

FCC EMI TEST REPORT

FCC ID	: PY7-81713C
Equipment	: GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, NFC, FM receiver and GNSS
Brand Name	: SONY
Applicant	: Sony Corporation
	1-7-1 Konan Minato-ku Tokyo, 108-0076 Japan
Manufacturer	: Sony Corporation
	1-7-1 Konan Minato-ku Tokyo, 108-0076 Japan
Standard	: FCC 47 CFR FCC Part 15 Subpart B Class B
Test Date(s)	: Dec. 26, 2021 ~ Feb. 24, 2022

We, Sporton International Inc. (Kunshan), 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. (Kunshan), the test report shall not be reproduced except in full.

JasonJia

Reviewed by: Jason Jia / Supervisor

Alexane

Approved by: Alex Wang / Manager



Sporton International Inc. (Kunshan)

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China



Table of Contents

History of this test report	.3
Summary of Test Result	.4
1. General Description	.5
 Product Feature of Equipment Under Test	.5 .5 .6
2. Test Configuration of Equipment Under Test	.7
 2.1. Test Mode 2.2. Connection Diagram of Test System 2.3. Support Unit used in test configuration and system 2.4. EUT Operation Test Setup	.7 .8 .9 10
3. Test Result	11
 3.1. Test of AC Conducted Emission Measurement	1 3
4. List of Measuring Equipment	15
5. Uncertainty of Evaluation	6
Appendix A. AC Conducted Emission Test Result	

Appendix B. Radiated Emission Test Result



History of this test report

Report No.	Version	Description	Issued Date
FC1D0403	01	Initial issue of report	Feb. 04, 2022
FC1D0403	02	Update radiated test mode 5 and test data	Feb. 24, 2022



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.107	AC Conducted Emission	Pass	Under limit 4.74 dB at 13.560 MHz
3.2	15.109	Radiated Emission	Pass	Under limit 4.17 dB at 40.670 MHz

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



1. General Description

1.1. Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n/ac, NFC, FM Receiver, and GNSS

Product Specification subjective to this standard						
	WWAN: PIFA Antenna					
	WLAN: PIFA Antenna					
Antonna Type	Bluetooth: PIFA Antenna					
Antenna Type	GPS/Glonass/Galileo/BDS: PIFA Antenna					
	NFC: Loop Antenna					
	FM : External antenna					

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

EUT Information List							
HW Version	IMEI Code	Performed Test Item					
A	0.386	004402543133445	Conducted Emission				
		004402543133452	Radiated Emission				

Accessory List					
AC Adapter	Model Name : UCH-32				
Earphone	Model Name : MDR-EX15AP				
USB Cable 1	Model Name : UCB24				
USB Cable 2	Model Name : A8485011				

Note:

- 1. Above EUT list used are electrically identical per declared by manufacturer.
- 2. For other wireless features of this EUT, test report will be issued separately.

1.2. Modification of EUT

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



1.3. Test Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)						
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158						
	FAX : +86-512-57900958						
	Sporton Sito No	ECC Designation No	FCC Test Firm				
Test Site No.	Sporton Site No.	FCC Designation No.	Registration No.				
	CO01-KS 03CH06-KS	CN1257	314309				

1.4. 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 Class 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 emission (150 kHz to 30 MHz), radiation emission (30MHz

