FCC Test Report

APPLICANT	:	**Sony Mobile Communications Inc.**
EQUIPMENT	:	**Smart phone**
BRAND NAME	:	**Sony**
FCC ID	:	**PY7-PM0950**
STANDARD	:	**FCC 47 CFR FCC Part 15 Subpart B**
CLASSIFICATION	:	**FCC CLASS B PERSONAL COMPUTERS AND PERIPHERALS**

The product was received on Feb. 04, 2016 and testing was completed on May 09, 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.

Louis Wu

Reviewed by: Louis Wu / Manager

Jones Tsai

Approved by: Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL INC.

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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC620410	Rev. 01	Initial issue of report	May 04, 2016
FC620410	Rev. 01	Detail changes list as below : 1. Revising the worse data of radiated emission frequency to 40 GHz. 2. Updating EUT information in section 1.3.	May 10, 2016

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 7.70 dB at 0.190 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 7.39 dB at 253.290 MHz

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, GPS and NFC

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

EUT Information List				
IMEI	HW Version	SW Version	S/N	Performed Test Item
004402455840201	A	36.0.A.1.28	WUJ01M9DW9	Radiated Spurious Emission Conducted Emission

Accessory List	
Earphone	Model No. : MH410c
	Type No. : AG-1100
	S/N : 14321E5F00817B2
USB Cable	Model No. : UCB16
	Type No. : AI-0142
	S/N : 1602A90A000378C

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.	
Test Site Location	No. 52, Hwa Ya 1st 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	
Test Site No.	**Sporton 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).

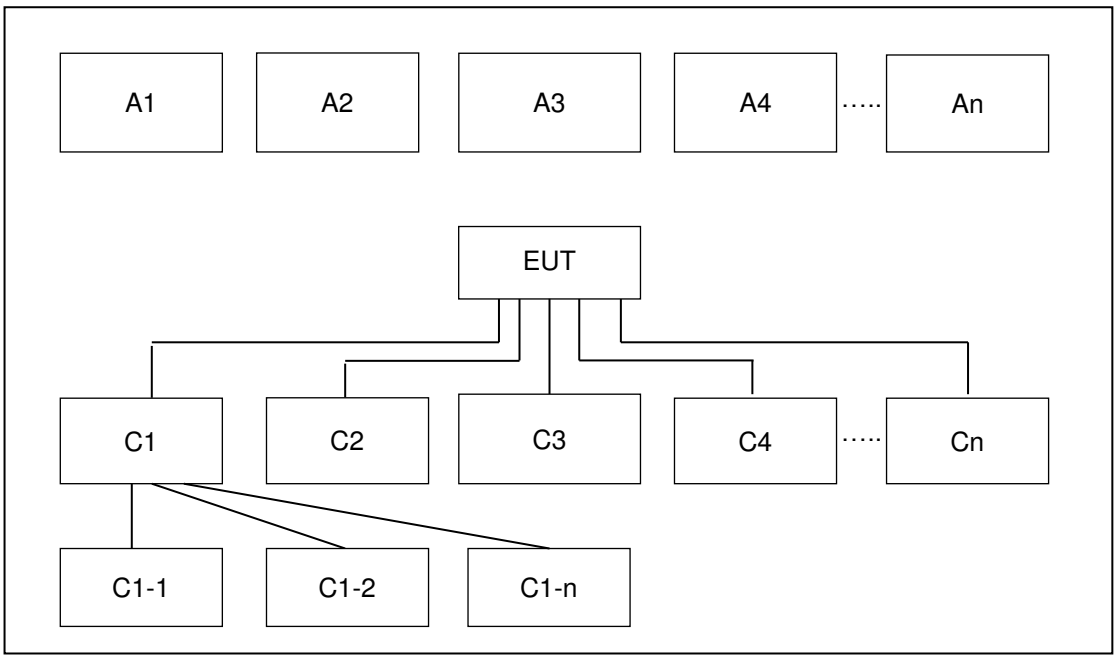
Item	EUT Configuration	Test Condition	
		EMI AC	EMI RE
1.	Data Link with Notebook	☒	☒

1. 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.
2. After pretest mode 1 and 2, which found mode 1 is the worst case and test frequency above 1GHz of this mode was reported.

Abbreviations:

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

2.2. Connection Diagram of Test System



Conduction and Radiation Test Setup									
No.	**Wireless Station**	**Connection Type**	**Test Mode**						
			1	**2**	**-**	**-**	**-**	**-**	**-**
A1	BT Earphone	Bluetooth	X	X	-	-	-	-	-
A2	System Simulator	GSM	X	X	-	-	-	-	-
A3	GPS Station	GPS	X	-	-	-	-	-	-
A4	AP router	WiFi	X	X	-	-	-	-	-
No.	**Setup Peripherals**	**Connection Type**	**1**	**2**	**-**	**-**	**-**	**-**	**-**
C1	Notebook	USB cable	X	X	-	-	-	-	-
C1-1	IPod	USB Cable to C1	X	X	-	-	-	-	-
C1-2	AP Router	RJ-45 Cable to C1	X	X	-	-	-	-	-
C2	Earphone	Earphone jack	X	X	-	-	-	-	-
C3	SD card	SD I/O interface without cable	X	X	-	-	-	-	-

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Sony	SBH20	PY7-RD0010	Unshielded, 0.75m	N/A
5.	WLAN AP	D-Link	DIR-865L	KA2IR865LA1	N/A	Unshielded, 1.8 m
6.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
7.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
8.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	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, WLAN, and GPS idle.

