FCC Test Report

APPLICANT : Sony Mobile Communications Inc

EQUIPMENT: PDA Phone

BRAND NAME : Sony

TYPE NAME : PM-0787-BV FCC ID : PY7-PM0787

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION : FCC CLASS B PERSONAL

COMPUTERS AND PERIPHERALS

The product was received on Dec. 04, 2014 and testing was completed on Mar. 11, 2015. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2009 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.

Reviewed by: Louis Wu / Manager

Louis Win

Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 1 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Testing Laboratory 1190

Report No.: FC4D0472



TABLE OF CONTENTS

RE	VISIO	N HISTORY	
SU	MMAF	RY OF TEST RESULT	4
1.	GENI	ERAL DESCRIPTION	5
	1.1.	Applicant	5
	1.2.	Manufacturer	
	1.3.	Feature of Equipment Under Test	5
	1.4.	Details of Tested Sample (EUT) Information	6
	1.5.	Modification of EUT	6
	1.6.	Test Location	7
	1.7.	Applied Standards	7
2.	TEST	CONFIGURATION OF EQUIPMENT UNDER TEST	8
	2.1.	Test Mode	8
	2.2.	Connection Diagram of Test System	9
	2.3.	Support Unit used in test configuration and system	10
	2.4.	EUT Operation Test Setup	
3.	TEST	「RESULT	11
	3.1.	Test of AC Conducted Emission Measurement	11
	3.2.	Test of Radiated Emission Measurement	17
4.	LIST	OF MEASURING EQUIPMENT	23
5.	UNCI	ERTAINTY OF EVALUATION	24

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 2 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC4D0472	Rev. 01	Initial issue of report	Mar. 27, 2015

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 3 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	6.30 dB at
					0.190 MHz
					Under limit
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	8.58 dB at
					250.050 MHz

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 4 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

1. General Description

1.1. Applicant

Sony Mobile Communications Inc

Nya Vattentornet 22188 Lund/Sweden

1.2. Manufacturer

Sony Mobile Communications Inc

Nya Vattentornet 22188 Lund/Sweden

1.3. Feature of Equipment Under Test

The Equipment Under Test (hereafter called: EUT) is PDA Phone supporting, GSM/WCDMA/LTE, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n, Bluetooth with FM Receiver, GPS, Ant +, and NFC features, and below is details of information.

Product Feature					
Equipment	PDA Phone				
Brand Name	Sony				
Type Name	PM-0787-BV				
FCC ID	PY7-PM0787				
GSM Operating Band(s)	GSM 850/900/1800/1900MHz				
GPRS / EGPRS Multi Slot Class	GPRS Class 33, EGPRS Class 33				
WCDMA Operating Band(s)	FDD Band I / II / V / VIII				
WCDMA Rel. Version	Rel. 8				
LTE Operating Band(s)	FDD Band I / III / V / VII / VIII / XXVIII TDD Band XL				
LTE Rel. Version	Rel. 10				
Wi-Fi Specification	802.11b/g/n HT20 802.11a/n HT20/HT40				
Bluetooth Version	v3.0 + EDR / v4.0 - LE				
NFC Specification	ISO14443A / ISO14443B / Felica / ISO15693				
ANT+	ANT+				
Power Supply	Battery / AC Adapter / Car Charger				

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 5 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

1.4. Details of Tested Sample (EUT) Information

Below EUT sample and accessory are used to test.

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EUT Information List								
IMEI HW Version SW Version S/N Performed Test Item								
IMEI 1: 004402454037015 IMEI 2: 004402454037007	AP	26.1.B.1.23	YT9111CG6U	Conducted Emission				
IMEI 1: 004402454037015 IMEI 2: 004402454037007	AP	20.1.B.1.23	YT9111CG6U	Radiated Emission				

	Accessory List	
Battery Model No. : Bellis		
	Model No. : MH410c	
	Type No. : AG-1100	
Earphone	S/N:	
	12431A1B0011582 (For Conducted Emission)	
	12431A180011AEC (For Radiated Emission)	
	Model No. : EC450	
	Type No. : AI-0700	
USB Cable 1	S/N:	
	142412D8250297C (For Conducted Emission)	
	132312D02961412 (For Radiated Emission)	
	Model No. : AA9	
USB Cable 2	Type No. : N/A	
	S/N: N/A	

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.

