# **FCC Test Report**

APPLICANT : CT Asia (HK) Ltd.

**EQUIPMENT**: Smartphone

BRAND NAME : BLU

MODEL NAME : DASH X LTE

FCC ID : YHLBLUDASHXLTE

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

**CLASSIFICATION**: Certification

The product was received on Sep. 11, 2015 and testing was completed on Oct. 23, 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.

Prepared by: Andy Yeh / Manager

Approved by: Jones Tsai / Manager

laC-MRA Testi

Page Number

Report Version



: 1 of 24

: Rev. 01

Report Issued Date: Nov. 16, 2015

Report No.: FC591106

### 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
FC591106	Rev. 01	Initial issue of report	Nov. 16, 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 10.58 dB at 0.510 MHz
3.2	15.109	ICES003 Section 6.2	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 2.81 dB at 240.060 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 X LTE				
FCC ID	YHLBLUDASHXLTE				
	GSM/GPRS/EGPRS/WCDMA/HSPA/				
EUT supports Radios application	HSPA+(16QAM uplink is not supported)/LTE/				
EOT Supports Radios application	WLAN2.4GHz 802.11b/g/n HT20/HT40/				
	Bluetooth v3.0+EDR/ Bluetooth v4.0 LE				
IMEI Code	Conduction: 353919027655079/353919027656028				
IMEI Code	Radiation: 353919027655160/353919027656119				
HW Version	V1.0				
SW Version	BLU_D0010UU_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

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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

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)	$\boxtimes$	$\boxtimes$	Note 1
2.	Data application transferred mode	$\boxtimes$		$\boxtimes$
۷.	(EUT connected with notebook)		$\boxtimes$	

#### 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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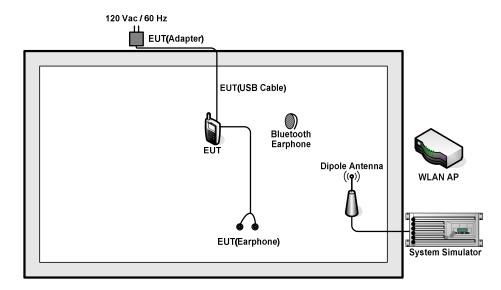
Test Items	EUT Configure Mode	Function Type
	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera(Back) + SIM1 <fig.1></fig.1>
AC Conducted		Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM2 <fig.1></fig.1>
Emission		Mode 3: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>
		Mode 4: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera(Front) + SIM1 <fig.1></fig.1>
	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera(Back) + SIM1 <fig.1></fig.1>
Radiated		Mode 2: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM2 <fig.1></fig.1>
Emissions < 1GHz		Mode 3: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>
		Mode 4: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera(Front) + SIM1 <fig.1></fig.1>
Radiated Emissions ≥ 1GHz	2	Mode 1: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>

#### Remark:

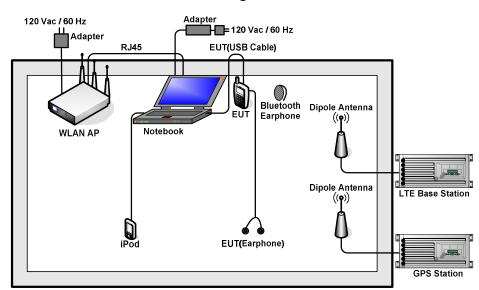
- 1. The worst case of AC is mode 1, and the USB Link mode of AC is mode 3, the test data of these modes were reported.
- 2. The worst case of RE < 1G is mode 3, the test data of this mode was reported.
- 3. Link with Notebook means data application transferred mode between EUT and Notebook.

