FCC Test Report

APPLICANT : TCL Communication Ltd.
EQUIPMENT : LTE USB Modem/4G AP
BRAND NAME : ALCATEL ONETOUCH

MODEL NAME : Y859NC
MARKETING NAME : Link 4 II

FCC ID : 2ACCJB022

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION: Certification

The product was received on Jun. 19, 2015 and testing was completed on Jul. 28, 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 Win

Approved by: Jones Tsai / Manager

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 No.: FC561905

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC561905	Rev. 01	Initial issue of report	Aug. 04, 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	8.61 dB at
					0.430 MHz
					Under limit
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	7.24 dB at
					184.980 MHz

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1. General Description

1.1. Applicant

TCL Communication Ltd.

5F, C-Tower, No.232, Liangjing Road, Zhangjiang High-tech Park, Pudong, Shanghai, China

1.2. Manufacturer

TCL Mobile Communication Co. Ltd. Huizhou

70 Huifeng 4rd., ZhongKai High-Technology Development District, Huizhou, Guangdong, P.R.C. 516006

1.3. Product Feature of Equipment Under Test

	Product Feature
Equipment	LTE USB Modem/4G AP
Brand Name	ALCATEL ONETOUCH
Model Name	Y859NC
Marketing Name	Link 4 II
FCC ID	2ACCJB022
	GPRS/EGPRS/WCDMA/HSPA/
EUT supports Radios application	HSPA+(Downlink Only)/DC-HSDPA/LTE/
	WLAN 2.4GHz 802.11b/g/n HT20
IMEI Code	Radiation: 014471000003274
INCICOGE	Conduction: 014471000000239
HW Version	v3.0
SW Version	Y859_00_03.20_06_20150612_2G1G
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.

SPORTON INTERNATIONAL (SHENZHEN) INC.

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1.4. Product Specification subjective to this standard

Product Specification subjective to this standard			
	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz		
	WCDMA Band V: 826.4 MHz ~ 846.6 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 ~ 1909.3 MHz		
	LTE Band 4 : 1710.7 MHz ~ 1734.3 MHz		
	LTE Band 7 :2502.5 MHz ~ 2567.5 MHz		
	LTE Band 17 : 706.5 MHz ~ 713.5 MHz		
	802.11b/g/n: 2412 MHz ~ 2462 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 II: 1932.4 MHz ~ 1987.6 MHz		
	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz		
Rx Frequency	LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz		
	LTE Band 4 : 2110.7 MHz ~ 2134.3 MHz		
	LTE Band 7 : 2622.5MHz ~ 2687.5 MHz		
	LTE Band 17 : 736.5 MHz ~ 743.5 MHz		
	802.11b/g/n: 2412 MHz ~ 2462 MHz		
	WWAN : Internal Antenna		
Antenna Type	WLAN : Internal Antenna		
	GPRS: GMSK		
	EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK		
	WCDMA: QPSK (Uplink)		
	HSDPA/DC-HSDPA: QPSK (Uplink)		
	HSUPA: QPSK (Uplink)		
Type of Modulation	HSPA+: 16QAM (Downlink Only)		
	DC-HSDPA: 64QAM		
	LTE: QPSK / 16QAM		
	802.11b: DSSS (DBPSK / DQPSK / CCK)		
	802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM)		

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1.5. Specification of Accessory

	Specification of Accessory					
	Brand Name	ALCATEL onetouch	Model Name	UC11US		
AC Adapter 1	Power Rating	I/P: 100-240Vac, 200mA, C	D/P: 5Vdc, 100	0mA		
	P/N	CBA0057AG0C2				
	Brand Name	ALCATEL onetouch	Model Name	UC11AU		
AC Adapter 2	Power Rating	I/P: 100-240Vac, 200mA, C	D/P: 5Vdc, 100	0mA		
	P/N	CBA0057AC0C2				
	Brand Name	ALCATEL onetouch	Model Name	UC11AR		
AC Adapter 3	Power Rating	I/P: 100-240Vac, 200mA, O/P: 5Vdc, 1000mA				
	P/N	CBA0057AH0C2				
	Brand Name	ALCATEL onetouch	Model Name	UC11EU		
AC Adapter 4	Power Rating	I/P: 100-240Vac, 200mA, O/P: 5Vdc, 1000mA				
	P/N	CBA0057AM0C2				
	Brand Name	ALCATEL onetouch	Model Name	UC11EU		
AC Adapter 5	Power Rating	I/P: 100-240Vac, 200mA, O/P: 5Vdc, 1000mA				
	P/N	CBA0057AA0C2				
	Brand Name	ALCATEL onetouch	Model Name	TLi018D1		
Battery	Power Rating	3.8Vdc, 1800mAh				
	P/N	B1800011C110F1ZW				
USB Cable	Brand Name	N/A	Model Name	N/A		
USB Cable	Signal Line Type	1.0m shielded cable, without	ut ferrite 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,		
	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 (SHENZHEN) INC.		
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China		
	TEL: +86-755- 3320-2398		
Toot Site No	Sporton Site No. FCC Registration No.		
Test Site No.	03CH01-SZ	831040	

