



FCC Test Report

APPLICANT : Panasonic Mobile Communications
Development of Europe Ltd
EQUIPMENT : Mobile Phone
BRAND NAME : NTT docomo
MODEL NAME : Panasonic EB-4070
MARKETING NAME : P-01J
FCC ID : UCE216065A
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on Jul. 13, 2016 and testing was completed on Jul. 25, 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

Approved by: Jones Tsai / Manager



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FCC ID : UCE216065A

Page Number : 1 of 28

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TABLE OF CONTENTS

REVISION HISTORY..... 3

SUMMARY OF TEST RESULT 4

1. GENERAL DESCRIPTION 5

 1.1. Applicant..... 5

 1.2. Manufacturer 5

 1.3. Product Feature of Equipment Under Test 5

 1.4. Product Specification of Equipment Under Test 6

 1.5. Modification of EUT 6

 1.6. Test Location 7

 1.7. Applicable Standards 7

2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST 8

 2.1. Test Mode 8

 2.2. Connection Diagram of Test System 10

 2.3. Support Unit used in test configuration and system 11

 2.4. EUT Operation Test Setup 11

3. TEST RESULT 12

 3.1. Test of AC Conducted Emission Measurement 12

 3.2. Test of Radiated Emission Measurement 18

4. LIST OF MEASURING EQUIPMENT 27

5. UNCERTAINTY OF EVALUATION 28



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC671309	Rev. 01	Initial issue of report	Aug. 18, 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 6.10 dB at 0.470 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 4.21 dB at 157.000 MHz for Quasi-Peak



1. General Description

1.1. Applicant

Panasonic Mobile Communications Development of Europe Ltd
Willoughby Road, Bracknell, Berkshire RG12 8FP, UK

1.2. Manufacturer

Panasonic Mobile Communications Development of Europe Ltd
Willoughby Road, Bracknell, Berkshire RG12 8FP, UK

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	NTT docomo
Model Name	Panasonic EB-4070
Marketing Name	P-01J
FCC ID	UCE216065A
EUT supports Radios application	WCDMA/HSPA/LTE/NFC WLAN 11b/g/n HT20 Bluetooth v4.1 EDR/LE
HW Version	Rev C
SW Version	ACPU: amethyst-lp-12-0088, CCPU: AMET.1200C1100034.1013.00
EUT Stage	Production Unit

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

Specification of Accessory		
AC Adapter	Brand Name	NTT docomo
	Model Name	AC Adaptor 04
Battery	Brand Name	Sanyo
	Model Name	P33
Earphone	Brand Name	NTT docomo
	Model Name	Stereo Earphone Type 02
USB Cable	Brand Name	NTT docomo
	Model Name	Micro USB Cable Type 01



1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	WCDMA Band V: 826.4 MHz ~ 846.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Rx Frequency	WCDMA Band V: 871.4 MHz ~ 891.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz NFC : 13.56 MHz
Antenna Type	WWAN : Monopole Antenna WLAN : Monopole Antenna Bluetooth : Monopole Antenna GPS : Monopole Antenna NFC : Loop Antenna
Type of Modulation	WCDMA: QPSK (Uplink) HSDPA: 16QAM (Uplink) HSUPA: QPSK (Uplink) 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : $\pi/4$ -DQPSK Bluetooth (3Mbps) : 8-DPSK GPS : BPSK NFC: ASK

1.5. Modification of EUT

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



1.6. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1023 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 30-2, Dingfu Tsuen, Linkou District, New Taipei City, Taiwan 244, R.O.C. TEL: +886-2-2603-5367 / +886-2-2601-1640 FAX: +886-2-2601-1695	
Test Site No.	Sporton Site No.	FCC Registration No.
	OS02-LK	TW1023

1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC 47 CFR FCC Part 15 Subpart B
- ♦ ANSI C63.4-2014

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



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).

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

Item	EUT Configuration	Test Condition		
		EMI AC	EMI RE<1G	EMI RE≥1G
1.	Operating Mode (EUT with earphone)	Note 1	<input checked="" type="checkbox"/>	Note 1
2.	Charging Mode (EUT with adapter)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Note 1
3.	Data application transferred mode (EUT with notebook)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Abbreviations:

- EMI AC: AC conducted emissions
- EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz
- EMI RE < 1G: EUT radiated emissions < 1GHz

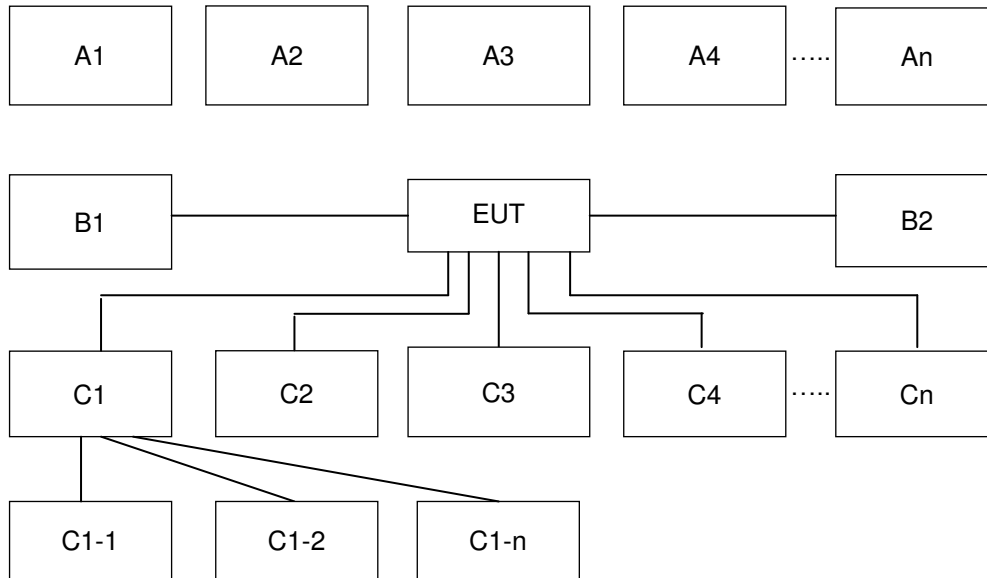
Note 1: Testing for this mode is not required or not the worst case.