1.5. Modification of EUT

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

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 6 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

1.6. 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,				
Test Site Location	Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.				
rest 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			

1.7. Applied 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 C63.4-2009

Remark:

- 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.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 7 of 24

Report Issued Date : Mar. 27, 2015

Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2009 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).

The following tables are showing the test modes as the worst cases and recorded in this report.

		Test Co	ndition
Item	EUT Configuration	ЕМІ	EMI
		AC	RE
1.	Data Link with Notebook	\boxtimes	\boxtimes

The data application (each file size is greater than 30Mbytes) is continuously transferred between the EUT and Notebook connected via USB cable, while GSM, WLAN, and Bluetooth and GPS idle.

Abbreviations:

EMI AC: AC conducted emissions
 EMI RE: EUT radiated emissions

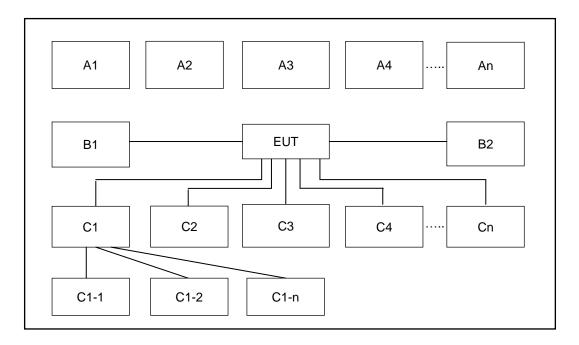
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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 8 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1



2.2. Connection Diagram of Test System



	Conduction and Radiation Test Setup								
No.	Wireless Station	O		Test Mode					
NO.		Connection Type	1	2	•	-	-	-	-
A1	Bluetooth Earphone	Bluetooth	Х	Х					
A2	System Simulator	GSM	Х	Х					
A3	AP router	WiFi	Х	Х					
A4	NFC Card	NFC	Х	Х					
No.	Setup Peripherals	Connection Type	1	2	•	-	-	-	-
C1	Notebook	USB cable	Х	Х					
C1-1	iPod	USB Cable to C1	Х	Х					
C1-2	AP router	RJ-45 Cable to C1	Х	Х					
C2	Earphone	Earphone jack	Х	Х					
Ca	CD cord	SD I/O interface							
C3	SD card	without cable	X	Х					

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 9 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

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	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-Link	DIR-865L	KA2IR865LA1	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Sony	SBH20	PY7-RD0010	Unshielded, 0.75m	N/A
5.	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
6.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
7.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
8.	NFC Card	Metro Taipei	Easy Card	N/A	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 GSM and Bluetooth, and WLAN idle.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 10 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

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

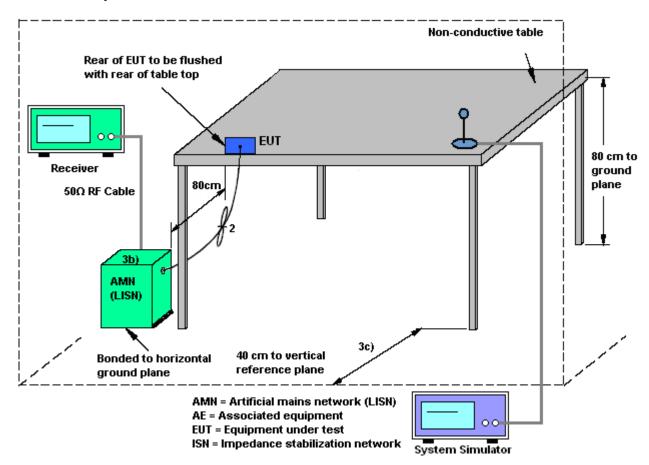
- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least
 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other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

