

Report No: CCISE181115504

# **FCC REPORT**

Applicant:	SWAGTEK
Address of Applicant:	10205 NW 19th St. Suite 101, Miami, FL, 33172
Equipment Under Test (E	EUT)
Product Name:	4inch 3G Smart Phone
Model No.:	X4 PLUS, KAPPA, W4 PLUS
Trade mark:	LOGIC, iSWAG, UNONU
FCC ID:	O55404217
Applicable standards:	FCC CFR Title 47 Part 15 Subpart B
Date of sample receipt:	30 Nov., 2018
Date of Test:	30 Nov., to 20 Dec., 2018
Date of report issued:	20 Dec., 2018
Test Result:	PASS *

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



### Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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#### Version 2

Version No.	Date	Description
00	20 Dec., 2018	Original

Tested by:

Mike.0U

Date:

Date:

20 Dec., 2018

20 Dec., 2018

Test Engineer

Reviewed by:

Wimer hand

**Project Engineer** 

# <u>CCIS</u>

## Report No: CCISE181115504

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# 4 Test Summary

Test Item	Section in CFR 47	Result		
Conducted Emission	Part 15.107	Pass		
Radiated Emission	Part 15.109	Pass		
Remark: Pass: The EUT complies with the essential requirements in the standard. N/A: The EUT not applicable of the test item.				



# **5** General Information

## **5.1 Client Information**

Applicant:	SWAGTEK
Address of Applicant:	10205 NW 19th St. Suite 101, Miami, FL, 33172
Manufacturer/Factory:	SWAGTEK
Address:	10205 NW 19th St. Suite 101, Miami, FL, 33172

## 5.2 General Description of E.U.T.

Product Name:	4inch 3G Smart Phone
Model No.:	X4 PLUS, KAPPA, W4 PLUS
Power supply:	Rechargeable Li-ion Battery DC3.7V-1600mAh
AC adapter :	Input: AC100-240V, 50/60Hz, 0.15A Output: DC 5.0V, 700mA
Test Sample Condition:	The test samples were provided in good working order with no visible defects.
Remarks:	X4 PLUS, KAPPA, W4 PLUS were identical inside, the electrical circuit design, layout, components used and internal wiring. The only difference is that one product has three models, each model corresponds to one brand, three The trademarks are LOGIC and iSWAG and UNONU, the X4 PLUS model corresponds to the trademark LOGIC, the KAPPA model corresponds to the trademark iSWAG, and the W4 PLUS model corresponds to the trademark UNONU.

### 5.3 Test Mode

Operating mode	Detail description
PC mode	Keep the EUT in Downloading mode(Worst case)
Charging+Recording mode	Keep the EUT in Charging+Recording mode
Charging+Playing mode	Keep the EUT in Charging+Playing mode
FM mode	Keep the EUT in FM receiver mode
GPS mode	Keep the EUT in GPS receiver mode

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

## 5.4 Measurement Uncertainty

Parameters	Expanded Uncertainty
Conducted Emission (9kHz ~ 30MHz)	±2.22 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	±2.76 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.28 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.72 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±2.88 dB (k=2)



## 5.5 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX745	N/A	DoC
DELL	MONITOR	E178FPC	E178FPC N/A	
DELL	KEYBOARD	SK-8115 N/A		DoC
DELL	MOUSE	MOC5UO	N/A	DoC
LENOVO	Laptop	SL510	2847A65	DoC

## 5.6 Related Submittal(s) / Grant (s)

This is an original grant, no related submittals and grants.

## 5.7 Description of Cable Used

Cable Type	Description	Length From		То	
Detached USB Cable Shielding		1.0m	EUT	PC/Adapter	

## 5.8 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### • FCC - Registration No.: 727551

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The Registration No. is 727551.

#### IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

#### CNAS - Registration No.: CNAS L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

#### • A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <u>https://portal.a2la.org/scopepdf/4346-01.pdf</u>

### 5.9 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd. Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China Tel: +86-755-23118282, Fax: +86-755-23116366 Email: info@ccis-cb.com, Website: http://www.ccis-cb.com



## 5.10 Test Instruments list

Radiated Emission:						
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020	
Loop Antenna	SCHWARZBECK	FMZB1519B	00044	03-16-2018	03-15-2019	
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-16-2018	03-15-2019	
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-16-2018	03-15-2019	
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-22-2017	06-21-2020	
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-21-2017	11-20-2018	
EMI Test Software	AUDIX	E3	Version: 6.110919b		b	
Pre-amplifier	HP	8447D	2944A09358	03-07-2018	03-06-2019	
Pre-amplifier	CD	PAP-1G18	11804	03-07-2018	03-06-2019	
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-07-2018	03-06-2019	
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-21-2017	11-20-2018	
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-07-2018	03-06-2019	
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-07-2018	03-06-2019	
Cable	MICRO-COAX	MFR64639	K10742-5	03-07-2018	03-06-2019	
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-07-2018	03-06-2019	

Conducted Emission:						
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
EMI Test Receiver	Rohde & Schwarz	ESCI	101189	03-07-2018	03-06-2019	
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-07-2018	03-06-2019	
LISN	CHASE	MN2050D	1447	03-19-2018	03-18-2019	
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	07-21-2018	07-20-2019	
Cable	HP	10503A	N/A	03-07-2018	03-06-2019	
EMI Test Software	AUDIX	E3	Version: 6.110919b			