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

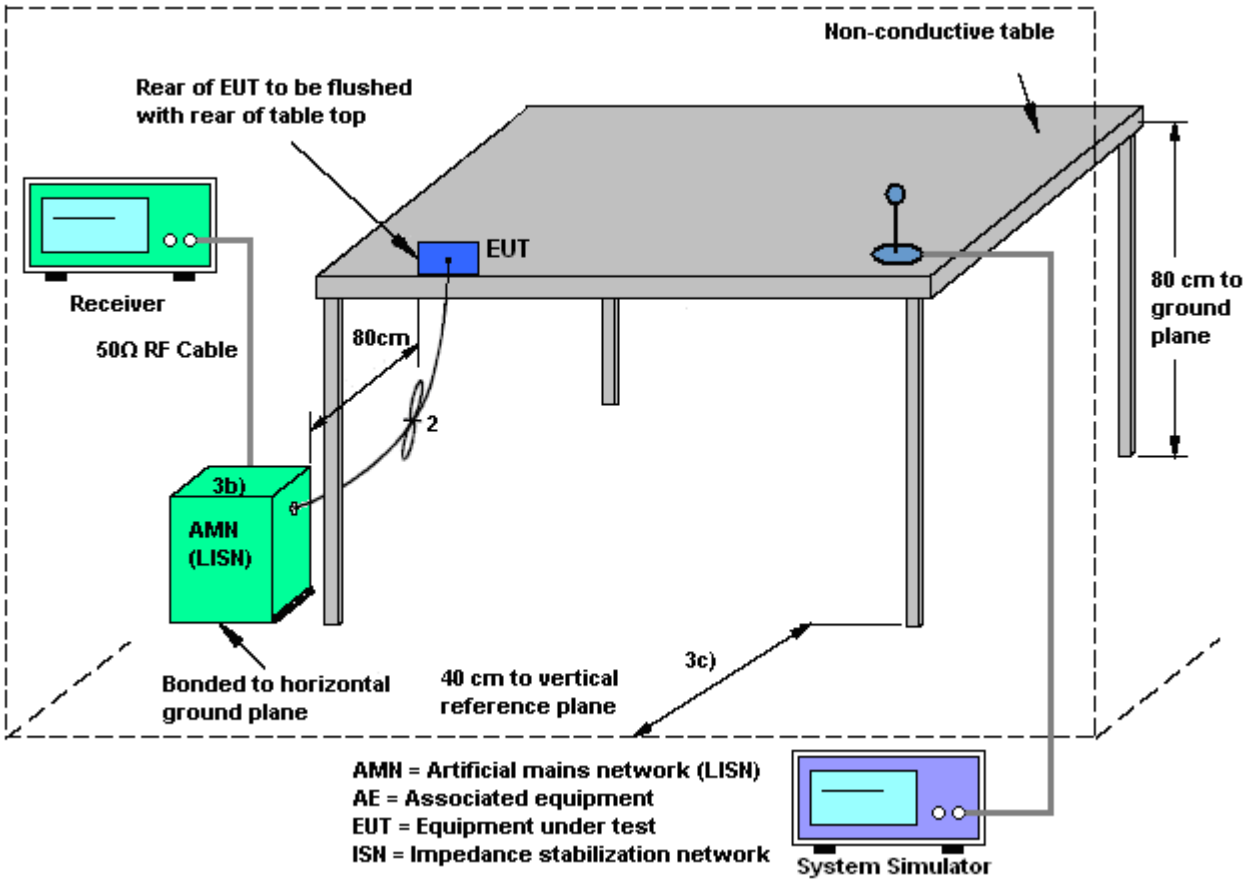
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

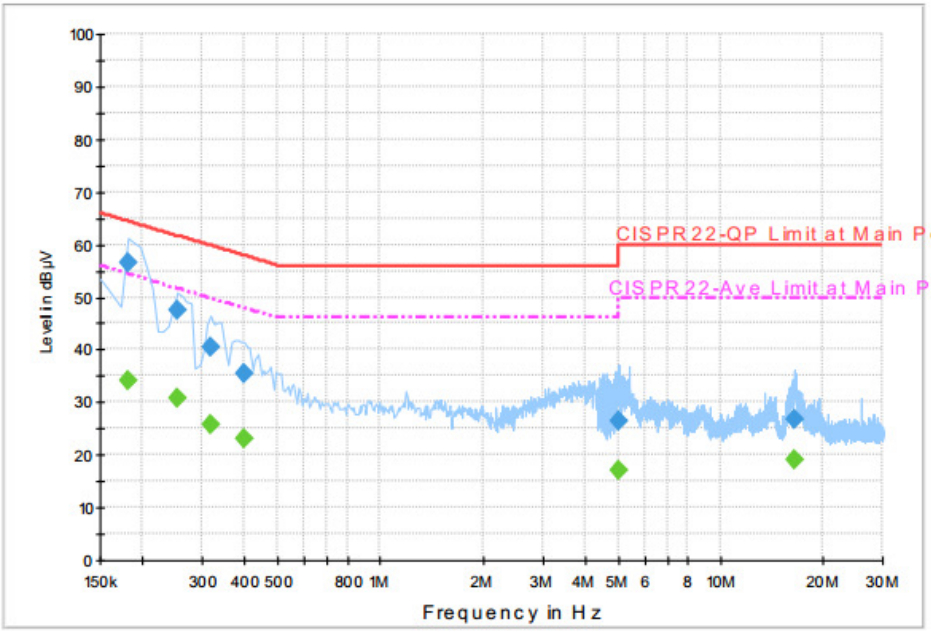
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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



3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	52~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + Earphone + Battery		