to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
	Mode 1: GSM850 (Middle Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (2.4GHz) Idle + Camera (Rear) + Earphone + USB Cable 1(Charging from Adapter)
	Mode 2: WCDMA Band V (Lowest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (5GHz) Idle + Camera (Front) + Earphone + USB Cable 2(Charging from Adapter)
AC	Mode 3: GSM1900 Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (2.4GHz) Idle + MPEG 4 + Earphone + USB Cable 1(Charging from Adapter)
Conducted Emission	Mode 4: LTE Band 5 (Highest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (5GHz) Idle + NFC On + Earphone + USB Cable 2(Charging from Adapter)
	Mode 5: LTE Band 12 (Lowest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (2.4GHz) Idle + FM Rx(98MHz) + Earphone + USB Cable 1(Data Link with Notebook)
	Mode 6: LTE Band 5 (Highest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (5GHz) Idle + GNSS Rx + Earphone + USB Cable 2(Data Link with Notebook)
	Mode 1: GSM850 (Middle Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (2.4GHz) Idle + Camera (Rear) + Earphone + USB Cable 1(Charging from Adapter)
	Mode 2: WCDMA Band V (Lowest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (5GHz) Idle + Camera (Front) + Earphone + USB Cable 2(Charging from Adapter)
Padiatod	Mode 3: GSM1900 Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (2.4GHz) Idle + MPEG 4 + Earphone + USB Cable 1(Charging from Adapter)
Emissions	Mode 4: LTE Band 5 (Highest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (5GHz) Idle + NFC On + Earphone + USB Cable 1(Charging from Adapter)
	Mode 5: LTE Band 12 (Lowest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (2.4GHz) Idle + FM Rx(88MHz) + Earphone + USB Cable 1(Data Link with Notebook)
	Mode 6: LTE Band 5 (Highest Channel) Idle + Bluetooth Idle with Bluetooth Earphone + WLAN (5GHz) Idle + GNSS Rx + Earphone + USB Cable 2(Data Link with Notebook)
Remark:	
 After pre- range of 3 channel f 	scanned the L/M/H channel for all frequency band which operate within the frequency 30MHz ~ 960MHz (GSM850/WCDMA Band V/LTE Band 5/12/FM); only the worst or them between 30MHz ~ 960MHz test data of this mode was reported.

- 2. Data Link with Notebook means data application transferred mode between EUT and Notebook.
- 3. For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.



2.2. Connection Diagram of Test System



Conduction Test Setup								
No	Wireless Station	Connection Type	Test Mode			Connection Time Test Mode	Connection Type	
NO.	Wireless Station	connection type	1	2	3	4	5	6
A1	System Simulator	GSM/WCDMA/LTE/FM	Х	X	Х	Х	Х	Х
A2	BT Earphone	Bluetooth	Х	X	Х	Х	Х	Х
A3	GPS/Glonass Station	GNSS						Х
A4	Signal Generator	FM					Х	
A5	AP router	WiFi	X	Х	X	Х	Х	Х
A6	Notebook	WiFi	X X		X	Х	Х	Х
No.	Power Source	Connection Type	1	2	3	4	5	6
B1	AC : 120V/60Hz	AC Power Cable	X X		X	Х		
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6
C1	Notebook	USB link					Х	Х
C2	SD Card	SD I/O interface without cable	x x		x	х	Х	Х
C3	Earphone	Earphone jack	X	X	X	X	Х	Х
C4	Ipod/HD/U Disk	USB					Х	Х
C5	Router	LAN Link					Х	Х



Radiated Test Setup									
No	Wireless Station	Connection Type	Test Mode						
NO.	wireless Station	Connection Type	1	2	3	4	5	6	
A1	System Simulator	GSM/WCDMA/LTE	Х	Х	Х	Х	Х	Х	
A2	Earphone	Bluetooth	Х	Х	Х	Х	Х	Х	
A3	Signal Generator	GNSS						Х	
A4	Signal Generator	FM					Х		
A5	AP router	WiFi	Х	Х	Х	Х	Х	Х	
A6	Notebook	WiFi	Х	X X		Х	Х	Х	
No.	Power Source	Connection Type	1	2	3	4	5	6	
B1	AC : 120V/60Hz	AC Power Cable	Х	X X X		Х			
No.	Setup Pripherals	Connection Type	1	2	3	4	5	6	
C1	Notebook	USB link					Х	Х	
C2	SD Card	SD I/O interface without cable	x x x x x		Х	х			
C3	Earphone	Earphone jack	X X X X		Χ	X			
C1-1	Hard Disk	USB					Χ	Χ	
C1-2	Router	LAN Link					Х	X	

2.3. Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritus	MT8821C	N/A	N/A	Unshielded,1.8m
2.	System Simulator	Anritus	MT8820C	N/A	N/A	Unshielded,1.8m
3.	GNSS Station	R&S	SMBV100A	N/A	N/A	Unshielded,1.8m
4.	FM Station	R&S	SMBV100A	258305	N/A	N/A
5.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded,1.8m
6.	WLAN AP	TP-Link	TL-WDR5600	N/A	N/A	Unshielded,1.8m
7.	Notebook	Lenovo	G480	QDS-BRCM1050I	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
8.	Notebook	Lenovo	S730-13IWL	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
9.	SD Card	Kingston	8GB	N/A	N/A	N/A
10.	Hard Disk	Lenovo	F310	DoC	Shielded, 1.2m	N/A
11.	Hard disk	KINGSHARE	KSP6120G	Fcc DoC	Shielded, 1.2m	N/A
12.	Bluetooth Earphone	Sony	SBH82D	PY7-33726V	N/A	N/A



2.4. EUT Operation Test Setup

The EUT was in WWAN idle mode during the test. The EUT was synchronized with the BCCH, and had been continuous receiving mode by setting paging reorganization of the system simulator.

