# **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 : PY7-84773W

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. 22, 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.

Reviewed by: Louis Wu / Manager

Lunis Wu

Approved by: Jones Tsai / Manager

## SPORTON INTERNATIONAL INC.

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

SPORTON INTERNATIONAL INC.

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Testing Laboratory 1190

Report No.: FC692208-01

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## **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC692208-01	Rev. 01	Initial issue of report	Feb. 06, 2017

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## **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 11.60 dB at 0.158 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 8.29 dB at 167.700 MHz

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## 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

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n, NFC, and GPS

3.5, 1 3, 4, 2, 2, 3, 3,, 3,, 3,						
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						
^	A 0.05		RQ3002HWM1	RQ3002HWM1	Conducted Emission				
А	0.85	RQ3002HWM2	Radiated Spurious Emission						

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	Accessory List						
Familian a d	Model No. : MH410c						
Earphone 1	S/N: 1632A8640000088						
Fambana 0	Model No. : MH410c						
Earphone 2	S/N:N/A						
HOD Oakla	Model No. : UCB20						
USB Cable	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.

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### 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 <sup>st</sup> Rd., Hwa Ya Tech	nology 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				
Test Site No.	Sporton	Site No.			
rest 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:

- 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.

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# 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:

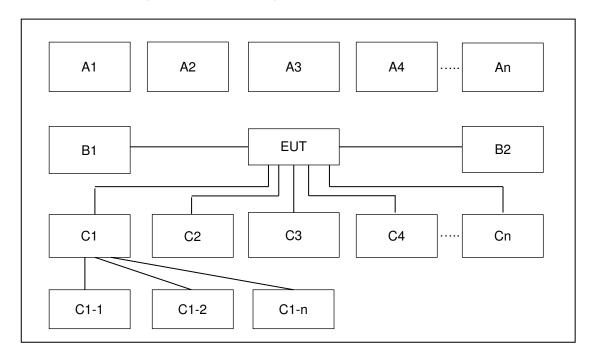
- 1. The worst case of Radiated Emissions was measured for signal above 1GHz.
- Data Link with Notebook means data application transferred mode between EUT and Notebook.

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## 2.2. Connection Diagram of Test System



	Test Setup									
No.	Setup Peripherals	Connection Type		Test Mode						
NO.	Setup Periprierals	Connection Type -		Setup Peripherals Connection Type 1	2	•	-	•	-	-
C1	Notebook	USB cable	Х	Χ						
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						
C3	SD card	SD I/O interface	Х	Х						
U3	3D Card	without cable	^	^						

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## 2.3. Support Unit used in test configuration and system

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.

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## 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			

<sup>\*</sup>Decreases with the logarithm of the frequency.

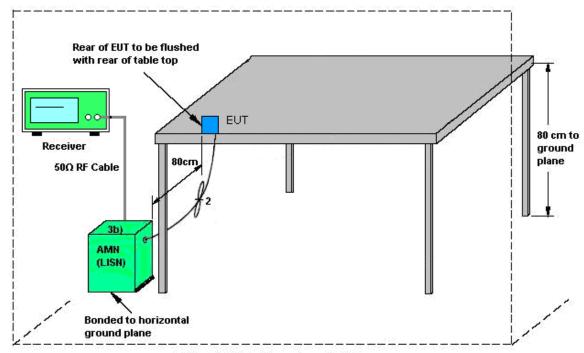
## 3.1.2 Measuring Instruments

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.
- 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



AMN = Artificial mains network (LISN)

AE = Associated equipment

EUT = Equipment under test

ISN = Impedance stabilization network

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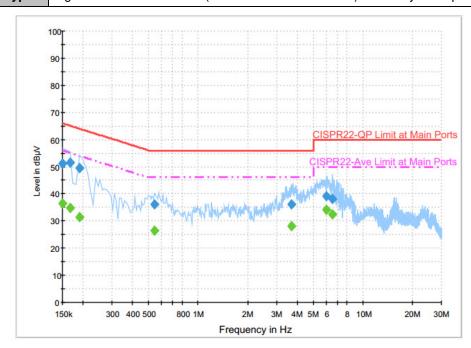
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## 3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	23~24℃
Test Engineer :	Eric Zheng	Relative Humidity :	51~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line

Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 1



### Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	51.2	Off	L1	19.6	14.8	66.0
0.166000	51.5	Off	L1	19.6	13.7	65.2
0.190000	49.5	Off	L1	19.6	14.5	64.0
0.542000	36.3	Off	L1	19.6	19.7	56.0
3.678000	36.2	Off	L1	19.7	19.8	56.0
6.038000	39.2	Off	L1	19.7	20.8	60.0
6.526000	38.1	Off	L1	19.7	21.9	60.0

### Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	36.6	Off	L1	19.6	19.4	56.0
0.166000	34.7	Off	L1	19.6	20.5	55.2
0.190000	31.4	Off	L1	19.6	22.6	54.0
0.542000	26.5	Off	L1	19.6	19.5	46.0
3.678000	28.1	Off	L1	19.7	17.9	46.0
6.038000	34.3	Off	L1	19.7	15.7	50.0
6.526000	32.3	Off	L1	19.7	17.7	50.0

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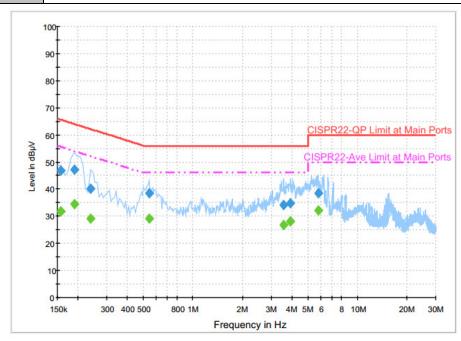
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Test Mode :	Mode 1	Temperature :	23~24℃
Test Engineer :	Eric Zheng	Relative Humidity :	51~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral

Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 1



### Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	46.9	Off	N	19.6	18.7	65.6
0.190000	47.3	Off	N	19.6	16.7	64.0
0.238000	40.2	Off	N	19.6	22.0	62.2
0.542000	38.4	Off	N	19.6	17.6	56.0
3.574000	34.0	Off	N	19.6	22.0	56.0
3.918000	34.7	Off	N	19.6	21.3	56.0
5.782000	38.5	Off	N	19.7	21.5	60.0

#### Final Result : Average

mai ricoant						
Frequency	Average	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	riitei	Lille	(dB)	(dB)	(dBµV)
0.158000	31.7	Off	N	19.6	23.9	55.6
0.190000	34.5	Off	N	19.6	19.5	54.0
0.238000	29.2	Off	N	19.6	23.0	52.2
0.542000	29.2	Off	N	19.6	16.8	46.0
3.574000	26.9	Off	N	19.6	19.1	46.0
3.918000	28.0	Off	N	19.6	18.0	46.0
5.782000	32.2	Off	N	19.7	17.8	50.0

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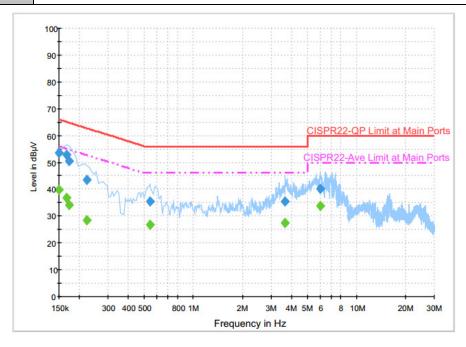
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Test Mode :	Mode 2	Temperature :	<b>23~24</b> ℃
Test Engineer :	Eric Zheng	Relative Humidity :	51~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line

Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 2



### Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dΒμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	53.6	Off	L1	19.6	12.4	66.0
0.166000	52.8	Off	L1	19.6	12.4	65.2
0.174000	50.5	Off	L1	19.6	14.3	64.8
0.222000	43.4	Off	L1	19.6	19.3	62.7
0.542000	35.6	Off	L1	19.6	20.4	56.0
3.662000	35.4	Off	L1	19.6	20.6	56.0
5.982000	40.0	Off	L1	19.7	20.0	60.0

