# **FCC Test Report**

APPLICANT : TCL Communication Ltd.

**EQUIPMENT**: Tablet PC

BRAND NAME : ALCATEL ONETOUCH

MODEL NAME : 9006W

MARKETING NAME : ONETOUCH PIXI 2 (7)

FCC ID : 2ACCJB014

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

**CLASSIFICATION**: Certification

The product was received on Apr. 01, 2015 and testing was completed on Apr. 25, 2015. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2009 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 (SHENZHEN) INC., the test report shall not be reproduced except in full.

Reviewed by: Louis Wu / Manager

Louis Wu

Approved by: Jones Tsai / Manager

bnes/sai

SPORTON INTERNATIONAL (SHENZHEN) INC.

1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China

SPORTON INTERNATIONAL (SHENZHEN) INC.

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Report Issued Date : May 15, 2015

Testing Laboratory 2353

Report No. : FC540109

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## **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC540109	Rev. 01	Initial issue of report	May 15, 2015

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### **SUMMARY OF TEST RESULT**

Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	4.96 dB at
					0.520 MHz
					Under limit
2.0	45 400	45 400 By first J.F. street	4.5.400 limita	DACC	7.26 dB at
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	30.000 MHz for
					Quasi-Peak

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## 1. General Description

### 1.1. Applicant

#### **TCL Communication Ltd.**

5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203

### 1.2. Manufacturer

#### TCL Communication Ltd.

5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203

### 1.3. Product Feature of Equipment Under Test

	Product Feature
Equipment	Tablet PC
Brand Name	ALCATEL ONETOUCH
Model Name	9006W
Marketing Name	ONETOUCH PIXI 2 (7)
FCC ID	2ACCJB014
	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA
	HSPA+(Downlink Only)/LTE
EUT supports Radios application	WLAN 2.4GHz 802.11b/g/n HT20/
	WLAN 5GHz 802.11a/n HT20/HT40/
	Bluetooth v3.0 + EDR/Bluetooth v4.1 LE
IMEI Code	Conduction: 014399000021071
IIWEI Code	Radiation: 014399000021071
HW Version	V03
SW Version	B2E
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.

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## 1.4. Product Specification subjective to this standard

Product Specification subjective to this standard			
. године ороси	GSM850 : 824.2 MHz ~ 848.8 MHz		
	GSM1900 : 1850.2 MHz ~ 1909.8MHz		
	WCDMA Band V : 826.4 MHz ~ 846.6 MHz		
	WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz		
	WCDMA Band II : 1852.4 MHz ~ 1907.6 MHz		
	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz		
Tx Frequency	LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz		
	LTE Band 12: 699.7 MHz ~ 715.3 MHz		
	802.11b/g/n: 2412 MHz ~ 2462 MHz		
	802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz;		
	5745 MHz ~ 5825 MHz		
	Bluetooth: 2402 MHz ~ 2480 MHz		
	GSM850 : 869.2 MHz ~ 893.8 MHz		
	GSM1900 : 1930.2 MHz ~ 1989.8 MHz		
	WCDMA Band V : 871.4 MHz ~ 891.6 MHz		
	WCDMA Band IV : 2112.4 MHz ~ 2152.6 MHz		
	WCDMA Band II : 1932.4 MHz ~ 1987.6 MHz		
	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz		
	LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz		
Rx Frequency	LTE Band 12: 729.7 MHz ~ 745.3 MHz		
	802.11b/g/n: 2412 MHz ~ 2462 MHz		
	802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz;		
	5745 MHz ~ 5825 MHz		
	Bluetooth: 2402 MHz ~ 2480 MHz		
	GPS: 1.57542 GHz		
	Glonass: 1602 MHz + n× 0.5625MHz (n=-7,-6,-5,0,,6)		
	WWAN: IFA Antenna		
_	WLAN: IFA Antenna		
Antenna Type	Bluetooth: IFA Antenna		
	GPS/Glonass: IFA Antenna		
	GPRS: GMSK		
	EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK		
	WCDMA: QPSK (Uplink)		
	HSDPA / DC-HSDAP: QPSK (Uplink)		
	HSUPA: QPSK (Uplink)		
	HSPA+: 16QAM (Downlink Only)		
	DC-HSDAP: 64QAM		
Type of Modulation	LTE: QPSK / 16QAM		
Type of medalidion	802.11b: DSSS (DBPSK / DQPSK / CCK)		
	802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)		
	Bluetooth v4.1 LE: GFSK		
	Bluetooth (1Mbps) : GFSK		
	Bluetooth (1Mbps): 31 3K Bluetooth (2Mbps): $\pi$ /4-DQPSK		
	Bluetooth (3Mbps) : 8-DPSK		
	GPS/Glonass : BPSK		
	OF OPOINTIESS . DE OIL		