Remark: For signal above 1GHz, the worst case was test item 3.



Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	2/3	Mode 1 : Bluetooth Idle + WLAN Idle + SD Card + Camera + Adapter Mode 2 : Bluetooth Idle + WLAN Idle + SD Card + MPEG4 + USB Cable (Data Link with Notebook)
Radiated Emissions < 1GHz	1/2/3	Mode 1 : Bluetooth Idle + WLAN Idle + SD Card + Camera + Adapter Mode 2 : Bluetooth Idle + WLAN Idle + SD Card + MPEG4 + Earphone Mode 3 : Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)
Radiated Emissions ≥ 1GHz	3	Mode 1 : Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)
Remark: <ol style="list-style-type: none">1. The worst case of AC is mode 2; only the test data of this mode was reported.2. The worst case of RE < 1G is mode 3; only the test data of this mode was reported.3. Data Link with Notebook means data application transferred mode between EUT and Notebook.		

2.2. Connection Diagram of Test System



Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3				
A1	BT Earphone	Bluetooth	X	X	X				
A2	AP router	WiFi	X	X	X				
No.	Power Source	Connection Type	1	2	3				
B1	AC : 120V/60Hz	AC Power Cable	X						
No.	Setup Peripherals	Connection Type	1	2	3				
C1	Notebook	USB Cable			X				
C1-1	iPod	USB Cable to C1			X				
C1-2	AP router	RJ-45 Cable to C1			X				
C2	Earphone	Earphone jack to USB Cable		X					
C3	SD card	SD I/O interface without Cable	X	X	X				

Conduction Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2					
A1	BT Earphone	Bluetooth	X	X					
A2	AP router	WiFi	X	X					
No.	Power Source	Connection Type	1	3					
B1	AC : 120V/60Hz	AC Power Cable	X						
No.	Setup Peripherals	Connection Type	1	3					
C1	Notebook	USB Cable		X					
C1-1	iPod	USB Cable to C1		X					
C1-2	AP router	RJ-45 Cable to C1		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.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
3.	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
4.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
5.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between Laptop and EUT via USB cable.
2. Execute "Video Player" to play MPEG4 files.
3. Turn on camera to capture images.



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.

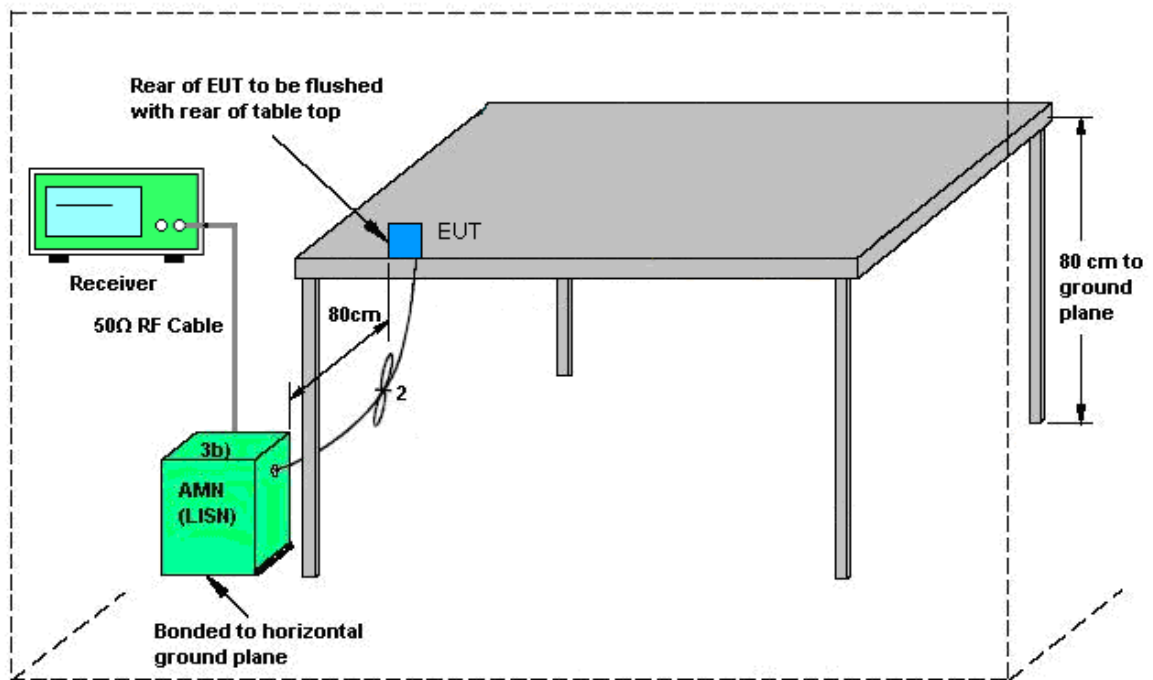
3.1.2 Measuring Instruments

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.