Page Number : 11 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report No.: FC4D0472



3.1.4 Test Setup

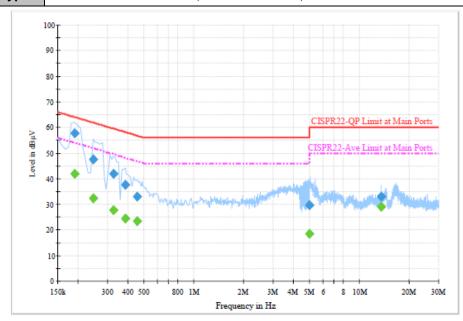


TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 12 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~23℃		
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%		
Test Voltage :	120Vac / 60Hz	Phase :	Line		

Function Type: Data Link with Notebook (with USB cable 2) + SIM 1



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	57.7	Off	L1	19.5	6.3	64.0
0.246000	47.4	Off	L1	19.6	14.5	61.9
0.326000	41.8	Off	L1	19.5	17.8	59.6
0.382000	37.8	Off	L1	19.6	20.4	58.2
0.454000	33.0	Off	L1	19.6	23.8	56.8
4.982000	29.6	Off	L1	19.7	26.4	56.0
13.558000	32.9	Off	L1	19.8	27.1	60.0

Final Result : Average

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Frequency	Average	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	riitei	Lille	(dB)	(dB)	(dBµV)
0.190000	42.0	Off	L1	19.5	12.0	54.0
0.246000	32.3	Off	L1	19.6	19.6	51.9
0.326000	27.9	Off	L1	19.5	21.7	49.6
0.382000	24.4	Off	L1	19.6	23.8	48.2
0.454000	23.3	Off	L1	19.6	23.5	46.8
4.982000	18.3	Off	L1	19.7	27.7	46.0
13.558000	29.0	Off	L1	19.8	21.0	50.0

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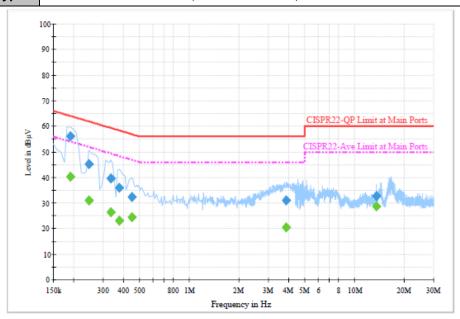
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 13 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1



Test Mode :	Mode 1	Temperature :	21~23℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral

Function Type: Data Link with Notebook (with USB cable 2) + SIM 1



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	56.1	Off	N	19.5	7.9	64.0
0.246000	45.3	Off	N	19.6	16.6	61.9
0.334000	39.5	Off	N	19.5	19.9	59.4
0.374000	35.9	Off	N	19.5	22.5	58.4
0.446000	32.5	Off	N	19.6	24.4	56.9
3.838000	30.9	Off	N	19.6	25.1	56.0
13.558000	32.6	Off	N	19.8	27.4	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	40.4	Off	N	19.5	13.6	54.0
0.246000	30.9	Off	N	19.6	21.0	51.9
0.334000	26.3	Off	N	19.5	23.1	49.4
0.374000	23.0	Off	N	19.5	25.4	48.4
0.446000	24.4	Off	N	19.6	22.5	46.9
3.838000	20.6	Off	N	19.6	25.4	46.0
13.558000	28.7	Off	N	19.8	21.3	50.0

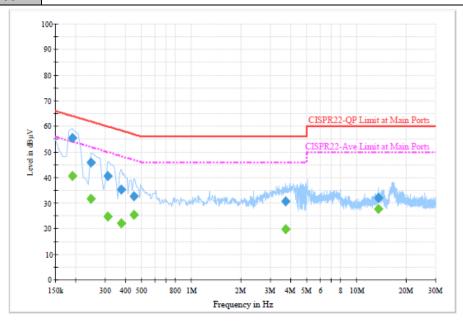
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 14 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01



Test Mode :	Mode 2	Temperature :	21~23 ℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Line