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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.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
4.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Bluetooth Earphone	Samsung	HS3000	A3LHS3000	N/A	N/A
6.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
7.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
8.	WLAN AP	ASUSTek	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 2.7 m with Core
9.	iPod	Apple	A1199	FCC DoC	Unshielded, 1.2 m	N/A
10.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
11.	iPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Unshielded, 1.2 m	N/A

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#### 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 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 function 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	

<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

- 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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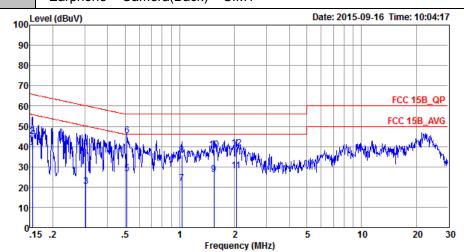
#### 3.1.4 Test Setup



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#### 3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~23℃
Test Engineer :	Jacky Yang	Relative Humidity: 41~43%	
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Tune	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter)		
Function Type :	  + Earphone + Camera(Back	) + SIM1	



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_L\_20150304 LINE

Project : (FC)591106 Mode : Mode 1

IMEI : 353919027655079/353919027656028

				002 / 0000				
			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
_	MHz	dBu₹	dB	dBuV	dBu₹	dB	dB	
1	0.15	37.39	-18.35	55.74	26.60	0.44	10.35	Average
2	0.15	44.99	-20.75	65.74	34.20	0.44	10.35	QP
3	0.30	20.27	-29.88	50.15	9.50	0.57	10.20	Average
4	0.30	38.97	-21.18	60.15	28.20	0.57	10.20	QP
5	0.51	26.42	-19.58	46.00	15.60	0.66	10.16	Average
6 *	0.51	45.42	-10.58	56.00	34.60	0.66	10.16	QP
7	1.03	21.86	-24.14	46.00	11.20	0.51	10.15	Average
8	1.03	35.76	-20.24	56.00	25.10	0.51	10.15	QP
9	1.54	26.15	-19.85	46.00	15.50	0.48	10.17	Average
10	1.54	38.35	-17.65	56.00	27.70	0.48	10.17	QP
11	2.04	27.96	-18.04	46.00	17.30	0.47	10.19	Average
12	2.04	39.06	-16.94	56.00	28.40	0.47	10.19	OP

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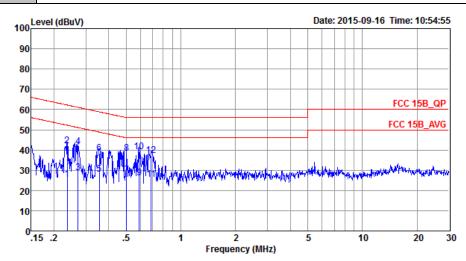
Test Mode :	Mode 1		Temperatu	re :	<b>21~23</b> ℃					
Test Engineer :	Jacky Yang		Relative H	umidity:	41~43%					
Test Voltage :	120Vac / 60Hz	20Vac / 60Hz Phase : Neutral								
Function Type :	GSM850 Idle +	Bluetooth Id	lle + WLAN	ldle + USE	Cable	e (Charging	from Adapter)			
	+ Earphone + C	amera(Back	() + SIM1							
100 <sup>L</sup>	evel (dBuV)	(dBuV) Date: 2015-09-16 Time: 09:59:05								
90										
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60						FCC 15B_Q	<u>P</u>			
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0-1	15 .2 .5	1	2	5	10	20	30			
			Frequency (MHz	)						
Site	: CO01-SZ on: FCC 15B QP LI	CM M 2015020	A NEITTONT							
	: (FC)591106	ISN_N_2013030	OT NEOTRAL							
Mode	: Mode 1									
IMEI	: 3539190276550	79/353919027 Over Li		LISN	~abla					
	Freq Level		ine Level			Remark				
	MHz dBuV	dB d	dBuV dBuV	dB	dB					
1	0.27 20.89	-30.23 51	.12 10.10	0.57	10.22	Average				
2		-26.23 61			10.22					
3		-12.54 46				Average				
4 * 5		-11.64 56 -20.87 46			10.16	QP Average				
6		-19.37 56				_				
7		-17.06 46				x- Average				
8		-12.26 56			10.17					
9			.00 16.50			Average				
10 11		-15.45 56			10.18					
11		-18.54 46 -14.54 56			10.19	Average OP				
			00.70			~~				