Note: The test site complies with ANSI C63.4 2009 requirement.

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	EMI	
			RE<1G	RE≥1G	
1.	Charging Mode (EUT with adapter)	\boxtimes	\boxtimes	Note 1	
2.	Data application transferred mode (EUT with notebook)	\boxtimes	\boxtimes	\boxtimes	

Abbreviations:

EMI AC: AC conducted emissions

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

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

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

Remark: For signal above 1GHz, the worst case was test item 2.

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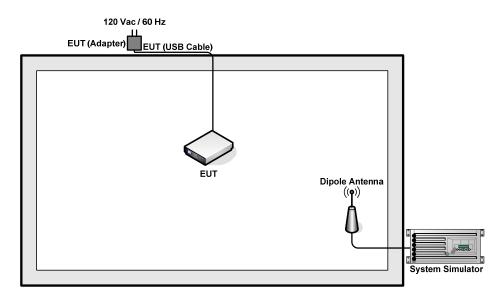
Test Items	EUT Configure Mode	Function Type
AC Conducted	1/2	Mode 1: GPRS850 Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Battery <fig.1></fig.1>
Emission	1/2	Mode 2: LTE Band 7 Idle + WLAN Idle + Battery + USB Cable (Data Link with Notebook) <fig.2></fig.2>
Radiated	d 40	Mode 1: GPRS850 Idle + WLAN Idle + USB Cable (Charging from Adapter 1) + Battery <fig.1></fig.1>
Emissions < 1GHz	1/2	Mode 2: LTE Band 7 Idle + WLAN Idle + Battery + USB Cable (Data Link with Notebook) <fig.2></fig.2>
Radiated Emissions ≥ 1GHz	2	Mode 1: LTE Band 7 Idle + WLAN Idle + Battery + USB Cable (Data Link with Notebook) <fig.2></fig.2>

Remark:

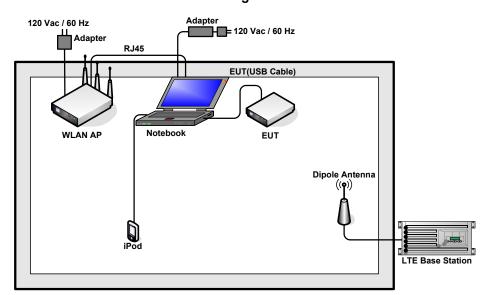
- 1. The worst case of AC is mode 1; and the USB Link mode of AC is mode 2; the test data of these modes are reported.
- 2. The worst case of RE < 1G is mode 2; only the test data of these modes are reported.
- 3. Link with notebook means data application transferred mode between EUT and notebook.

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2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

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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	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	FCC DoC	Shielded, 1.5 m	N/A
3.	WLAN AP	D-Link	DIR-615	N/A	N/A	Unshielded, 1.8 m
4.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
5.	iPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Shielded, 1.2 m	N/A
6.	iPod	Apple	MC525 ZP/A	FCC DoC	Shielded, 1.0 m	N/A
7.	SD Card	SanDisk	4G Class 4	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in GPRS 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.

At the same time, the EUT was attached to the Notebook, 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.