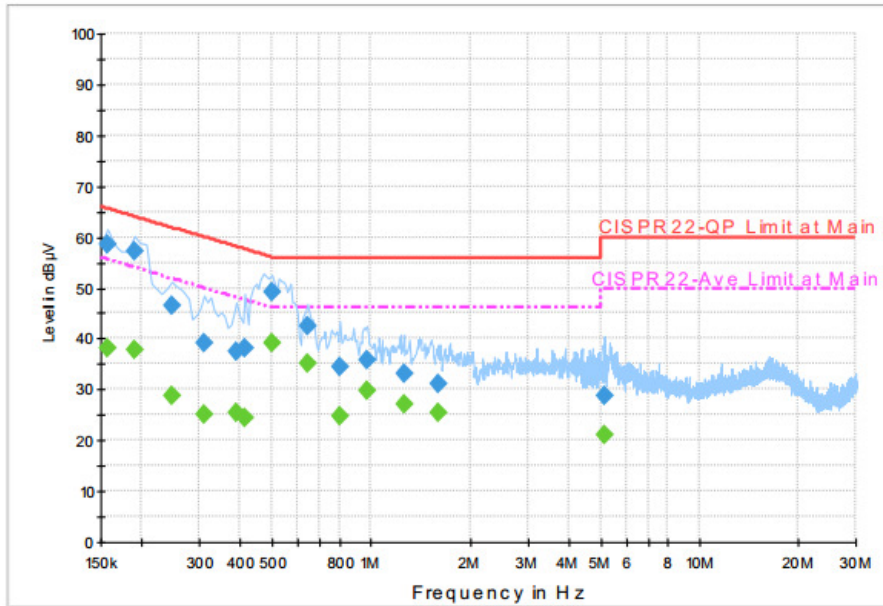
3.1.4 Test Setup



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	23~24°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + MPEG4 + USB Cable (Data Link with Notebook)		

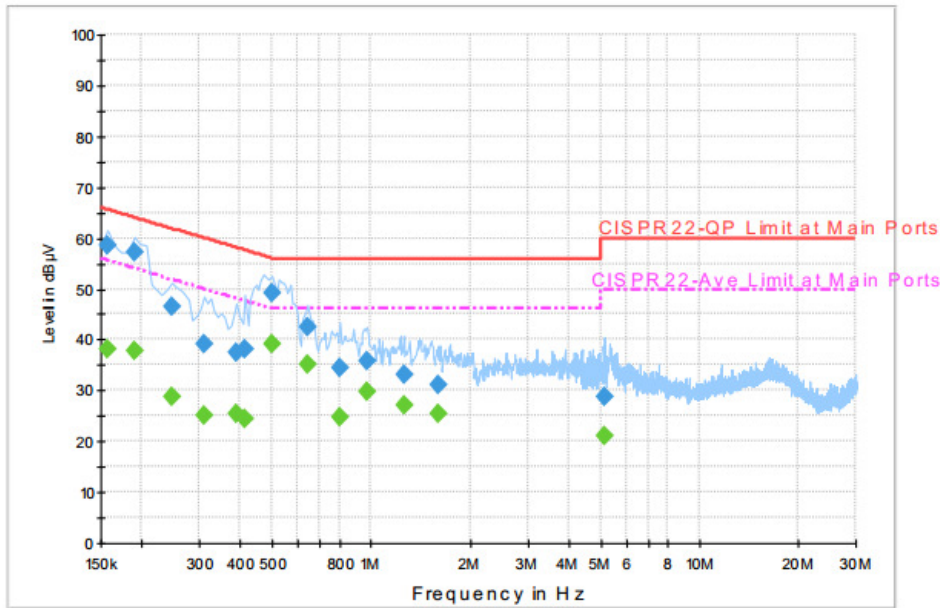


Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	58.6	Off	L1	19.6	7.0	65.6
0.190000	57.3	Off	L1	19.6	6.7	64.0
0.246000	46.4	Off	L1	19.6	15.5	61.9
0.310000	39.1	Off	L1	19.6	20.9	60.0
0.390000	37.6	Off	L1	19.6	20.5	58.1
0.414000	38.1	Off	L1	19.6	19.5	57.6
0.502000	49.2	Off	L1	19.6	6.8	56.0
0.638000	42.6	Off	L1	19.6	13.4	56.0
0.806000	34.5	Off	L1	19.6	21.5	56.0
0.974000	35.8	Off	L1	19.6	20.2	56.0
1.262000	33.2	Off	L1	19.6	22.8	56.0
1.606000	30.9	Off	L1	19.6	25.1	56.0
5.134000	28.7	Off	L1	19.7	31.3	60.0



Test Mode :	Mode 2	Temperature :	23~24°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + MPEG4 + USB Cable (Data Link with Notebook)		

