ASS-B 31 -09 /60Hz Over Limit dB -16.49 -22.28 -18.81 -16.31 -13.54	52 m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00	18. Freque 	ncy (MHz) 70915 F ntenna Factor dB/m 13.57 17.46 18.71 29.05 29.80	Cable Loss dB 1.21 1.49 2.10 3.65 3.75	DNTAL Preamp Factor dB 31.82 31.80 31.75 31.60 31.26	A/Pos	T/Pos deg	Remark Peak Peak Peak Peak Peak Peak	
Site Conditio Project Power Memo 1 2 3 4 5 6	Freq MHz 82.92 132.33 283.26 888.00 933.50 956.60	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level 23.51 21.22 27.19 29.69 32.46 32.58	6-HY ASS-B 31 -09 /60Hz 0ver Limit dB -16.49 -22.28 -18.81 -16.31 -13.54 -13.42	52° m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 46.00	18. Freque 1156_1 1156_1 	ncy (MHz) 70915 F ntenna Factor 13.57 17.46 18.71 29.05 29.80 30.92	Cable Loss dB 1.21 1.49 2.10 3.65 3.75 3.81	DNTAL Preamp Factor dB 31.82 31.80 31.75 31.60 31.26 31.05	10406. A/Pos cm 100	T/Pos deg 142	Remark Peak Peak Peak Peak Peak Peak Peak	
Site Conditio Project Power Memo 1 2 3 4 5 6 7	: in : : : Freq MHz 82.92 132.33 283.26 888.00 933.50 956.60 1960.00	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19 29.69 32.46 32.58 50.46	6-HY ASS-B 31 -09 /60Hz 0ver Limit dB -16.49 -22.28 -18.81 -16.31 -13.54 -13.42	52° m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00	18. Freque 	ncy (MHz) 70915 F 70915 F antenna Factor 13.57 17.46 18.71 29.05 29.80 30.92 25.71	Cable Loss dB 1.21 1.49 2.10 3.65 3.75 3.81 6.32	Preamp Factor dB 31.82 31.80 31.75 31.60 31.26 31.05 60.99	A/Pos	T/Pos deg 142 	Remark Peak Peak Peak Peak Peak Peak Peak Pea	
Site Conditio Project Power Memo	: in : Freq HTz 82.92 132.33 283.26 888.00 933.50 956.60 1960.00 2738.00	2624 03CH06 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19 29.69 32.46 32.58 50.46 37.05	6-HY ASS-B 31 -09 /60Hz 0ver Limit -16.49 -22.28 -18.81 -16.31 -13.54 -13.42 -36.95 -23.85	52° m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 46.00 74.00 74.00	18. Freque 	ncy (MHz) 70915 F 70915 F 70915 F 70915 F 8 70915 F 8 70915 F 7 8 70915 F 7 8 7 8 7 8 7 8 7 9 8 8 3 0.92 25.71 27.96 30.92	Cable Loss dB 1.21 1.49 2.10 3.65 3.75 3.81 6.32 7.61	Preamp Factor dB 31.82 31.80 31.75 31.60 31.26 31.05 60.99 61.14	A/Pos	T/Pos deg 142 	Remark Peak Peak Peak Peak Peak Peak Peak Pea	
0 Site Conditio Project Power Memo 1 2 3 4 5 6 7 8 9 10	Freq MHz 82.92 132.33 283.26 888.00 933.50 956.60 1960.00 2738.00 4708.00 6578.00	2624 03CH00 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19 29.69 32.46 32.58 50.46 37.05 40.15 43.00	6-HY ASS-B 31 -09 /60Hz 0ver Limit -16.49 -22.28 -18.81 -13.54 -13.42 -36.95 -33.85 -31.00	52" m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00	18. Freque 	ncy (MHz) 70915 F 70915 F 70915 F 70915 F 8 70915 F 8 70915 F 7 8 70915 F 7 8 7 8 7 7 9 8 8 7 9 8 8 9 8 9 9 8 9 3 0.92 25.71 27.96 30.90 34.36	//7812. /ORIZC Cable Loss dB 1.21 1.49 2.10 3.65 3.81 6.32 7.61 10.40 12.40	Preamp Factor dB 31.82 31.80 31.75 31.60 31.26 31.05 60.99 61.14 59.82 59.37	A/Pos	T/Pos deg 142 142 	Remark Peak Peak Peak Peak Peak Peak Peak Pea	