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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

^{*}Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

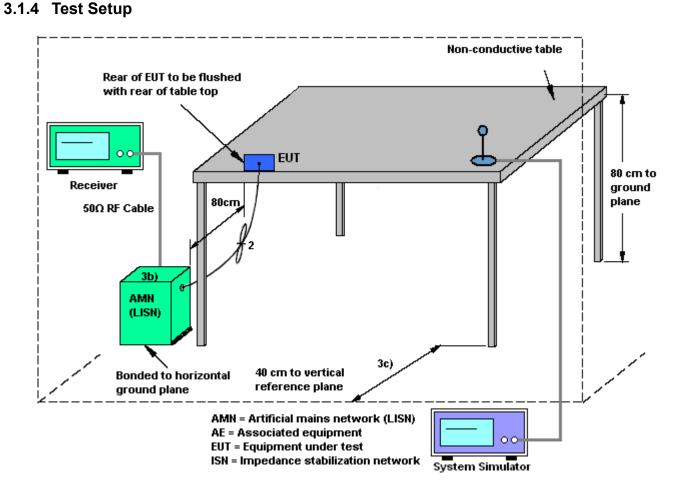
The measuring equipment is listed in the section 4 of this test report.

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.

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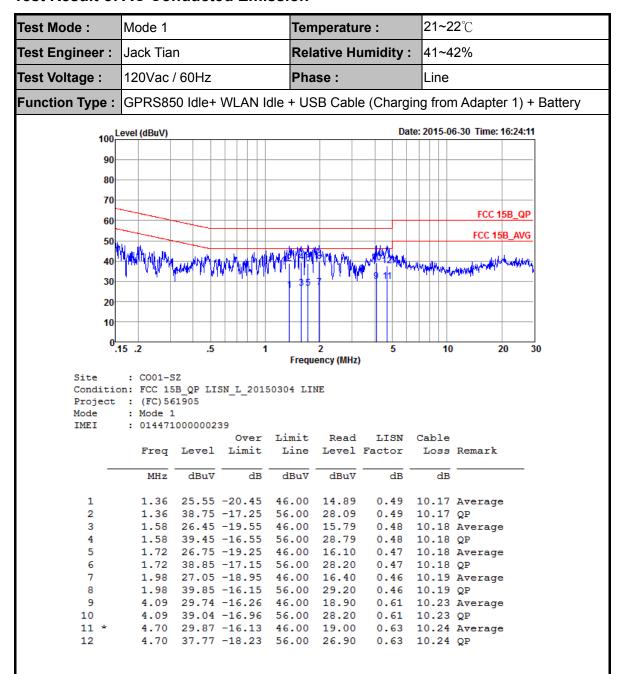
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3.1.5 Test Result of AC Conducted Emission



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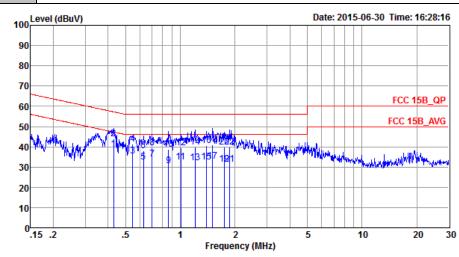


 Test Mode :
 Mode 1
 Temperature :
 21~22℃

 Test Engineer :
 Jack Tian
 Relative Humidity :
 41~42%

 Test Voltage :
 120Vac / 60Hz
 Phase :
 Neutral

Function Type: GPRS850 Idle+ WLAN Idle + USB Cable (Charging from Adapter 1) + Battery