# 6 Test results and Measurement Data

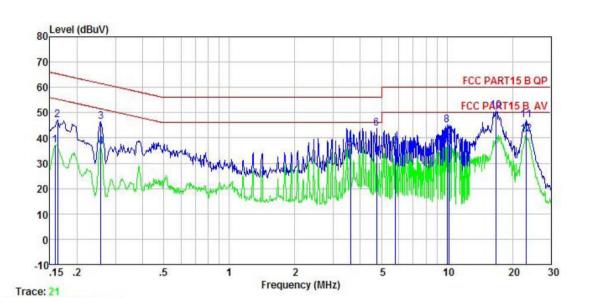
## 6.1 Conducted Emission

Test Method:       ANSI C63.4:2014         Test Method:       ANSI C63.4:2014         Test Frequency Range:       150kHz to 30MHz         Class / Severity:       Class B         Receiver setup:       RBW=9kHz, VBW=30kHz         Limit:       Frequency range (MHz)         Quasi-peak       Average         0.15-0.5       66 to 56°         0.5-30       60         0.5-30       60         * Decreases with the logarithm of the frequency.         Test setup:       Reference Plane         Quasi-peak       Ac power         EUT Segment Unter Test       EUT Segment Unter Test         EUT Segment Unter Test       EUT Segment Unter Test         EUT Segment Unter Test       EUT Segment Unter Test         EUT Deprive a stabilization network(L1.S.N.). The provide a       500hm/50UH coupling impedance for the measing equipment.         Test procedure       1. The E.U.T and simulators are also connected to the main power through a         line impedance stabilization network(L1.S.N.). The provide a       500hm/50UH coupling impedance for the measuring equipment.         2. The peripheral devices are also connected to the main power through a       LISN that provides a 50ohm/50UH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).         3. Both sides of A.C. l	Test Requirement:	FCC Part 15 B Section 15.10	)7			
Test Frequency Range:       150kHz to 30MHz         Class / Severity:       Class B         Receiver setup:       RBW=9kHz, VBW=30kHz         Limit:       Frequency range (MHz)       Quasi-peak         Quasi-peak       Average         0.15-0.5       66 to 56°         0.5-5       56         0.5-30       60         v       Decreases with the logarithm of the frequency.         Test setup:       Reference Plane         V       V         V	· ·					
Class J Severity:         Class B         Receiver setup:         Limit:         Frequency range (MHz)         Limit (dBµV)         Quasi-peak         Average         0.15-0.5         66 to 56*         0.5-3         S6         Average         0.5-3         S6         0.5-3         S6         Average         0.5-3         S6         Average         0.5-3         S6         Average         Quasi-peak         Average         Limit (dBµV)         Lime feature <td <="" colspan="2" td=""><td></td><td></td><td></td><td></td></td>	<td></td> <td></td> <td></td> <td></td>					
RBW=9kHz, VBW=30kHz         Limit:       Limit (dBµV)         Quasi-peak       Average         0.15-0.5       66 to 56*       56 to 46*         0.5-5       56       46         0.5-30       60       50         * Decreases with the logarithm of the frequency.         Test setup:         Reference Plane         UXX       Equipment       E.U.T         Test procedure       1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 500hm/50uH coupling impedance for the maxing equipment.         Test procedure       1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 500hm/50uH coupling impedance for the maxing equipment.         2. The peripheral devices are also connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 500hm/50uH coupling impedance with 500hm termination. (Please refers to the block diagram of the test setup and photographs).         3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.         Test environment:       Temp:: 23 °C       Humid:: 56%       Press:: 101kPa						
Limit:       Frequency range (MHz)       Limit (dBµV)         Quasi-peak       Average         0.15-0.5       66 to 56*       56 to 46*         0.5-5       56       46         0.5-30       60       50         * Decreases with the logarithm of the frequency.         Test setup:       Reference Plane         UNX       Equipment         EU T E gamment       EU.T         EU T E gamment       EU.T         Test procedure       1. The E.U.T         Test procedure       1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(LLS.N). The provide a 500hm/50uH coupling impedance for the measuring equipment.         2. The peripheral devices are also connected to the test setup and photographs).       3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.         Test environment:       Temp:       23 °C       Humid:       56%       Press:       101kPa         Test Instruments:       Refer to section 5.9 for details       Frest:       101kPa	-					
Frequency range (WH2)       Quasi-peak       Average         0.15-0.5       66 to 56*       56 to 46*         0.5-5       56       46         0.5-30       60       50         * Decreases with the logarithm of the frequency.         Test setup:         Reference Plane         LISN       40cm         Aux         EUT         Reference Plane         Formark         EUT         Reference Plane         Formark         EUT         Reference Plane         Formark         EUT         Formark <t< td=""><td>· · ·</td><td>RBW=9kHz, VBW=30kHz</td><td></td><td></td></t<>	· · ·	RBW=9kHz, VBW=30kHz				
0.15-0.5       66 to 56*       56 to 46*         0.5-5       56       46         0.5-30       60       50         * Decreases with the logarithm of the frequency.         Test setup:         Reference Plane         LISN 40cm 90cm List         AUX       Eul Fragment         Eul Transference Plane         Remark         EUT Equipment List         Formark         EUT Equipment List         Test table/insulation plane         Remark         EUT Equipment List         Test table/insulation helenerit         Test table/insulation helenerit         Test table/insulation helenerit         Test procedure         1       The E.U. T and simulators are connected to the main power through a line impedance stabilization helenerit         1       The E.U. T and simulators are connected to the main power through a line interface cable height-0 fm         1       The E.U. T and simulators are connected to the main power through a LISN that provides a 500hm/50uH coupling impedance with 500hm termination. (Please refers to the block diagram of the test setup and photographs).         3       Both sides of A.C. line are checked for maximum	Limit:	Frequency range (MHz)		· · · · · ·		
0.5-5       56       46         0.5-30       60       50         * Decreases with the logarithm of the frequency.         Reference Plane         Image: Colspan="2">Reference Plane         Reference Plane         Image: Colspan="2">Image: Colspan="2">Reference Plane         Reference Plane         Reference Plane         Reference Plane         Reference Plane         Reference Plane         Reference Plane </td <td></td> <td>0.15-0.5</td> <td></td> <td></td>		0.15-0.5				
* Decreases with the logarithm of the frequency.         Test setup:         Image: transmission of the frequency of the test setup of thest of test setup of the test setup of the t						
Reference Plane         LISN 40cm 80cm LISN         AUX       Filter AC power         Equipment       E.U.T         Test table/Insulation plane       EMI Receiver         Remark       EUT Equipment Under Test         LISN.       Test procedure       1. The E.U.T and simulators are connected to the main power through a line impedance stabilization Network         Test procedure       1. The E.U.T and simulators are connected to the main power through a 500hm/50uH coupling impedance for the measuring equipment.         2. The peripheral devices are also connected to the main power through a LISN that provides a 500hm/50uH coupling impedance with 500hm termination. (Please refers to the block diagram of the test setup and photographs).         3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.         Test Instruments:       Temp:       23 °C       Humid:       56%       Press:       101kPa         Test mode:       Refer to section 5.3 for details       Ferst of the test section 5.3 for details		0.5-30	60	50		
Test procedure       1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network: Test label relight-10 minipage for the measuring equipment.         2. The peripheral devices are also connected to the main power through a line impedance stabilization network (L.I.S.N.). The provide a 500hm/50uH coupling impedance for the measuring equipment.         3. The peripheral devices are also connected to the main power through a line impedance stabilization. (Please refers to the block diagram of the test setup and photographs).         3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.         Test Instruments:       Test note:       Refer to section 5.9 for details		* Decreases with the logarith	m of the frequency.			
Image: August and the second stabilization of the second stabilization network is a second stabilization network is a second stabilization network is a second stabilization network (L.I.S.N.). The provide a soohymoto stabilization network (L.I.S.N.).         2. The peripheral devices are also connected to the main power through a LISN that provides a 500hm/50uH coupling impedance with 500hm termination. (Please refers to the block diagram of the test setup and photographs).         3. Both sides of A.C. line are checked for maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.         Test environment:       Temp.: 23 °C       Humid.: 56%	Test setup:	Reference Pla	ne			
Ine impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment.         2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).         3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.         Test environment:       Temp.:       23 °C       Humid.:       56%       Press.:       101kPa         Test Instruments:       Refer to section 5.9 for details       Refer to section 5.3 for details		AUX Equipment E.U.T Test table/Insulation plane Remark E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m	Filter AC po			
Test Instruments:       Refer to section 5.9 for details         Test mode:       Refer to section 5.3 for details	Test procedure	<ul> <li>line impedance stabilization 500hm/50uH coupling imp</li> <li>2. The peripheral devices are a LISN that provides a 500 termination. (Please refers photographs).</li> <li>3. Both sides of A.C. line are interference. In order to fir positions of equipment and stabilization.</li> </ul>	on network(L.I.S.N.). The bedance for the measure also connected to the ohm/50uH coupling imp s to the block diagram of the checked for maximum and the maximum emiss d all of the interface ca	ne provide a ring equipment. main power through bedance with 500hm of the test setup and n conducted ion, the relative bles must be changed		
Test mode: Refer to section 5.3 for details	Test environment:	Temp.: 23 °C Hun	nid.: 56% Pre	ess.: 101kPa		
	Test Instruments:	Refer to section 5.9 for detai	ls	i		
Test results: Pass	Test mode:	Refer to section 5.3 for detai	ls			
	Test results:	Pass				