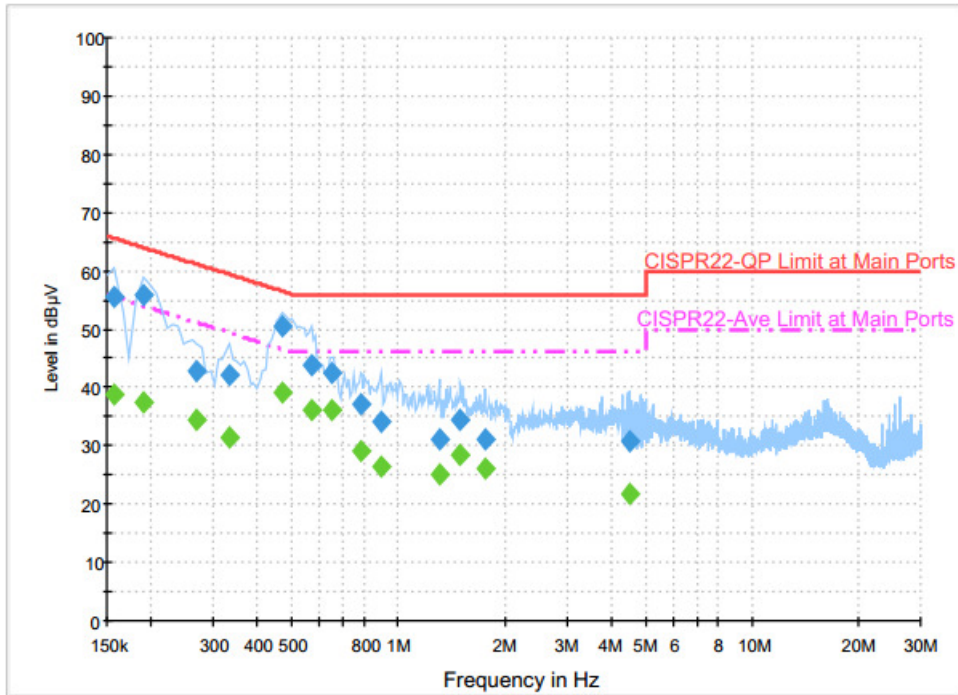


Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	38.0	Off	L1	19.6	17.6	55.6
0.190000	37.8	Off	L1	19.6	16.2	54.0
0.246000	28.8	Off	L1	19.6	23.1	51.9
0.310000	25.2	Off	L1	19.6	24.8	50.0
0.390000	25.5	Off	L1	19.6	22.6	48.1
0.414000	24.5	Off	L1	19.6	23.1	47.6
0.502000	39.1	Off	L1	19.6	6.9	46.0
0.638000	35.1	Off	L1	19.6	10.9	46.0
0.806000	24.7	Off	L1	19.6	21.3	46.0
0.974000	29.7	Off	L1	19.6	16.3	46.0
1.262000	27.3	Off	L1	19.6	18.7	46.0
1.606000	25.4	Off	L1	19.6	20.6	46.0
5.134000	20.9	Off	L1	19.7	29.1	50.0



Test Mode :	Mode 2	Temperature :	23~24°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + MPEG4 + USB Cable (Data Link with Notebook)		

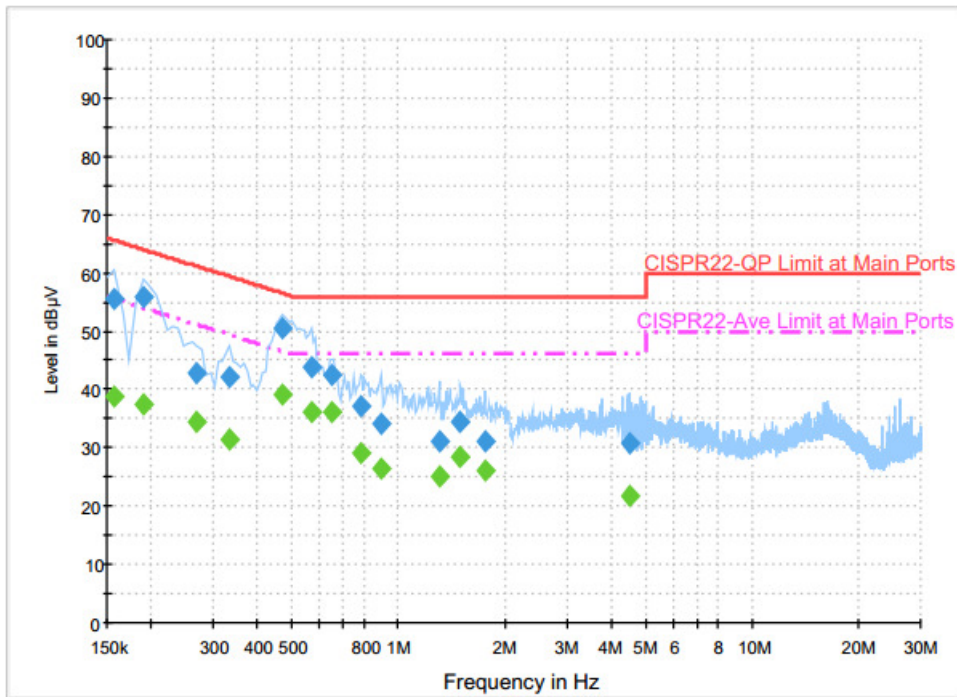


Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	55.7	Off	N	19.6	9.9	65.6
0.190000	55.7	Off	N	19.6	8.3	64.0
0.270000	42.7	Off	N	19.6	18.4	61.1
0.334000	42.2	Off	N	19.6	17.2	59.4
0.470000	50.4	Off	N	19.6	6.1	56.5
0.566000	43.7	Off	N	19.6	12.3	56.0
0.646000	42.5	Off	N	19.6	13.5	56.0
0.782000	37.2	Off	N	19.6	18.8	56.0
0.894000	34.2	Off	N	19.6	21.8	56.0
1.302000	31.1	Off	N	19.6	24.9	56.0
1.494000	34.5	Off	N	19.6	21.5	56.0
1.766000	31.2	Off	N	19.6	24.8	56.0
4.534000	30.6	Off	N	19.7	25.4	56.0



Test Mode :	Mode 2	Temperature :	23~24°C
Test Engineer :	Arthur Hsieh	Relative Humidity :	51~52%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + MPEG4 + USB Cable (Data Link with Notebook)		



Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	38.9	Off	N	19.6	16.7	55.6
0.190000	37.3	Off	N	19.6	16.7	54.0
0.270000	34.6	Off	N	19.6	16.5	51.1
0.334000	31.4	Off	N	19.6	18.0	49.4
0.470000	39.2	Off	N	19.6	7.3	46.5
0.566000	36.2	Off	N	19.6	9.8	46.0
0.646000	36.1	Off	N	19.6	9.9	46.0
0.782000	29.0	Off	N	19.6	17.0	46.0
0.894000	26.3	Off	N	19.6	19.7	46.0
1.302000	25.1	Off	N	19.6	20.9	46.0
1.494000	28.3	Off	N	19.6	17.7	46.0
1.766000	26.0	Off	N	19.6	20.0	46.0
4.534000	21.9	Off	N	19.7	24.1	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 (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Note: Measurement below 1GHz 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)
30 – 230	30	10
230 – 1000	37	10

