



FCC Test Report

APPLICANT : TCT Mobile Limited
EQUIPMENT : LTE USB Modem/4G AP
BRAND NAME : ALCATEL
onetouch
MODEL NAME : ONE TOUCH Y85000
MARKETING NAME : ALCATEL ONETOUCH LINK Y850
FCC ID : RAD522
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on Jul. 08, 2014 and testing was completed on Aug. 28, 2014. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2009 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 INC., the test report shall not be reproduced except in full.

Reviewed by: Louis Wu / Manager

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

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



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FD493052	Rev. 01	Initial issue of report	Oct. 15, 2014



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.107	ICES003 Section 6.1	AC Conducted Emission	< 15.107 limits < ICES003 6.1 limits	PASS	Under limit 3.17 dB at 0.650 MHz
3.2	15.109	ICES003 Section 6.2	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 7.64 dB at 664.000 MHz for peak

1. General Description

1.1. Applicant

TCT Mobile Limited

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

1.2. Manufacturer

TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED

70 Huifeng 4rd, ZhongKai Hi-tech Development District, Huizhou, Guangdong 516006 P.R.China
(TCL Mobile Communication Co.,LTD.Huizhou)

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE USB Modem/4G AP
Brand Name	ALCATEL onetouch
Model Name	ONE TOUCH Y85000
Marketing Name	ALCATEL ONETOUCH LINK Y850
FCC ID	RAD522
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE WLAN 11a/b/g/n HT20/HT40
HW Version	V4.0
SW Version	Y850V_00_01.13_15_20140626
EUT Stage	Identical Prototype

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

1.4. Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	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 5 : 824.7 MHz ~ 848.3 MHz LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5745 MHz ~ 5825 MHz
Rx Frequency	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 5 : 869.7 MHz ~ 893.3 MHz LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5745 MHz ~ 5825 MHz
Antenna Type	WWAN : Loop Antenna LTE : Loop Antenna WLAN : PIFA Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.5. Modification of EUT

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

1.6. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.
Test Site Location	No. 101, Complex Building C, Guanlong Village, Xili Town, Nanshan District, Shenzhen, Guangdong, P.R.C. TEL: +86-755-8637-9589
Test Site No.	Sporton Site No. : CO01-SZ

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

1.7. Applicable Standards

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

- ♦ FCC 47 CFR FCC Part 15 Subpart B
- ♦ ANSI C63.4-2009

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 C63.4-2009 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.

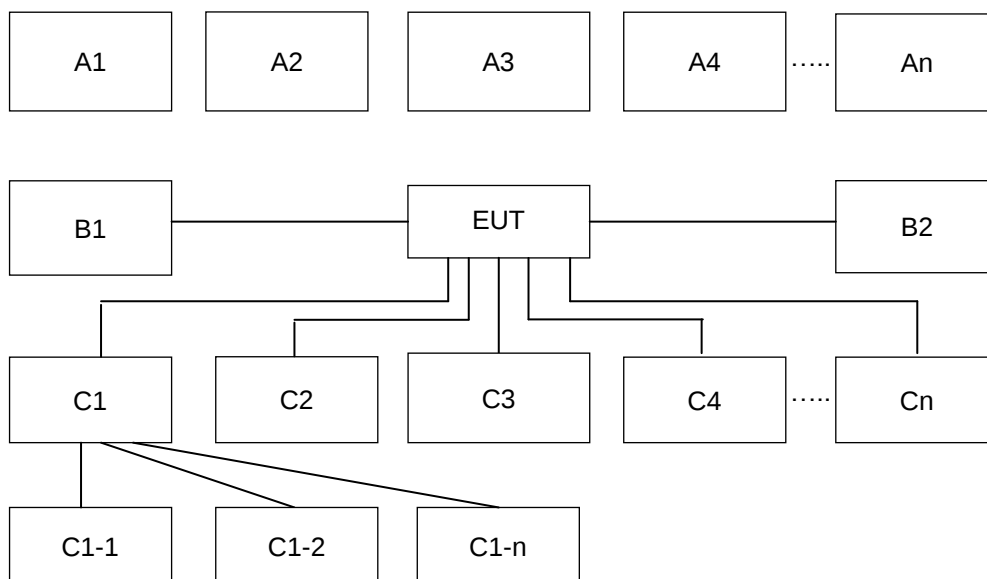
Item	EUT Configuration	Test Condition	
		EMI AC	EMI RE
1.	Charging Mode (EUT with notebook)	☒	☒
2.	Data application transferred mode (EUT with notebook)	☒	☒

