

FCC Test Report

APPLICANT	: Sony Mobile Communications Inc.
EQUIPMENT	: GSM/WCDMA/LTE Phone+Bluetooth,
	DTS/UNII a/b/g/n and NFC
BRAND NAME	: Sony
FCC ID	: PY7-33681M
STANDARD	: FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	: FCC CLASS B PERSONAL
	COMPUTERS AND PERIPHERALS

The product was received on Sep. 22, 2016 and testing was completed on Oct. 19, 2016. 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.

Lunis Wu

Reviewed by: Louis Wu / Manager

Approved by: Jones Tsai / Manager



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SPORTON INTERNATIONAL INC. TEL : 886-3-327-3456 FAX : 886-3-328-4978 FCC ID : PY7-33681M Page Number: 1 of 24Report Issued Date: Feb. 06, 2017Report Version: Rev. 01Report Template No.: BU5-FD15B Version 1.3



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC692209-01	Rev. 01	Initial issue of report	Feb. 06, 2017



Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 11.20 dB at 0.158 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 8.36 dB at 171.750 MHz

SUMMARY OF TEST RESULT



1. General Description

1.1. Applicant

Sony Mobile Communications Inc.

4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan

1.2. Manufacturer

Sony Mobile Communications Inc.

4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan

1.3. Product Feature of Equipment Under Test

Product Specification subjective to this standard				
	WWAN: Coupling type (LDS) Antenna			
	WLAN: PIFA Antenna			
Antenna Type	Bluetooth: PIFA Antenna			
	GPS/Glonass: PIFA Antenna			
	NFC: Loop Antenna			

EUT Information List						
HW Version	SW Version	S/N	Performed Test Item			
<u>^</u>	0.95	RQ3002HWM1	Conducted Emission			
A	0.85	RQ3002HWM2	Radiated Spurious Emission			



Accessory List				
Formhone d	Model No. : MH410c			
Earphone 1	S/N : 1632A8640000088			
Formhone 0	Model No. : MH410c			
Earphone 2	S/N : N/A			
USB Cable	Model No. : UCB20			
	S/N : 1625A91900007E2			

Note:

- 1. Above EUT list and accessory list used are electrically identical per declared by manufacturer.
- 2. Above the accessories list are used to exercise the EUT during test.
- 3. For other wireless features of this EUT, test report will be issued separately.

1.4. Modification of EUT

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



1.5. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

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

1.6. 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, device supporting USB interface or similar peripherals (defined as the Section 15.3 (r) Peripheral device) acting as a peripheral for personal computers shall be authorized as "The Class B personal computers and peripherals" per the Section 15.101 (a) Equipment authorization of unintentional radiators.
- 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.



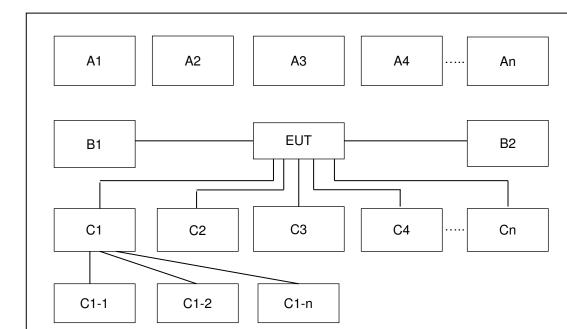
2. Test Configuration of Equipment Under Test

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 (150 kHz to 30 MHz), radiation (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: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 1					
Emission	Mode 2: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 2					
Radiated	Mode 1: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 1					
Emissions	Mode 2: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 2					
Remark:	Remark:					
1. The wors	The worst case of Radiated Emissions was measured for signal above 1GHz.					
2. Data Link	Data Link with Notebook means data application transferred mode between EUT and					
Notebook	Notebook.					





2.2. Connection Diagram of Test System

	Test Setup									
No	Setup Peripherals	Oomnootion Trees		Test Mode						
No.		Connection Type	1	2	-	-	-	-	-	
C1	Notebook	USB cable	Х	Х						
C1-2	iPod	USB Cable to C1	Х	Х						
C1-3	AP Router	RJ-45 Cable to C1	Х	Х						
C2	Earphone	Earphone jack	Х	Х						
C3	SD card	SD I/O interface	x	x						
		without cable	^							



2.3.	Support Unit used in test configuration and syster	m

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	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
3.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
4.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The data application (each file size is greater than 30Mbytes) is continuously transferred between the EUT and Notebook connected via USB cable, while Flight mode.