At the same time, 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 "GNSS Test" to make the EUT receive continuous signals from GNSS station.
- 3. Execute "Video player" to play MPEG4 files.
- 4. Turn on camera to capture images.
- 5. Turn on NFC function
- 6. Execute "FM Test" to make the EUT receive continuous signals from FM station.



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.

<class b<="" th=""></class>

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

Refer a test equipment and calibration data table in 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 shall be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.



3.1.4. Test Setup



3.1.5. Test Result of AC Conducted Emission

Please refer to Appendix A.



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:

<Class B>

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

3.2.2. Measuring Instruments

Refer a test equipment and calibration data table in 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=120 kHz/VBW=300 kHz for frequency below 1 GHz; RBW=1 MHz VBW=3 MHz (Peak), RBW=1 MHz/VBW=10 Hz (Average) for frequency above 1 GHz).
- 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

Please refer to Appendix B.



4. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 21, 2021	Dec. 26, 2021	Apr. 20, 2022	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 14, 2021	Dec. 26, 2021	Oct. 13, 2022	Conduction (CO01-KS)
AC LISN	R&S	ENV216	100334	9kHz~30MHz	Oct. 14, 2021	Dec. 26, 2021	Oct. 13, 2022	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 14, 2021	Dec. 26, 2021	Oct. 13, 2022	Conduction (CO01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;M ax 30dBm	Oct. 16, 2021	Dec. 30, 2021	Oct. 15, 2022	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44GHz	Apr. 12, 2021	Dec. 30, 2021	Apr. 11, 2022	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	49921	30MHz-1GHz	May 27, 2021	Dec. 30, 2021	May 26, 2022	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 25, 2021	Dec. 30, 2021	Apr. 24, 2022	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101093	18GHz~40GHz	Jan. 06, 2021	Dec. 30, 2021	Jan. 05, 2022	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Apr. 12, 2021	Dec. 30, 2021	Apr. 11, 2022	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270203	500MHz~26.5G Hz	Apr. 13, 2021	Dec. 30, 2021	Apr. 12, 2022	Radiation (03CH06-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 06, 2021	Dec. 30, 2021	Jan. 05, 2022	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 30, 2021	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 30, 2021	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 30, 2021	NCR	Radiation (03CH06-KS)

NCR: No Calibration Required



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence	2 0dB
of 95% (U = 2Uc(y))	2.908

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

Measuring Uncertainty for a Level of Confidence	E OdP
of 95% (U = 2Uc(y))	3.VUB

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

Measuring Uncertainty for a Level of Confidence	E 04D
of 95% (U = 2Uc(y))	5.VaB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence	5 0dB
of 95% (U = 2Uc(y))	5:00B



Appendix A. AC Conducted Emission Test Results













































Note:

- 1. Level(dB μ V) = Read Level(dB μ V) + LISN Factor(dB) + Cable Loss(dB)
- 2. Over Limit(dB) = Level(dBµV) Limit Line(dBµV)



Appendix B. Radiated Emission Test Result

Test Engineer : Carl Ni Relative Humidity : 41~42% Test Distance : 3m Polarization : Horizontal #6 & #7 are system simulator signals which can be ignored. #9 is RF signal which comes from Bluetooth/WLAN Access Point used to con the EUT, and which can be ignored. 120 Level (dBuV/m) FCC CLASS-B FCC CLASS-B 84.0 A FCC CLASS-B (AVG)	
Test Distance : 3m Polarization : Horizontal Remark : #6 & #7 are system simulator signals which can be ignored. #9 is RF signal which comes from Bluetooth/WLAN Access Point used to conthe EUT, and which can be ignored. 108.0	
Remark : #6 & #7 are system simulator signals which can be ignored. #9 is RF signal which comes from Bluetooth/WLAN Access Point used to con the EUT, and which can be ignored.	
120 Level (dBuV/m) 108.0	ect
108.0 96.0 96.0 96.0 84.0 FCC CLASS-B 72.0 60.0 60.0 60.0	
96.0 96.0 84.0 FCC CLASS-B 72.0	
96.0 84.0 72.0 60.0	
84.0 FCC CLASS-B 72.0	
72.0 60.0 FCC CLASS-B (AVG)	
60.0 FCC CLASS-B (AVG)	
48.0 9 10 11 12 13 14 -6dB	
36.0	
24.0	
12.0	
0 30 3000. 5000. 7000. 9000. 11000. 13000. 15000. 170000. 21000. 23000. 25000. 27000. 30000	
Site : 03CH06-KS Condition : FCC CLASS-B 3m CBL6111D SN23188 HORIZONTAL Project : (FC]1D0403 Mode : 1	
Over Limit ReadAntenna Cable Preamp A/Pos T/Pos Freq Level Limit Line Level Factor Loss Factor Remark	
MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	