Abbreviations:

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

Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1	Mode 1: GSM850 Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Adapter Mode 2: WCDMA II Idle + WLAN (5GHz) Idle + USB Cable (Data Link with Notebook) + Adapter Mode 3: LTE Band 4 Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Adapter
Radiated Emissions	1	Mode 1: GSM850 Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Adapter Mode 2: WCDMA II Idle + WLAN (5GHz) Idle + USB Cable (Data Link with Notebook) + Adapter Mode 3: LTE Band 4 Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Adapter
Remark: - The worst case of AC is mode 2; only the test data of this mode was reported. - The worst case of RE is mode 1; only the test data of this mode was reported. - Data Link with Notebook means data application transferred mode between EUT and Notebook.		

2.2. Connection Diagram of Test System



Conduction Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	-	-	-	-
A1	Notebook	WiFi	X	X	X				
A2	System Simulator	GSM/UMTS/CDMA/ WCDMA/LTE	X	X	X				
No.	Power Source	Connection Type	1	2	3	-	-	-	-
B1	AC : 120V/60Hz	AC Adapter	X	X	X				
No.	Setup Peripherals	Connection Type	1	2	3	-	-	-	-
C1-1	iPod	USB Cable to C1	X	X	X				
C1	Notebook	USB Cable jack	X	X	X				
C1-2	AP router	RJ-45 to C1	X	X	X				
C2	SD card	SD I/O interface without cable	X	X	X				

Radiation Test Setup									
No.	Wireless Station	Connection Type	Test Mode						
			1	2	3	-	-	-	-
A1	Notebook	WiFi	X	X	X				
A2	System Simulator	GSM/UMTS/CDMA/ WCDMA/LTE	X	X	X				
No.	Power Source	Connection Type	1	2	3	-	-	-	-
B1	AC : 120V/60Hz	AC Adapter	X	X	X				
No.	Setup Peripherals	Connection Type	1	2	3	-	-	-	-
C1-1	iPod	USB Cable to C1	X	X	X				
C1	Notebook	USB Cable jack	X	X	X				
C1-2	AP router	RJ-45 to C1	X	X	X				
C2	SD card	SD I/O interface without cable	X	X	X				

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Notebook	Lenovo	G480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	iPod	Apple	A1285	FCC DoC	Unshielded, 1.2 m	N/A
6.	iPod nano 8G	Apple	MC690ZP/A	FCC DoC	Unshielded, 1.2 m	N/A
7.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
8.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A



2.4. EUT Operation Test Setup

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

The EUT was attached to the 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.