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## 1.5. Specification of Accessory

	Specification of Accessory				
AC Adoptor	Brand Name	ALCATEL onetouch	Model Name	UC13US	
AC Adapter	Power Rating	I/P: 100-240Vac,	I/P: 100-240Vac, 500mA, O/P: 5Vdc, 2000mA		
	P/N	CBA0059AG0C1	CBA0059AG0C1		
	Brand Name	ALCATEL onetouch	Model Name	TLp032B2	
Battery	Power Rating	3.7Vdc, 3240mAh			
	P/N	C3240009C2YHYKFG			
USB Cable	Brand Name	NA	Model Name	NA	
USB Cable	Signal Line Type	0.8m shielded without core			

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#### 1.6. Modification of EUT

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

### 1.7. Test Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.		
	1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town,		
Took Cita Location	Nanshan District, Shenzhen, Guangdong, P. R. China		
Test Site Location	TEL: +86-755-8637-9589		
	FAX: +86-755-8637-9595		
Toot Site No.	Sporton Site No.		
Test Site No.	CO01-SZ		

Test Site	SPORTON INTERNATIONAL INC.		
	No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park,		
Test Site Location	Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.		
rest Site Location	TEL: +886-3-327-3456		
	FAX: +886-3-328-4978		
Toot Site No	Sporton Site No.	FCC Registration No.	
Test Site No.	03CH06-HY	TW1022	

### 1.8. 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 C63.4-2009

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

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## 2. Test Configuration of Equipment Under Test

### 2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2009 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.

		Test Condition			
Item	EUT Configuration		EMI	EMI	
		AC	RE<1G	RE≥1G	
1.	Charging Mode (EUT with adapter)	$\boxtimes$	$\boxtimes$	$\boxtimes$	
2.	Data application transferred mode		$\boxtimes$		
	(EUT connected with notebook)				

#### Abbreviations:

EMI AC: AC conducted emissions

EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz

• EMI RE < 1G: EUT radiated emissions < 1GHz

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

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Test Items	EUT Configure Mode	Function Type
		Mode 1: GPRS850 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging from Adapter) + Earphone + Battery + Camera <fig.1></fig.1>
AC Conducted	1/2	Mode 2: GPRS1900 Idle + Bluetooth Idle + WLAN (5GHz) Idle + USB Cable (Charging from Adapter) + Earphone + Battery + MPEG4 <fig.1></fig.1>
Emission	1/2	Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Earphone + Battery + GPS Rx <fig.2></fig.2>
		Mode 4: WCDMA Band II Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging from Adapter) + Earphone + Battery + Glonass Rx <fig.3></fig.3>
	1/2	Mode 1: GPRS850 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging from Adapter) + Earphone + Battery + Camera <fig.1></fig.1>
Radiated		Mode 2: GPRS1900 Idle + Bluetooth Idle + WLAN (5GHz) Idle + USB Cable (Charging from Adapter) + Earphone + Battery + MPEG4 <fig.1></fig.1>
Emissions < 1GHz		Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Earphone + Battery + GPS Rx <fig.2></fig.2>
		Mode 4: WCDMA Band II Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging from Adapter) + Earphone + Battery + Glonass Rx <fig.3></fig.3>
Radiated	1/2	Mode 1: GPRS850 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging from Adapter) + Earphone + Battery + Camera <fig.1></fig.1>
Emissions ≥ 1GHz	1/2	Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Earphone + Battery + GPS Rx <fig.2></fig.2>

### Remark:

- 1. The worst case of AC is mode 4; and the USB Link mode of AC is mode 3, the test data of these modes were reported.
- 2. The worst case of RE < 1G is mode 1; and the USB Link mode of RE is mode 3, the test data of these modes were reported.
- Link with notebook means data application transferred mode between EUT and notebook.