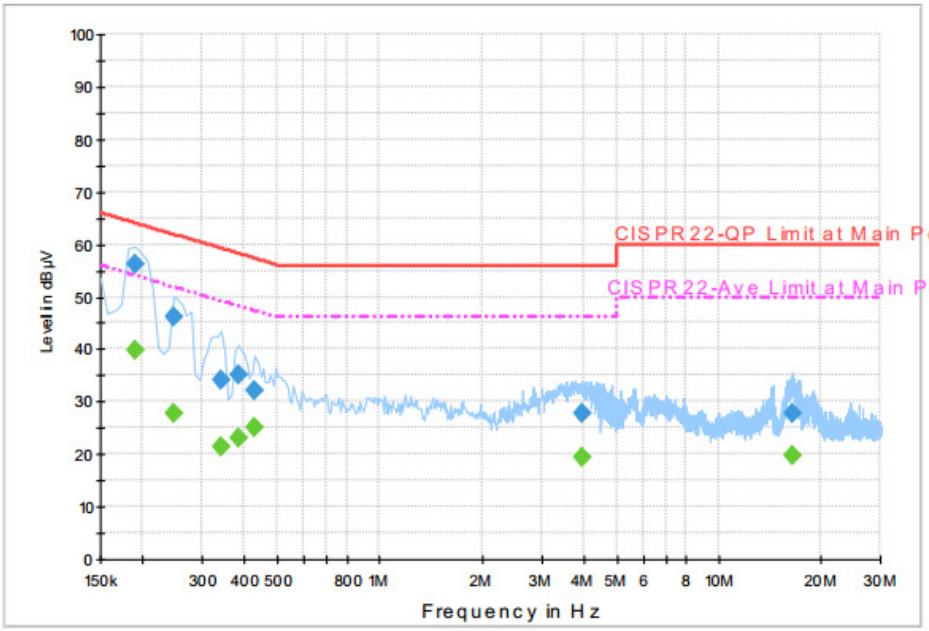
Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.182000	56.4	Off	L1	19.6	8.0	64.4
0.254000	47.3	Off	L1	19.6	14.3	61.6
0.318000	40.3	Off	L1	19.6	19.5	59.8
0.398000	35.4	Off	L1	19.6	22.5	57.9
5.046000	26.6	Off	L1	19.7	33.4	60.0
16.470000	26.9	Off	L1	19.8	33.1	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.182000	34.0	Off	L1	19.6	20.4	54.4
0.254000	30.9	Off	L1	19.6	20.7	51.6
0.318000	25.7	Off	L1	19.6	24.1	49.8
0.398000	23.2	Off	L1	19.6	24.7	47.9
5.046000	17.1	Off	L1	19.7	32.9	50.0
16.470000	19.2	Off	L1	19.8	30.8	50.0

Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	52~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + Earphone + Battery		



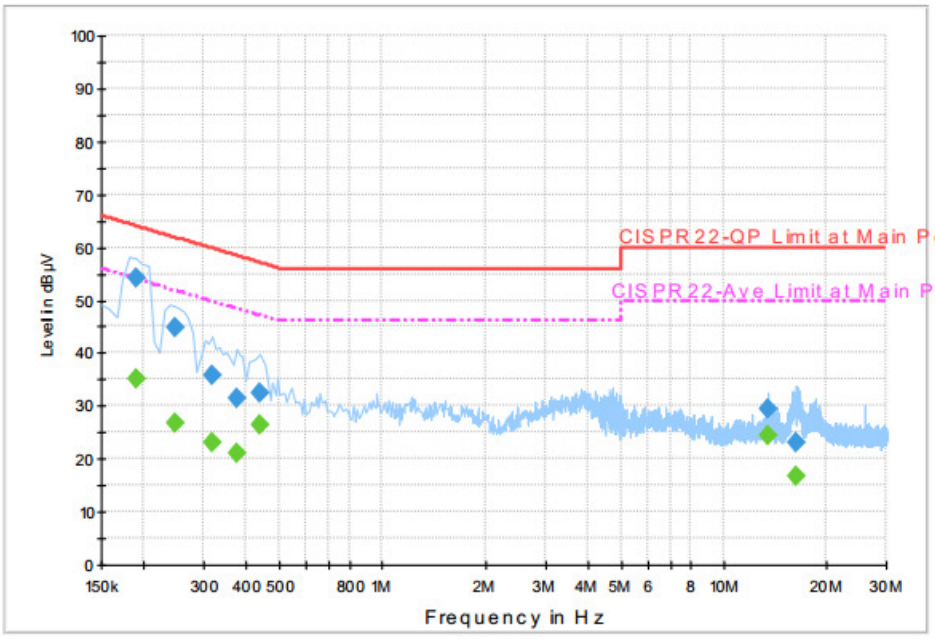
Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	56.3	Off	N	19.6	7.7	64.0
0.246000	46.2	Off	N	19.6	15.7	61.9
0.342000	34.2	Off	N	19.6	25.0	59.2
0.382000	35.1	Off	N	19.6	23.1	58.2
0.430000	32.3	Off	N	19.6	25.0	57.3
3.974000	27.7	Off	N	19.6	28.3	56.0
16.630000	27.9	Off	N	19.9	32.1	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	39.9	Off	N	19.6	14.1	54.0
0.246000	27.9	Off	N	19.6	24.0	51.9
0.342000	21.5	Off	N	19.6	27.7	49.2
0.382000	23.0	Off	N	19.6	25.2	48.2
0.430000	25.0	Off	N	19.6	22.3	47.3
3.974000	19.4	Off	N	19.6	26.6	46.0
16.630000	19.9	Off	N	19.9	30.1	50.0