#### Final Result : Average

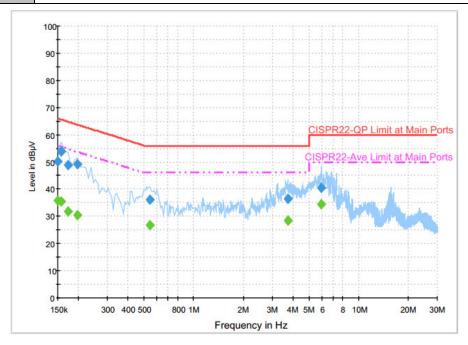
•	mai nesun	. Atolugo					
	Frequency	Average	Filter	Line	Corr.	Margin	Limit
	(MHz)	(dBµV)	riitei	Lille	(dB)	(dB)	(dBµV)
	0.150000	39.9	Off	L1	19.6	16.1	56.0
	0.166000	36.7	Off	L1	19.6	18.5	55.2
	0.174000	34.2	Off	L1	19.6	20.6	54.8
	0.222000	28.4	Off	L1	19.6	24.3	52.7
	0.542000	26.9	Off	L1	19.6	19.1	46.0
	3.662000	27.4	Off	L1	19.6	18.6	46.0
	5.982000	33.7	Off	L1	19.7	16.3	50.0

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Test Mode:	Mode 2	Temperature :	<b>23~24</b> ℃
Test Engineer :	Eric Zheng	Relative Humidity :	51~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral

Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 2



### Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dΒμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	50.3	Off	N	19.6	15.7	66.0
0.158000	54.0	Off	N	19.6	11.6	65.6
0.174000	48.7	Off	N	19.6	16.1	64.8
0.198000	49.1	Off	N	19.6	14.6	63.7
0.542000	36.2	Off	N	19.6	19.8	56.0
3.718000	36.6	Off	N	19.6	19.4	56.0
5.958000	40.4	Off	N	19.7	19.6	60.0

#### Final Result : Average

mai ricoant						
Frequency	Average	Filter	Line	Corr.	Margin	Limit
(MHz)	(dBµV)	riitei	Lille	(dB)	(dB)	(dBµV)
0.150000	35.8	Off	N	19.6	20.2	56.0
0.158000	35.4	Off	N	19.6	20.2	55.6
0.174000	31.6	Off	N	19.6	23.2	54.8
0.198000	30.4	Off	N	19.6	23.3	53.7
0.542000	26.7	Off	N	19.6	19.3	46.0
3.718000	28.3	Off	N	19.6	17.7	46.0
5.958000	34.6	Off	N	19.7	15.4	50.0

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

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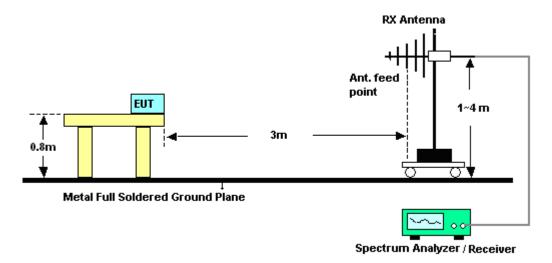
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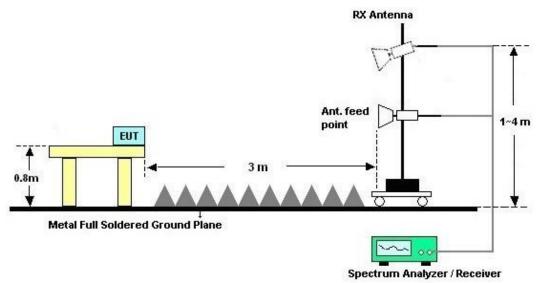
CC Test Report No. : FC692208-01

## 3.2.4. Test Setup of Radiated Emission

#### For radiated emissions from 30MHz to 1GHz



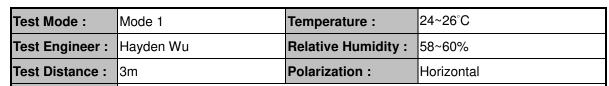
#### For radiated emissions above 1GHz



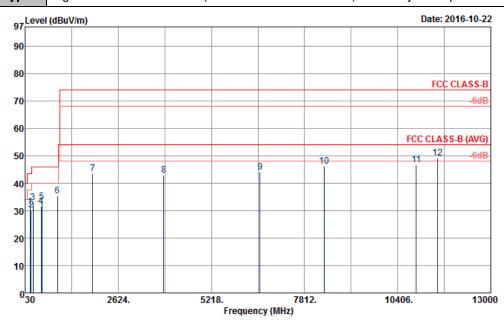
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3.2.5. Test Result of Radiated Emission



Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 1



Site : 03CH06-HY

Condition : FCC CLASS-B 3m 9120D\_1156\_160817 HORIZONTAL

Project : 692208-01 Power : From System

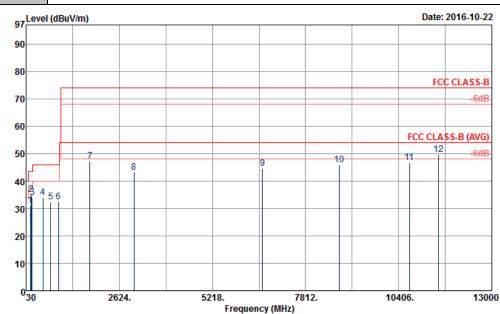
	Freq	Level	Over Limit	Limit Line		Intenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	169.05	31.43	-12.07	43.50	45.20	15.89	2.06	31.72			Peak
2	200.10	30.31	-13.19	43.50	44.19	15.90	1.94	31.72			Peak
3	250.32	32.86	-13.14	46.00	43.65	18.70	2.21	31.70	113	307	Peak
4	479.90	31.70	-14.30	46.00	37.00	23.70	2.86	31.86			Peak
5	500.20	33.32	-12.68	46.00	38.21	24.10	2.90	31.89			Peak
6	930.00	35.27	-10.73	46.00	33.14	30.19	3.19	31.25			Peak
7	1916.00	43.53	-30.47	74.00	71.31	26.47	6.15	60.40			Peak
8	3890.00	43.08	-30.92	74.00	64.17	30.24	10.11	61.44			Peak
9	6574.00	43.98	-30.02	74.00	55.87	35.71	12.34	59.94			Peak
10	8364.00	46.22	-27.78	74.00	53.42	38.33	13.67	59.20			Peak
11	10918.00	46.75	-27.25	74.00	49.73	41.00	14.94	58.92			Peak
12	11512.00	49.13	-24.87	74.00	48.61	42.50	16.02	58.00	100	0	Peak

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Test Mode :	Mode 1	Temperature :	24~26°C
Test Engineer :	Hayden Wu	Relative Humidity :	58~60%
Test Distance :	3m	Polarization :	Vertical

Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 1



: 03CH06-HY Site

Condition  $: FCC\ CLASS-B\ 3m\ 9120D\_1156\_160817\ VERTICAL$ 

Project : 692208-01 Power : From System

	Freq	Level	Over Limit	Limit Line		Intenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	144.48	31.13	-12.37	43.50	43.05	17.67	2.12	31.71			Peak
2	167.70	35.21	-8.29	43.50	48.88	15.98	2.07	31.72	100	189	Peak
3	200.37	33.96	-9.54	43.50	47.82	15.92	1.94	31.72			Peak
4	499.50	33.99	-12.01	46.00	38.90	24.08	2.90	31.89			Peak
5	720.00	32.50	-13.50	46.00	34.01	27.13	3.43	32.07			Peak
6	930.00	32.49	-13.51	46.00	30.36	30.19	3.19	31.25			Peak
7	1810.00	47.24	-26.76	74.00	75.46	26.19	5.99	60.40			Peak
8	3034.00	43.25	-30.75	74.00	67.29	29.03	7.76	60.83			Peak
9	6612.00	44.65	-29.35	74.00	56.44	35.77	12.40	59.96			Peak
10	8746.00	45.87	-28.13	74.00	52.64	38.30	14.48	59.55			Peak
11	10702.00	46.87	-27.13	74.00	50.73	41.00	14.60	59.46			Peak
12	11518.00	49.77	-24.23	74.00	49.34	42.42	16.02	58.01	100	0	Peak

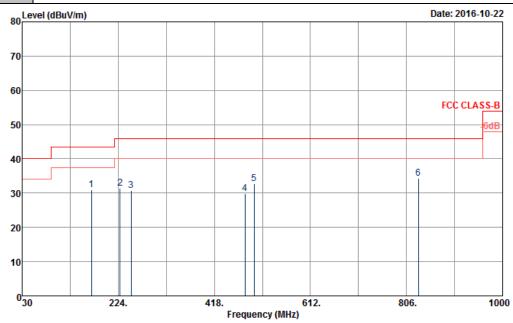
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FCC Test Report Report No.: FC692208-01

Test Mode :	Mode 2	Temperature :	24~26°C
Test Engineer :	Hayden Wu	Relative Humidity :	58~60%
Test Distance :	3m	Polarization :	Horizontal

Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 2



Site : 03CH06-HY

Condition : FCC CLASS-B 3m LF\_ANT\_2725 HORIZONTAL

Project : 692208-01 Power : From System

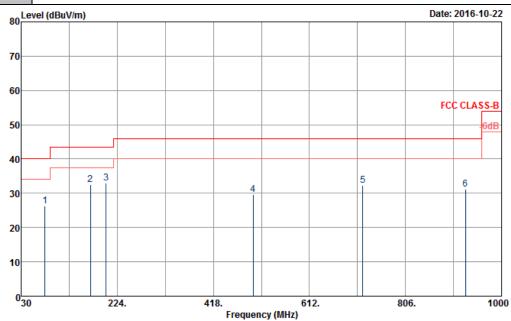
	Freq	Level		Limit Line					A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	170.13	31.04	-12.46	43.50	44.90	15.80	2.06	31.72			Peak
2	227.64	31.32	-14.68	46.00	44.30	16.64	2.09	31.71			Peak
3	249.78	30.74	-15.26	46.00	41.53	18.70	2.21	31.70			Peak
4	479.90	29.94	-16.06	46.00	35.24	23.70	2.86	31.86			Peak
5	498.10	32.74	-13.26	46.00	37.67	24.06	2.90	31.89			Peak
6	829.90	34.30	-11.70	46.00	34.03	28.75	3.33	31.81	112	324	Peak

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FCC Test Report No.: FC692208-01

Test Mode :	Mode 2	Temperature :	24~26°C
Test Engineer :	Hayden Wu	Relative Humidity :	58~60%
Test Distance :	3m	Polarization :	Vertical

Function Type: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone 2



Site : 03CH06-HY

Condition : FCC CLASS-B 3m LF\_ANT\_2725 VERTICAL

Project : 692208-01 Power : From System

	Freq	Level		Limit Line					A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	78.06	26.25	-13.75	40.00	42.52	13.28	2.19	31.74			Peak
2	169.86	32.64	-10.86	43.50	46.50	15.80	2.06	31.72			Peak
3	201.72	32.95	-10.55	43.50	46.78	15.94	1.95	31.72	100	214	Peak
4	498.10	29.57	-16.43	46.00	34.50	24.06	2.90	31.89			Peak
5	720.00	32.29	-13.71	46.00	33.80	27.13	3.43	32.07			Peak
6	927.20	31.09	-14.91	46.00	29.05	30.11	3.21	31.28			Peak

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# 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. 10, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Oct. 10, 2016	Aug. 29, 2017	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Apr. 19, 2016	Oct. 10, 2016	Apr. 18, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Oct. 10, 2016	Dec. 01, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 14, 2015	Oct. 10, 2016	Dec. 13, 2016	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 06, 2016	Oct. 10, 2016	Jan. 05, 2017	Conduction (CO05-HY)
Test Software	N/A	EMC32	8.40.0	N/A	N/A	Oct. 10, 2016	N/A	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N- 6-06	2725&AT-N06 01	30MHz~1GHz	Oct. 15, 2016	Oct. 22, 2016	Oct. 14, 2017	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Oct. 22, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 05, 2016	Oct. 22, 2016	Aug. 04, 2017	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Oct. 22, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jun. 22, 2016	Oct. 22, 2016	Jun. 21, 2017	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	RG_142_B/U	NA	30MHz ~ 1GHz	Nov. 26, 2015	Oct. 22, 2016	Nov. 25, 2016	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	RG_142_B/U	NA	1GHz ~ 26.5GHz	Nov. 26, 2015	Oct. 22, 2016	Nov. 25, 2016	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Oct. 22, 2016	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF78020821 2	1m~4m	N/A	Oct. 22, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Oct. 22, 2016	N/A	Radiation (03CH06-HY)
Hygrometer	WISEWIND	410	BU5004	N/A	May 03, 2016	Oct. 22, 2016	May 02, 2017	Radiation (03CH06-HY)
Test Software	Audix	E3	6.2009-8-24	N/A	N/A	Oct. 22, 2016	N/A	Radiation (03CH06-HY)

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## 5. Uncertainty of Evaluation

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

	4
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	0.00
Confidence of 95% (U = 2Uc(y))	3.90

### **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

SPORTON INTERNATIONAL INC.

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