#### Measurement data:

Product name:	4inch 3G Smart Phone	Product model:	X4 PLUS
Test by:	Mike	Test mode:	PC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%



#### Remark

1

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line		Remark
77.00	MHz	dBuV	dB	dB	dBuV	 dBuV	āB	
1	0.158	26.28	0.17	10.77	37.22	55.56	-18.34	Average
2	0.162	36.27	0.17	10.77	47.21	65.34	-18.13	QP
3	0.258	35.69	0.14	10.75	46.58	61.51	-14.93	QP
1 2 3 4 5 6 7 8 9	0.258	25.57	0.14	10.75	36.46	51.51	-15.05	Average
5	3.603	24.79	0.17	10.90	35.86	46.00	-10.14	Average
6	4.746	32.80	0.20	10.86	43.86	56.00	-12.14	QP
7	5.805	25.52	0.23	10.83	36.58	50.00	-13.42	Average
8	10.019	33.93	0.32	10.94	45.19	60.00	-14.81	QP
9	10.179	26.12	0.32	10.94	37.38	50.00	-12.62	Average
10	16.839	39.73	0.30	10.91	50.94	60.00	-9.06	QP
11	23.018	35.95	0.31	10.89	47.15	60.00	-12.85	QP
12	23.018	30.32	0.31	10.89	41.52	50.00	-8.48	Average

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.

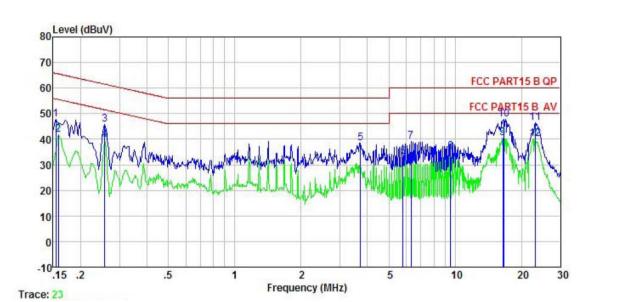
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.

