FCC Test Report

APPLICANT : CT Asia (HK) Ltd.

EQUIPMENT: Smartphone

BRAND NAME : BLU

MODEL NAME : DASH M

FCC ID : YHLBLUDASHM

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION : Certification

The product was received on Aug. 27, 2015 and testing was completed on Sep. 09, 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

Lunis 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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC582711	Rev. 01	Initial issue of report	Sep. 21, 2015

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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 6.42 dB at 2.310 MHz
3.2	15.109	ICES003 Section 6.2	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 3.56 dB at 41.340 MHz for Quasi-Peak

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1. General Description

1.1. Applicant

CT Asia (HK) Ltd.

Unit1309-11,13th Floor 9 Wing Hong Street Cheung Sha Wan Kowloon, Hong Kong

1.2. Manufacturer

CT Asia (HK) Ltd.

Unit1309-11,13th Floor 9 Wing Hong Street Cheung Sha Wan Kowloon, Hong Kong

1.3. Product Feature of Equipment Under Test

Product Feature				
Equipment	Smartphone			
Brand Name BLU				
Model Name	DASH M			
FCC ID	YHLBLUDASHM			
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+(Downlink Only) WLAN 2.4GHz 802.11b/g/n HT20/HT40/ Bluetooth v3.0 + EDR/Bluetooth v4.0 LE			
IMEI Code	Conduction: 353919026821995/353924026821995 Radiation: 353919026822886/353924026822886			
HW Version	V1.0			
SW Version	BLU_D030U_V02_GENERIC			
EUT Stage	Pre-Production			

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				
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 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 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 WCDMA Band II: 412.4 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS: 1.57542 GHz			
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna GPS: 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) HSPA+: 16QAM(Downlink Only) 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE: GFSK Bluetooth (1Mbps): GFSK Bluetooth (2Mbps): \pi /4-DQPSK Bluetooth (3Mbps): 8-DPSK GPS: BPSK			

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1.5. Modification of EUT

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

1.6. Test Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.		
	1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili		
Test Site Location	Town, Nanshan District, Shenzhen, Guangdong, P. R. China		
rest 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.		
	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan		
Test Site Location	warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China		
	TEL: +86-755- 3320-2398		
Toot Site No	Sporton Site No.	FCC/IC Registration No.	
Test Site No.	03CH01-SZ	831040/4086F	

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
- IC ICES-003 Issue 5
- IC RSS-Gen Issue 4

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	\boxtimes
2.	Data application transferred mode	\boxtimes	\boxtimes	\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

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EUT Configure Mode	Function Type
	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera <fig.1></fig.1>
1/2	Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 <fig.1></fig.1>
	Mode 3: WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx <fig.2></fig.2>
	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera <fig.1></fig.1>
diated ns < 1GHz	Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 <fig.1></fig.1>
	Mode 3: WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx <fig.2></fig.2>
	Mode 1: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 <fig.1></fig.1>
SHz 1/2	Mode 2: WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx <fig.2></fig.2>
	Configure Mode 1/2

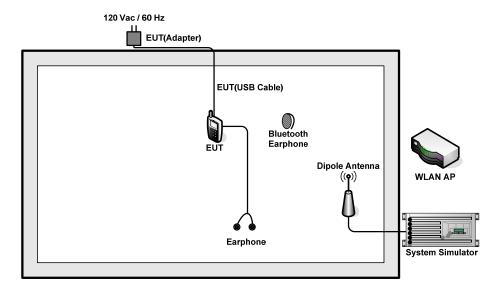
Remark:

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

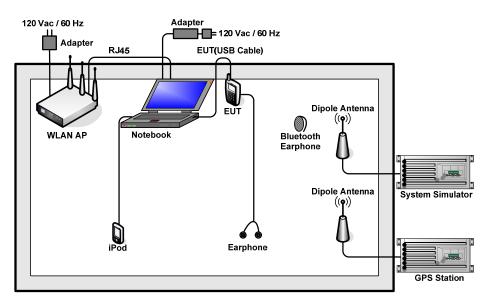
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2.2. Connection Diagram of Test System



<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	CMU200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
3.	Notebook	Lenovo	E540	PRC4	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
5.	WLAN AP	D-Link	DIR-615	N/A	N/A	Unshielded, 1.8 m
6.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
7.	WLAN AP	ASUSTek	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 2.7 m with Core
8.	iPod	Apple	MC525 ZP/A	FCC DoC	Shielded, 1.0 m	N/A
9.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
10.	IPod Earphone	Apple	MC690ZP/A	FCC DoC	N/A	N/A