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FCC Test Report	Report No. : FC591106

Test Mode :	Mode 3	Temperature :	<b>21~23</b> ℃
Test Engineer :	Jacky Yang	Relative Humidity :	41~43%
Test Voltage :	120Vac / 60Hz	Phase :	Line

Function Type: LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_L\_20150304 LINE

Project : (FC)591106 Mode : Mode 3

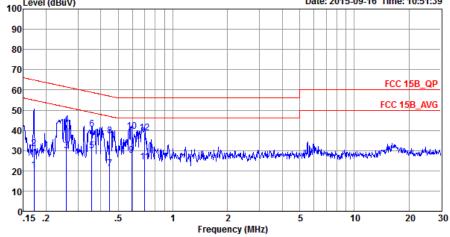
IMEI : 353919027655079/353919027656028

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBu∀	dB	dB	
1	0.24	25.30	-26.92	52.22	14.51	0.54	10.25	Average
2	0.24	42.00	-20.22	62.22	31.21	0.54	10.25	QP
3	0.27	28.88	-22.19	51.07	18.10	0.56	10.22	Average
4	0.27	41.58	-19.49	61.07	30.80	0.56	10.22	QP
5	0.36	28.14	-20.69	48.83	17.41	0.55	10.18	Average
6	0.36	38.54	-20.29	58.83	27.81	0.55	10.18	QP
7	0.50	27.72	-18.28	46.00	16.89	0.67	10.16	Average
8	0.50	38.42	-17.58	56.00	27.59	0.67	10.16	QP
9	0.59	26.36	-19.64	46.00	15.60	0.61	10.15	Average
10 *	0.59	39.26	-16.74	56.00	28.50	0.61	10.15	QP
11	0.69	25.40	-20.60	46.00	14.70	0.55	10.15	Average
12	0.69	37.30	-18.70	56.00	26.60	0.55	10.15	QP

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FCC Test Report Report No. : FC591106

Test Mode :	Mode 3	Temperature :	21~23°C		
Test Engineer :	Jacky Yang	Relative Humidity :	41~43%		
Test Voltage :	120Vac / 60Hz	Phase :	Neutral		
Function Type :	LTE Band 7 Idle + Blueto Notebook) + Earphone + G		+ USB Cable (Data Link with		
100 L	evel (dBuV)	Date:	2015-09-16 Time: 10:51:39		
90-					
80-					
70-					



: CO01-SZ

Condition: FCC 15B\_QP LISN\_N\_20150304 NEUTRAL Project : (FC)591106

Mode : Mode 3

: 353919027655079/353919027656028 IMEI

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBu₹	dB	dBuV	dBu₹	dB	dB	
1	0.17	20.21	-34.69	54.90	9.40	0.48	10.33	Average
2	0.17	31.11	-33.79	64.90	20.30	0.48	10.33	QP
3	0.26	29.90	-21.57	51.47	19.11	0.56	10.23	Average
4	0.26	42.90	-18.57	61.47	32.11	0.56	10.23	QP
5	0.36	29.95	-18.83	48.78	19.20	0.57	10.18	Average
6	0.36	40.45	-18.33	58.78	29.70	0.57	10.18	QP
7	0.45	21.14	-25.75	46.89	10.40	0.58	10.16	Average
8	0.45	37.24	-19.65	56.89	26.50	0.58	10.16	QP
9	0.59	27.53	-18.47	46.00	16.80	0.58	10.15	Average
10 *	0.59	39.63	-16.37	56.00	28.90	0.58	10.15	QP
11	0.70	24.40	-21.60	46.00	13.70	0.55	10.15	Average
12	0.70	38.80	-17.20	56.00	28.10	0.55	10.15	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:

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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.
- 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.