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

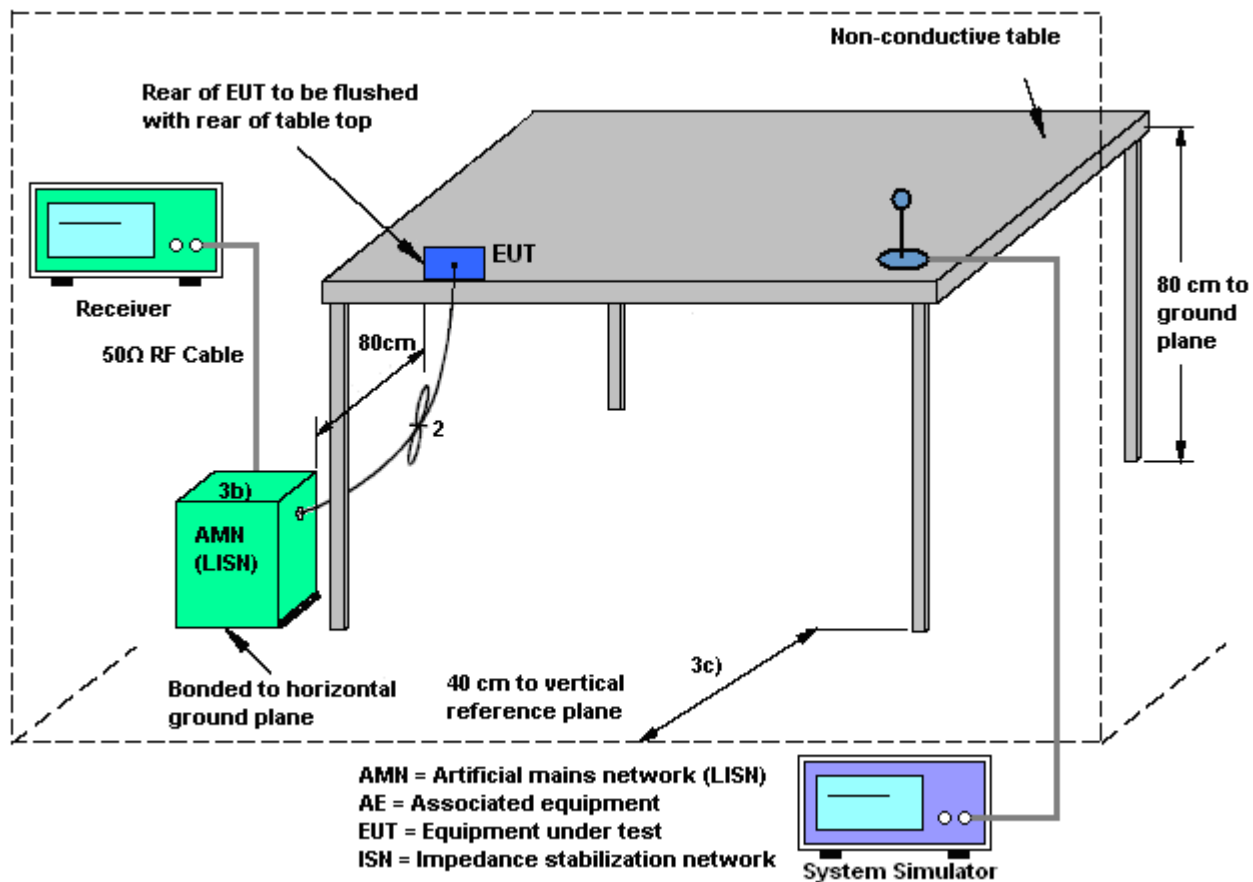
3.1.2 Measuring Instruments

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

3.1.3 Test Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

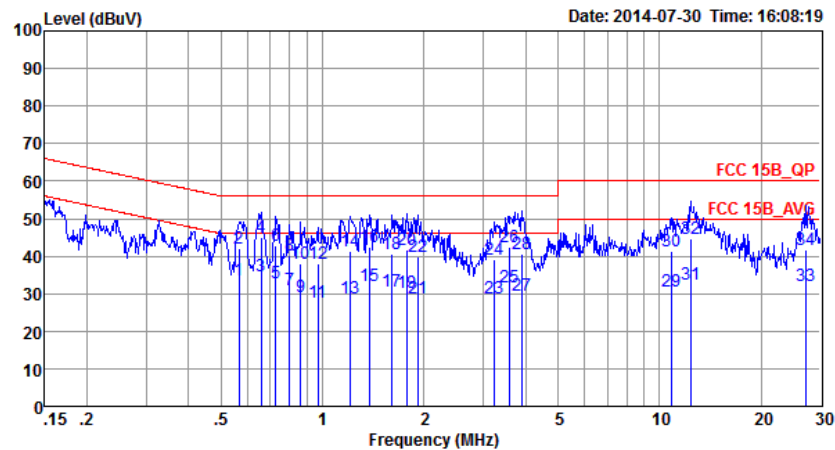
3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	21~22℃
Test Engineer :	Jack Ten	Relative Humidity :	41~42%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WCDMA II Idle + WLAN (5GHz) Idle + USB Cable (Data Link with Notebook) + Adapter		