Site : CO01-SZ

Condition: FCC 15B_QP LISN_N_20150304 NEUTRAL

Project : (FC)561905 Mode : Mode 1

IMEI : 014471000000239

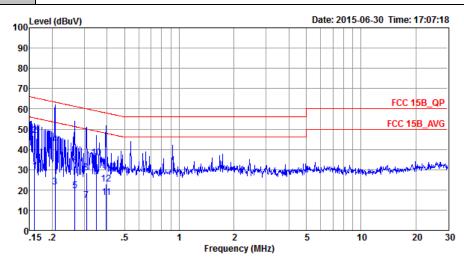
			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
_	MHz	dBu∀	dB	dBu∀	dBuV	dB	dB	
1 *	0.43	38.63	-8.61	47.24	27.90	0.57	10.16	Average
2	0.43	43.93	-13.31	57.24	33.20	0.57	10.16	QP
3	0.55	35.55	-10.45	46.00	24.81	0.59	10.15	Average
4	0.55	41.35	-14.65	56.00	30.61	0.59	10.15	QP
5	0.63	32.32	-13.68	46.00	21.60	0.57	10.15	Average
6	0.63	38.02	-17.98	56.00	27.30	0.57	10.15	QP
7	0.70	33.90	-12.10	46.00	23.20	0.55	10.15	Average
8	0.70	39.60	-16.40	56.00	28.90	0.55	10.15	QP
9	0.86	30.71	-15.29	46.00	20.00	0.56	10.15	Average
10	0.86	38.91	-17.09	56.00	28.20	0.56	10.15	QP
11	1.00	32.51	-13.49	46.00	21.80	0.56	10.15	Average
12	1.00	39.51	-16.49	56.00	28.80	0.56		
13	1.20	32.22	-13.78	46.00	21.50	0.56	10.16	Average
14	1.20	39.82	-16.18	56.00	29.10	0.56		
15	1.40	32.63	-13.37	46.00	21.90	0.56	10.17	Average
16	1.40	40.63	-15.37	56.00	29.90	0.56	10.17	QP
17	1.50	32.74	-13.26	46.00	22.00	0.57	10.17	Average
18	1.50	40.94	-15.06	56.00	30.20	0.57	10.17	QP
19	1.74	31.55	-14.45	46.00	20.80	0.57	10.18	Average
20	1.74	39.95	-16.05	56.00	29.20	0.57	10.18	QP
21	1.86	31.35	-14.65	46.00	20.60	0.57	10.18	Average
22	1.86	39.75	-16.25	56.00	29.00	0.57	10.18	

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Test Mode :	Mode 2	Temperature :	21~22 ℃
Test Engineer :	Jack Tian	Relative Humidity :	41~42%
Test Voltage :	120Vac / 60Hz	Phase :	Line

Function Type: LTE Band 7 Idle + WLAN Idle + Battery + USB Cable (Data Link with Notebook)



: CO01-SZ

Condition: FCC 15B_QP LISN_L_20150304 LINE

Project : (FC) 561905 Mode : Mode 2

: 014471000000239 IMEI

	. 0111/1	.0000002						
			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBu∀	dB	dBu∇	dBu∀	dB	dB	
1	0.16	29.20	-26.27	55.47	18.40	0.45	10.35	Average
2 *	0.16	46.70	-18.77	65.47	35.90	0.45	10.35	QP
3	0.21	21.31	-32.01	53.32	10.50	0.52	10.29	Average
4	0.21	42.41	-20.91	63.32	31.60	0.52	10.29	QP
5	0.27	19.68	-31.57	51.25	8.89	0.56	10.23	Average
6	0.27	31.78	-29.47	61.25	20.99	0.56	10.23	QP
7	0.31	14.76	-35.26	50.02	3.99	0.57	10.20	Average
8	0.31	28.46	-31.56	60.02	17.69	0.57	10.20	QP
9	0.35	27.64	-21.36	49.00	16.90	0.55	10.19	Average
10	0.35	35.84	-23.16	59.00	25.10	0.55	10.19	QP
11	0.40	16.41	-31.54	47.95	5.70	0.54	10.17	Average
12	0.40	23.01	-34.94	57.95	12.30	0.54	10.17	QP

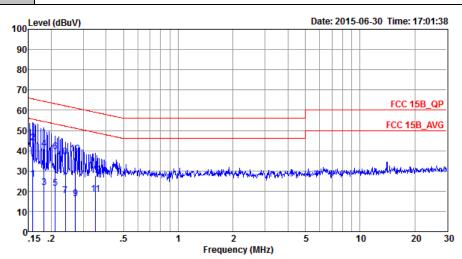
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Test Mode :	Mode 2	Temperature :	21~22℃
Test Engineer :	Jack Tian	Relative Humidity :	41~42%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral

Function Type: LTE Band 7 Idle + WLAN Idle + Battery + USB Cable (Data Link with Notebook)