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

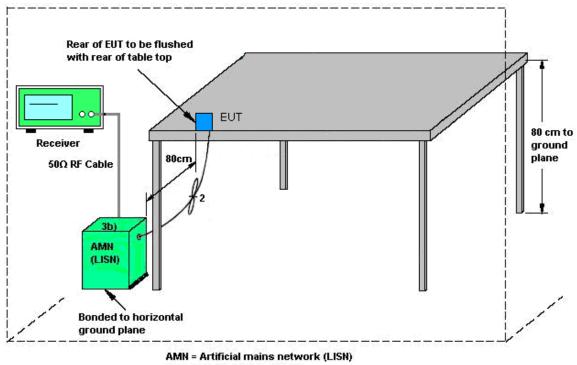
The measuring equipment is listed in the section 4 of this test report.

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



- AE = Associated equipment
- EUT = Equipment under test
- ISN = Impedance stabilization network



3.1.5 Test Result of AC Conducted Emission

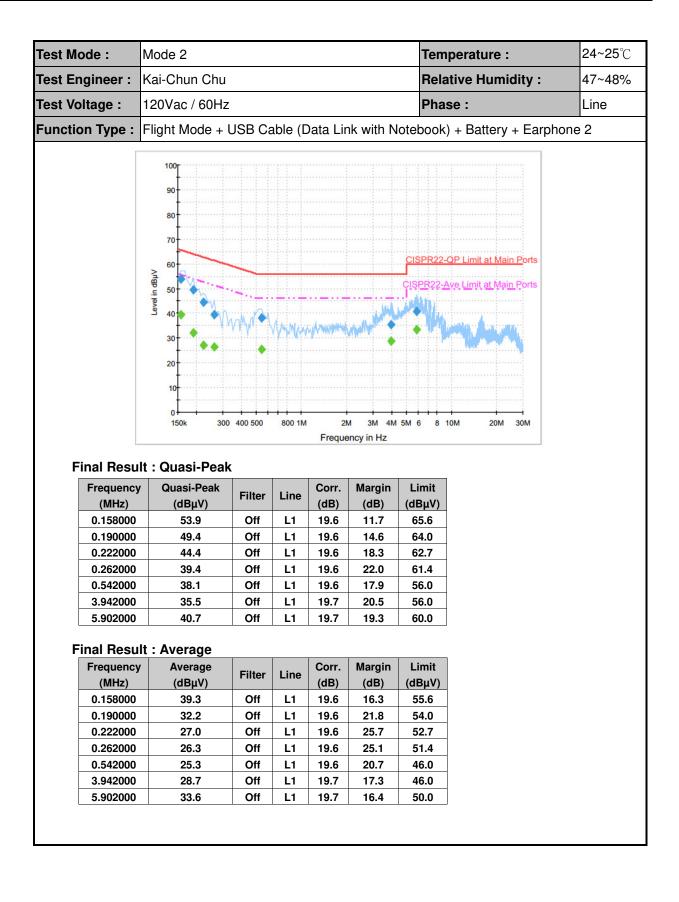
Test Mo	de :	Mode 1			Temp	erature :		24~25 ℃
Test En		Kai-Chun Chu		Relative Humidity :			47~48%	
Test Vol	-	120Vac / 60Hz			Phase		-	Line
							x) + Battery + Earphone 1	
FUNCTIO	n Type :	Flight Mode + C	130 08		ala Lir	ik with in	OLEDOOR	
		20 100 0 0 0 0 0 0 0 0 0 0 0 0	00 500	4	2M Frequen	3M 4M 5 cy in Hz	CISPR22-A	2P Limit at Main Ports ve Limit at Main Ports
Fi	nal Rosu	lt : Quasi-Peak						
	Frequency (MHz)		Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)]
	0.158000	54.4	Off	L1	19.6	11.2	65.6	
	0.174000	50.1	Off	L1	19.6	14.7	64.8	_
_	0.206000	49.1	Off	L1	19.6	14.3	63.4	-
	0.230000	43.1	Off	L1	19.6	19.3	62.4	-
-	0.542000 3.574000	36.6	Off Off	L1 L1	19.6 19.6	19.4 21.2	56.0 56.0	-
	4.006000	34.6	Off	L1	19.0	21.2	56.0	1
	5.854000	40.4	Off	L1	19.7	19.6	60.0	1
	6.758000	39.4	Off	L1	19.7	20.6	60.0]
Fi		It : Average						7
	Frequency	-	Filter	Line	Corr.	Margin	Limit	
	(MHz)	(dBµV)			(dB)	(dB)	(dBµV)	-
-	0.158000	41.4	Off Off	L1	19.6	14.2	55.6 54.8	-
-	0.174000 0.206000	35.6 31.2	Off	L1 L1	19.6 19.6	19.2 22.2	54.8 53.4	-
_	0.230000	27.4	Off	L1	19.6	25.0	52.4	-
	0.542000	27.4	Off	L1	19.6	18.6	46.0	-
	3.574000	27.1	Off	L1	19.6	18.9	46.0	
	4.006000	27.2	Off	L1	19.7	18.8	46.0	
	5.854000	33.1	Off	L1	19.7	16.9	50.0	4
	6.758000	30.9	Off	L1	19.7	19.1	50.0	