3.2.2. Measuring Instruments

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

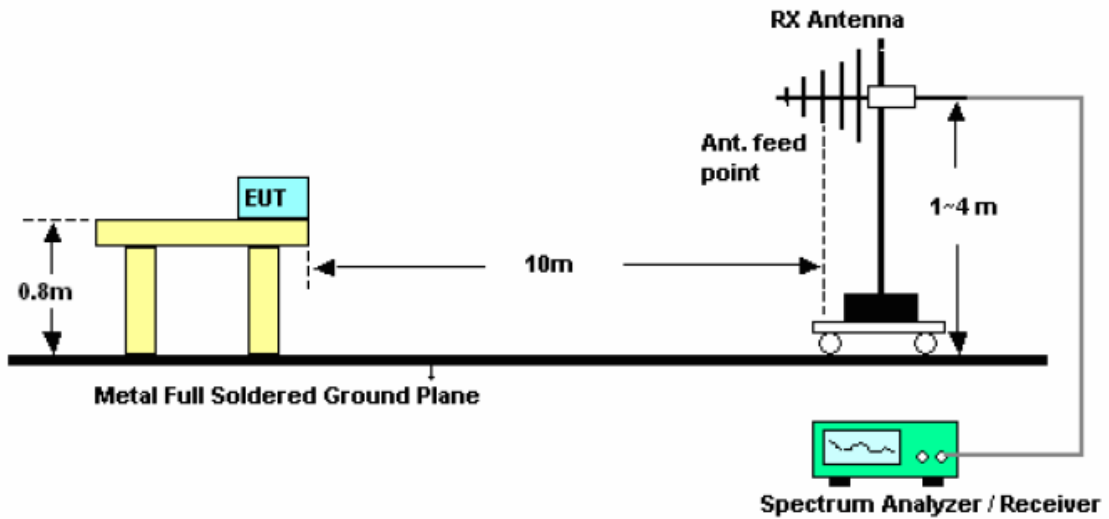


3.2.3. Test Procedures

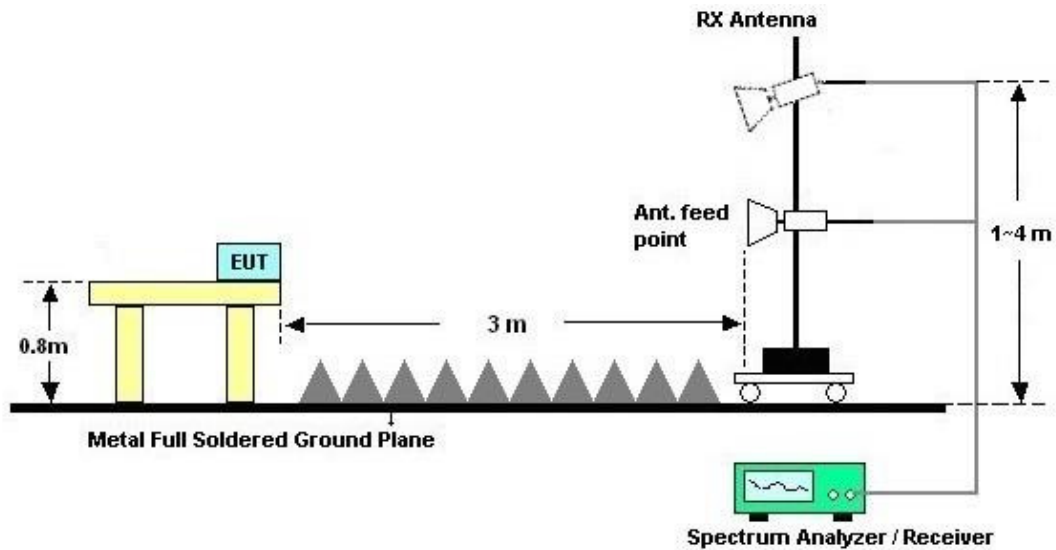
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 10 meters (30M~1G) and 3 meters (1G~ 13G) from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the 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 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

Test Mode :	Mode 3	Temperature :	23~25°C
Test Engineer :	Eric Jeng	Relative Humidity :	53~55%
Test Distance :	10m	Polarization :	Horizontal
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)		

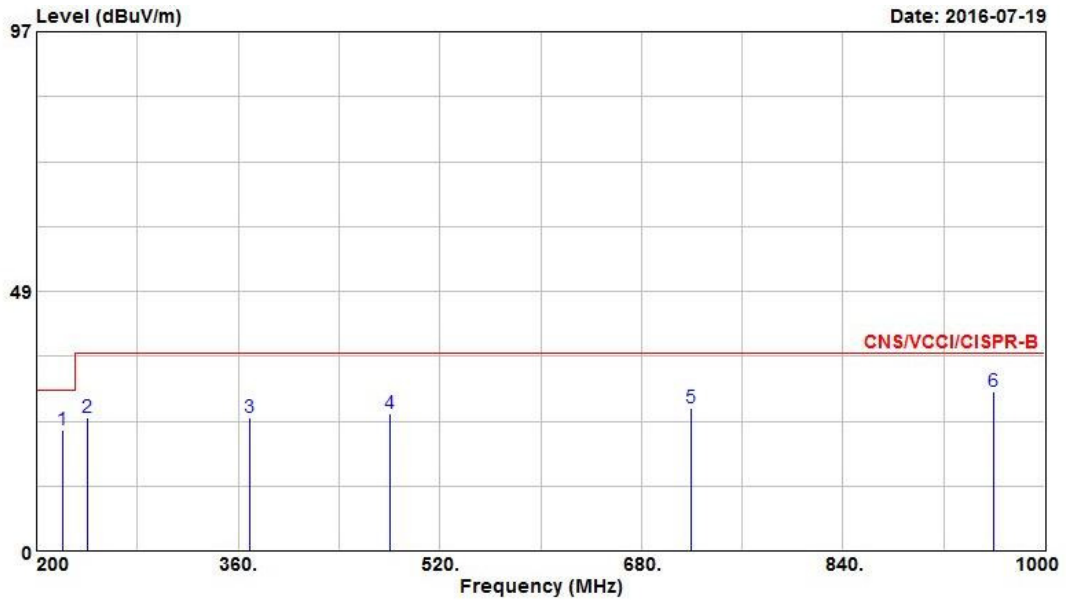


Site : OS03-LK
 Condition : CNS/VCCI/CISPR-B 10m HORIZONTAL
 Project : 671309
 Power : From System
 Mode : Mode 3