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. Execute "GPS Test" to make the EUT receive continuous signals from GPS 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

^{*}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

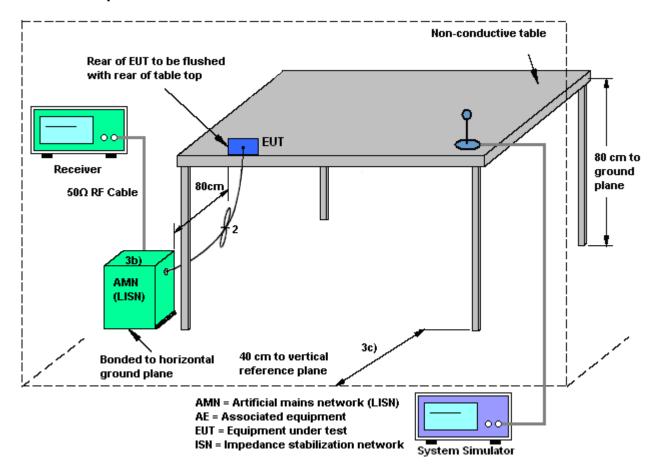
- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other 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.
- 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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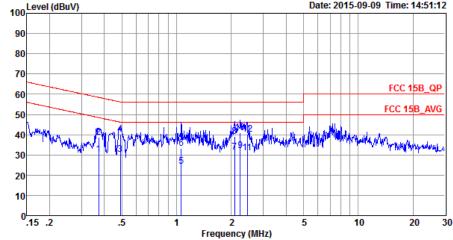
3.1.4 Test Setup



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3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	21~23℃		
Test Engineer :	Jacky Yang	Relative Humidity :	41~43%		
Test Voltage :	120Vac / 60Hz	Phase :	Line		
Function Type :	WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from				
Function Type :	Adapter) + Earphone + MPI	EG4			
100 ^L	evel (dBuV)	Date:	2015-09-09 Time: 14:51:12		
90					
80					



Site : CO01-SZ

Condition: FCC 15B_QP LISN_L_20150304 LINE

Project : (FC)582711 Mode : Mode 2

IMEI : 353919026821995/353924026821995

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBu∀	dB	dBu∀	dBu∀	dB	dB	
1	0.37	30.33	-18.10	48.43	19.60	0.55	10.18	Average
2	0.37	38.83	-19.60	58.43	28.10	0.55	10.18	QP
3	0.49	30.42	-15.72	46.14	19.60	0.66	10.16	Average
4	0.49	40.22	-15.92	56.14	29.40	0.66	10.16	QP
5	1.06	24.36	-21.64	46.00	13.70	0.51	10.15	Average
6	1.06	33.16	-22.84	56.00	22.50	0.51	10.15	QP
7	2.09	31.26	-14.74	46.00	20.60	0.47	10.19	Average
8	2.09	39.16	-16.84	56.00	28.50	0.47	10.19	QP
9 *	2.24	32.08	-13.92	46.00	21.41	0.48	10.19	Average
10	2.24	41.08	-14.92	56.00	30.41	0.48	10.19	QP
11	2.45	30.90	-15.10	46.00	20.20	0.50	10.20	Average
12	2.45	40.20	-15.80	56.00	29.50	0.50	10.20	QP