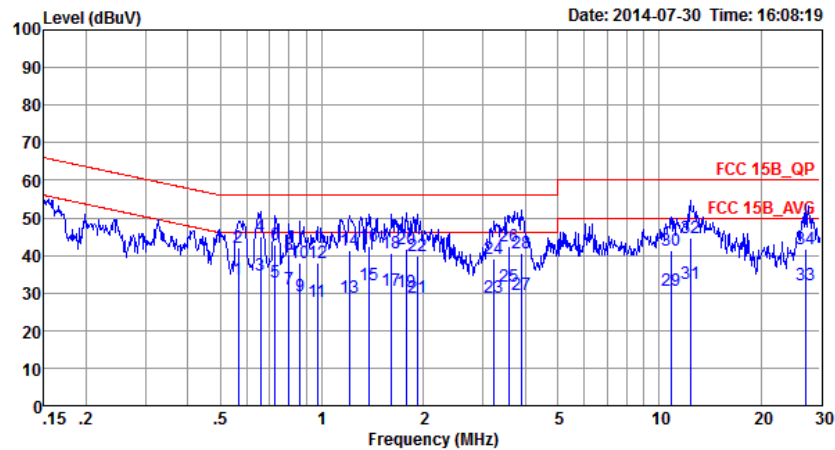


Site : CO01-SZ
Condition: FCC 15B_QP LISN_L_20140304 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.56	33.41	-12.59	46.00	23.00	0.26	10.15	Average
2	0.56	42.21	-13.79	56.00	31.80	0.26	10.15	QP
3	0.66	34.65	-11.35	46.00	24.30	0.20	10.15	Average
4 *	0.66	45.15	-10.85	56.00	34.80	0.20	10.15	QP
5	0.73	32.94	-13.06	46.00	22.60	0.19	10.15	Average
6	0.73	42.74	-13.26	56.00	32.40	0.19	10.15	QP
7	0.80	30.96	-15.04	46.00	20.60	0.21	10.15	Average
8	0.80	40.16	-15.84	56.00	29.80	0.21	10.15	QP
9	0.86	28.98	-17.02	46.00	18.60	0.23	10.15	Average
10	0.86	37.88	-18.12	56.00	27.50	0.23	10.15	QP
11	0.97	27.80	-18.20	46.00	17.40	0.25	10.15	Average
12	0.97	37.90	-18.10	56.00	27.50	0.25	10.15	QP
13	1.21	28.71	-17.29	46.00	18.30	0.25	10.16	Average
14	1.21	41.31	-14.69	56.00	30.90	0.25	10.16	QP
15	1.38	32.11	-13.89	46.00	21.70	0.24	10.17	Average
16	1.38	42.41	-13.59	56.00	32.00	0.24	10.17	QP
17	1.61	30.71	-15.29	46.00	20.30	0.23	10.18	Average
18	1.61	40.71	-15.29	56.00	30.30	0.23	10.18	QP
19	1.78	30.31	-15.69	46.00	19.90	0.23	10.18	Average
20	1.78	41.61	-14.39	56.00	31.20	0.23	10.18	QP
21	1.93	28.91	-17.09	46.00	18.50	0.22	10.19	Average
22	1.93	40.01	-15.99	56.00	29.60	0.22	10.19	QP
23	3.24	28.84	-17.16	46.00	18.29	0.33	10.22	Average
24	3.24	39.24	-16.76	56.00	28.69	0.33	10.22	QP
25	3.60	31.57	-14.43	46.00	21.00	0.35	10.22	Average
26	3.60	42.47	-13.53	56.00	31.90	0.35	10.22	QP
27	3.90	29.69	-16.31	46.00	19.09	0.37	10.23	Average
28	3.90	40.59	-15.41	56.00	29.99	0.37	10.23	QP
29	10.85	30.57	-19.43	50.00	19.40	0.81	10.36	Average



Test Mode :	Mode 2	Temperature :	21~22°C
Test Engineer :	Jack Ten	Relative Humidity :	41~42%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WCDMA II Idle + WLAN (5GHz) Idle + USB Cable (Data Link with Notebook) + Adapter		