Function Type: Data Link with Notebook (with USB cable 2) + SIM 2



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	55.5	Off	L1	19.5	8.5	64.0
0.246000	46.0	Off	L1	19.6	15.9	61.9
0.310000	40.6	Off	L1	19.5	19.4	60.0
0.374000	35.4	Off	L1	19.5	23.0	58.4
0.446000	32.7	Off	L1	19.6	24.2	56.9
3.718000	30.6	Off	L1	19.6	25.4	56.0
13.558000	32.2	Off	L1	19.8	27.8	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	40.5	Off	L1	19.5	13.5	54.0
0.246000	31.7	Off	L1	19.6	20.2	51.9
0.310000	24.8	Off	L1	19.5	25.2	50.0
0.374000	22.0	Off	L1	19.5	26.4	48.4
0.446000	25.3	Off	L1	19.6	21.6	46.9
3.718000	19.8	Off	L1	19.6	26.2	46.0
13.558000	27.7	Off	L1	19.8	22.3	50.0

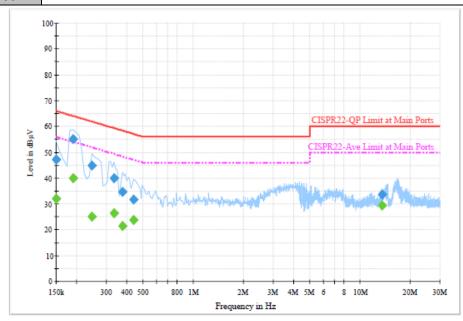
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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 15 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01



Test Mode :	Mode 2	Temperature :	21~23℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral

Function Type: Data Link with Notebook (with USB cable 2) + SIM 2



Final Result : Quasi-Peak

Frequency	Quasi-Peak	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)			(dB)	(dB)	(dBµV)
0.150000	47.2	Off	N	19.5	18.8	66.0
0.190000	55.0	Off	N	19.5	9.0	64.0
0.246000	44.9	Off	N	19.6	17.0	61.9
0.334000	40.0	Off	N	19.5	19.4	59.4
0.374000	34.6	Off	N	19.5	23.8	58.4
0.438000	31.7	Off	N	19.6	25.4	57.1
13.558000	33.6	Off	N	19.8	26.4	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	32.0	Off	N	19.5	24.0	56.0
0.190000	40.0	Off	N	19.5	14.0	54.0
0.246000	25.2	Off	N	19.6	26.7	51.9
0.334000	26.3	Off	N	19.5	23.1	49.4
0.374000	21.5	Off	N	19.5	26.9	48.4
0.438000	23.8	Off	N	19.6	23.3	47.1
13.558000	29.4	Off	N	19.8	20.6	50.0

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 16 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

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 $(dB\mu V/m) = 20 \log Emission level (\mu V/m)$
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level.

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 17 of 24

Report Issued Date : Mar. 27, 2015

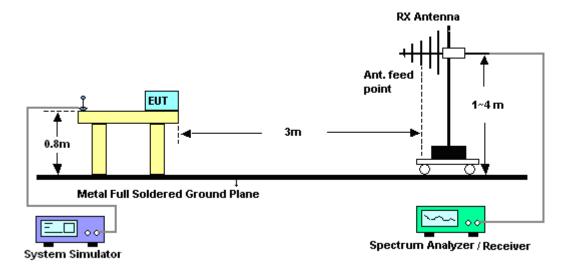
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