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21~23°C Test Mode: Mode 2 Temperature: Test Engineer: Jacky Yang **Relative Humidity:** 41~43% 120Vac / 60Hz Phase: Test Voltage: Neutral WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from **Function Type:** Adapter) + Earphone + MPEG4 100 Level (dBuV) Date: 2015-09-09 Time: 14:55:03 80 70 FCC 15B_QP 60 FCC 15B_AVG 50 40 30 20 10 .15 .2 10 20 30 Frequency (MHz) Site : CO01-SZ Condition: FCC 15B_QP LISN_N_20150304 NEUTRAL Project : (FC) 582711 Mode : Mode 2 IMEI : 353919026821995/353924026821995 Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark dBu∀ dB dBuV dBuV MHz dB dB 1 0.39 31.63 -16.49 48.12 20.91 0.55 10.17 Average 0.39 43.23 -14.89 58.12 0.55 10.17 QP 2 32.51 3 0.45 28.94 -17.95 46.89 18.20 0.58 10.16 Average 0.45 41.54 -15.35 56.89 30.80 0.48 31.86 -14.46 46.32 21.10 0.58 10.16 QP 4 0.60 10.16 Average 5 0.48 44.06 -12.26 56.32 33.30 0.60 10.16 QP 7 0.55 31.05 -14.95 46.00 20.31 0.59 10.15 Average 8 0.55 42.35 -13.65 56.00 31.61 0.59 10.15 QP 9 0.60 31.13 -14.87 46.00 20.40 0.58 10.15 Average 10 0.60 41.23 -14.77 56.00 30.50 0.58 10.15 QP 19.10 0.72 29.80 -16.20 46.00 11 0.55 10.15 Average 0.72 39.70 -16.30 56.00 29.00 0.55 10.15 QP 12 13 0.79 30.40 -15.60 46.00 19.70 0.55 10.15 Average 14 0.79 41.80 -14.20 56.00 31.10 0.55 10.15 QP 0.86 31.21 -14.79 46.00 20.50 0.56 10.15 Average 15 0.86 44.11 -11.89 56.00 33.40 0.56 10.15 QP 16 0.96 30.41 -15.59 46.00 19.70 0.96 43.31 -12.69 56.00 32.60 17 0.56 10.15 Average 18 0.56 10.15 QP 1.04 32.21 -13.79 46.00 21.50 19 0.56 10.15 Average

1.04 43.51 -12.49 56.00 32.80

20

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0.56 10.15 QP



Test Mode: Mode 2 Temperature: 21~23°C

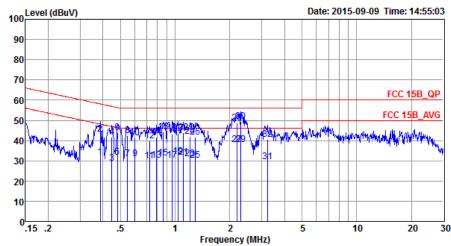
Test Engineer: Jacky Yang Relative Humidity: 41~43%

Test Voltage: 120Vac / 60Hz Phase: Neutral

WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from

WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4

Date: 2015-09-09 Time: 14:55:03



Site : CO01-SZ

Condition: FCC 15B_QP LISN_N_20150304 NEUTRAL

Project : (FC) 582711

Mode : Mode 2

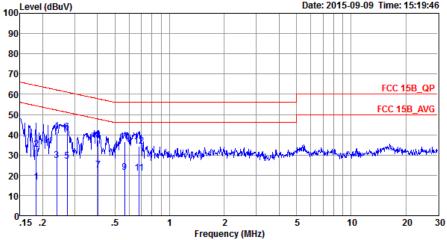
IMEI : 353919026821995/353924026821995

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBu∇	dB	dBu∇	dBu∀	dB	dB	
21	1.11	31.72	-14.28	46.00	21.00	0.56	10.16	Average
22	1.11	43.92	-12.08	56.00	33.20	0.56	10.16	QP
23	1.20	30.92	-15.08	46.00	20.20	0.56	10.16	Average
24	1.20	42.12	-13.88	56.00	31.40	0.56	10.16	QP
25	1.30	30.43	-15.57	46.00	19.71	0.56	10.16	Average
26	1.30	41.63	-14.37	56.00	30.91	0.56	10.16	QP
27	2.20	37.87	-8.13	46.00	27.10	0.58	10.19	Average
28	2.20	48.77	-7.23	56.00	38.00	0.58	10.19	QP
29	2.31	38.18	-7.82	46.00	27.40	0.58	10.20	Average
30 *	2.31	49.58	-6.42	56.00	38.80	0.58	10.20	QP
31	3.22	29.63	-16.37	46.00	18.80	0.61	10.22	Average
32	3.22	40.53	-15.47	56.00	29.70	0.61	10.22	QP

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21~23℃ Test Mode: Mode 3 Temperature: Test Engineer: Jacky Yang Relative Humidity: 41~43% Test Voltage: 120Vac / 60Hz Phase: Line WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + GPS Rx 100 Level (dBuV) Date: 2015-09-09 Time: 15:19:46 90