3. Final Level =Receiver Read level + LISN Factor + Cable Loss.





Product name:	4inch 3G Smart Phone	Product model:	X4 PLUS
Test by:	Mike	Test mode:	PC mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%



	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBu∛	dB	dB	dBuV	dBuV	₫₿	
1	0.154	36.11	0.98	10.78	47.87	65.78	-17.91	QP
2	0.158	30.04	0.98	10.77	41.79	55.56	-13.77	Average
3	0.258	33.99	0.95	10.75	45.69	61.51	-15.82	QP
4	0.258	28.03	0.95	10.75	39.73	51.51	-11.78	Average
5	3.720	26.59	1.00	10.90	38.49	56.00	-17.51	QP
1 2 3 4 5 6 7 8 9 10	5.805	21.27	1.01	10.83	33.11	50.00	-16.89	Average
7	6.319	27.37	1.02	10.81	39.20	60.00	-20.80	QP
8	9.552	23.37	1.02	10.92	35.31	50.00	-14.69	Average
9	16.486	28.75	0.83	10.91	40.49	50.00	-9.51	Average
10	16.573	36.15	0.83	10.91	47.89	60.00	-12.11	QP
11	23.018	34.86	0.68	10.89	46.43	60.00	-13.57	QP
12	23.140	28.62	0.68	10.89	40.19	50.00	-9.81	Average

1. An initial pre-scan was performed on the line and neutral lines with peak detector.

2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.

3. Final Level =Receiver Read level + LISN Factor + Cable Loss.



# CCIS

# 6.2 Radiated Emission

I CO Fait IS D	Section 15	5.109					
ANSI C63.4:201	4						
30MHz to 6000	MHz						
Measurement D	istance: 3	sm (Se	mi-Anechoi	c Chan	nber)		
Frequency	Detect	tor	RBW	VBV	N	Remark	
30MHz-1GHz			120kHz			Quasi-peak Value	
Above 1GHz						Peak Value	
					IZ	Average Value	
		Limit	•	2011)	0	Remark Quasi-peak Value	
						Quasi-peak Value	
						Quasi-peak Value	
						Quasi-peak Value	
					Average Value		
Above 1G	lz –		74.0			Peak Value	
EUT Tum Table Ground Plane – Above 1GHz	4m 4m 1m 1m	Ground R		RF Test Receiver			
	30MHz to 60001 Measurement D Frequency 30MHz-1GHz Above 1GHz 500MHz-88W 88MHz-216M 216MHz-960 960MHz-1G Above 1GHz Below 1GHz EUT Turn Table 3 Ground Plane – Above 1GHz	Frequency       Detect         30MHz-1GHz       Quasi-p         Above 1GHz       Pea         RMS       Frequency         30MHz-88MHz       88MHz-216MHz         216MHz-960MHz       960MHz-1GHz         960MHz-1GHz       Above 1GHz         Below 1GHz       Im         Below 1GHz       Im         Above 1GHz       Im	30MHz to 6000MHz         Measurement Distance: 3m (Se         Frequency       Detector         30MHz-1GHz       Quasi-peak         Above 1GHz       Peak         RMS       Frequency         Limit       30MHz-88MHz         88MHz-216MHz       960MHz-1GHz         960MHz-1GHz       960MHz-1GHz         Above 1GHz       960MHz-1GHz         Below 1GHz       Image: Constraint of the second se	30MHz to 6000MHz         Measurement Distance: 3m (Semi-Anechoi         Frequency         Jetector         RBW         30MHz-1GHz         Above 1GHz         Frequency         Limit (dBuV/m @         30MHz-88MHz         40.0         88MHz-216MHz         43.5         216MHz-960MHz         Above 1GHz         Above 1GHz         Total and a set of the colspan="2">Total and a set of the colspan="2"">Total and total and a set of the colspan="2">Total an	30MHz to 6000MHz         Measurement Distance: 3m (Semi-Anechoic Chan         Frequency       Detector       RBW       VBN         30MHz-1GHz       Quasi-peak       120kHz       300k         Above 1GHz       Peak       1MHz       3MH         Frequency       Limit (dBuV/m @3m)       30MHz-88MHz       40.0         88MHz-216MHz       43.5       216MHz-960MHz       46.0         960MHz-1GHz       54.0       54.0         Above 1GHz       74.0       54.0         Below 1GHz         For the second s	30MHz to 6000MHz         Measurement Distance: 3m (Semi-Anechoic Chamber)         Frequency       Detector       RBW       VBW         30MHz-1GHz       Quasi-peak       120kHz       300kHz         Above 1GHz       Peak       1MHz       3MHz         Frequency       Limit (dBuV/m @3m)       30MHz-88MHz       40.0       0         30MHz-216MHz       43.5       0       0         216MHz-9600MHz       46.0       0       0         9600MHz-1GHz       54.0       0       0         Above 1GHz       74.0       0       0         Below 1GHz         Above 1GHz         Above 1GHz         Were and the second to the second	