Peak No.	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBUV/m	dB	dBUV/m	dBUV	dB/m	dB	dB		cm	deg
1	31.210	20.61	-9.39	30.00	23.42	23.30	0.89	27.00	Peak	---	---
2	120.000	22.37	-7.63	30.00	30.39	17.10	1.77	26.89	Peak	---	---
3	144.010	21.93	-8.07	30.00	31.00	16.04	1.78	26.89	Peak	---	---
4 @	155.600	23.11	-6.89	30.00	32.82	15.40	1.78	26.89	Peak	400	201
5	180.000	19.56	-10.44	30.00	30.10	14.20	2.15	26.89	Peak	---	---
6	200.580	20.35	-9.65	30.00	30.71	14.40	2.13	26.89	Peak	---	---



Test Mode :	Mode 3	Temperature :	23~25°C
Test Engineer :	Eric Jeng	Relative Humidity :	53~55%
Test Distance :	10m	Polarization :	Horizontal
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)		

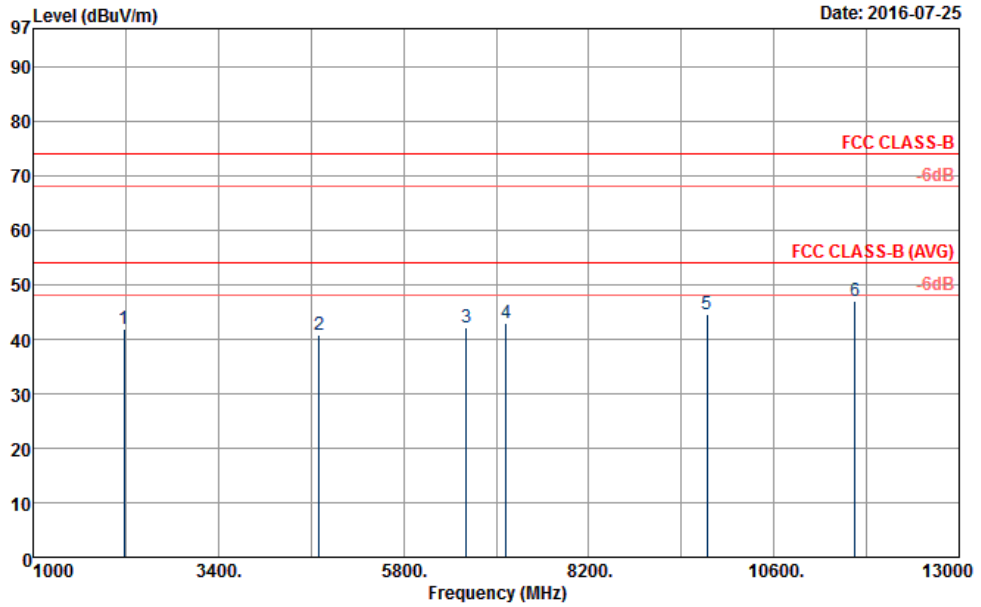


Site : OS03-LK
 Condition : CNS/VCCI/CISPR-B 10m HORIZONTAL
 Project : 671309
 Power : From System
 Mode : Mode 3

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	220.580	22.61	-7.39	30.00	32.78	14.30	2.29	26.76	Peak	---	---
2	240.000	24.79	-12.21	37.00	32.53	16.50	2.40	26.64	Peak	---	---
3	368.800	24.86	-12.14	37.00	28.64	19.92	3.13	26.83	Peak	---	---
4	480.000	25.77	-11.23	37.00	27.55	22.22	3.49	27.49	Peak	---	---
5	720.000	26.76	-10.24	37.00	25.42	24.31	4.77	27.74	Peak	---	---
6	960.000	29.86	-7.14	37.00	25.36	25.95	5.72	27.17	Peak	---	---



Test Mode :	Mode 3	Temperature :	20~23°C
Test Engineer :	Danile Lee	Relative Humidity :	50~53%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)		