Test Mode :	Mode 2	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	52~53%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + Earphone + Battery		



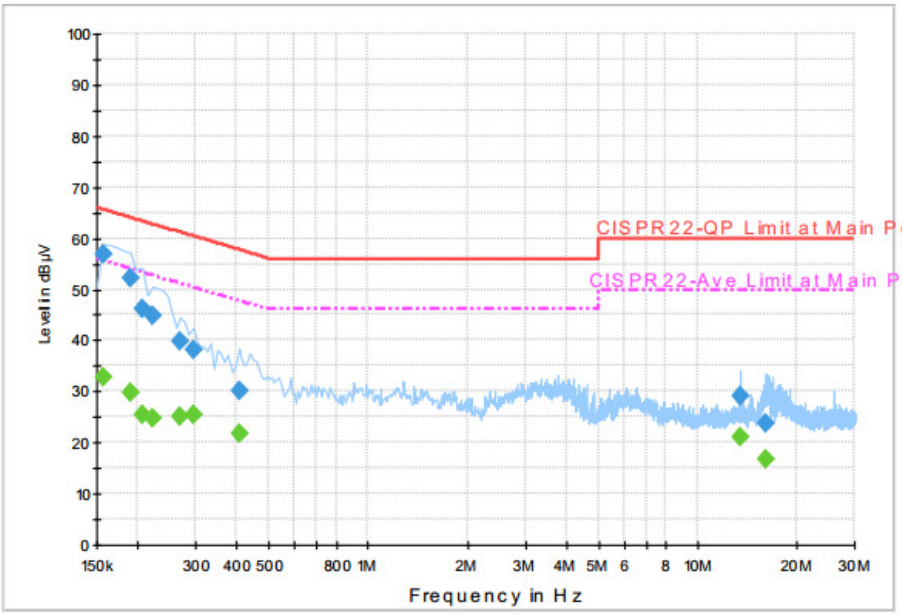
Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	54.3	Off	L1	19.6	9.7	64.0
0.246000	44.7	Off	L1	19.6	17.2	61.9
0.318000	35.7	Off	L1	19.6	24.1	59.8
0.374000	31.4	Off	L1	19.6	27.0	58.4
0.438000	32.4	Off	L1	19.6	24.7	57.1
13.558000	29.4	Off	L1	19.8	30.6	60.0
16.310000	23.0	Off	L1	19.8	37.0	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190000	35.0	Off	L1	19.6	19.0	54.0
0.246000	26.8	Off	L1	19.6	25.1	51.9
0.318000	22.9	Off	L1	19.6	26.9	49.8
0.374000	21.1	Off	L1	19.6	27.3	48.4
0.438000	26.3	Off	L1	19.6	20.8	47.1
13.558000	24.3	Off	L1	19.8	25.7	50.0
16.310000	16.6	Off	L1	19.8	33.4	50.0

Test Mode :	Mode 2	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	52~53%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + Earphone + Battery		



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	57.0	Off	N	19.6	8.6	65.6
0.190000	52.2	Off	N	19.6	11.8	64.0
0.206000	46.2	Off	N	19.7	17.2	63.4
0.222000	44.8	Off	N	19.6	17.9	62.7
0.270000	39.9	Off	N	19.6	21.2	61.1
0.294000	38.3	Off	N	19.6	22.1	60.4
0.406000	30.1	Off	N	19.6	27.6	57.7
13.558000	29.1	Off	N	19.8	30.9	60.0
16.190000	23.6	Off	N	19.9	36.4	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	32.8	Off	N	19.6	22.8	55.6
0.190000	29.9	Off	N	19.6	24.1	54.0
0.206000	25.4	Off	N	19.7	28.0	53.4
0.222000	24.8	Off	N	19.6	27.9	52.7
0.270000	25.0	Off	N	19.6	26.1	51.1
0.294000	25.3	Off	N	19.6	25.1	50.4
0.406000	21.7	Off	N	19.6	26.0	47.7
13.558000	21.0	Off	N	19.8	29.0	50.0
16.190000	16.6	Off	N	19.9	33.4	50.0

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 (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: Measurement above 18GHz follows the CISPR 22 limit line as below：

15.109 (g) As an alternative to the radiated emission limits shown in paragraphs (a) and (b) of this section, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, “Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement”

Frequency (MHz)	Field Strength (dBuV/meter)	Measurement Distance (meters)
18000 - 40000	83.54	1

3.2.2. Measuring Instruments

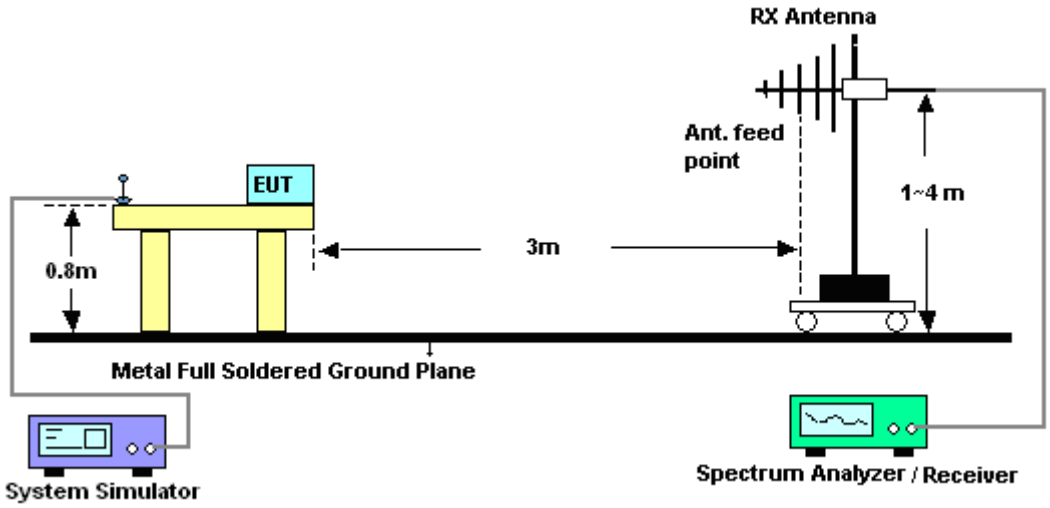
The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