Site : CO01-SZ

Condition: FCC 15B_QP LISN_N_20150304 NEUTRAL

Project : (FC)561905 Mode : Mode 2

IMEI : 014471000000239

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBu∀	dB	dBu∀	dBu∀	dB	dB	
1	0.16	25.81	-29.75	55.56	15.00	0.46	10.35	Average
2 *	0.16	44.01	-21.55	65.56	33.20	0.46	10.35	QP
3	0.18	21.71	-32.66	54.37	10.91	0.49	10.31	Average
4	0.18	40.81	-23.56	64.37	30.01	0.49	10.31	QP
5	0.21	21.30	-31.88	53.18	10.50	0.52	10.28	Average
6	0.21	39.50	-23.68	63.18	28.70	0.52	10.28	QP
7	0.24	17.60	-34.53	52.13	6.80	0.55	10.25	Average
8	0.24	36.90	-25.23	62.13	26.10	0.55	10.25	QP
9	0.27	16.19	-34.88	51.07	5.40	0.57	10.22	Average
10	0.27	38.49	-22.58	61.07	27.70	0.57	10.22	QP
11	0.35	18.55	-30.41	48.96	7.80	0.57	10.18	Average
12	0.35	27.75	-31.21	58.96	17.00	0.57	10.18	QP

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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	Field Strength	Measurement Distance		
(MHz)	(microvolts/meter)	(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

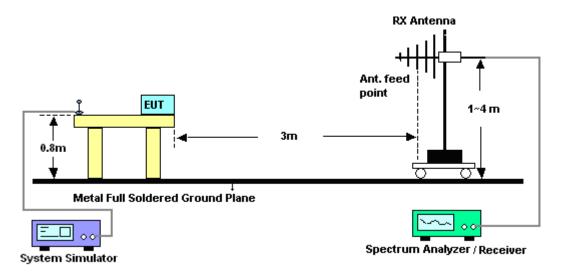
- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The 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 μ V/m) = 20 log Emission level (μ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

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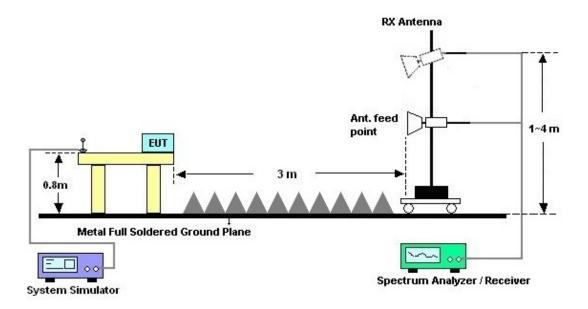
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3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



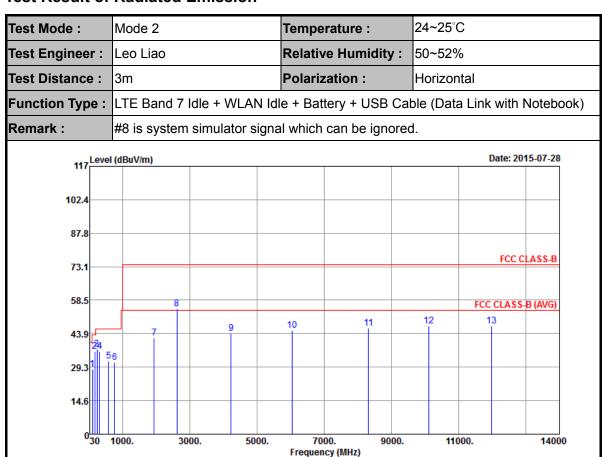
For radiated emissions above 1GHz



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3.2.5. Test Result of Radiated Emission