Mode :	Mod	e 1						Ten	nperat	ure :		21~22	°C
Test Engineer :	Carl	Ni						Rel	ative H	lumic	lity :	41~42	%
Test Distance :	3m	Polarization : Vertical									al		
Remark :	#6 is #8 is the E	6 is system simulator signal which can be ignored. 8 is RF signals which come from Bluetooth/WLAN Access Point used to connect ne EUT, and which can be ignored.											
120 Level	(dBuV/	m)											
96.0													
84.0													
72.0											F	CC CLAS	S-B Гав
60.0	8										FCC CL	ASS-B (A	VG)
48.0		9 	10	promotion	11	12 	13 •••• ^{••••} •••••	14		een her of the second se	enderen de	-(idB
24.0 / 12.0													
530 Site Condition Project Mode	3000	03CH06 FCC CL/ (FC]1D(1	. 7000. -KS ASS-В Зт 0403	9000. 1 GBL611	1000. 13 1D SN2 _ ReadA	000.150 Frequen 3188 VE	Cable	Preamp	A/Pos	23000. T/Pos	25000. 2	7000. 3	30000
	Freq MHz	dBuV/m		dBuV/m	dBuV	Hactor dB/m	Loss dB	Hactor dB	cm	deg	Kemark		
1 ! 2 3 1 4 1 5 2 6 8 7 9 8 24 9 42 10 76 11 110 12 136 13 161 14 176	41. 64 76. 56 06. 63 54. 16 10. 42 81. 66 80. 60 62. 00 30. 00 81. 00 64. 00 98. 00 43. 00	35. 59 23. 80 26. 49 35. 26 24. 33 37. 88 30. 17 59. 44 40. 26 43. 51 45. 50 48. 00 48. 55	-4. 41 -16. 20 -17. 01 -8. 24 -19. 17 -23. 83 -33. 74 -30. 49 -28. 93 -28. 50 -26. 00 -25. 45	40. 00 40. 00 43. 50 43. 50 43. 50 54. 00 74. 00 74. 00 74. 00 74. 00 74. 00 74. 00	47. 63 40. 67 38. 58 47. 17 36. 36 36. 92 27. 27 80. 89 56. 76 54. 28 51. 16 47. 83 45. 86	18. 86 13. 71 18. 02 17. 41 16. 96 27. 33 28. 21 31. 10 34. 00 36. 70 38. 55 39. 98 41. 74 42. 40	0. 75 1. 27 1. 68 2. 00 2. 35 4. 84 5. 10 7. 25 9. 60 13. 11 15. 89 17. 78 19. 78 20. 70	31. 65 31. 85 31. 79 31. 32 31. 34 31. 21 30. 41 59. 80 60. 10 60. 53 60. 53 60. 09 59. 36 57. 41	100 		Peak Peak Peak Peak Peak Peak Peak Peak		