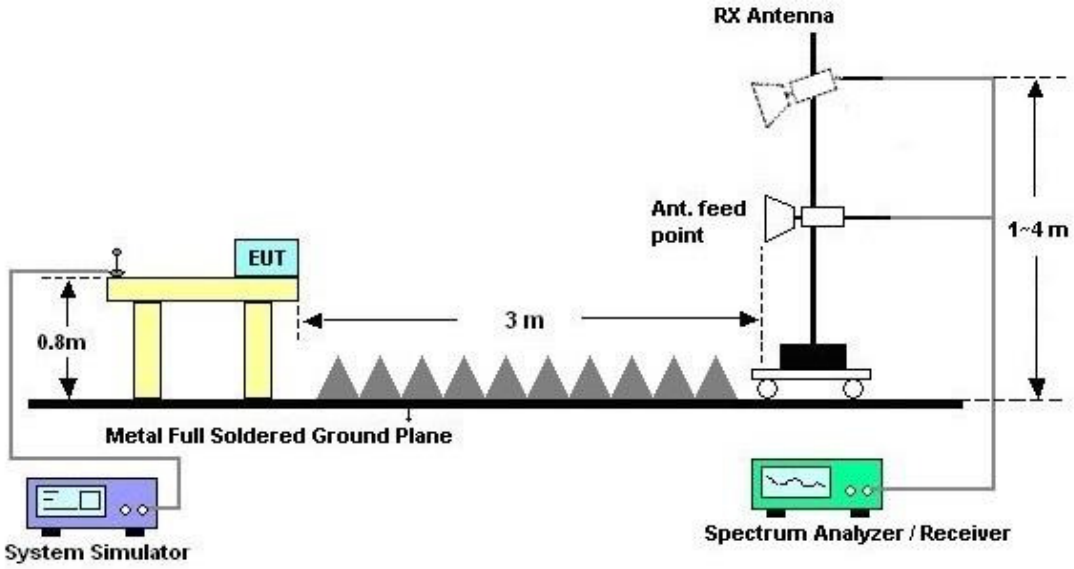
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters (30M~18G) and 1 meters (18G~40G) from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the 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 (dBμV/m) = 20 log Emission level (μV/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

3.2.4. Test Setup of Radiated Emission

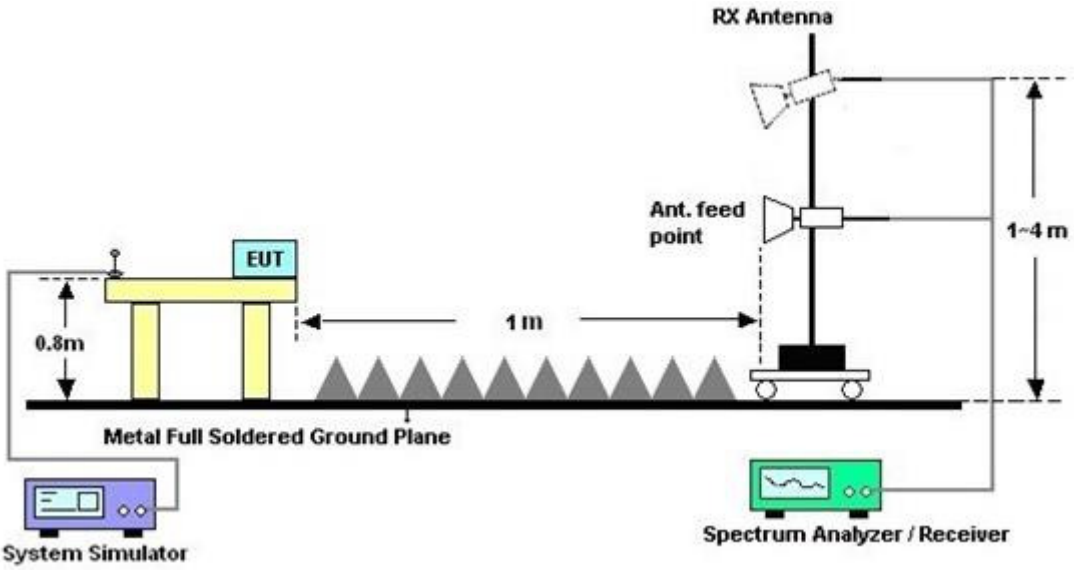
For radiated emissions from 30MHz to 1GHz