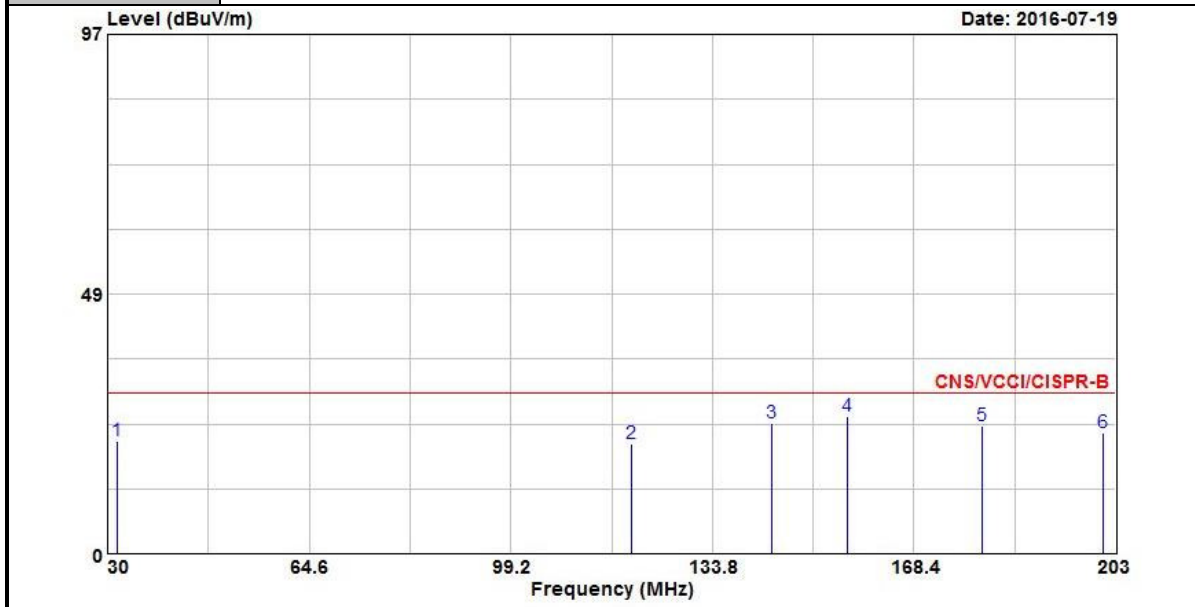


Site : 03CH06-HY
 Condition : FCC CLASS-B 3m 9120D_1156_150827 HORIZONTAL
 Project : 671309
 Power : From System
 Memo : Mode 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna 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	2180.00	41.89	-32.11	74.00	69.20	26.68	6.51	60.50	---	---	Peak
2	4710.00	40.76	-33.24	74.00	59.37	31.03	10.61	60.25	---	---	Peak
3	6618.00	42.07	-31.93	74.00	55.70	34.35	12.40	60.38	---	---	Peak
4	7132.00	42.91	-31.09	74.00	55.78	35.60	11.89	60.36	---	---	Peak
5	9732.00	44.57	-29.43	74.00	52.52	38.94	14.21	61.10	---	---	Peak
6	11654.00	47.09	-26.91	74.00	49.53	39.83	16.22	58.49	100	0	Peak



Test Mode :	Mode 3	Temperature :	23~25°C
Test Engineer :	Eric Jeng	Relative Humidity :	53~55%
Test Distance :	10m	Polarization :	Vertical
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)		

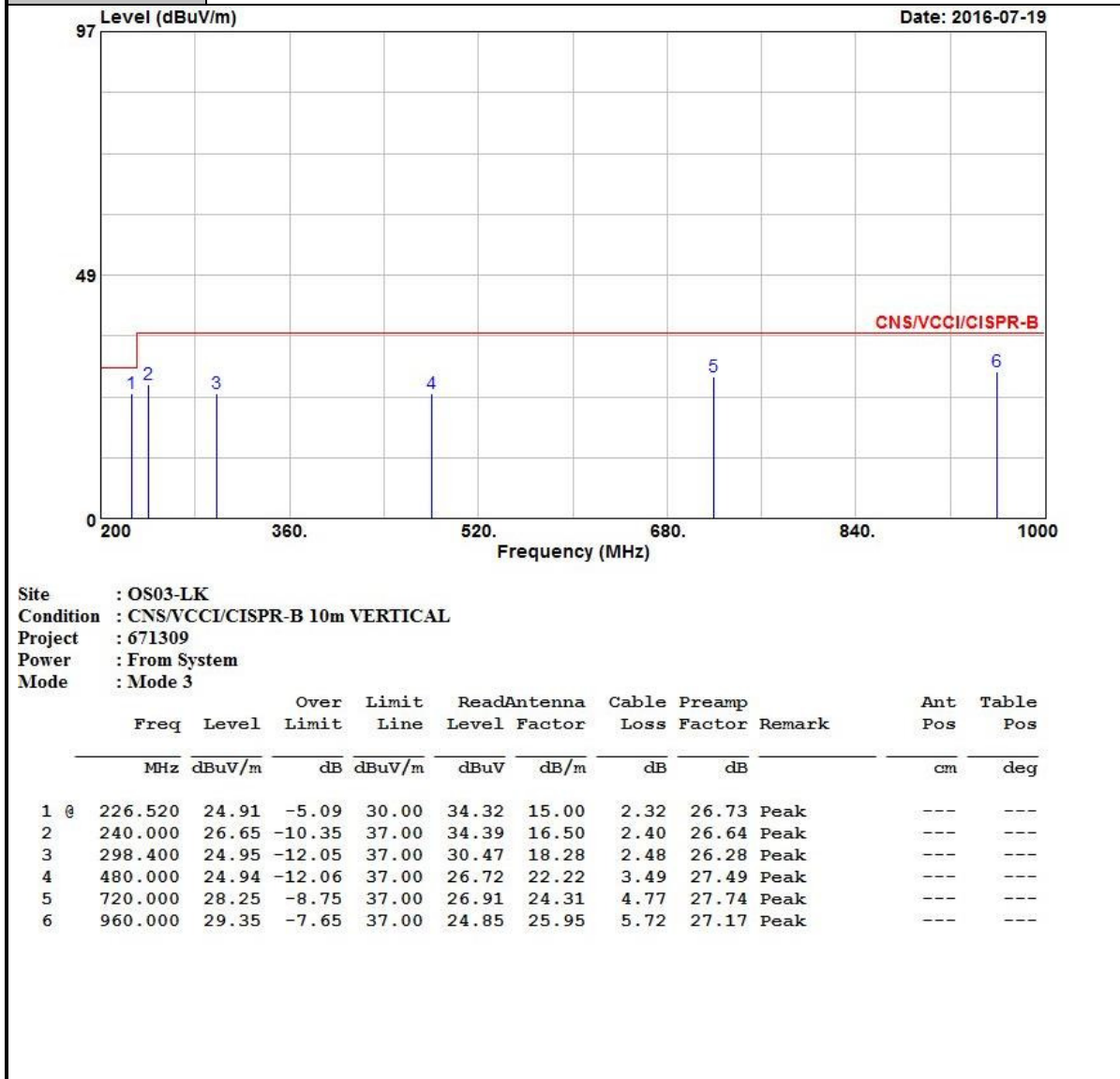


Site : OS03-LK
 Condition : CNS/VCCI/CISPR-B 10m VERTICAL
 Project : 671309
 Power : From System
 Mode : Mode 3

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	31.730	21.08	-8.92	30.00	24.38	22.80	0.90	27.00	Peak	---	---
2	120.000	20.65	-9.35	30.00	28.67	17.10	1.77	26.89	Peak	---	---
3 @	144.000	24.45	-5.55	30.00	33.52	16.04	1.78	26.89	Peak	---	---
4 @	157.000	25.79	-4.21	30.00	35.56	15.32	1.80	26.89	QP	100	254
5 @	180.000	23.93	-6.07	30.00	34.47	14.20	2.15	26.89	Peak	---	---
6	200.920	22.72	-7.28	30.00	33.08	14.40	2.13	26.89	Peak	---	---