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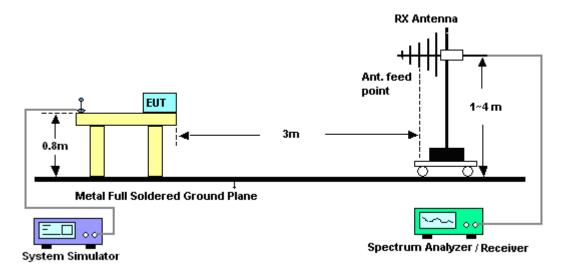
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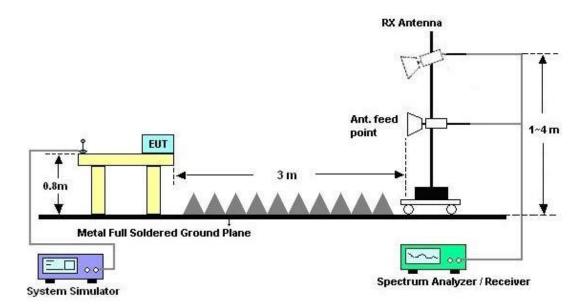
- 8. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

#### 3.2.4. Test Setup of Radiated Emission

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



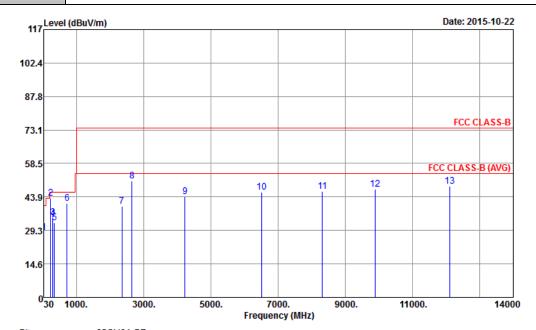
#### For radiated emissions above 1GHz



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#### 3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 3	Temperature :	23~25°C					
Test Engineer :	Leo Liao	Relative Humidity :	48~52%					
Test Distance :	3m	Polarization :	Horizontal					
Eupotion Type :	TE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with							
Function Type :	Notebook) + Earphone + GPS Rx + SIM1							
Remark :	#8 is system simulator signa	ator signal which can be ignored.						



: 03CH01-SZ

Site Condition : FCC CLASS-B 3m LF\_ANT\_141107 HORIZONTAL

(FC) 591106 Project Mode 3 Mode

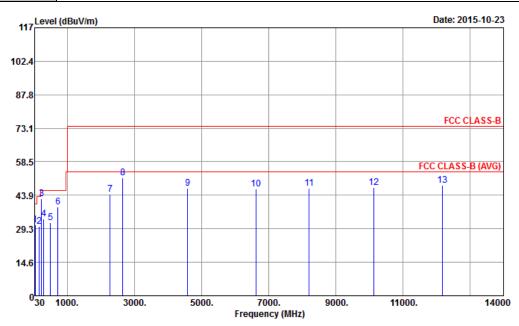
: 35919027655160/353919027656119 IMEI

	Ence	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
	rreq	rever	LIMIL	LINE	rever	I actor	LUSS	I actor			Kelliai K
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	28.35	-11.65	40.00	28.12	25.60	0.70	26.07			Peak
2	240.06	43.19	-2.81	46.00	54.53	12.25	1.57	25.16	125	80	QP
3	298.65	34.95	-11.05	46.00	44.21	14.07	1.71	25.04			Peak
4	300.00	34.56	-11.44	46.00	43.79	14.10	1.71	25.04			Peak
5	344.80	32.53	-13.47	46.00	41.28	14.69	1.95	25.39			Peak
6	720.00	41.23	-4.77	46.00	44.12	20.73	2.71	26.33			Peak
7	2358.00	39.91	-34.09	74.00	46.98	32.56	10.95	50.58			Peak
8	2654.00	50.85			56.79	32.82	11.81	50.57			Peak
9	4232.00	44.05	-29.95	74.00	47.13	34.04	14.67	51.79			Peak
10	6508.00	46.03	-27.97	74.00	43.43	36.30	16.62	50.32			Peak
11	8318.00	46.30	-27.70	74.00	41.85	36.31	17.88	49.74			Peak
12	9900.00	47.33	-26.67	74.00	40.33	38.00	18.92	49.92			Peak
13	12116.00	48.57	-25.43	74.00	40.28	39.45	18.74	49.90	125	200	Peak