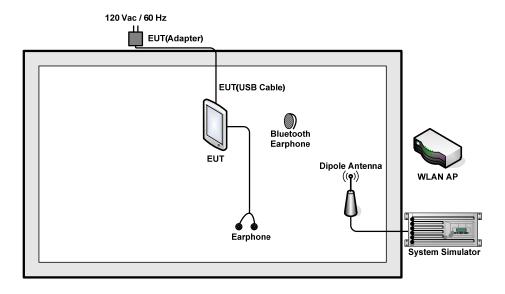
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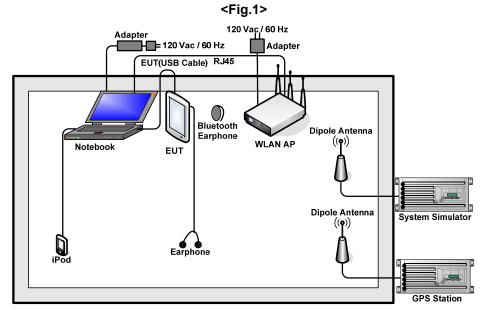
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## 2.2. Connection Diagram of Test System

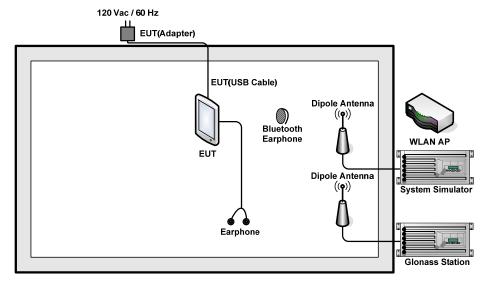




<Fig.2>

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<Fig.3>

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

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
4.	Glonass Station	RACELOGIC	RLLS03-2RP	N/A	N/A	Unshielded, 1.8 m
5.	WLAN AP	D-Link	DIR-815	KA2IR815A1	N/A	Unshielded, 1.8 m
6.	WLAN AP	ASUSTek	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
7.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
8.	Notebook	Lenovo	E540	PRC4	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
9.	NOTE BOOK	Dell	Latitude E6320	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
10	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
11	Bluetooth Earphone	SonyErricsson	MW600	PY700A2029	N/A	N/A
12.	iPod	Apple	N/A	N/A	Shielded, 1.0m	N/A
13.	IPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Shielded, 1.2 m	N/A
14.	IPod Earphone	Apple	MC690ZP/A	FCC DoC	Unshielded, 1.2 m	N/A
15.	iPod Earphone	Apple	A1285	DoC	Unshielded, 1.2 m	N/A
16.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
17.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

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### 2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA idle mode during the testing. The EUT was synchronized to the BCCH, and was in continuous receiving mode by setting system simulator's paging reorganization.

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 Notebook and EUT via USB cable.
- 2. Execute "Video Player" to play MPEG4 files.
- 3. Turn on camera to capture images.
- 4. Turn on GPS/Glonass function to make the EUT receive continuous signals from GPS/Glonass station.