Mode :	Mode 2						Ter	nperatu	re :	21~22°C		
Test Engineer :	Carl Ni					Rel	lative Hu	umidity :	41~42%			
Test Distance :	3m	3m Polarization : H									al	
Remark :	#7 is sy #9 is R and wh	7 is system simulator signal which can be ignored. 9 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.										
120Leve	l (dBuV/m)											
108.0												
96.0												
84.0												
72.0									F	CC CLASS B -6dB		
60.0		9							FCC CL	ASS-B (AVG)		
48.0		10	1	1 1	2 13	14	~	مرياني بالعرب مريان		-6dB		
36.0	National States	abel person	Gan Hospite				\square					
24.0												
12.0							_					
030	3000.	5000. 7000.	9000. 1	1000. 1:	3000. 150	00. 170	00. 1900	0. 21000. 2	3000. 25000. 2	7000. 3000	0	
Site Condition Project Mode	: 030 : FCC : (FC : 2	H06-KS CLASS B 3]1D0403	m CBL611	1D SN	Frequen	cy (MHz))rizont/	AL					
	Freq Le	Over vel Limit	Limit Line	Read/ Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos 1	∏∕Pos Remark			
	MHz dBu	V/m dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg			
2 1 3 1 4 2 5 5 6 7 7 8 8 25 9 51 10 70 11 103 12 125 13 145 14 160	30. 97 21 306. 63 28 72. 59 33 94. 81 25 i44. 10 25 i44. 77 27 i70. 99 37 i64. 00 40 99. 00 59 35. 00 44 i33. 00 45 i43. 00 47 i66. 00 48 28. 00 48		43.50 43.50 46.00 46.00 46.00 74.00 74.00 74.00 74.00 74.00 74.00 74.00	41. 72 46. 47 34. 89 28. 42 28. 46 37. 36 61. 18 74. 12 55. 78 52. 93 50. 80 49. 93 47. 08	24. 37 17. 29 16. 08 19. 13 25. 02 25. 68 26. 69 31. 16 35. 08 36. 51 38. 31 39. 76 41. 79	1. 68 2. 12 2. 78 3. 79 4. 45 4. 45 7. 38 10. 71 12. 51 15. 35 17. 07 18. 44 19. 64	31. 79 31. 33 31. 61 31. 61 31. 61 31. 11 31. 25 59. 69 60. 04 60. 09 60. 09 60. 09 60. 09 59. 60		Peak Peak Peak Peak Peak Peak Peak Peak Peak Peak Peak			