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est Mode :	Mode 1			Temp	erature	:	24~25 ℃
est Engineer :	er: Kai-Chun Chu Relative Humidity :			idity :	47~48%		
est Voltage :	120Vac / 60Hz			Phase	:		Neutral
unction Type :	Flight Mode +	USB Ca	able (E	Data Lir	nk with N	lotebool	() + Battery + Earphone 1
Final Resu Frequency (MHz) 0.166000 0.206000 0.254000 0.534000 3.886000 6.182000 Final Resu	100 90 80 70 60 70 60 70 60 70 60 70 60 70 60 70 60 70 60 70 60 70 60 70 60 70 <th>400 500</th> <th>able (E</th> <th>2m Frequen (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6</th> <th>3M 4M 5 3M 4M 5 cy in Hz Margin (dB) 11.4 13.3 17.0 20.6 16.3 20.4 22.0</th> <th>CISPR22-C</th> <th>2P Limit at Main Ports</th>	400 500	able (E	2m Frequen (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6	3M 4M 5 3M 4M 5 cy in Hz Margin (dB) 11.4 13.3 17.0 20.6 16.3 20.4 22.0	CISPR22-C	2P Limit at Main Ports
Frequency (MHz)	γ Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	
		Off	N	19.6	14.5	55.2	
0.166000		Off	Ν	19.6	17.5	54.4	
0.166000 0.182000	50.5		Ν	19.6	24.0	53.4	
		Off	14	19.0	•		
0.182000	29.4	Off Off	N	19.6	26.4	51.6	_
0.182000 0.206000	29.4 25.2						-
0.182000 0.206000 0.254000	29.4 25.2 30.9	Off	Ν	19.6	26.4	51.6	-