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Test Mode :	Mode 3	Temperature :	23~25°C					
Test Engineer :	Leo Liao	Relative Humidity :	48~52%					
Test Distance :	3m	Polarization :	Vertical					
Function Type :	LTE Band 7 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with							
Function Type :	Notebook) + Earphone + GPS Rx + SIM1							
Remark :	#8 is system simulator signa							



Site : 03CH01-SZ

: FCC CLASS-B 3m LF\_ANT\_141107 VERTICAL : (FC) 591106 Condition

Project

Mode 3 Mode

IMEI 35919027655160/353919027656119

			Over	Limit	Read/	Antenna	Cable	Preamp	A/Pos	T/Pos	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	42.69	31.07	-8.93	40.00	42.12	14.25	0.70	26.00			Peak
2	166.62	30.24	-13.26	43.50	42.31	11.97	1.38	25.42			Peak
3	240.06	42.45	-3.55	46.00	53.79	12.25	1.57	25.16	125	80	Peak
4	300.00	33.71	-12.29	46.00	42.94	14.10	1.71	25.04			Peak
5	499.50	31.96	-14.04	46.00	36.76	19.36	2.17	26.33			Peak
6	720.00	38.90	-7.10	46.00	41.79	20.73	2.71	26.33			Peak
7	2280.00	44.27	-29.73	74.00	51.79	32.48	10.69	50.69			Peak
8	2654.00	51.58			57.52	32.82	11.81	50.57			Peak
9	4586.00	46.86	-27.14	74.00	48.89	34.25	15.23	51.51			Peak
10	6630.00	46.68	-27.32	74.00	44.24	36.25	16.65	50.46			Peak
11	8214.00	46.97	-27.03	74.00	42.83	36.38	17.71	49.95			Peak
12	10146.00	47.34	-26.66	74.00	40.33	38.22	18.87	50.08			Peak
13	12170.00	48.15	-25.85	74.00	40.16	39.43	18.44	49.88	200	300	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	Oct. 22, 2015~ Oct. 23, 2015	May 25, 2016	Radiation (03CH01-SZ)
Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz;M ax 30dBm	Jun. 07, 2015	Oct. 22, 2015~ Oct. 23, 2015	Jun. 06, 2016	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz-2GHz	Oct. 17, 2015	Oct. 22, 2015~ Oct. 23, 2015	Oct. 16, 2016	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 17, 2015	Oct. 22, 2015~ Oct. 23, 2015	Oct. 16, 2016	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz ~3000MHz / 30 dB	Jan. 28, 2015	Oct. 22, 2015~ Oct. 23, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5G Hz	Jan. 28, 2015	Oct. 22, 2015~ Oct. 23, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	61601000198 5	N/A	NCR	Oct. 22, 2015~ Oct. 23, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Oct. 22, 2015~ Oct. 23, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Oct. 22, 2015~ Oct. 23, 2015	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESCI7	100724	9kHz~3GHz;	Jan. 28, 2015	Sep. 16, 2015	Jan. 27, 2016	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	103892	9kHz~30MHz	Feb.02, 2015	Sep. 16, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	AN3016	16850	9kHz~30MHz	Feb. 02, 2015	Sep. 16, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000089 1	100Vac~250Vac	Aug. 07, 2015	Sep. 16, 2015	Aug. 06, 2016	Conduction (CO01-SZ)
Pulse Limiter	COM-POWER	LIT-153 Transient Limiter	53139	150kHz~30MHz	Oct. 24, 2014	Sep. 16, 2015	Oct. 23, 2015	Conduction (CO01-SZ)

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# 5. Uncertainty of Evaluation

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

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

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

Measuring Uncertainty for a Level of	4 0 d D	
Confidence of 95% (U = 2Uc(y))	4.8dB	

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