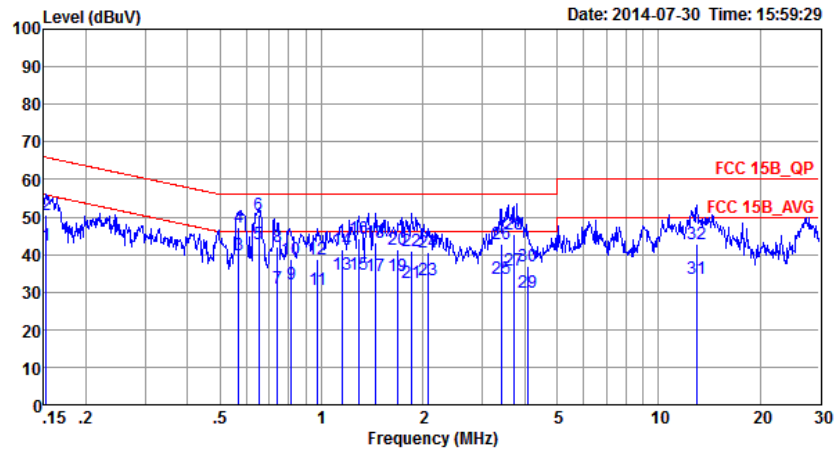


Site : CO01-SZ
Condition: FCC 15B_QP LISN_L_20140304 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
30	10.85	41.27	-18.73	60.00	30.10	0.81	10.36	QP
31	12.38	32.40	-17.60	50.00	20.90	1.07	10.43	Average
32	12.38	44.60	-15.40	60.00	33.10	1.07	10.43	QP
33	27.13	32.07	-17.93	50.00	18.09	3.39	10.59	Average
34	27.13	41.87	-18.13	60.00	27.89	3.39	10.59	QP



Test Mode :	Mode 2	Temperature :	21~22℃
Test Engineer :	Jack Ten	Relative Humidity :	41~42%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA II Idle + WLAN (5GHz) Idle + USB Cable (Data Link with Notebook) + Adapter		

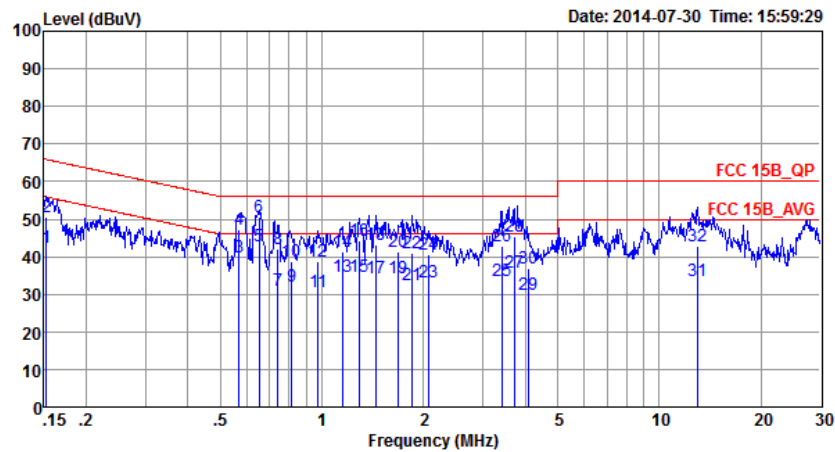


Site : CO01-SZ
Condition: FCC 15B_QP LISN_N_20140304 NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.15	42.49	-13.38	55.87	31.80	0.33	10.36	Average
2	0.15	50.39	-15.48	65.87	39.70	0.33	10.36	QP
3	0.57	40.00	-6.00	46.00	29.50	0.35	10.15	Average
4	0.57	47.10	-8.90	56.00	36.60	0.35	10.15	QP
5 *	0.65	42.83	-3.17	46.00	32.40	0.28	10.15	Average
6	0.65	50.43	-5.57	56.00	40.00	0.28	10.15	QP
7	0.74	31.11	-14.89	46.00	20.70	0.26	10.15	Average
8	0.74	41.91	-14.09	56.00	31.50	0.26	10.15	QP
9	0.81	32.23	-13.77	46.00	21.80	0.28	10.15	Average
10	0.81	38.63	-17.37	56.00	28.20	0.28	10.15	QP
11	0.97	30.67	-15.33	46.00	20.20	0.32	10.15	Average
12	0.97	38.67	-17.33	56.00	28.20	0.32	10.15	QP
13	1.15	34.80	-11.20	46.00	24.30	0.34	10.16	Average
14	1.15	41.50	-14.50	56.00	31.00	0.34	10.16	QP
15	1.29	34.71	-11.29	46.00	24.21	0.34	10.16	Average
16	1.29	44.21	-11.79	56.00	33.71	0.34	10.16	QP
17	1.45	34.32	-11.68	46.00	23.80	0.35	10.17	Average
18	1.45	43.22	-12.78	56.00	32.70	0.35	10.17	QP
19	1.69	34.34	-11.66	46.00	23.80	0.36	10.18	Average
20	1.69	41.24	-14.76	56.00	30.70	0.36	10.18	QP
21	1.85	32.65	-13.35	46.00	22.10	0.37	10.18	Average
22	1.85	41.05	-14.95	56.00	30.50	0.37	10.18	QP
23	2.07	33.16	-12.84	46.00	22.60	0.37	10.19	Average
24	2.07	40.46	-15.54	56.00	29.90	0.37	10.19	QP
25	3.42	33.66	-12.34	46.00	23.00	0.44	10.22	Average
26	3.42	42.86	-13.14	56.00	32.20	0.44	10.22	QP
27	3.72	35.88	-10.12	46.00	25.21	0.45	10.22	Average
28	3.72	45.28	-10.72	56.00	34.61	0.45	10.22	QP
29	4.11	29.79	-16.21	46.00	19.10	0.46	10.23	Average