est Mode :	Mode 2					Tem	perature :	24~25 ℃
est Engineer :	Kai-Chun Chu				Rela	ative Humidity :	47~48%	
est Voltage :	120Vac / 60Hz					Pha	se :	Neutral
unction Type :	Flight Mode + I	USB Ca	able (D	Data Lir	nk with N	otebook) + Battery + Ear	phone 2
	100 90 80 70 60 60 50 40 40 40 40 40 40 40 40 40 40 40 40 40		ν-γγ γ γγγ				<u>-OP Limit at Main P</u> orts <u>Ave Limit at Main P</u> orts	
	0 150k 300	400 500	800 1M		M 3M 4M ency in Hz	15M 6 8	10M 20M 30M	
	150k 300 t : Quasi-Peak		800 1M	Frequ	ency in Hz		10M 20M 30M	
Frequency	t : Quasi-Peak Quasi-Peak		800 1M	Freque	ency in Hz Margin	Limit	10M 20M 30M	
Frequency (MHz)	t : Quasi-Peak Quasi-Peak (dBµV)	<u> </u>		Freque Corr. (dB)	ency in Hz Margin (dB)	Limit (dBµV)	10M 20M 30M	
Frequency	t : Quasi-Peak Quasi-Peak	Filter	Line	Freque	ency in Hz Margin	Limit	10M 20M 30M	
Frequency (MHz) 0.150000	150k 300 t : Quasi-Peak Quasi-Peak (dBμV) 50.0	Filter Off	Line	Freque Corr. (dB) 19.6	Margin (dB) 16.0	Limit (dBµV) 66.0	10M 20M 30M	
Frequency (MHz) 0.150000 0.206000	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4	Filter Off Off	Line N N	Freque Corr. (dB) 19.6 19.6	Margin (dB) 16.0 23.0	Limit (dBµV) 66.0 63.4	10M 20M 30M	
Frequency (MHz) 0.150000 0.206000 0.326000	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4 30.0	Filter Off Off Off	Line N N N	Freque (dB) 19.6 19.6	Margin (dB) 16.0 23.0 29.6	Limit (dBµV) 66.0 63.4 59.6	10M 20M 30M	
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4 30.0 38.9 25.4 35.2	Filter Off Off Off Off	Line N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 56.0	10M 20M 30M	
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4 30.0 38.9 25.4	Filter Off Off Off Off Off	Line N N N N	Freque Corr. (dB) 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0		
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000 3.630000 5.910000	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4 30.0 38.9 25.4 35.2	Filter Off Off Off Off Off Off	Line N N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 56.0		
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000 3.630000 5.910000	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4 30.0 38.9 25.4 35.2 39.1 t : Average	Filter Off Off Off Off Off Off Off	Line N N N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 56.0		
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000 3.630000 5.910000 Final Resu	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4 30.0 38.9 25.4 35.2 39.1 t : Average	Filter Off Off Off Off Off Off	Line N N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19.7	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8 20.9	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 56.0 60.0		
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000 3.630000 5.910000 Final Resu Frequency	150k 300 t : Quasi-Peak (dBμV) 0 50.0 40.4 30.0 38.9 25.4 35.2 39.1 39.1 t : Average (dBμV) 32.1	Filter Off Off Off Off Off Off Off	Line N N N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.7 Corr.	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8 20.9 Margin	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 56.0 60.0		
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000 3.630000 5.910000 Final Resu Frequency (MHz) 0.150000 0.206000	150k 300 t : Quasi-Peak (dBμV) 0 50.0 40.4 30.0 38.9 25.4 35.2 39.1 39.1 t : Average (dBμV) 32.1 24.7 24.7	Filter Off Off Off Off Off Off Off Off Filter	Line N N N N N N Line N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.7 Corr. (dB) 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8 20.9 20.9 Margin (dB) 23.9 28.7	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 56.0 60.0 Limit (dBµV) 56.0 53.4		
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000 3.630000 5.910000 Final Resu Frequency (MHz) 0.150000 0.206000 0.326000	150k 300 t : Quasi-Peak (dBμV) 50.0 40.4 30.0 38.9 25.4 35.2 39.1 t : Average (dBμV) 32.1 24.7 20.0	Filter Off Off Off Off Off Off Off Filter	Line N N N N N N Line N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.7 Corr. (dB) 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8 20.9 20.9 Margin (dB) 23.9 28.7 29.6	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 60.0 Limit (dBµV) 56.0 53.4 49.6		
Frequency (MHz) 0.150000 0.206000 0.326000 0.526000 1.894000 3.630000 5.910000 Final Resu Frequency (MHz) 0.150000 0.206000 0.326000 0.326000 0.526000	150k 300 t : Quasi-Peak (dBμV) 6 50.0 40.4 30.0 38.9 25.4 35.2 39.1 39.1 t : Average (dBμV) 32.1 24.7 20.0 28.9 28.9	Filter Off Off Off Off Off Off Off Filter	Line N N N N N N Line N N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.7 Corr. (dB) 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8 20.9 Xargin (dB) 23.9 28.7 29.6 17.1	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 60.0 60.0 Limit (dBµV) 56.0 53.4 49.6 46.0		
Frequency (MHz) 0.150000 0.206000 0.326000 1.894000 3.630000 5.910000 Final Resu Frequency (MHz) 0.150000 0.326000 0.326000 1.894000	t : Quasi-Peak Quasi-Peak (dBμV) 50.0 40.4 30.0 38.9 25.4 35.2 39.1 t : Average (dBμV) 32.1 24.7 20.0 28.9 20.7	Filter Off Off Off Off Off Off Off Filter	Line N N N N N N N Line N N N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.7 Corr. (dB) 19.6 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8 20.9 Xargin (dB) 23.9 28.7 29.6 17.1 29.6	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 56.0 60.0 Limit (dBµV) 56.0 53.4 49.6 46.0		
Frequency (MHz) 0.150000 0.206000 0.326000 1.894000 3.630000 5.910000 Final Resu Frequency (MHz) 0.150000 0.206000 0.326000 0.526000	150k 300 t : Quasi-Peak (dBμV) 6 50.0 40.4 30.0 38.9 25.4 35.2 39.1 39.1 t : Average (dBμV) 32.1 24.7 20.0 28.9 28.9	Filter Off Off Off Off Off Off Off Filter	Line N N N N N N Line N N N N N	Freque (dB) 19.6 19.6 19.6 19.6 19.6 19.6 19.7 Corr. (dB) 19.6 19.6 19.6 19.6	Margin (dB) 16.0 23.0 29.6 17.1 30.6 20.8 20.9 Xargin (dB) 23.9 28.7 29.6 17.1	Limit (dBµV) 66.0 63.4 59.6 56.0 56.0 60.0 60.0 Limit (dBµV) 56.0 53.4 49.6 46.0		