Site : CO01-SZ

Condition: FCC 15B_QP LISN_L_20150304 LINE

Project : (FC)582711 Mode : Mode 3

IMEI : 353919026821995/353924026821995

			Over	Limit	Read	TIN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBu∀	dBuV	dB	dB	
1	0.18	16.71	-37.57	54.28	5.91	0.49	10.31	Average
2	0.18	32.91	-31.37	64.28	22.11	0.49	10.31	QP
3	0.24	27.19	-24.94	52.13	16.40	0.54	10.25	Average
4	0.24	41.79	-20.34	62.13	31.00	0.54	10.25	QP
5	0.27	26.78	-24.25	51.03	16.00	0.56	10.22	Average
6	0.27	41.18	-19.85	61.03	30.40	0.56	10.22	QP
7	0.40	22.42	-25.35	47.77	11.71	0.54	10.17	Average
8	0.40	37.22	-20.55	57.77	26.51	0.54	10.17	QP
9	0.56	21.48	-24.52	46.00	10.71	0.62	10.15	Average
10 *	0.56	36.48	-19.52	56.00	25.71	0.62	10.15	QP
11	0.68	21.10	-24.90	46.00	10.40	0.55	10.15	Average
12	0.68	34.30	-21.70	56.00	23.60	0.55	10.15	QP

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21~23℃ Test Mode: Mode 3 Temperature: Test Engineer: Jacky Yang Relative Humidity: 41~43% 120Vac / 60Hz Phase: Test Voltage: Neutral WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + GPS Rx 100 Level (dBuV) Date: 2015-09-09 Time: 15:17:37 90 80 70 FCC 15B_QP 60 FCC 15B_AVG 50 40 30 20 10 .15 .2 2 10 20 30 Frequency (MHz) : CO01-SZ Condition: FCC 15B_QP LISN_N_20150304 NEUTRAL Project : (FC) 582711 Mode : Mode 3 TMET : 353919026821995/353924026821995 Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark dB dBuV dBuV MHz dBu∀ dB . dB 0.25 29.20 -22.62 51.82 18.41 0.55 10.24 Average 0.25 42.90 -18.92 61.82 32.11 0.55 10.24 QP 3 0.34 26.96 -22.13 49.09 16.20 0.57 10.19 Average 0.34 38.96 -20.13 59.09 28.20 0.40 22.92 -25.03 47.95 12.20 0.57 10.19 QP 0.55 10.17 Average 5 0.40 37.02 -20.93 57.95 26.30 0.55 10.17 QP

0.45 18.54 -28.35 46.89 7.80 0.45 33.74 -23.15 56.89 23.00

0.57 25.14 -20.86 46.00 14.40

0.57 39.64 -16.36 56.00 28.90 0.65 22.01 -23.99 46.00 11.30

0.65 36.61 -19.39 56.00 25.90

7

8

10 *

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12

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0.58 10.16 Average 0.58 10.16 QP

0.59 10.15 Average

0.59 10.15 QP 0.56 10.15 Average

0.56 10.15 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.
- 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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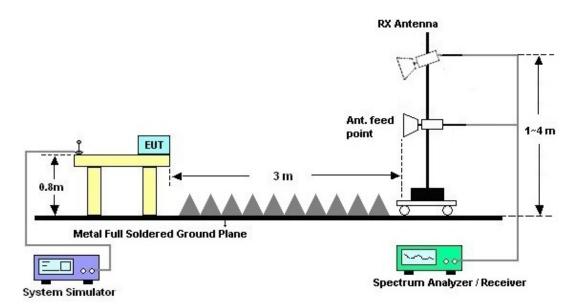
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3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz

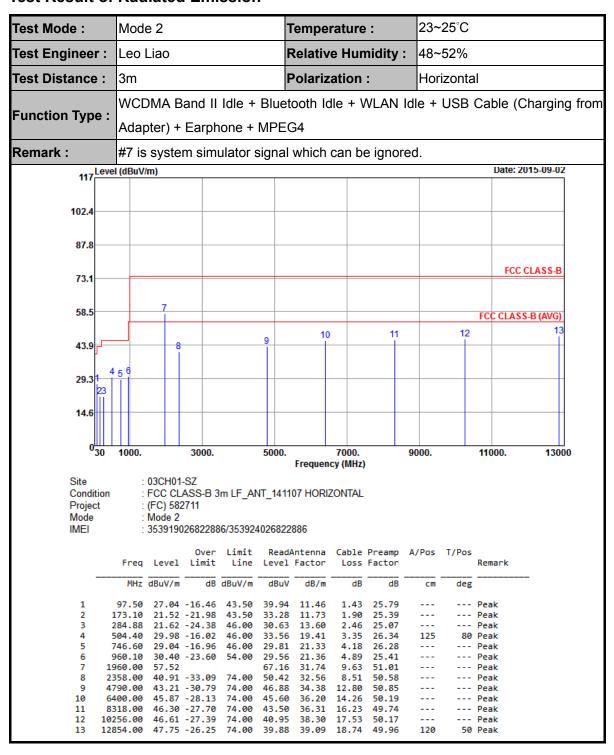


For radiated emissions above 1GHz



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3.2.5. Test Result of Radiated Emission