Test Mode :	Mode 2	Temperature :	21~22℃
Test Engineer :	Jack Ten	Relative Humidity :	41~42%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WCDMA II Idle + WLAN (5GHz) Idle + USB Cable (Data Link with Notebook) + Adapter		



Site : CO01-SZ
Condition: FCC 15B_QP LISN_N_20140304 NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
30	4.11	36.89	-19.11	56.00	26.20	0.46	10.23	QP
31	12.99	33.55	-16.45	50.00	21.79	1.30	10.46	Average
32	12.99	42.95	-17.05	60.00	31.19	1.30	10.46	QP

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

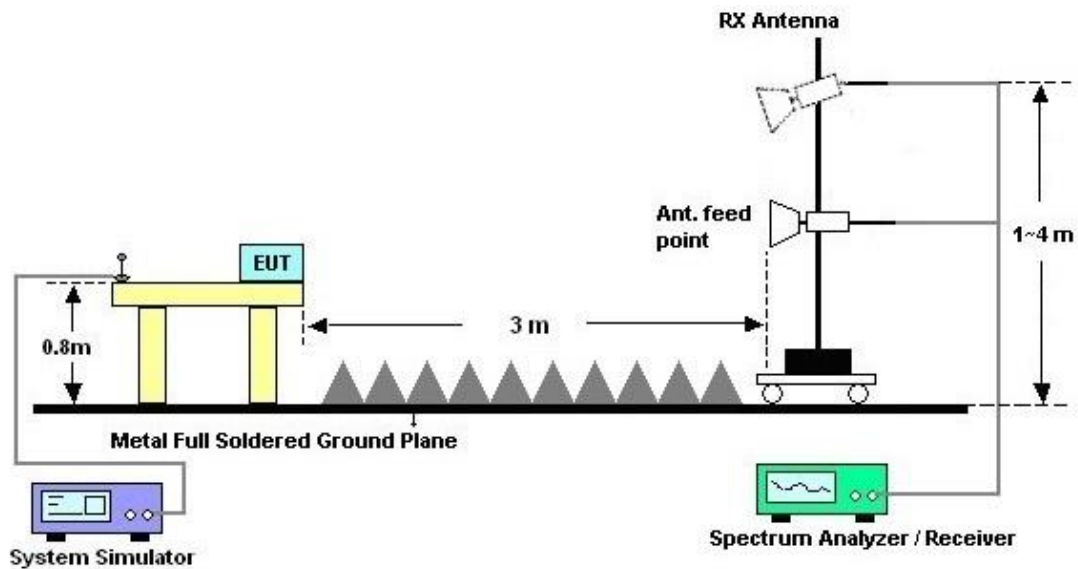
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna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