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### 3. Test Result

### 3.1. Test of AC Conducted Emission Measurement

#### 3.1.1 Limits of AC Conducted Emission

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

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

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

### 3.1.2 Measuring Instruments

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

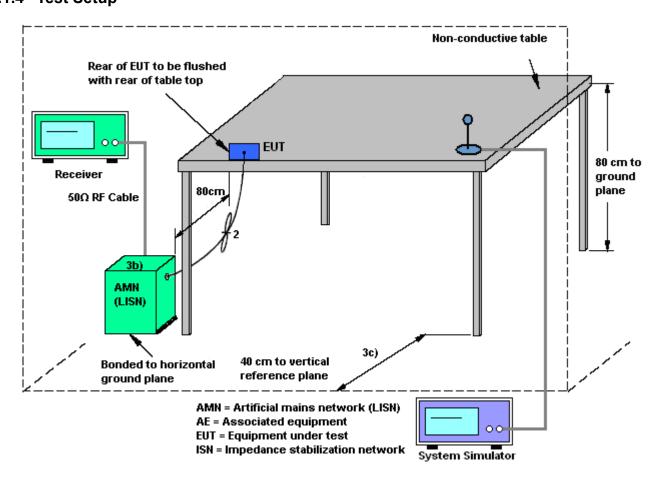
#### 3.1.3 Test Procedure

- 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.
- 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.

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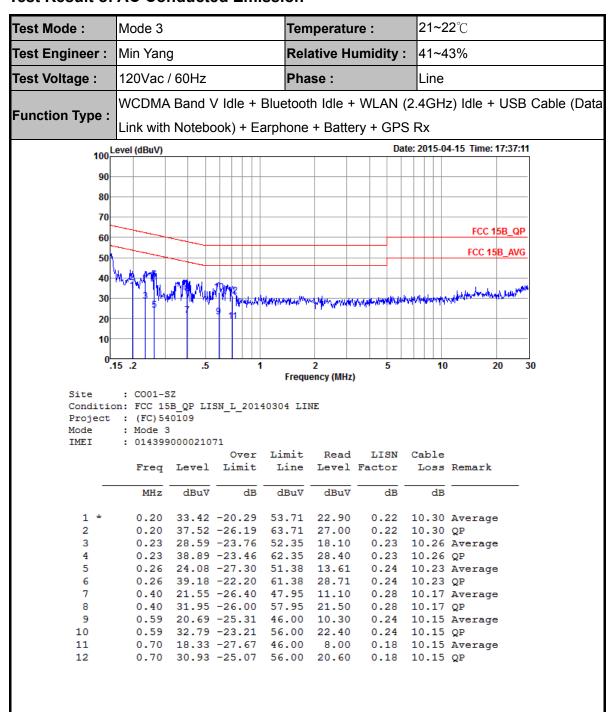
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### 3.1.4 Test Setup



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#### 3.1.5 Test Result of AC Conducted Emission



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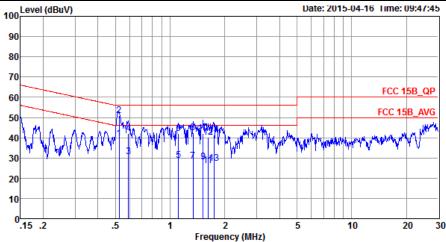
Test Mode :	Mode 3			Ten	nperatu	re :	21~2	<b></b>	
Test Engineer :	Min Yang					umidity:	41~4		
Test Voltage :	120Vac	/ 60Hz			 ISE :		Neut	ral	
			/ Idle + I			· WLAN (			B Cable (Data
Function Type :	Link with	Notebo	ook) + Ea	arphone	+ Batte	ry + GPS	Rx		
100 <sup>L</sup>	evel (dBuV)					Date	e: 2015-0	4-15 Time: 17:39	:11
90									
80									
70-									
								FCC 15B_0	)P
60								FCC 15B_A\	/G
50	10	-						100 105_71	<u></u>
40 2		kkildada (h. 1							
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10									_
0	<u> </u>	.5	1			5		20	30
.1	15 .2	.5	1		2 ency (MHz	_	10	20	30
Site	: CO01-S	Z							
	n: FCC 15 : (FC)54	_	SN_N_2014	10304 NE	UTRAL				
Mode	: (rc)54								
IMEI	: 014399		71						
				Limit	Read		Cable		
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark	
_	MHz	dBuV	dB	dBu∇	dBu∇	dB	dB		-
1	0.16	32.48	-23.12	55.60	21.80	0.33	10.35	Average	
2	0.16	37.38	-28.22	65.60	26.70	0.33	10.35	QP	
3			-28.33		15.71			Average	
4			-22.63				10.32		
5			-23.04					Average	
6			-23.74				10.30		
7			-27.81					Average	
8						0.33			
9			-20.72					Average	
10 *			-15.72						
11 12			-36.75 -29.05				10.21	Average QP	
								~	
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21~22°C Test Mode: Mode 4 Temperature: Min Yang Relative Humidity: 41~43% Test Engineer : 120Vac / 60Hz Phase: Test Voltage: Line WCDMA Band II Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable Function Type: (Charging from Adapter) + Earphone + Battery + Glonass Rx 100 Level (dBuV)