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Test Mode :	Mode 2		1	Tempe	rature	:	23~25°C			
Test Engineer :	Test Engineer : Leo Liao Relative H					nidity :	48~52%			
Test Distance :	3m		F	Polariz	ation	:	Vertica	ıl		
Function Type :		and II Idle + Earphone +			lle + V	VLAN IC	lle + US	SB (Cable (Ch	narging fror
Remark :	Remark: #7 is system simulator signal which can be ignored.									
117 Leve	l (dBuV/m)								Date: 201	5-09-02
102.4										
87.8										
73.1									FCC CI	ASS-B
58.5	7								FCC CLASS-I	B (AVG)
43.9	8	9		10		11		12		13
29.3 2 3 14.6	56									
030	1000.	3000.	5000.	Frequen	7000. cv (MHz)		0000.		11000.	13000
Site Condition Project Mode IMEI	: (FC) 58 : Mode 2	ASS-B 3m LF_AN	- 1026822	07 VERT	ICAL	Preamp #	A/Pos T/	Pos		
	Freq Level			Factor		Factor			Remark	
	MHz dBuV/m		dBuV	-	dB	dB		deg	on	
2 3 4 5	98.31 22.71 200.64 18.93 546.40 26.52 309.60 31.43	-3.56 40.00 -20.79 43.50 -24.57 43.50 -19.48 46.00 -14.57 46.00 -16.23 46.00	35.61 30.50 29.87 30.76	11.46 11.62 19.54 22.41	1.43 2.06 3.50 4.40	25.79 25.25 26.39 26.14			Peak Peak Peak Peak	
8 22 9 40 10 62	032.00 45.27 230.00 45.19	-29.65 74.00 -28.73 74.00 -28.81 74.00 -28.30 74.00	52.08 51.54 45.07	33.92 36.03	10.57 11.61 14.06	50.74 51.80 49.97			Peak Peak Peak Peak Peak	
12 102	270.00 46.48	-27.52 74.00 -26.29 74.00	40.86	38.31	17.50	50.19			Peak Peak	

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23~25°C Test Mode: Mode 3 Temperature: Test Engineer: Leo Liao **Relative Humidity:** 48~52% Polarization: Test Distance: 3m Horizontal WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + GPS Rx Remark: #7 is system simulator signal which can be ignored. 117 Level (dBuV/m) Date: 2015-09-07 102.4 87.8 FCC CLASS-B 73.1 58.5 FCC CLASS-B (AVG) 13 12 43.9 0<mark>3</mark>0 7000. 9000. 11000. 13000 1000. 3000. 5000. Frequency (MHz) Site : 03CH01-SZ Condition : FCC CLASS-B 3m LF_ANT_141107 HORIZONTAL Project : (FC) 582711 Mode Mode 3 IMEI : 353919026822886/353924026822886 Over Limit ReadAntenna Cable Preamp A/Pos T/Pos Freq Level Limit Line Level Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 43.23 25.13 -14.87 40.00 36.36 13.83 0.93 --- Peak 234.39 34.98 -11.02 46.00 45.78 12.15 2.23 25.18 283.80 40.89 -5.11 46.00 49.94 13.57 2.45 25.07 100 20 Peak 314.00 40.80 -5.20 46.00 49.08 2.58 14.29 25.15 ------ Peak -6.09 479.90 39.91 46.00 44.31 18.59 3.24 Peak 26.23 794.90 30.89 -15.11 46.00 30.34 Peak 2132.00 62.07 70.42 32.34 10.18 50.87 ------ Peak 2358.00 44.91 -29.09 74.00 51.98 32.56 10.95 50.58 --- Peak 3698.00 45.44 -28.56 74.00 51.28 33.61 11.52 50.97 Peak 45.83 -28.17 45.79 10 6146.00 74.00 35.95 13.95 49.86 Peak 8318.00 46.30 -27.70 74.00 43.50 36.31 16.23 49.74 --- Peak 10108.00 47.10 -26.90 47.75 -26.25 74.00 41.07 38.19 17.88 50.04 Peak 74.00 20 Peak 11862.00 39.80 39.42 18.51 49.98 100