Test Engineer : Carl Ni Relative Humidity : 41-42% Test Distance : 3m Polarization : Vertical Remark : #6 is system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored. Image: transmitted of the system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored. Image: transmitted of the system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored. Image: transmitted of the system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and the system simulator signal which can be ignored. Image: transmitted of the system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and the system simulator signal which can be ignored. Image: transmitted of the system simulator signal which can be ignored. #10 is RF signals which come from which signal which can be ignored. Image: transmitted of the system simulator signal which can be ignored. #10 is RF signals which come from which signal which can be ignored. Image: transmitted of the system simulator signal which can be ignored. #10 is RF signals which come from which signal which can be ignored. #10 is RF signalsis which come f	Mode :	Mode 2			Temperature :	21~22°C						
Test Distance : 3m Polarization : Vertical #6 is system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored. Remark : #6 is system simulator signal which come from WLAN Access Point used to connect the EUT, and which can be ignored. 1000000000000000000000000000000000000	Test Engineer :	Carl Ni			Relative Humidity :	41~42%						
Remark : #6 is system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored. $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $\frac{10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.}$ $10 \text{ is RF signals which come from WLAN Access Point used to connect the EUT, and the form of the form $	Test Distance :	3m			Polarization :	Vertical						
$\frac{120}{100} \frac{1}{100} $	Remark :	#6 is sys #10 is R and whic	#6 is system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.									
$\frac{108.0}{96.0} + \frac{1}{96.0} +$	120	l (dBuV/m)										
$\frac{36.0}{10^{-0}} + \frac{1}{10^{-0}} + \frac{1}{10^{$	108.0											
$\frac{1}{1} + \frac{1}{2} + \frac{1}$	84.0											
$ \frac{60.0}{40.0} \frac{1}{40.0} \frac{1}{$	72.0					FCC CLASS B -6dB						
$\frac{480}{360} + \frac{12}{9} + \frac{12}{9} + \frac{13}{14} + \frac{14}{160} + \frac{14}{9} + 1$	60.0		10		FCC C	LASS-B (AVG)						
24.0	48.0 36.0	8 per hatter to the the	Nall Heren Plant and a state of the state of	12 13 14 Martin Martine Martine Martine	un phane and a stand and a stand	-6dB 						
12.0 3000. 5000. 7000. 9000. 11000. 13000. 15000. 17000. 19000. 21000. 23000. 25000. 27000. 30000 Frequency (MHz) Site :: 030H06-KS Condition :: FC0 CLASS B 3m CBL6111D SN23188 VERTICAL Project :: (FC11D0403 Mode :: 2 MHz Meter Limit Line Level Factor Meter Limit Line Level Factor Meter Limit AB dBUV/m dB/m dB/m dB dB MHz dBUV/m dB dBUV/m dB/m dB/m Meter Limit Line Level Factor Loss Factor Remark 1 ! 42.61 35.68 -4.32 40.00 48.23 18.34 0.77 31.66 100 169 Peak 1.1 / 42.61 35.68 -4.32 40.00 45.01 14.04 0.97 31.34 Peak 2 Sing colspan="2">Peak 3 108.57 26.44 -17.06 43.50 38.51 18.00 1.70 31.77 Peak 2 Sing colspan="2">Peak 5 22.885 7.65 -18.55 40.00 38.47 18.09 2.44 31.35 Peak 7 Peak 3 108.57 26.44 -17.06 43.50 38.51 18.00 1.70 31.77 Peak Peak 3 108.57 26.4 -13.15 43.50 42.25 17.43 1.99 31.32 Peak Peak Sing 200 3.84 7 1.99 31.34	24.0											
"30 3000. 5000. 7000. 9000. 11000. 13000. 17000. 19000. 21000. 23000. 25000. 27000. 30000 Frequency (MHz) Site : 030CH06-KS Condition : F6C CLASS B 3m CBL6111D SN23188 VERTICAL Project : (FC]1D0403 Mode : (FC]1D0403 ReadAntenna Level Factor Cable Preamp Loss Factor A/Pos T/Pos MHz dBuV/m dB dBuV/m dB Way dB/m Cable Preamp Level Factor A/Pos T/Pos 1 42.61 35.68 -4.32 40.00 48.23 18.34 0.77 31.66 100 169 Peak 2 56.19 28.68 -11.32 40.00 45.01 14.04 0.97 31.34 Peak 3 108.57 26.44 -17.06 43.50 32.51 17.43 1.99 31.32 Peak 5 228.85 27.65 -18.35 46.00 27.12 7.89 5.02 30.34 Peak 6 870.99 38.62 7.78 27.28 4.81 31.25 Peak	12.0											
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	30 3000. 5000. 7000. 9000. 11000. 13000. 15000. 17000. 19000. 21000. 23000. 25000. 27000. 30000 Frequency (MHz) Site : 03CH06-KS Condition : FCC CLASS B 3m CBL6111D SN23188 VERTICAL Project : (FC]1D0403 Mode : 2											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Freq Leve	Uver Limit el Limit Line	ReadAntenna Cable F Level Factor Loss F	Preamp A/Pos T/Pos Factor Remar	k						
14 10028.00 49.08 -24.92 74.00 47.25 41.79 19.64 59.00 Peak	1 ! 2 3 1 4 1 5 2 6 8 7 9 8 20 9 47 10 51 11 86 12 110 13 143 14 160	MHZ dBuv, 42. 61 35. (i 56. 19 28. (i) 08. 57 26. (i) 28. 85 27. (i) 28. 85 27. (i) 00.00 38. (i) 48. 59 29. (i) 03. 00 38. (i) 57. 00 42. (i) 99. 00 59. (i) 30. 00 46. (i) 11. 00 47. (i) 28. 00 49. (i)	Am Am Am Am Am 68 -4.32 40.00 68 -11.32 40.00 68 -11.32 40.00 43.50 35 -13.15 43.50 35 -13.15 43.50 43.50 69 -16.31 46.00 69 -16.31 46.00 69 -31.31 74.00 69 69 -31.31 74.00 74.00 69 -28.55 74.00 62 -27.18 74.00 69 -26.51 74.00 60 63 -28.55 74.00 60 62 62 63 64 64 64 65 65 65 65 74.00 65 74.00 65 65 74.00 65 74.00 66 74.00 65 74.00 65 74.00 65 74.00 65 74.00 65 74.00 65 74.00 65 74.00 65 74.00 65 74.00	dBuv dB/m dB 48.23 18.34 0.77 45.01 14.04 0.97 38.51 18.00 1.70 42.25 17.43 1.99 38.47 18.09 2.44 37.78 27.28 4.81 27.12 27.89 5.02 61.68 30.00 6.53 58.12 34.45 10.17 73.28 35.08 10.71 55.30 37.26 13.97 52.96 38.54 15.85 49.54 39.73 18.26 47.25 41.79 19.64	dB cm deg 31. 66 100 169 Peak 31. 34 Peak 31. 77 Peak 31. 35 Peak 31. 35 Peak 30. 34 Peak 60. 05 Peak 60. 04 Peak 61. 08 Peak 60. 53 Peak 60. 04 Peak 60. 63 Peak 60. 04 Peak 60. 63 Peak 60. 04 Peak 60. 63 Peak 60. 04 Peak 60. 04 Peak							