Site Conditio Project Power Memo 1 2 3 4 5 6 7 8 9 10 11	: in : Freq HTz 82.92 132.33 283.26 888.00 933.50 956.60 1960.00 2738.00 4708.00 6578.00 7370.00	2624 03CH00 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19 29.69 32.46 32.58 50.46 37.05 40.15 43.00 44.85	6-HY ASS-B 31 -09 /60Hz 0ver Limit -16.49 -22.28 -18.81 -16.31 -13.54 -13.42 -36.95 -33.85 -31.00 -29.15	52" m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00	18. Freque 	ncy (MHz) 70915 F 70915 F 70915 F 8 70915 F 8 8 70915 F 8 8 8 7 17.46 18.71 29.05 29.80 30.92 25.71 27.96 30.90 34.36 36.11	Cable Loss dB 1.21 1.49 2.10 3.65 3.75 3.81 6.32 7.61 10.40 12.40 13.63	Preamp Factor dB 31.82 31.80 31.75 31.60 31.26 31.05 60.99 61.14 59.82 59.37 59.13	A/Pos	T/Pos deg 142 142 	Remark Peak Peak Peak Peak Peak Peak Peak Pea	
Site Conditio Project Power Memo 1 2 3 4 5 6 7 8 9 10 11 12	rn : : : : : : : : : : : : : : : : : : :	2624 03CH00 FCC CL/ 811821- 120Vac, Mode 1 Level dBuV/m 23.51 21.22 27.19 29.69 32.46 32.58 50.46 37.05 40.15 43.00 44.85 47.48	6-HY ASS-B 31 -09 /60Hz 0ver Limit -16.49 -22.28 -18.81 -13.54 -13.54 -13.42 -36.95 -33.85 -31.00 -29.15 -26.52	52" m 9120D Limit Line dBuV/m 40.00 43.50 46.00 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00 74.00	18. Freque 	ncy (MHz) 70915 F 70915 F 70915 F 17.46 18.71 29.05 29.80 30.92 25.71 27.96 30.90 34.36 36.11 37.15	Cable Loss dB 1.21 1.49 2.10 3.65 3.75 3.81 6.32 7.61 10.40 12.40 13.63 15.13	Preamp Factor dB 31.82 31.80 31.75 31.60 31.26 31.05 60.99 61.14 59.82 59.37 59.13 58.62	A/Pos	T/Pos deg 142 	13000 Remark Peak Peak Peak Peak Peak Peak Peak Pea	

3.2.5. Test Result of Radiated Emission







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	Mar. 23, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	Mar. 23, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Mar. 23, 2018	Nov. 29, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 23, 2018	N/A	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N- 6-06	2725&AT-N06 01	30MHz~1GHz	Oct. 14, 2017	Mar. 24, 2018	Oct. 13, 2018	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 04, 2018	Mar. 24, 2018	Jan. 03, 2019	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 08, 2017	Mar. 24, 2018	Aug. 07, 2018	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 25, 2017	Mar. 24, 2018	Apr. 24, 2018	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	May. 22, 2017	Mar. 24, 2018	May. 21, 2018	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF78020821 2	1m~4m	N/A	Mar. 24, 2018	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Mar. 24, 2018	N/A	Radiation (03CH06-HY)
Test Software	AUDIX	e3	6.2009-8-24(k 5)	N/A	N/A	Mar. 24, 2018	N/A	Radiation (03CH06-HY)



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence	27
of 95% (U = 2Uc(y))	2.1

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

Measuring Uncertainty for a Level of Confidence	2.0
of 95% (U = 2Uc(y))	3.9

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

Measuring Uncertainty for a Level of Confidence	4.7
of 95% (U = 2Uc(y))	4.7