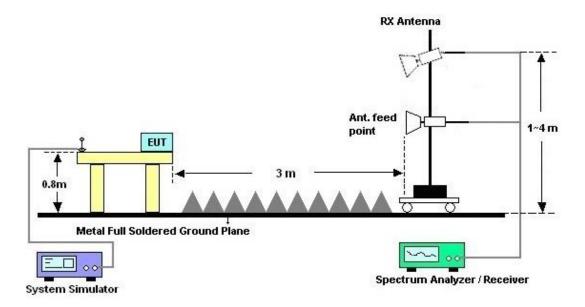


3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz

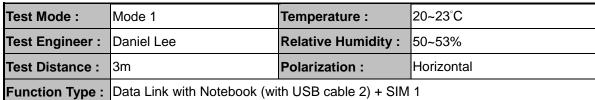


For radiated emissions above 1GHz

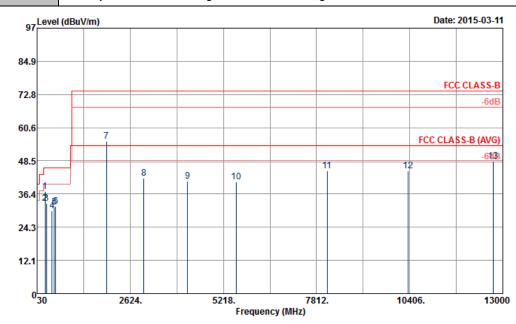


TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 18 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

3.2.5. Test Result of Radiated Emission



#7 is system simulator signal which can be ignored. Remark:



Site : 03CH06-HY

Condition : FCC CLASS-B 3m HF-ANT_583_140731 HORIZONTAL

Project : 4D0472 Power : From System

Mode	:	Mode 1									
	Freq	Level	Over Limit	Limit Line	ReadA Level	ntenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
-	MHz	$\overline{\mathtt{d} \mathtt{B} \mathtt{u} \mathtt{V} / \mathtt{m}}$	dB	$\overline{\tt dBuV/m}$	dBu∀	_dB/m	<u>dB</u>	\overline{dB}	cm	deg	
1 2 3 4 5	250.05 254.10 290.55 450.50 508.60	32.88 30.33	-8.58 -13.04 -13.12 -15.67 -14.27	46.00 46.00 46.00 46.00 46.00	55.13 50.08 49.72 43.08 43.77	12.30 12.86 13.01 16.82 17.40	1.73 1.75 1.87 2.31 2.50	31.74 31.73 31.72 31.88 31.94	100		Peak Peak Peak Peak Peak
6 7 8 9 10 11 12	550.60 1960.00 3000.00 4226.00 5574.00 8112.00	31.96 55.69 42.02 41.16 40.72 44.83	-14.27 -14.04 -31.98 -32.84 -33.28 -29.17 -29.14	74.00 74.00 74.00 74.00 74.00 74.00	42.62 79.45 63.48 60.32 56.22 56.42 55.34	17.40 18.80 31.33 32.80 33.73 35.04 35.76 37.29	2.54 5.40 6.74 8.76 8.88 12.31	32.00 60.49 61.00 61.65 59.42 59.66 60.69			Peak Peak Peak Peak Peak Peak Peak
13	12738.00		-25.72	74.00	53.09	39.39	15.79	59.99	100		Peak

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 19 of 24 Report Issued Date: Mar. 27, 2015 Report Version : Rev. 01