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz

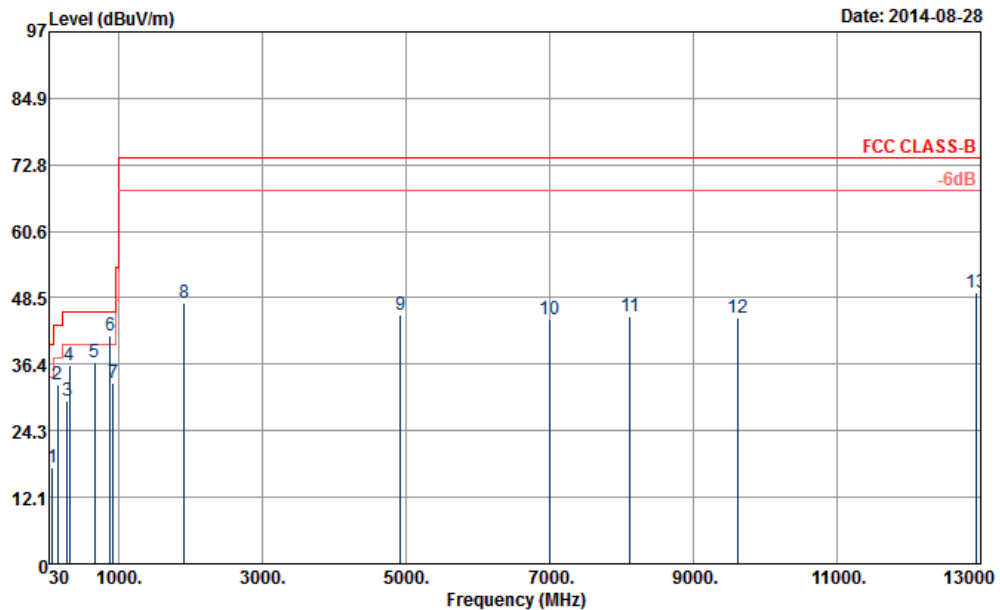


For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 1	Temperature :	20~22°C
Test Engineer :	Ziv Huang	Relative Humidity :	46~48%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	GSM850 Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Adapter		
Remark :	#6 is system simulator signal which can be ignored.		



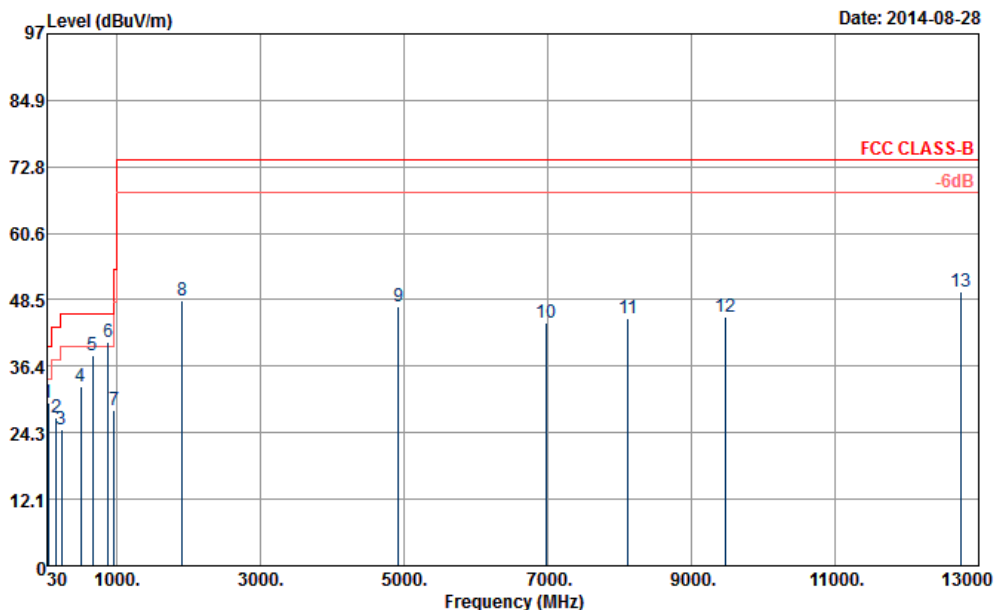
Site : 03CH06-HY
Condition : FCC CLASS-B 3m HF-ANT_583_140731 HORIZONTAL