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.

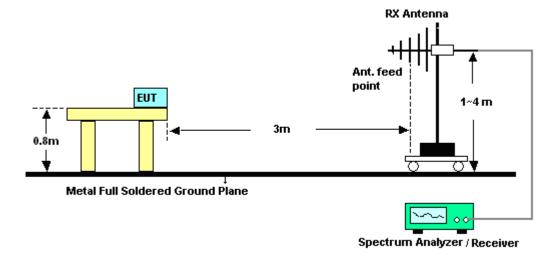
3.2.3. Test Procedures

- 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.

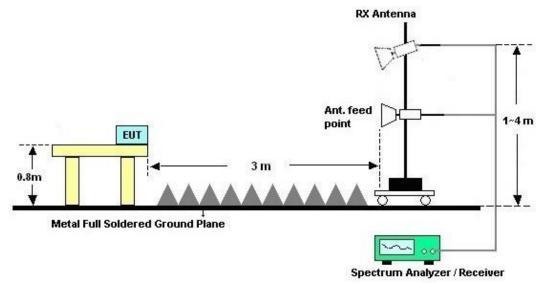


3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz

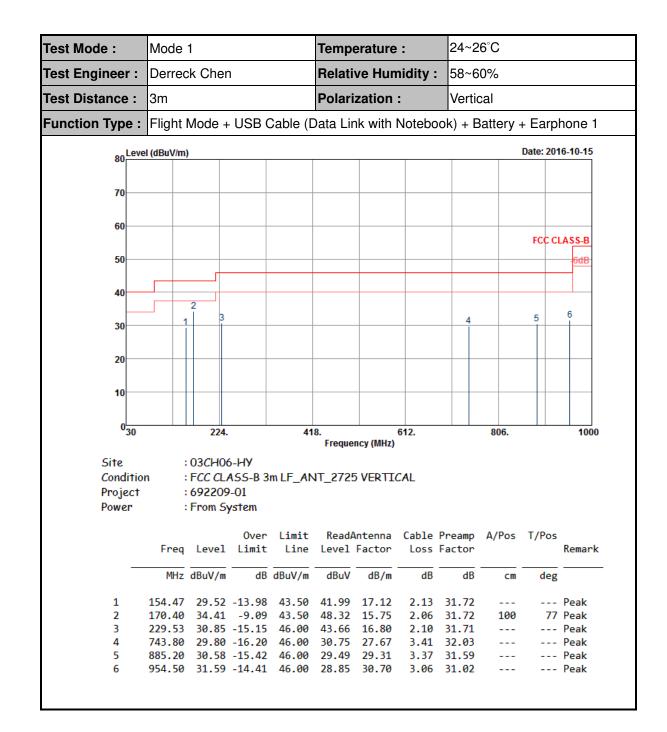




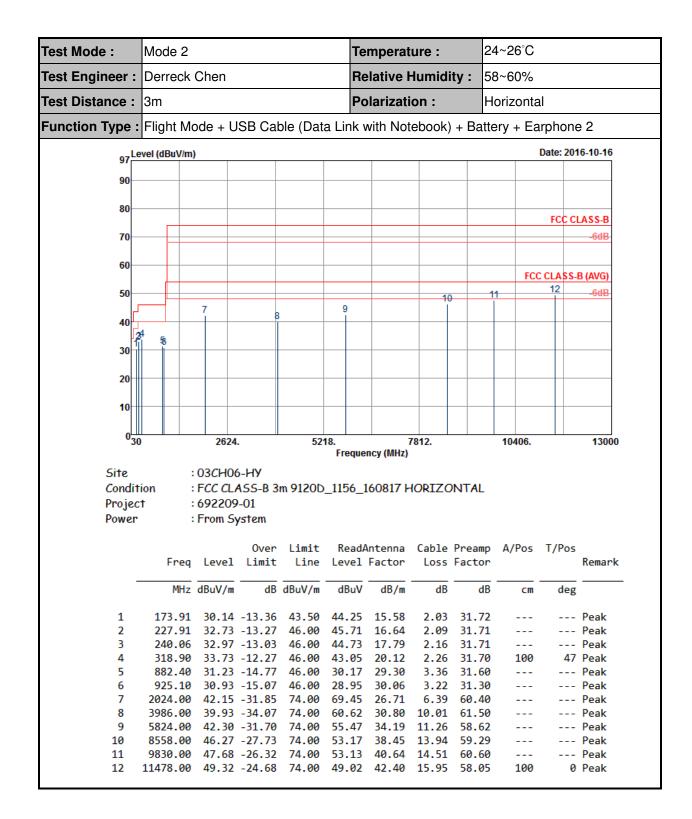
3.2.5. Test Result of Radiated Emission

Fest Mode :	Mode 1			Temp	Temperature :			24~26°C			
Test Engineer :	gineer : Derreck Chen			Relati	elative Humidity : 58~60%			0%			
Test Distance : 3m				Polarization :				Horiz	ontal		
Function Type :	Flight I	Node +	USB	Cable (E	Data Lii	nk with	Notebo	ook) + E	attery -	+ Earp	hone 1
onLeve	l (dBuV/m)									Date: 20	16-10-15
00											
70											
60										FCCC	LASS-B
50											-6dB
40											
		1 23	3 45							e	
30											
20											
10											
0											
0 [_] 30		224.		41		ncy (MHz)	612.		806.		1000
Site	:	03CH06	5-HY								