Report No.: FC4D0472



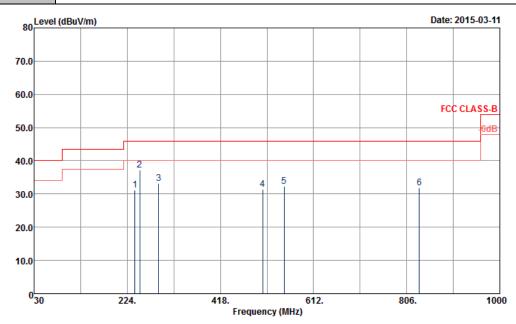
Test Mode :	Mode	1		Temperature : 20~23°C								
Test Engineer :	Test Engineer: Daniel Lee					ve Hun	nidity :	50~5	50~53%			
Test Distance :	3m				Polarization :			Vertic	Vertical			
Function Type : Data Link with Notebook (with USB cable 2) + SIM 1												
Remark :	#8 is s	system	simulat	or signa	al which	can be	e ignore	d.				
97 Leve	el (dBuV/m)								Date: 20	15-03-11	
84.9												
72.8										FCC C	LASS-B	
											-6dB	
60.6		8							FCC	CLASS	B (AVG)	
48.5				^		10	11		12	2	<u>-6∂B</u>	
36.4	5 6 5 1			9								
24.3												
12.1												
030		2624		52		ncy (MHz)	7812.		10406.		13000	
Site : 03CH06-HY Condition : FCC CLASS-B 3m HF-AN Project : 4D0472 Power : From System Mode : Mode 1							VERTIC	AL				
		Level	Over Limit				Cable : Loss :		A/Pos	T/Pos	Remark	
	МНг	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{7}}\overline{\mathtt{m}}$	dB	dBu∇7m	dBu∇	<u>dB7m</u>	dB	dB	cm	deg		
8 9 10 11 12 12	30.54 200.10 250.05 550.60 601.00 832.00 1022.00 1960.00 4200.00 5618.00 9578.00 0950.00	23.53 27.52 28.49 29.34 30.90 41.14 57.05 41.22 42.69 44.39 45.54	-14.21 -19.97 -18.48 -17.51 -16.66 -15.10 -32.86 -32.78 -31.31 -29.61 -28.46 -25.28	40.00 43.50 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	38.92 44.54 45.23 39.15 40.03 39.51 70.50 80.81 60.20 57.55 55.50 53.39 53.56	18.02 9.20 12.30 18.80 18.60 20.04 27.71 31.33 33.68 35.80 35.67 37.67 39.36	0.65 1.54 1.73 2.54 2.77 3.17 3.81 5.40 9.00 9.82 12.87 13.72	31.80 31.75 31.74 32.00 32.06 31.82 60.88 60.49 61.66 60.48 59.65 59.24 59.92	100		Peak Peak Peak Peak Peak Peak Peak Peak	

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 20 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report No.: FC4D0472

Test Mode :	Mode 2	Temperature :	20~23°C				
Test Engineer :	Daniel Lee	Relative Humidity :	50~53%				
Test Distance :	3m	Polarization :	Horizontal				
	Part 151 - 31 Natal and 7 31 HOP and to 0) a OIM 0						

Function Type: Data Link with Notebook (with USB cable 2) + SIM 2



Site : 03CH06-HY

Condition : FCC CLASS-B 3m BILO6_131010_9664 HORIZONTAL

Project : 4D0472 Power : From System Mode : Mode 2

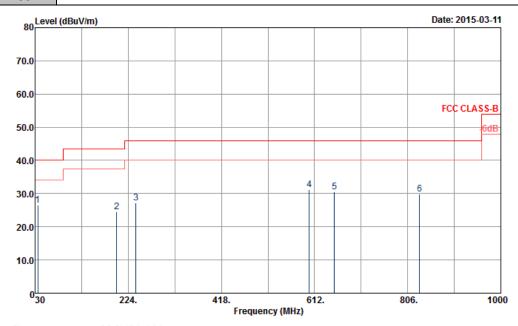
	Freq	Level				Antenna Factor					Remark
	MHz	$\overline{\mathtt{d} B \mathtt{u} \mathtt{V} /m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{\mathtt{d} \mathtt{B} \mathtt{u} \mathtt{V} 7m}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	<u>dB</u> 7m	<u>dB</u>	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$		deg	
1	240.06			46.00				31.74			Peak
2	250.05 289.74	37.29 33.25			55.00	12.30		31.74 31.72	100		Peak Peak
4 5	506.50 550.60			46.00 46.00		17.40 18.80		31.94 32.00			Peak Paak
ŏ								31.82			

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 21 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report No.: FC4D0472

Test Mode :	Mode 2	Temperature :	20~23°C
Test Engineer :	Daniel Lee	Relative Humidity :	50~53%
Test Distance :	3m	Polarization :	Vertical