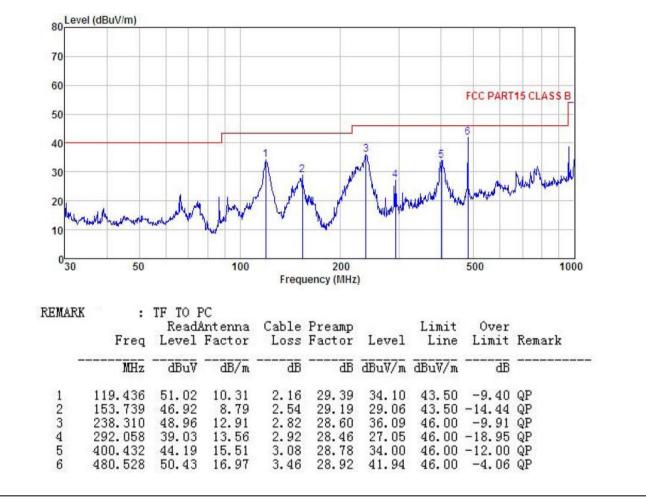
Test Procedure:	ground degrees 2. The EU antenna tower. 3. The ant ground horizon measur 4. For eac and the and the find the	at a 3 meter s to determine T was set 3 m a, which was enna height i to determine tal and vertica ement. h suspected n the antenna rotatable tab maximum re	semi-anechoi the position neters away f mounted on t s varied from the maximun al polarization emission, the a was tuned t le was turned ading.	ic camber. The of the highes from the inter he top of a va- one meter to n value of the ns of the ante EUT was ar o heights from d from 0 degr	ne table was st radiation. ference-rec ariable-heig o four meter field streng nna are se ranged to it m 1 meter t ees to 360	ceiving ght antenna rs above the gth. Both t to make the s worst case o 4 meters
	6. If the er limit spe EUT wo margin	ecified, then to	of the EUT in esting could be ed. Otherwise ested one by	peak mode be stopped a e the emission one using pe	nd the peak ons that did eak, quasi-p	
Test environment:	Temp.:	25 °C	Humid.:	55%	Press.:	1 01kPa
Test Instruments:	Refer to se	ection 5.9 for	details			
Test mode:	Refer to se	ection 5.3 for	details			
Test results:	Passed					
Remark:	All of the or recorded	bserved valu	e above 6GH	Iz ware the r	niose floor ,	which were no



#### Measurement Data:

Below	1GHz:
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Product Name:	4inch 3G Smart Phone	Product model:	X4 PLUS
Test By:	Mike	Test mode:	PC mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	<b>Temp: 24</b> °C Huni: 57%



Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.

2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Product Name:	4inch	3G Sma	art Phone		Pro	duct mo	del:	X4 PLU	JS
Test By:	Mike				Tes	st mode:		PC mo	de
Test Frequency:	30 M	Hz ~ 1 G	Hz		Pol	arizatior	):	Horizoi	ntal
Test Voltage:	AC 1	20/60Hz			Env	vironmer	nt:	Temp:	24℃ Huni: 57%
80 Level (d	BuV/m)								
70									
60								FCC PART	TIS CLASS B
50					-	2		5	
40						A		Ť	Å
30					1 M	W L	3 4		Avl all
20				N #	M. M	Mart		marth	and or one
20	ma And Hold	mund	a sur	When have	W	Y			
10 who where			14 Martin						
030	50		100		200			500	1000
				Freq	uency (MHz	:)			
REMARK	:	TF TO F	C Intenna	Cable	D		Tinia	0	
	Freq	Level			Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV		āĒ	āĒ	dBuV/m	dBuV/m	āĒ	
1 1	55.910	45.52	8.90	2.56	29.17	27.81	43.50	-15.69	OP
2 2	37.476 50.477	56.65	12.89 14.61	2.83 3.10	28.61 28.56	43.76	46.00	-2.24	QP
	03.250	42.63	15.54	3.09				-13.53	
4 4		51.46	16.97	3.46	28.92	42.97	46.00	-3.03	QP
4 4 5 4	80.528 71.449	44.29	21.00	4.36	28.36	41.29	46.00	-4.71	OB