Condition				m LF_AN	IT_272	5 HORIZ	CONTAL				
Project Power		692209 From Sy									
1 OWEI		1101110	STem								
	Enoc	Lovo1	Over	Limit		Antenna Factor			A/Pos	T/Pos	
	Freq	Level				Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
_		Level dBuV/m	Limit						A/Pos	T/Pos deg	Remark
1		dBuV/m	Limit	Line dBuV/m	Level	Factor	Loss dB	Factor		deg	Remark
2	MHz 170.13 230.61	dBuV/m 28.96 32.04	Limit dB -14.54 -13.96	Line dBuV/m 43.50 46.00	Level dBuV 42.82 44.75	Factor dB/m 15.80 16.89	Loss 	Factor dB 31.72 31.71	 		Remark Peak Peak
2 3	MHz 170.13 230.61 245.73	dBuV/m 28.96 32.04 32.31	Limit 	Line dBuV/m 43.50 46.00 46.00	Level dBuV 42.82 44.75 43.58	Factor dB/m 15.80 16.89 18.25	Loss dB 2.06 2.11 2.19	Factor dB 31.72 31.71 31.71	 	deg 108	Remark Peak Peak Peak Peak
2	MHz 170.13 230.61	dBuV/m 28.96 32.04 32.31 31.17	Limit dB -14.54 -13.96	Line dBuV/m 43.50 46.00 46.00 46.00	Level dBuV 42.82 44.75	Factor dB/m 15.80 16.89 18.25	Loss dB 2.06 2.11 2.19	Factor dB 31.72 31.71	 	deg 108	Remark Peak Peak