For radiated emissions from 1GHz to 18GHz

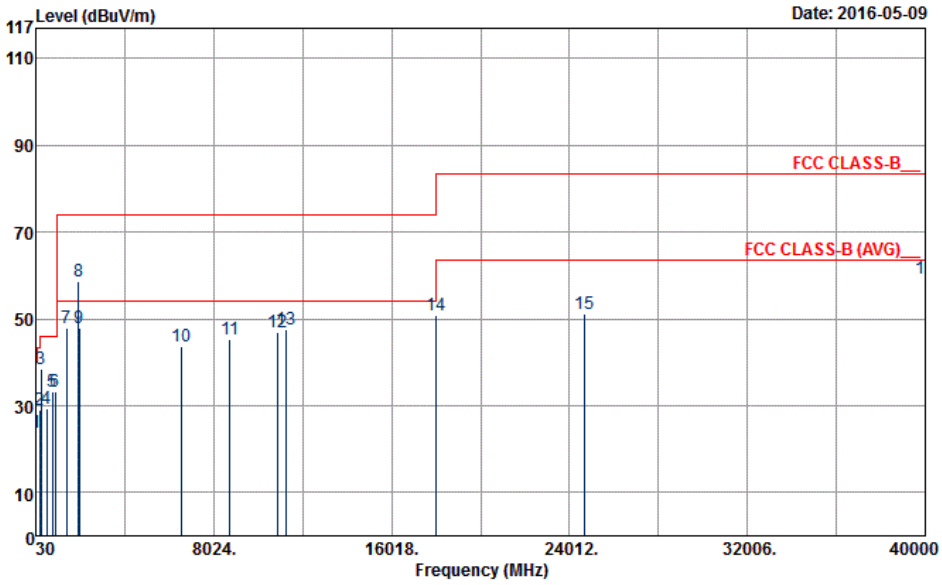


For radiated emissions from 18GHz to 40GHz



3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 1	**Temperature :**	17~18℃
Test Engineer :	Donny Pang	**Relative Humidity :**	41~43%
Test Distance :	3m	**Polarization :**	Horizontal
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + Earphone + Battery		
Remark :	#8 is system simulator signal which can be ignored.		

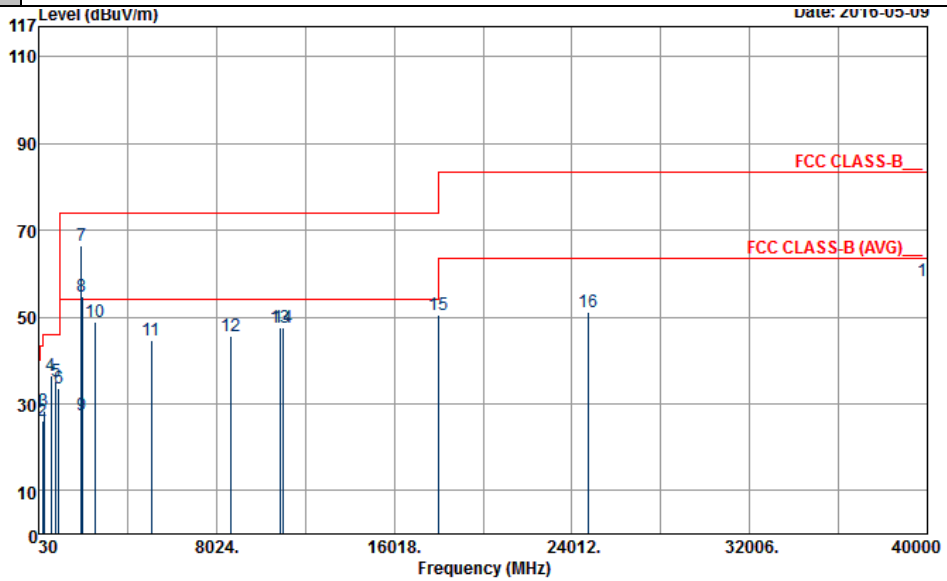


Site : 03CH06-HY
Condition : FCC CLASS-B__ SHF-EHF HORN HORIZONTAL

Power : From System
Mode : Mode 1
Distance : below 18GHz :3m
: above 18GHz:1m

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	23.72	-16.28	40.00	27.90	25.70	1.90	31.78	---	---	Peak
2	210.63	28.99	-14.51	43.50	42.62	16.10	2.00	31.73	---	---	Peak
3	253.29	38.61	-7.39	46.00	49.11	19.00	2.21	31.71	---	---	Peak
4	507.20	29.41	-16.59	46.00	34.17	24.22	2.94	31.92	---	---	Peak
5	779.50	33.35	-12.65	46.00	33.92	28.04	3.38	31.99	---	---	Peak
6	899.90	33.41	-12.59	46.00	32.08	29.40	3.39	31.46	---	---	Peak
7	1398.00	48.02	-25.98	74.00	78.01	25.39	5.22	60.60	100	134	Peak
8	1960.00	58.80			86.76	26.23	6.31	60.50	---	---	Peak
9	1996.00	47.78	-26.22	74.00	75.59	26.30	6.39	60.50	---	---	Peak
10	6602.00	43.67	-30.33	74.00	57.30	34.35	12.40	60.38	---	---	Peak
11	8750.00	45.16	-28.84	74.00	53.23	37.30	14.48	59.85	---	---	Peak
12	10884.00	46.88	-27.12	74.00	51.07	40.40	14.87	59.46	---	---	Peak
13	11270.00	47.44	-26.56	74.00	50.29	40.34	15.54	58.73	---	---	Peak
14	17991.00	50.94	-23.06	74.00	44.82	48.30	15.12	57.30	100	161	Peak
15	24710.00	51.29	-32.25	83.54	42.27	40.20	22.78	53.96	---	---	Peak
16	40000.00	59.44	-24.10	83.54	45.02	45.00	26.32	56.90	---	---	Peak

Test Mode :	Mode 1	**Temperature :**	17~18°C
Test Engineer :	Donny Pang	**Relative Humidity :**	41~43%
Test Distance :	3m	**Polarization :**	Vertical
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + Earphone + Battery		
Remark :	#7 is system simulator signal which can be ignored.		