Test Engineer:				emperature :		21~22°C				
	Carl Ni			Relative H	umidity :	41~42%				
Test Distance :	3m				Polarizatio	on :	Horizontal			
# Remark : #	#7 is system simulator signal which can be ignored. #9 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.									
120 Level (dBuV/m)										
108.0										
96.0										
84.0										
72.0						F	CC CLASS B -6dB			
60.0	9					FCC CL	A\$S-B (AVG)			
48.0	8	10 11	12	13 14	ور و و و و و و و و و و و و و و و و و و	and all and and and and	-6dB			
36.0	and a start of the									
24.0										
12.0										
0 <mark>30</mark>	3000. 5000.	7000. 9000. 11	1000. 13000. 150	0. 17000.	19000. 21000. 2	23000. 25000. 2	7000. 30000			
Frequency(MHz) Site : 03CH06-KS Condition : FCC CLASS B 3m CBL6111D SN23188 HORIZONTAL Project : (FC]1D0403 Mode : 4										
	Freq Level	Over Limit Limit Line	ReadAntenna Level Factor	Cable Pro Loss Fa	eamp A/Pos ctor	T/Pos Remark				
	MHz dBuV/m	dB dBuV/m	dBuV dB/m	dB	dB cm	deg				
1 33 2 103 3 14 4 17 5 21 6 755 7 89 8 336 9 5199 10 7322 11 921 12 1250 13 1573 14 1743	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	18. 05 40. 00 17. 43 43. 50 14. 77 43. 50 14. 77 43. 50 15. 00 43. 50 15. 00 43. 50 18. 14 46. 00 33. 81 74. 00 29. 32 74. 00 26. 76 74. 00 24. 85 74. 00 24. 85 74. 00	28. 02 24. 59 38. 89 17. 31 41. 48 16. 65 49. 47 16. 10 41. 31 16. 17 28. 72 26. 70 59. 12 32. 53 75. 58 35. 08 55. 87 36. 56 54. 20 37. 52 51. 04 39. 24 48. 24 41. 26	0.59 3 1.67 3 1.95 3 2.11 3 2.11 3 4.48 3 4.87 3 4.87 3 8.52 5 10.71 6 14.48 6 12.77 6 14.48 6 17.05 6 19.40 5 20.57 5	1. 25 1. 80 1. 35 1. 33 1. 34 1. 13 1. 14 0. 04 0. 52 1. 19 0. 09 0. 99 7. 66	Peak Peak Peak Peak Peak Peak Peak Peak Peak Peak Peak Peak				



Mode :	Mode 4							Te	Temperature :			21~22°C	
Test Engineer :	Carl Ni							Re	Relative Humidity :			41~42%	
Test Distance :	3m							Ро	Polarization :			Vertical	
Remark :	#7 is #9 is and	#7 is system simulator signal which can be ignored. #9 is RF signals which come from WLAN Access Point used to connect the EUT and which can be ignored.										he EUT,	
120 Level	l (dBuV/	'm)											
108.0													_
96.0											_		
84.0 72.0											F	CC CLASS	B
60.0		9									FCC CL	ASS-B (AV	<u>G)</u>
48.0	8	an and the mapping of	10 polishorhonan		1:	2 1 ******	3	m	ر المراد مر المراد ا مراد المراد ال	where we are the state	wardstraught	-6d	<u> B</u>
36.0 24.0													
12.0 030	300	0 5000	7000	9000 1	1000 1	3000 150	00.170	0 1900	0 21000	23000	25000 2	7000 30	1000
Site Condition Project Mode	:	03CH06- FCC CL/ (FC]1D0 4	-KS ASS B 3m 0403	n CBL611	1D SN2	Frequen	RTICAL		. /5				
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	A/POS	1/Pos	Remark		
$\begin{array}{c}1\\2\\3\\4\\1\\5\\2\\6\\8\\7\\8\\8\\24\\9\\51\\10\\7\\0\\11\\100\\12\\124\\13\\150\\14\\170\end{array}$	MHz 41. 64 71. 71 06. 63 51. 25 11. 39 01. 15 91. 36 96. 00 99. 00 01. 00 95. 00 95. 00 95. 00 82. 00	dBuV/m 33. 63 35. 23 28. 34 31. 54 29. 06 29. 22 39. 29 39. 39 61. 03 44. 96 45. 83 46. 95 47. 79 49. 68	dB -6. 37 -4. 77 -15. 16 -11. 96 -14. 44 -16. 78 -34. 61 -29. 04 -28. 17 -27. 05 -26. 21 -24. 32	dBuV/m 40.00 40.00 43.50 43.50 43.50 43.50 74.00 74.00 74.00 74.00 74.00 74.00	dBuV 45. 67 52. 58 40. 43 43. 40 41. 02 28. 94 38. 23 60. 62 75. 28 56. 43 53. 16 50. 76 49. 26 45. 81	dB/m 18. 86 13. 35 18. 02 17. 48 17. 02 26. 91 27. 37 31. 17 35. 08 36. 50 38. 23 39. 80 41. 62	dB 0. 75 1. 19 1. 68 1. 98 2. 36 4. 60 4. 87 7. 30 10. 71 12. 48 15. 18 17. 05 18. 75 20. 35	df 31. 65 31. 89 31. 79 31. 32 31. 32 31. 32 31. 12 59. 70 60. 04 60. 45 60. 74 60. 02 58. 10	5 cm 5 100 2 3 3 3 5 5 5 5 5 5 5 6 7	deg 261 	QP Peak Peak Peak Peak Peak Peak Peak Pea		