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Test Mode :	Mode 3			Tempe	emperature: 23~25°C			3~25°C		
Test Engineer : Leo Liao Rel					e Hun	nidity :	: 48~52%			
Test Distance :	nce: 3m Polarization:						Vertical			
Function Type :	WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link Notebook) + Earphone + GPS Rx								ata Link witl	
Remark :	#7 is syste	m simulato	signa	l which	can be	e ignore	d.			
117 Leve	l (dBuV/m)							Date: 2	015-09-03	
102.4										
87.8										
73.1								FCC	CLASS-B	
58.5	7							FCC CLASS	S-B (AVG)	
43.9	{	9			10	11	1:	2	13	
29.3	55									
030	1000.	3000.	5000.		7000.		9000.	11000.	13000	
Site Condition Project Mode IMEI	: (FC) 582 : Mode 3	-SZ ASS-B 3m LF_	ANT_141	Frequen	cy (MHz)					
	Freq Level	Over Limi Limit Lin		dAntenna l Factor		Preamp / Factor	A/Pos T/Po	s Remark		
	MHz dBuV/m	dB dBuV/	m dBu\	/ dB/m	dB	dB	cm de	g	_	
2 1 3 2 4 4 5 6	43.50 26.81 166.62 28.82 240.06 29.37 179.90 40.81 574.50 32.13 715.10 31.96	-14.68 43.5 -16.63 46.0 -5.19 46.0 -13.87 46.0 -14.04 46.0	0 40.43 0 40.03 0 45.23 0 34.44 0 33.63	1 11.97 2 12.25 1 18.59 4 20.14 2 20.62	1.86 2.26 3.24 3.94 4.06	25.42 25.16 26.23 26.39 26.34	100	- Peak - Peak - Peak 0 Peak - Peak - Peak		
8 24 9 46 10 66 11 86	130.00 61.81 146.00 45.20 932.00 45.27 530.00 45.68 908.00 46.35	-28.80 74.0 -28.73 74.0 -28.32 74.0 -27.65 74.0	0 51.82 0 51.54 0 45.43 0 44.46	33.92 1 36.25 5 36.50	11.21 11.61 14.48 15.75	50.48 51.80 50.46 50.36		- Peak - Peak - Peak - Peak - Peak		
	270.00 46.48 180.00 46.68							- Peak 0 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	Sep. 02, 2015~ Sep. 07, 2015	May 25, 2016	Radiation (03CH01-SZ)
Spectrum Analyzer	R&S	FSV40	101041	10kHz~40GHz; Max 30dBm	Sep. 25, 2014	Sep. 02, 2015~ Sep. 07, 2015	Sep. 24, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz~2GHz	Nov. 07, 2014	Sep. 02, 2015~ Sep. 07, 2015	Nov. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	Sep. 02, 2015~ Sep. 07, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz / 30 dB	Jan. 28, 2015	Sep. 02, 2015~ Sep. 07, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5G Hz	Jan. 28, 2015	Sep. 02, 2015~ Sep. 07, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 05, 2015	Sep. 02, 2015~ Sep. 07, 2015	May 04, 2016	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	61601000198 5	N/A	NCR	Sep. 02, 2015~ Sep. 07, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Sep. 02, 2015~ Sep. 07, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Sep. 02, 2015~ Sep. 07, 2015	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESCI7	100724	9kHz~3GHz	Jan. 28, 2015	Sep. 09, 2015	Jan. 27, 2016	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	103892	9kHz~30MHz	Feb. 02, 2015	Sep. 09, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	AN3016	16850	9kHz~30MHz	Feb. 02, 2015	Sep. 09, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000089 1	100Vac~250Vac	Sep. 29, 2014	Sep. 09, 2015	Sep. 28, 2015	Conduction (CO01-SZ)
Pulse Limiter	COM-POWER	LIT-153 Transient Limiter	53139	150kHz~30MHz	Oct. 24, 2014	Sep. 09, 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

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

Managerian Unacetainty for a Lavel of	T
Measuring Uncertainty for a Level of	3.9dB
Confidence of 95% (U = 2Uc(y))	0.5dB

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