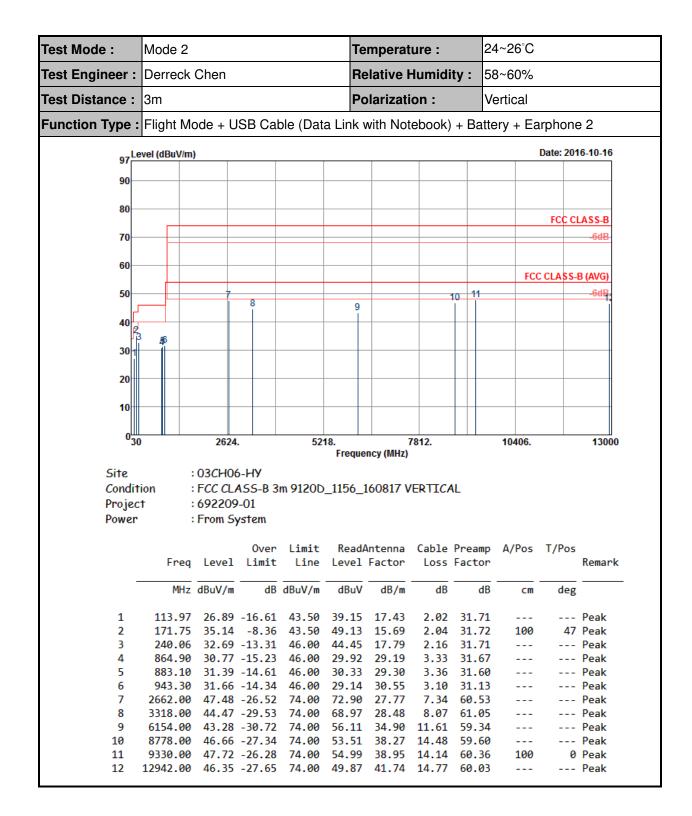














4. List of Measuring Equipment

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	Oct. 19, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Oct. 19, 2016	Aug. 29, 2017	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Apr. 19, 2016	Oct. 19, 2016	Apr. 18, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Oct. 19, 2016	Dec. 01, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 14, 2015	Oct. 19, 2016	Dec. 13, 2016	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 06, 2016	Oct. 19, 2016	Jan. 05, 2017	Conduction (CO05-HY)
Test Software	N/A	EMC32	8.40.0	N/A	N/A	Oct. 19, 2016	N/A	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N- 6-06	2725&AT-N06 01	30MHz~1GHz	Nov. 17, 2015	Oct. 15, 2016 ~ Oct. 16, 2016	Nov. 16, 2016	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Oct. 15, 2016 ~ Oct. 16, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 05, 2016	Oct. 15, 2016 ~ Oct. 16, 2016	Aug. 04, 2017	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Oct. 15, 2016 ~ Oct. 16, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jun. 22, 2016	Oct. 15, 2016 ~ Oct. 16, 2016	Jun. 21, 2017	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	RG_142_B/U	NA	30MHz ~ 1GHz	Nov. 16, 2015	Oct. 15, 2016 ~ Oct. 16, 2016	Nov. 15, 2016	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	RG_142_B/U	NA	1GHz ~ 26GHz	Nov. 16, 2015	Oct. 15, 2016 ~ Oct. 16, 2016	Nov. 15, 2016	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Oct. 15, 2016 ~ Oct. 16, 2016	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF78020821 2	1m~4m	N/A	Oct. 15, 2016 ~ Oct. 16, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Oct. 15, 2016 ~ Oct. 16, 2016	N/A	Radiation (03CH06-HY)
Hygrometer	WISEWIND	410	BU5004	N/A	May 03, 2016	Oct. 15, 2016 ~ Oct. 16, 2016	May 02, 2017	Radiation (03CH06-HY)
Test Software	Audix	E3	6.2009-8-24	N/A	N/A	Oct. 15, 2016 ~ Oct. 16, 2016	N/A	Radiation (03CH06-HY)



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of	2.70
Confidence of 95% (U = 2Uc(y))	2.70

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

Measuring Uncertainty for a Level of	3.90
Confidence of 95% (U = 2Uc(y))	5.90

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

Measuring Uncertainty for a Level of	4.70
Confidence of 95% (U = 2Uc(y))	4.70