TITON Cable

Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_L\_20140304 LINE

Project : (FC)540109 Mode : Mode 4 IMEI : 014399000021071

			over	Limit	кеаа	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBu₹	dBuV	dB	dB	
1	0.52	39.44	-6.56	46.00	29.01	0.28	10.15	Average
2 *	0.52	51.04	-4.96	56.00	40.61	0.28	10.15	QP
3	0.59	30.59	-15.41	46.00	20.20	0.24	10.15	Average
4	0.59	41.99	-14.01	56.00	31.60	0.24	10.15	QP
5	1.11	28.71	-17.29	46.00	18.30	0.25	10.16	Average
6	1.11	42.21	-13.79	56.00	31.80	0.25	10.16	QP
7	1.34	28.31	-17.69	46.00	17.90	0.24	10.17	Average
8	1.34	42.31	-13.69	56.00	31.90	0.24	10.17	QP
9	1.52	28.21	-17.79	46.00	17.80	0.24	10.17	Average
10	1.52	42.01	-13.99	56.00	31.60	0.24	10.17	QP
11	1.62	26.11	-19.89	46.00	15.70	0.23	10.18	Average
12	1.62	40.31	-15.69	56.00	29.90	0.23	10.18	QP
13	1.74	27.31	-18.69	46.00	16.90	0.23	10.18	Average
14	1.74	41.51	-14.49	56.00	31.10	0.23	10.18	QP

Over Limit

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**21~22**℃ Test Mode: Mode 4 Temperature: Test Engineer: Min Yang **Relative Humidity:** 41~43% Phase: 120Vac / 60Hz Test Voltage: Neutral WCDMA Band II Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable Function Type: (Charging from Adapter) + Earphone + Battery + Glonass Rx 100 Level (dBuV) Date: 2015-04-16 Time: 09:38:16 90 80 70 FCC 15B QP 60 FCC 15B\_AVG 50 30 20 10 .15 .2 10 Frequency (MHz) : CO01-SZ Condition: FCC 15B QP LISN N 20140304 NEUTRAL Project : (FC) 540109 Mode : Mode 4 : 014399000021071 TMET Over Limit Read LISN Cable Loss Remark Freq Level Limit Line Level Factor MHz dBuV dB dBu∀ dBuV 0.15 42.99 -12.97 55.96 32.30 0.33 10.36 Average 0.15 49.89 -16.07 65.96 39.20 0.18 35.54 -18.79 54.33 24.91 0.33 10.36 QP 0.32 10.31 Average 2 0.18 45.64 -18.69 64.33 35.01 0.32 10.31 QP 0.22 32.70 -20.13 52.83 22.10 0.22 46.50 -16.33 62.83 35.90 0.33 10.27 Average 0.33 10.27 QP 5

0.26 27.98 -23.58 51.56 17.40

0.26 37.88 -23.68 61.56 27.30

0.29 39.56 -20.90 60.46 28.99

0.53 39.94 -6.06 46.00 29.41

0.53 48.14 -7.86 56.00 37.61

50.46 22.99

33.56 -16.90

8

9

10 11 \* 0.29

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0.34 10.24 Average

0.38 10.15 Average

10.21 Average

0.34 10.24 QP

0.36 10.21 QP

0.38 10.15 OP

0.36

#### 3.2. Test of Radiated Emission Measurement

#### 3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

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

#### 3.2.2. Measuring Instruments

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

#### 3.2.3. Test Procedures

- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- 5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- 6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
- 7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

