



FCC PART 15D

MEASUREMENT AND TEST REPORT

For

Global China Technology Limited

Room 308, 3/F Kwong Sang Hong Centre, 151-153 Hoi Bun Road, Kwun Tong, Hong Kong

FCC ID: VNNDD5622

Report Type: Class II Permissive Change	Product Type: Amplified DECT Phone (Handset Unit)
Report Number: <u>RSZ160531003-00PPA1</u>	
Report Date: <u>2016-10-20</u>	
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Note: This test report is prepared for the customer shown above and for the equipment described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Global China Technology Limited*'s product, model number: *PowerTel 720 Assure + Twin (FCC ID: VNNDD5622)* (the "EUT") in this report was a handset unit of *Amplified DECT Phone*, which was measured approximately: 18.0 cm (L) x 5.5 cm (W) x 2.5 cm (H), rated with input voltage: 3.6V 750mAh NiMH battery.

Adapter Information: AC Adapter

Model: HX-AD059080-U06

Input: AC 100-240V, 50/60Hz, 0.15A;

Output: DC 5.9V, 0.8A

Note: The series product, for handset unit model PowerTel 720 Assure +, PowerTel 725 Reliant +, PowerTel 720 Assure + Twin, PowerTel 730 Assure Voice +, PowerTel 735 Reliant Voice +, DD5622HER1, DD5632HER1, DD5622HER2, DD5622VHER1 and DD5632VHER1, they share the same product only named differently due to different combination per client's request. Model PowerTel 720 Assure + Twin selected for testing, the detailed information can be referred to the attached declaration letter that stated and guaranteed by the applicant.

** All measurement and test data in this report was gathered from production sample serial number: 1602381 (Assigned by BACL, Kunshan). The EUT supplied by the applicant was received on 2016-05-31.*

Objective

This report is prepared on behalf of *Global China Technology Limited*. The measurements were performed according to the measurement procedure described in ANSI C63.17 - 2013 and ANSI C63.4 - 2014.

This is a CIIPC application of the device, the differences between the original device and the current one are as follows:

1. Change the adapter with DOE level 6 for charger of handset unit.

For the change made to the device, the test item "Conducted Emissions" was performed.

Related Submittal(s)/Grant(s)

Submitted with FCC part 15D base unit of a system with FCC ID: VNNDD5622

Test Methodology

All measurements contained in this report were conducted with ANSI C63.17 - 2013, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz. All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Kunshan).

The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Item	Uncertainty	
AC Power Lines Conducted Emissions	± 3.26 dB	
Radiated emission	30MHz~1GHz	± 5.91 dB
	Above 1G	± 4.92 dB
Temperature	± 1.0 °C	
Humidity	$\pm 6\%$	

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on Chenghu Road, Kunshan Development Zone No.248, Kunshan, Jiangsu, China.

Test site at Bay Area Compliance Laboratories Corp. (Kunshan) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on October 31, 2013. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in TBR6 mode which is provided by the manufacturer.

Equipment Modifications

No modification was made to the EUT tested.

Local Support Equipment List and Details

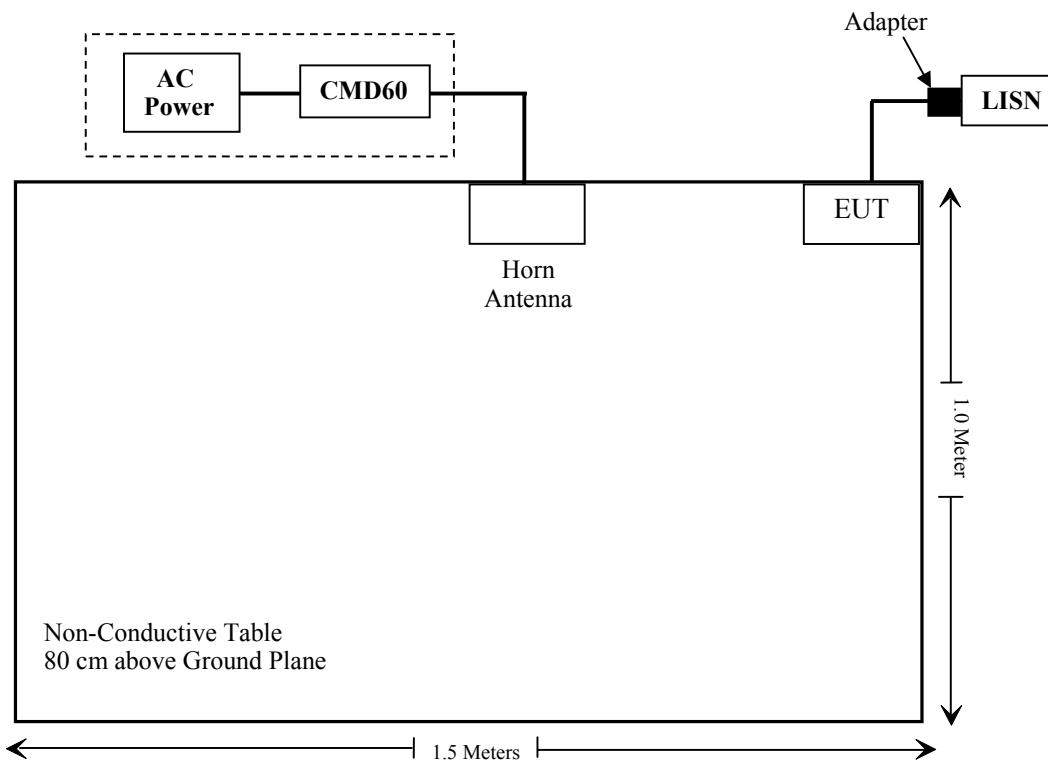
Manufacturer	Description	Model	Serial Number
R&S	Digital Radio-Communication Tester	CMD60	830553/018