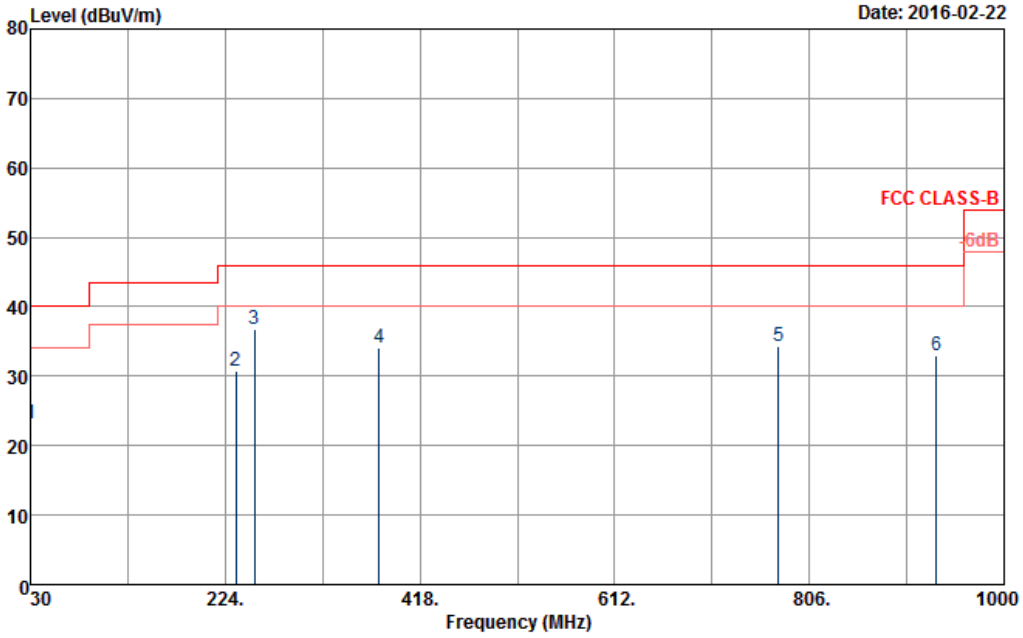


Site : 03CH06-HY
Condition : FCC CLASS-B_ SHF-EHF HORN VERTICAL

Power : From System
Mode : Mode 1
Distance : below 18GHz :3m
: above 18GHz:1m

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	31.89	28.07	-11.93	40.00	33.36	24.58	1.91	31.78	---	---	Peak
2	210.36	25.97	-17.53	43.50	39.61	16.10	1.99	31.73	---	---	Peak
3	253.56	28.48	-17.52	46.00	38.97	19.00	2.22	31.71	---	---	Peak
4	598.90	36.39	-9.61	46.00	39.80	25.58	3.11	32.10	100	131	Peak
5	796.30	35.18	-10.82	46.00	35.62	28.17	3.36	31.97	---	---	Peak
6	939.80	33.67	-12.33	46.00	31.21	30.45	3.12	31.11	---	---	Peak
7	1960.00	66.62			94.58	26.23	6.31	60.50	---	---	Peak
8	1994.00	54.74	-19.26	74.00	82.65	26.28	6.31	60.50	100	197	Peak
9	1994.00	27.51	-26.49	54.00	55.42	26.28	6.31	60.50	100	197	Average
10	2592.00	48.82	-25.18	74.00	74.56	27.62	7.22	60.58	---	---	Peak
11	5100.00	44.51	-29.49	74.00	60.37	31.58	11.38	58.82	---	---	Peak
12	8696.00	45.56	-28.44	74.00	53.89	37.22	14.21	59.76	---	---	Peak
13	10900.00	47.55	-26.45	74.00	51.60	40.42	14.94	59.41	---	---	Peak
14	11046.00	47.65	-26.35	74.00	51.00	40.47	15.21	59.03	---	---	Peak
15	18000.00	50.46	-23.54	74.00	44.14	48.50	15.12	57.30	---	---	Peak
16	24776.00	51.25	-32.29	83.54	42.14	40.20	22.85	53.94	---	---	Peak
17	40000.00	58.44	-25.10	83.54	44.02	45.00	26.32	56.90	---	---	Peak

Test Mode :	Mode 2	Temperature :	17~18°C
Test Engineer :	Donny Pang	Relative Humidity :	41~43%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + Earphone + Battery		