**Report No.: FC540109** 

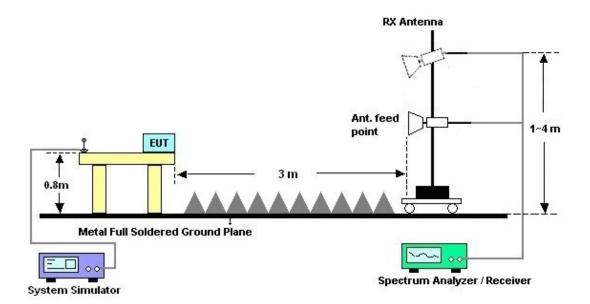
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### 3.2.4. Test Setup of Radiated Emission

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



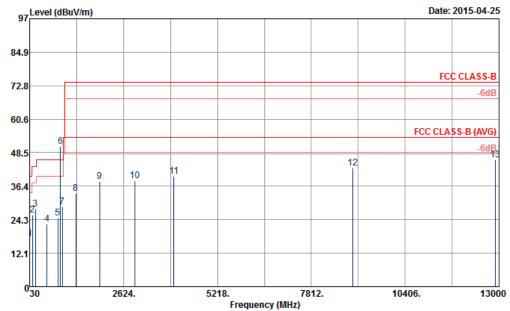
#### For radiated emissions above 1GHz



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#### 3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 1	Temperature :	21~22°C						
Test Engineer :	Luke Chang	Relative Humidity :	40~42%						
Test Distance :	3m	Polarization :	Horizontal						
Eurotion Type	GPRS850 Idle + Bluetooth	Idle + WLAN (2.4GH	z) Idle + USB Cable (Charging						
Function Type :	rom Adapter) + Earphone + Battery + Camera								
Remark :	#6 is system simulator signa	l which can be ignored	6 is system simulator signal which can be ignored.						



Site : 03CH06-HY

Condition : FCC CLASS-B 3m HF-ANT\_583\_140731 HORIZONTAL

Power : 120Vac/60Hz

Memo	:	: Mode 1									
	Freq	Level	Over Limit	Limit Line	Read <i>l</i> Level	ntenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
-	MHz	$\overline{\mathtt{d} \mathtt{B} \mathtt{u}  \mathtt{V}  /m}$	dB	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	dBu∇	dB/m	d.B	<u>dB</u>	cm	deg	
1	30.00	17.25	-22.75	40.00	30.11	18.40	0.64	31.90			Peak
2 3	106.95	26.04	-17.46	43.50	45.05	11.68	1.13	31.82	7.2.7		Peak
3	193.35	27.97	-15.53	43.50	49.25	9.00	1.50	31.78	153		Peak
4	506.50	22.78	-23.22	46.00	34.75	17.40	2.50	31.87			Peak
5	805.40	24.77	-21.23	46.00	33.63	19.85	3.08	31.79			Peak
б*	881.40	50.70		1	58.38	20.45	3.32	31.45			Peak
7	935.60	29.01	-16.99	46.00	36.05	20.66	3.36	31.06			Peak
8	1306.00	33.67	-40.33	74.00	59.74	27.89	4.97	58.93			Peak
9	1968.00	38.12	-35.88	74.00	59.08	31.45	6.10	58.51			Peak
10	2930.00	38.45	-35.55	74.00	56.44	32.69	7.52	58.20			Peak
11	4016.00	40.03	-33.97	74.00	56.30	33.42	9.08	58.77			Peak
12	8964.00	42.86	-31.14	74.00	52.13	35.96	13.77	59.00			Peak
13	12892.00	45.97	-28.03	74.00	48.32	39.46	16.61	58.42	100		Peak

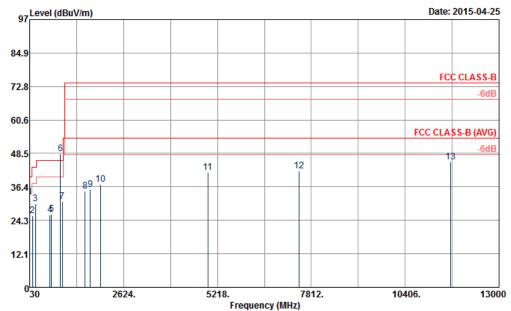
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21~22°C Test Mode: Mode 1 Temperature: Test Engineer: Luke Chang Relative Humidity: 40~42% Polarization: Test Distance: 3m Vertical GPRS850 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging Function Type: from Adapter) + Earphone + Battery + Camera Remark: #6 is system simulator signal which can be ignored.