Site : 03CH01-SZ

Condition : FCC CLASS-B 3m LF_ANT_141107 HORIZONTAL

Project : (FC) 561905 Mode : Mode 2 IMEI : 014471000003274

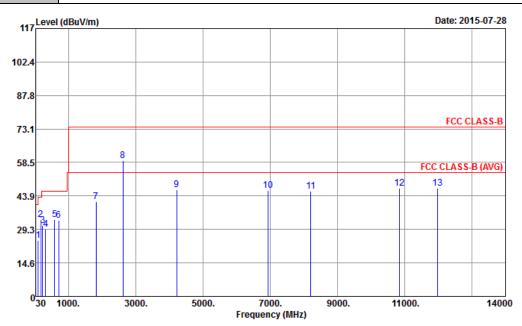
	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	111.27	28.33	-15.17	43.50	39.07	13.36	1.62	25.72			Peak
2	184.98	36.26	-7.24	43.50	47.96	11.52	2.11	25.33	100	20	Peak
3	251.13	37.25	-8.75	46.00	47.48	12.43	2.48	25.14			Peak
4	324.50	36.14	-9.86	46.00	44.09	14.43	2.85	25.23			Peak
5	586.30	31.83	-14.17	46.00	34.70	19.66	3.90	26.43			Peak
6	764.10	31.15	-14.85	46.00	31.19	21.71	4.49	26.24			Peak
7	1946.00	42.03	-31.97	74.00	53.53	31.74	7.77	51.01			Peak
8	2624.00	54.86			63.49	32.81	9.11	50.55			Peak
9	4232.00	44.05	-29.95	74.00	49.46	34.04	12.34	51.79			Peak
10	6054.00	45.40	-28.60	74.00	45.43	35.85	13.85	49.73			Peak
11	8318.00	46.30	-27.70	74.00	43.50	36.31	16.23	49.74			Peak
12	10108.00	47.10	-26.90	74.00	41.07	38.19	17.88	50.04			Peak
13	11988.00	47.22	-26.78	74.00	39.49	39.49	18.19	49.95	150	40	Peak

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Report No. : FC561905

Test Mode :	Mode 2	Temperature :	24~25°C					
Test Engineer :	Leo Liao	Relative Humidity :	50~52%					
Test Distance :	3m	Vertical						
Function Type :	LTE Band 7 Idle + WLAN Idle + Battery + USB Cable (Data Link with Notebook)							
Remark :	#8 is system simulator signa	I which can be ignored	1.					



Site Condition : 03CH01-SZ : FCC CLASS-B 3m LF_ANT_141107 VERTICAL

(FC) 561905 Project Mode Mode 2 IMEI : 014471000003274

	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	106.14	24.53	-18.97	43.50	36.16	12.53	1.59	25.75			Peak
2	182.01	33.43	-10.07	43.50	45.17	11.51	2.09	25.34	158	60	Peak
3	239.79	30.91	-15.09	46.00	41.43	12.23	2.42	25.17			Peak
4	329.40	29.24	-16.76	46.00	37.16	14.49	2.86	25.27			Peak
5	586.30	33.73	-12.27	46.00	36.60	19.66	3.90	26.43			Peak
6	715.10	33.38	-12.62	46.00	34.80	20.62	4.30	26.34			Peak
7	1826.00	41.42	-32.58	74.00	54.31	30.67	7.38	50.94			Peak
8	2624.00	59.36			67.99	32.81	9.11	50.55			Peak
9	4218.00	46.65	-27.35	74.00	52.07	34.03	12.34	51.79			Peak
10	6946.00	46.21	-27.79	74.00	46.41	36.12	14.50	50.82			Peak
11	8214.00	45.97	-28.03	74.00	43.37	36.38	16.17	49.95			Peak
12	10836.00	47.34	-26.66	74.00	41.92	38.71	17.39	50.68	180	90	Peak
13	11970.00	47.23	-26.77	74.00	39.41	39.48	18.30	49.96			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&SA	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2015	Jul. 28, 2015	May 25, 2016	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz~2GHz	Nov. 07, 2014	Jul. 28, 2015	Nov. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	Jul. 28, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz / 30 dB	Jan. 28, 2015	Jul. 28, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5G Hz	Jan. 28, 2015	Jul. 28, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jul. 28, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jul. 28, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jul. 28, 2015	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESCI7	100724	9kHz~3GHz	Jan. 28, 2015	Jun. 30, 2015	Jan. 27, 2016	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	103892	9kHz~30MHz	Feb. 02, 2015	Jun. 30, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	AN3016	16850	9kHz~30MHz	Feb. 02, 2015	Jun. 30, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Sep. 29, 2014	Jun. 30, 2015	Sep. 28, 2015	Conduction (CO01-SZ)
Pulse Limiter	COM-POWER	LIT-153 Transient Limiter	53139	150kHz~30MHz	Oct. 24, 2014	Jun. 30, 2015	Oct. 23, 2015	Conduction (CO01-SZ)

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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

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

Measuring Uncertainty for a Level of	0.040
Confidence of 95% (U = 2Uc(y))	3.9dB

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