#### Above 1GHz:

Product Name:	4in	4inch 3G Smart Phone				oduct mo	odel:	X4 PL	X4 PLUS			
Test By:	Mik	æ			Те	Test mode:			PC mode			
Test Frequency	<b>y:</b> 1 G	Hz ~ 6 GH	Ηz		Ро	Polarization:			al			
Test Voltage:	AC	120/60Hz			En	vironme	nt:	Temp	: <b>24</b> ℃	Huni: 57%		
80 Lev	el (dBuV/m)											
_			_	_				FC	C PART 15 (	PK)		
70				1								
60									_			
_			_					FC	C PART 15 (	AV)		
50							4	3 and	prover state and the state of the	menter		
40					nilla Aproximation	nationala	and the property of the second	nu law martin		6		
we have	www.	mound	mandum	harrow the provide	autorista te		2	4				
30												
20							-					
10												
0100	0 1200	1500		2000					5000	6000		
100	1200	1500			uency (MH	IZ)			5000	0000		
REMAR	R .											
		Read	Intenna	Cable	Preamp		Limit					
	Fre	q Level	Factor	Loss	Factor	Level	Line	Limit	Remark			
	MH	z dBuV		dB	āā	dBuV/m	dBuV/m	āB				
1	3335 15	2 47.77	28.81	5 56	41.37	42 87	74 00	-31 13	Peak			
2	3335.15	2 37.65	28.81	5.56	41.37	32.75	54.00	-21.25	Average			
3 4		7 47.52 7 37.39		6.69	41.96							
	4396.62	4 48.84		7 91	41.96	50.56	74 00	-18.04	Average			
5				7.91					Average			
5 6	5875.42	1 00.00	~~. ~~									

2. The emission levels of other frequencies are very lower than the limit and not show in test report.





Product Name:	4inch	4inch 3G Smart Phone			Pro	Product model:			X4 PLUS		
Test By:	Mike	Mike		Те	st mode:		PC m	PC mode			
Test Frequency:	1 GH	1 GHz ~ 6 GHz		Ро	larizatio	n:	Horizo	ontal			
Test Voltage:	AC 1	20/60Hz			En	vironme	nt:	Temp	: <b>24</b> ℃	Huni: 57%	
80 Level (	dBuV/m)									_	
70				-				FCC	PART 15 (PI	K)	
70											
60				-				FCC	PART 15 (A	V)	
50									3	5	
40					where	second what any signal	mannen	warmer and the	a construction of	6	
40	moundentine		ner and a second se	hupbenharman	water benerous		2		f		
30											
20	_										
10											
01000	1200	1500	2	000	uency (MH:	-)			5000 6	5000	
				rieq	dency (MIL	.)					
REMARK	:	ReadA	ntenna	Cable	Preamp		Limit	Over			
	Freq	Level		Loss	Factor	Level		Limit	Remark		
	MHz	dBu∛		ā	āā	dBu∛/m	dBuV/m	āB			
			00.40	5.98	41.66	43.37		-30.63			
	597.480	47.42	29.43					-90 74	A		
2 3	597.480	37.31	29.43	5.98	41.66	33.26	54.00 74 00				
2 3 3 4 4 4	697.480 798.981 798.981	37.31 48.98 37.72	29.43 31.59 31.59	5.98 6.80 6.80	41.66 41.81 41.81	33.26 48.00 36.74	74.00 54.00	-26.00	Peak Average		
2 3 3 4 4 4 5 5	697.480 798.981	37.31 48.98	29.43 31.59	5.98 6.80	41.66 41.81 41.81 42.02	33.26 48.00 36.74 50.37	74.00 54.00 74.00	-26.00 -17.26 -23.63	Peak Average		