Function Type: Data Link with Notebook (with USB cable 2) + SIM 2



Site : 03CH06-HY

 $: FCC\ CLASS-B\ 3m\ BILOG_131010_9664\ VERTICAL$ Condition

Project : 4D0472 Power : From System : Mode 2 Mode

	Freq	Level		Limit Line						T/Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	<u>dB</u>	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{J}}\overline{\mathtt{m}}$	—dBu∇	<u>dB</u> 7m	<u>dB</u>	<u>d.B</u>	Cm	deg	
1 2 3 4 5 6	35.94 200.10 240.06 601.00 653.50 830.60	24.57 27.12 31.26 30.46	-13.48 -18.93 -18.88 -14.74 -15.54 -16.12	43.50 46.00 46.00 46.00	41.71 45.58 45.78 41.95 40.73 38.54	15.90 9.20 11.39 18.60 18.96 20.00	0.70 1.54 1.69 2.77 2.81 3.16	31.79 31.75 31.74 32.06 32.04 31.82	100		Peak Peak Peak Peak Peak Peak

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 22 of 24 Report Issued Date: Mar. 27, 2015 Report Version : Rev. 01

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9kHz ~ 2.75GHz	Dec. 01, 2014	Mar. 11, 2015	Nov. 30, 2015	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz ~ 30MHz	Dec. 02, 2014	Mar. 11, 2015	Dec. 01, 2015	Conduction (CO05-HY)
LISN (for auxiliary equipment)	Rohde & Schwarz	ENV216	100081	9kHz ~ 30MHz	Dec. 08, 2014	Mar. 11, 2015	Dec. 07, 2015	Conduction (CO05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Mar. 11, 2015	N/A	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Apr. 23, 2014	Mar. 11, 2015	Apr. 22, 2015	Conduction (CO05-HY)
LF Cable	Shuner	RG-402	N/A	N/A	Oct. 07, 2014	Mar. 11, 2015	Oct. 06, 2015	Conduction (CO05-HY)
Test Software	N/A	EMC32	8.40.0	N/A	N/A	Mar. 11, 2015	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESVS10	834468/0003	20MHz-1000MHz	May. 06, 2014	Mar. 11, 2015	May. 05, 2015	Radiation (03CH06-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211028	9kHz ~ 26.5GHz	Aug. 23, 2014	Mar. 11, 2015	Aug. 22, 2015	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 19, 2015	Mar. 11, 2015	Jan. 18, 2016	Radiation (03CH06-HY)
Bilog Antenna	Teseq GmbH	CBL6112D	35379	30MHz -2GHz	Sep. 27, 2014	Mar. 11, 2015	Sep. 26, 2015	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz~18GHz	Jul. 24, 2014	Mar. 11, 2015	Jul. 23, 2015	Radiation (03CH06-HY)
Amplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 16, 2014	Mar. 11, 2015	Apr. 15, 2015	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1815698	1GHz~18GHz	Dec. 12, 2014	Mar. 11, 2015	Dec. 11, 2015	Radiation (03CH06-HY)
Controller	INN-CO	CO2000	8000604	N/A	N/A	Mar. 11, 2015	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	Mar. 11, 2015	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1 m ~ 4 m	N/A	Mar. 11, 2015	N/A	Radiation (03CH06-HY)
Hygrometer	WISEWIND	410	BU5004	N/A	May. 06, 2014	Mar. 11, 2015	May. 05, 2015	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	RG 142	NA	30MHz ~ 1GHz	Nov. 27, 2014	Mar. 11, 2015	Nov. 26, 2015	Radiation (03CH06-HY)
RF Cable	Infinet	LL142	Infinet CA3601-3601 -1000	1GHz ~ 26.5GHz	Nov. 27, 2014	Mar. 11, 2015	Nov. 26, 2015	Radiation (03CH06-HY)
Test Software	Audix	E3	Version 6.2009-8-24	N/A	N/A	Mar. 11, 2015	N/A	Radiation (03CH06-HY)

Note: The test equipment calibration is traceable to the ISO17025.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 23 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of	2.26
Confidence of 95% (U = 2Uc(y))	2.20

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

Measuring Uncertainty for a Level of	4.50
Confidence of 95% (U = 2Uc(y))	4.50

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: PY7-PM0787 Page Number : 24 of 24
Report Issued Date : Mar. 27, 2015
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1