Site : 03CH06-HY

Condition : FCC CLASS-B 3m HF-ANT\_583\_140731 VERTICAL

Power : 120Vac/60Hz Memo : Mode 1

vienio		Mode 1									
	P	T 1	Over	Limit		ntenna		Preamp	A/Pos	T/Pos	D 1.
	Freq	Level	Limit	Line	rever	Factor	ross	Factor			Remark
-	МНг	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{J}}\overline{\mathtt{m}}$	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}7\overline{\mathtt{m}}$	dBu₹	dB7m	<u>dB</u>	$\overline{d}\overline{B}$		deg	
1	30.00	32.74	-7.26	40.00	45.60	18.40	0.64	31.90	100		QP
2	108.84	25.88	-17.62	43.50	44.60	11.96	1.14	31.82			Peak
3	192.00	30.29	-13.21	43.50	51.58	9.00	1.49	31.78			Peak
4	594.00	26.13	-19.87	46.00	36.75	18.60	2.74	31.96			Peak
5	634.60	26.43	-19.57	46.00	36.58	19.04	2.79	31.98			Peak
б*	881.40	48.28			55.96	20.45	3.32	31.45			Peak
7	937.00	30.97	-15.03	46.00	37.99	20.67	3.36	31.05			Peak
8	1566.00	34.72	-39.28	74.00	59.41	28.49	5.49	58.67			Peak
9	1708.00	35.52	-38.48	74.00	58.89	29.60	5.64	58.61			Peak
10	1994.00	37.24	-36.76	74.00	58.07	31.58	6.10	58.51			Peak
11	4958.00	41.53	-32.47	74.00	54.29	34.47	10.21	57.44			Peak
12	7482.00	42.17	-31.83	74.00	53.08	35.70	12.67	59.28			Peak
13	11664.00	45.28	-28.72	74.00	48.95	38.32	16.24	58.23	100	0	Peak

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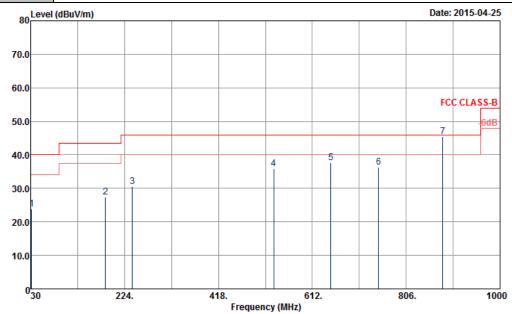


21~22°C Test Mode: Mode 3 Temperature: Test Engineer: Luke Chang **Relative Humidity:** 40~42% Test Distance: Polarization: 3m Horizontal WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data **Function Type:** Link with Notebook) + Earphone + Battery + GPS Rx Remark: #7 is system simulator signal which can be ignored. 80 Level (dBuV/m) Date: 2015-04-25 70.0 60.0 FCC CLASS-B 50.0 40.0 30.0 20.0 10.0 030 224. 418. 612. 1000 Frequency (MHz) : 03CH06-HY Site : FCC CLASS-B 3m BILOG\_131010\_9664 HORIZONTAL Condition Power : From System Memo : Mode 3 Cable Preamp 0ver Limit ReadAntenna A/Pos T/Pos Remark Freq Level Limit Line Level Factor Loss Factor MHz dBuV/m dB dBu∀/m dBuV ₫B dB/m dΒ deg 34.12 -9.38 34.16 -11.84 43.50 46.00 31.78 31.76 193.35 1.50 9.00 --- Peak 224.40 54.72 9.56 1.64 234567 ------ Peak 52.85 47.70 11.39 17.76 19.26 240.06 34.18 -11.82 1.69 31.75 46.00 --- Peak 2.52 2.97 3.05 3.32 36.08 -9.92 33.26 -12.74 37.21 -8.79 532.40 725.60 749.40 46.00 31.90 ------ Peak 42.97 46.26 31.94 31.90 46.00 Peak 19.80 171 153 Peak 46.00 31.45 881.40 58.81 20.45 --- Peak