Mode :	Mode 6 Temperature : 21~22°C										
Test Engineer :	Carl Ni			Relative I	Humidity :	41~42%					
Test Distance :	3m Polarization : Horiz										
Remark :	#6 is syst #10 is RF and whicl	#6 is system simulator signal which can be ignored. #10 is RF signals which come from WLAN Access Point used to connect the EUT, and which can be ignored.									
120 Leve	120 Level (dBuV/m)										
108.0											
96.0											
84.0											
72.0						F	CC CLASS-B				
60.0		0					-QUD				
48.0		11	12	13 14	~	FCC CL/	ASS-B (AVG) -6dB				
46.0 6	8 9 Martin Martin	and the second second second	and the forest in the forest and the	A GOVERNMENT OF	and a second second	anticol de la contra la casa antica de la contra de la co	************				
30.0	~										
24.0											
12.0											
030	3000. 500	0. 7000. 9000	. 11000. 1300 Fre	0. 15000. 1700 equency (MHz)	0. 19000. 21000.	23000. 25000. 27	7000. 30000				
Site : 03CH06-KS Condition : FCC CLASS-B 3m CBL6111D SN23188 HORIZONTAL Project : (FC]1D0403 Mode : 6											
	Freq Leve	Over Lim I Limit Lin	it ReadAnt ne Level Fa	enna <mark>C</mark> able I ctor Loss I	Preamp A/Pos Factor	T/Pos Remark					
	MHz dBuV/	m dB dBuV	/m dBuV	dB/m dB	dB cm	deg					
2 3 2 4 2 5 8 6 8 7 8 8 25 9 36 10 51 11 77 12 107 13 151 14 170	30.00 22.7 116.24 22.7 1295.78 25.3 303.09 33.0 191.36 38.9 196.21 30.7 147.00 38.86.00 49.00 41.5 99.00 61.7 32.00 44.9 41.00 45.8 78.00 48.1 165.00 48.8	5 -25, 75 43, 8 8 -23, 22 46, 0 8 -20, 62 46, 0 0 -35, 20 74, 0 3 -32, 47 74, 0 5 -29, 07 74, 0 9 -25, 81 74, 0 9 -25, 19 74, 0	50 30.79 1 00 35.28 1 00 35.07 1 00 35.07 1 00 35.07 1 00 35.07 1 00 35.07 1 00 35.07 2 38.51 2 00 59.93 3 00 59.93 3 00 59.23 3 00 55.63 3 00 52.32 3 00 49.11 4 00 45.00 4	0.1 0 1.62 6.47 2.38 9.14 2.79 6.13 4.61 6.70 4.87 6.70 4.88 1.18 7.36 3.06 8.94 5.08 10.71 6.73 13.16 8.44 15.64 0.14 18.90 1.59 20.34	31. 88 31. 35 31. 35 31. 42 31. 16 31. 18 59. 67 60. 04 60. 69 60. 60 59. 96 59. 96 58. 12	 Peak 					