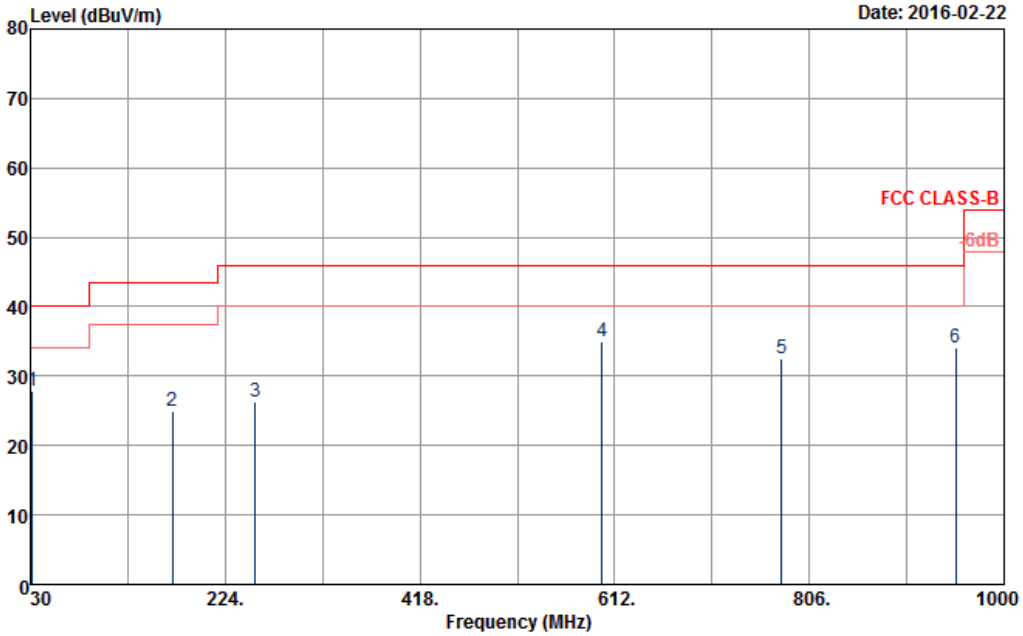


Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF_ANT_2725 HORIZONTAL

Power : From System
Mode : Mode 2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	23.23	-16.77	40.00	27.41	25.70	1.90	31.78	---	---	Peak
2	234.66	30.83	-15.17	46.00	43.17	17.25	2.13	31.72	---	---	Peak
3	253.56	36.86	-9.14	46.00	47.35	19.00	2.22	31.71	100	121	Peak
4	377.00	34.11	-11.89	46.00	41.74	21.76	2.39	31.78	---	---	Peak
5	775.30	34.25	-11.75	46.00	34.86	28.00	3.38	31.99	---	---	Peak
6	932.80	33.03	-12.97	46.00	30.76	30.27	3.17	31.17	---	---	Peak

Test Mode :	Mode 2	Temperature :	17~18°C
Test Engineer :	Donny Pang	Relative Humidity :	41~43%
Test Distance :	3m	Polarization :	Vertical
Function Type :	Data Link with Notebook (with USB Cable) + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + Earphone + Battery		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF_ANT_2725 VERTICAL

Power : From System
Mode : Mode 2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	31.62	27.93	-12.07	40.00	33.22	24.58	1.91	31.78	---	---	Peak
2	171.48	25.05	-18.45	43.50	39.04	15.69	2.05	31.73	---	---	Peak
3	253.83	26.23	-19.77	46.00	36.62	19.10	2.22	31.71	---	---	Peak
4	599.60	35.05	-10.95	46.00	38.45	25.59	3.11	32.10	100	311	Peak
5	778.10	32.53	-13.47	46.00	33.12	28.02	3.38	31.99	---	---	Peak
6	951.70	34.02	-11.98	46.00	31.27	30.70	3.05	31.00	---	---	Peak

7. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Feb. 25, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 26, 2015	Feb. 25, 2016	Aug. 25, 2016	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Apr. 20, 2015	Feb. 25, 2016	Apr. 19, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Feb. 25, 2016	Dec. 01, 2016	Conduction (CO05-HY)
LISN (for auxiliary equipment)	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 14, 2015	Feb. 25, 2016	Dec. 13, 2016	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 06, 2016	Feb. 25, 2016	Jan. 05, 2017	Conduction (CO05-HY)
Test Software	R & S	EMC32	8.40.0	N/A	N/A	Feb. 25, 2016	N/A	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C	2725	30MHz~1GHz	Nov. 17, 2015	Feb. 22, 2016 ~ May 09, 2016	Nov. 16, 2016	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Feb. 22, 2016 ~ May 09, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Hygrometer	WISEWIND	410	BU5004	N/A	May 04, 2015	Feb. 22, 2016 ~ Apr. 18, 2016	May 03, 2016	Radiation (03CH06-HY)
Hygrometer	Testo	DTM-303A	TP157061	N/A	Apr. 19, 2016	Apr. 19, 2016 ~ May 09, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 20, 2015	Feb. 22, 2016 ~ Apr. 18, 2016	Apr. 19, 2016	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 19, 2016	Apr. 19, 2016 ~ May 09, 2016	Apr. 18, 2017	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	RG_142_B/U	NA	30MHz ~ 1GHz	Nov. 26, 2015	Feb. 22, 2016 ~ May 09, 2016	Nov. 25, 2016	Radiation (03CH06-HY)
RF Cable	Infinet	LL142	Infinet CA3601-3601-1000	1GHz ~ 26.5GHz	Nov. 26, 2015	Feb. 22, 2016 ~ May 09, 2016	Nov. 25, 2016	Radiation (03CH06-HY)
Controller	INN-CO	EM1000	060782	Control Turn table & Ant Mast	N/A	Feb. 22, 2016 ~ May 09, 2016	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Feb. 22, 2016 ~ May 09, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Feb. 22, 2016 ~ May 09, 2016	N/A	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 21, 2015	Feb. 22, 2016 ~ May 09, 2016	Aug. 20, 2016	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jul. 01, 2015	Feb. 22, 2016 ~ May 09, 2016	Jun. 30, 2016	Radiation (03CH06-HY)
RF Cable	HUBER + SUHNER	RG 142_B/U	N/A	1GHz ~ 40GHz	Nov. 26, 2015	Feb. 22, 2016 ~ May 09, 2016	Nov. 25, 2016	Radiation (03CH06-HY)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 23, 2015	Feb. 22, 2016 ~ May 09, 2016	Nov. 22, 2016	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 02, 2015	Feb. 22, 2016 ~ May 09, 2016	Nov. 01, 2016	Radiation (03CH06-HY)
Preamplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~ 40GHz	Jun. 02, 2015	Feb. 22, 2016 ~ May 09, 2016	Jun. 01, 2016	Radiation (03CH06-HY)

8. Uncertainty of Evaluation

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.00**