Power : 120Vac/60Hz
Mode : Mode 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	72.66	17.44	-22.56	40.00	41.76	6.50	0.95	31.77	---	---	Peak
2	152.85	32.67	-10.83	43.50	52.64	10.40	1.38	31.75	---	---	Peak
3	281.64	29.70	-16.30	46.00	46.77	12.82	1.84	31.73	---	---	Peak
4	310.50	36.13	-9.87	46.00	52.52	13.40	1.94	31.73	---	---	Peak
5	665.40	36.63	-9.37	46.00	46.38	19.45	2.83	32.03	130	10	Peak
6	881.40	41.66			49.05	20.90	3.32	31.61	---	---	Peak
7	926.50	32.95	-13.05	46.00	39.72	21.16	3.36	31.29	---	---	Peak
8	1914.00	47.52	-26.48	74.00	71.58	31.08	5.34	60.48	---	---	Peak
9	4926.00	45.47	-28.53	74.00	62.66	34.44	8.94	60.57	---	---	Peak
10	6998.00	44.56	-29.44	74.00	58.01	35.80	11.15	60.40	---	---	Peak
11	8114.00	45.02	-28.98	74.00	56.61	35.76	12.31	59.66	---	---	Peak
12	9612.00	44.80	-29.20	74.00	56.18	36.62	13.12	61.12	---	---	Peak
13	12942.00	49.36	-24.64	74.00	54.08	39.47	15.96	60.15	100	350	Peak



Test Mode :	Mode 1	Temperature :	20~22°C
Test Engineer :	Ziv Huang	Relative Humidity :	46~48%
Test Distance :	3m	Polarization :	Vertical
Function Type :	GSM850 Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + Adapter		
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
Mode : Mode 1

Mode	Mode 1		Over	Limit	ReadAntenna		Cable	Preamp	A/Pos	T/Pos	Remark
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor			
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	48.36	29.64	-10.36	40.00	51.90	8.73	0.79	31.78	---	---	Peak
2	162.84	27.14	-16.36	43.50	47.39	9.98	1.52	31.75	---	---	Peak
3	233.04	24.92	-21.08	46.00	44.44	10.56	1.66	31.74	---	---	Peak
4	499.50	32.73	-13.27	46.00	44.39	17.79	2.48	31.93	---	---	Peak
5	664.00	38.36	-7.64	46.00	48.11	19.45	2.83	32.03	124	0	Peak
6	881.40	40.76			48.15	20.90	3.32	31.61	---	---	Peak
7	959.40	28.49	-17.51	46.00	34.73	21.39	3.35	30.98	---	---	Peak
8	1914.00	48.50	-25.50	74.00	72.56	31.08	5.34	60.48	---	---	Peak
9	4924.00	47.26	-26.74	74.00	64.45	34.44	8.94	60.57	---	---	Peak
10	6980.00	44.35	-29.65	74.00	57.80	35.80	11.15	60.40	---	---	Peak
11	8116.00	45.24	-28.76	74.00	56.83	35.75	12.31	59.65	---	---	Peak
12	9472.00	45.50	-28.50	74.00	56.62	36.47	13.46	61.05	---	---	Peak
13	12744.00	50.06	-23.94	74.00	54.85	39.40	15.81	60.00	100	1	Peak



4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
ESCIO TEST Receiver	R&S	ESCI	100724	9kHz~3GHz	Feb. 21, 2014	Jul. 30, 2014	Feb. 20, 2015	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Mar. 04, 2014	Jul. 30, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Mar. 04, 2014	Jul. 30, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Dec. 17, 201	Jul. 30, 2014	Dec. 16, 2014	Conduction (CO01-SZ)
Spectrum Analyzer	R&S	FSP30	101067	9kHz ~ 30GHz	Nov. 20, 2013	Aug. 28, 2014	Nov. 19, 2014	Radiation (03CH06-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211030	9kHz ~ 26.5GHz	Dec. 02, 2013	Aug. 28, 2014	Dec. 01, 2014	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESVS10	834468/0003	20MHz ~ 1000MHz	May 06, 2014	Aug. 28, 2014	May 05, 2015	Radiation (03CH06-HY)
Bilog Antenna	Schaffner	CBL6112B	2885	30MHz ~ 2GHz	Oct. 10, 2013	Aug. 28, 2014	Oct. 09, 2014	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Jul. 24, 2014	Aug. 28, 2014	Jul. 23, 2015	Radiation (03CH06-HY)
Amplifier	SONOMA	310N	186713	9kHz ~ 1GHz	Apr. 16, 2014	Aug. 28, 2014	Apr. 15, 2015	Radiation (03CH06-HY)
Preamplifier	EMCI	EMC051845	SN980048	1GHz ~ 18GHz	Jul. 17, 2014	Aug. 28, 2014	Jul. 16, 2015	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	Aug. 28, 2014	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1 m ~ 4 m	N/A	Aug. 28, 2014	N/A	Radiation (03CH06-HY)



5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.26
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.50
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