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21~22°C Test Mode: Mode 3 Temperature: Test Engineer: Luke Chang Relative Humidity: 40~42% Polarization: Test Distance: 3m Vertical WCDMA Band V Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Function Type: Link with Notebook) + Earphone + Battery + GPS Rx Remark: #7 is system simulator signal which can be ignored.



Site : 03CH06-HY

Condition : FCC CLASS-B 3m BILOG\_131010\_9664 VERTICAL

Power : From System
Memo : Mode 3

	Freq	Level		Limit Line							Remark
_	M H z	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	$-\overline{dB}$	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	dBu∇	<u>dB</u> /m	<u>dB</u>	<u>dB</u>	cm	deg	
1 2 3 4 5 6 7	32.16 184.44 240.06 532.40 650.00 749.40 881.70	27.36 30.56 35.78 37.56	-16.24 -16.14 -15.44 -10.22 -8.44 -9.70	46.00 46.00 46.00	37.35 48.63 49.23 47.40 47.74 45.35 53.06	17.64 9.06 11.39 17.76 19.00 19.80 20.45	0.66 1.46 1.69 2.52 2.80 3.05 3.32	31.89 31.79 31.75 31.90 31.98 31.90 31.44	203	 37	Peak Peak Peak Peak Peak Peak

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## 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI TEST Receiver	R&S	ESCI7	100768	9kHz~3GHz	May 04, 2014	Apr. 15, 2015~ Apr. 16, 2015	May 03, 2015	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Feb. 02, 2015	Apr. 15, 2015~ Apr. 16, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Feb. 02, 2015	Apr. 15, 2015~ Apr. 16, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000089 1	100Vac~250Vac	Sep. 29, 2014	Apr. 15, 2015~ Apr. 16, 2015	Sep. 28, 2015	Conduction (CO01-SZ)
Spectrum Analyzer	R&S	FSP30	101067	9kHz ~ 30GHz	Nov. 21, 2014	Apr. 25, 2015	Nov. 20, 2015	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESVS10	834468/0003	20MHz ~ 1000MHz	May 06, 2014	Apr. 25, 2015	May 05, 2015	Radiation (03CH06-HY)
Bilog Antenna	Schaffner	CBL6112B	2885	30MHz ~ 2GHz	Sep. 27, 2014	Apr. 25, 2015	Sep. 26, 2015	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Jul. 24, 2014	Apr. 25, 2015	Jul. 23, 2015	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917025 1	18GHz- 40GHz	Oct. 02, 2014	Apr. 25, 2015	Oct. 01, 2015	Radiation (03CH06-HY)
Amplifier	SONOMA	310N	187312	9kHz ~ 1GHz	Nov. 24, 2014	Apr. 25, 2015	Nov. 23, 2015	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz ~ 26.5GHz	Apr. 15, 2015	Apr. 25, 2015	Apr. 14, 2016	Radiation (03CH06-HY)
Preamplifier	EMCI	EMC051845	SN980048	1GHz ~ 18GHz	Jul. 17, 2014	Apr. 25, 2015	Jul. 16, 2015	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	Apr. 25, 2015	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF78020821 2	1 m ~ 4 m	N/A	Apr. 25, 2015	N/A	Radiation (03CH06-HY)

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## 5. Uncertainty of Evaluation

### <u>Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)</u>

Measuring Uncertainty for a Level of	2.3dB
Confidence of 95% (U = 2Uc(y))	2.5uB

#### <u>Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)</u>

Measuring Uncertainty for a Level of	
Confidence of 95% (U = 2Uc(y))	4.5dB

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