Test Mode :	Mode 3	Temperature :	23~25°C
Test Engineer :	Eric Jeng	Relative Humidity :	53~55%
Test Distance :	10m	Polarization :	Vertical
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)		

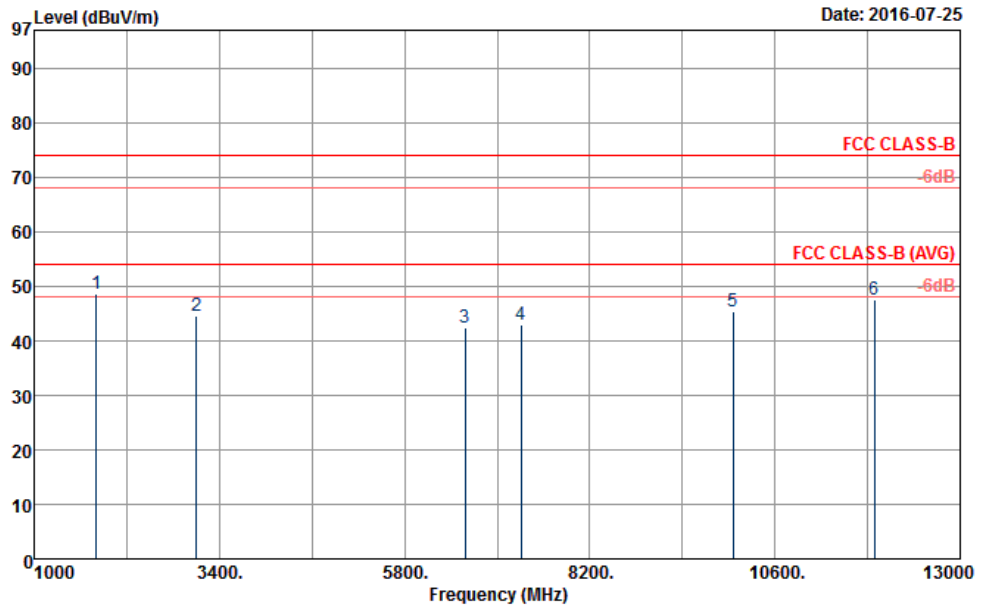


Site : OS03-LK
 Condition : CNS/VCCI/CISPR-B 10m VERTICAL
 Project : 671309
 Power : From System
 Mode : Mode 3

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1 @	226.520	24.91	-5.09	30.00	34.32	15.00	2.32	26.73	Peak	---	---
2	240.000	26.65	-10.35	37.00	34.39	16.50	2.40	26.64	Peak	---	---
3	298.400	24.95	-12.05	37.00	30.47	18.28	2.48	26.28	Peak	---	---
4	480.000	24.94	-12.06	37.00	26.72	22.22	3.49	27.49	Peak	---	---
5	720.000	28.25	-8.75	37.00	26.91	24.31	4.77	27.74	Peak	---	---
6	960.000	29.35	-7.65	37.00	24.85	25.95	5.72	27.17	Peak	---	---



Test Mode :	Mode 3	Temperature :	20~23°C
Test Engineer :	Danile Lee	Relative Humidity :	50~53%
Test Distance :	3m	Polarization :	Vertical
Function Type :	Bluetooth Idle + WLAN Idle + SD Card + USB Cable (Data Link with Notebook)		



Site : 03CH06-HY
 Condition : FCC CLASS-B 3m 9120D_1156_150827 VERTICAL
 Project : 671309
 Power : From System
 Memo : Mode 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1810.00	48.52	-25.48	74.00	76.99	26.04	5.99	60.50	100	123 Peak
2	3104.00	44.46	-29.54	74.00	69.01	28.54	7.89	60.98	---	---
3	6586.00	42.53	-31.47	74.00	56.26	34.31	12.34	60.38	---	---
4	7312.00	43.06	-30.94	74.00	55.79	35.98	11.71	60.42	---	---
5	10054.00	45.48	-28.52	74.00	53.83	39.23	13.45	61.03	---	---
6	11890.00	47.47	-26.53	74.00	50.23	39.25	16.63	58.64	---	---



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	Jul. 20, 2016	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 26, 2015	Jul. 20, 2016	Aug. 25, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2015	Jul. 20, 2016	Dec. 01, 2016	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 14, 2015	Jul. 20, 2016	Dec. 13, 2016	Conduction (CO05-HY)
Amplifier	HP	8447D	2944A09068	0.1MHz ~ 1.3GHz	Dec. 11, 2015	Jul. 19, 2016	Dec. 10, 2016	Radiation (OS03-LK)
Spectrum Analyzer	R&S	FSP 7	100641	9 kHz ~ 7 GHz	Jun. 23, 2016	Jul. 19, 2016	Jun. 22, 2017	Radiation (OS03-LK)
Test Receiver	R&S	ESCS 30	836858/024	9 kHz ~ 2.75 GHz	Jun. 24, 2016	Jul. 19, 2016	Jun. 23, 2017	Radiation (OS03-LK)
Bilog Antenna	TESEQ	CBL6112D	25236	30 MHz ~ 2 GHz	Oct. 23, 2015	Jul. 19, 2016	Oct. 22, 2016	Radiation (OS03-LK)
Turn Table	EMCO	2080	9711-2021	0 ~ 360 degree	N/A	Jul. 19, 2016	N/A	Radiation (OS03-LK)
Antenna Mast	EMCO	2075	9711-2115	1 m ~ 4 m	N/A	Jul. 19, 2016	N/A	Radiation (OS03-LK)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 07, 2016	Jul. 25, 2016	Jan. 06, 2017	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 21, 2015	Jul. 25, 2016	Aug. 20, 2016	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1850117	1GHz ~ 18GHz	Jun. 22, 2016	Jul. 25, 2016	Jun. 21, 2017	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Jul. 25, 2016	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Jul. 25, 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 Confidence of 95% ($U = 2Uc(y)$)	2.26
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.1
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