External I/O Cable

Cable Description	Length (m)	From/Port	To
Unshielded Detectable Adapter Cable	1.83	EUT	Adapter

Block Diagram of Test Setup

For conducted emissions



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§ 1.1307, §2.1093	RF Exposure (SAR)	Compliance
§ 15.317 § 15.203	Antenna Requirement	Compliance
§ 15.315 § 15.207	Conducted Emission	Compliance
§ 15.323 (a)	Emission Bandwidth	Compliance*
§ 15.319 (c)	Peak Transmit Power	Compliance*
§ 15.319 (d)	Power Spectral Density	Compliance*
§ 15.323 (d)	Emission Inside and Outside the sub-band	Compliance*
§ 15.319 (g)	Radiated Emission	Compliance*
§ 15.323 (f)	Frequency Stability Handset	Compliance*
§ 15.323 (c)(e) § 15.319 (f)	Specific Requirements for UPSCS	Compliance*

Compliance*: Please referred to FCC ID: VNNDD5622 granted on 2013-11-22, which was tested by Sula Huang, Bay Area Compliance Laboratories Corp. (Shenzhen).

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
AC Line Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESCS30	934115/007	2015-11-12	2016-11-11
Rohde & Schwarz	LISN	ESH3-Z5	862770/011	2015-11-12	2016-11-11
Rohde & Schwarz	Pulse limiter	ESH3-Z2	879940/0058	2016-06-19	2017-06-18
Rohde & Schwarz	Digital Radio-Communication Tester	CMD60	830553/018	2016-09-21	2017-09-20
MICRO-COAX	Coaxial line	UFB-293B-1-0480-50X50	97F0173	2016-09-01	2017-09-01
Rohde & Schwarz	CE Test software	EMC 32	V 09.10.0	-	-

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1307 & §2.1093 - RF EXPOSURE

Applicable Standard

FCC§1.1307 and §2.1093.

Test Result

Compliance, please refer to the SAR report: RSZ130827001-20.

FCC§15.317&§15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Antenna Connector Construction

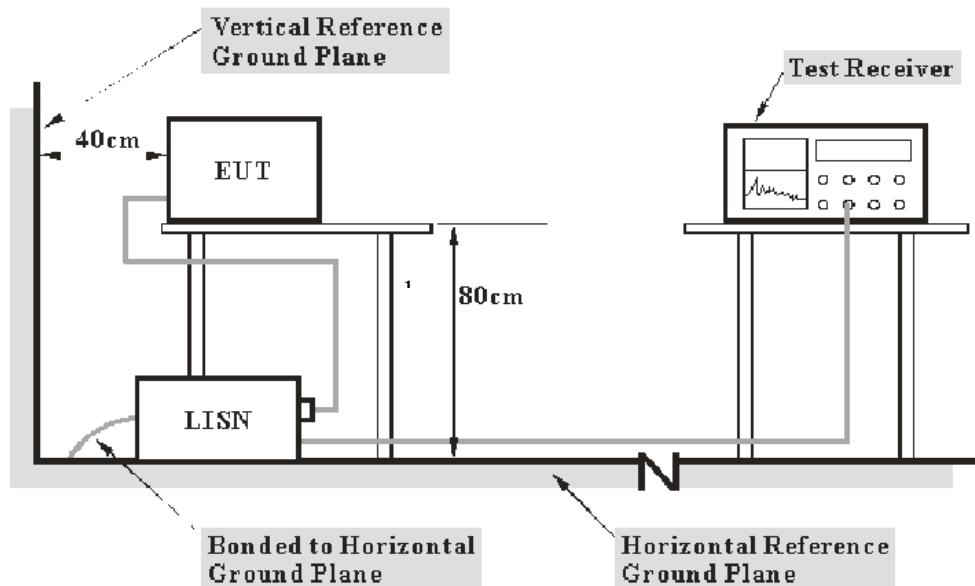
The EUT has one integrated antenna arrangement, which was permanently attached and the gain was 0 dBi, fulfill the requirement of this section. Please refer to the internal photos.

FCC§15.315 & §15.207 - CONDUCTED EMISSIONS

Applicable Standard

FCC§15.315, an unlicensed PCS device that is designed to be connected to the public utility (AC) power line must meet the limits specified in §15.207.

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.4-2014. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the Quasi-peak and average detection mode.

Test Results Summary

According to the recorded data in following table, with the worst margin reading of:

5.96 dB at 0.330000 MHz in the Line conducted mode

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level is in compliance with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cisp}$$

In BACL, $U_{(Lm)}$ is less than U_{cisp} , if L_m is less than L_{lim} , it implies that the EUT complies with the limit.

Test Data

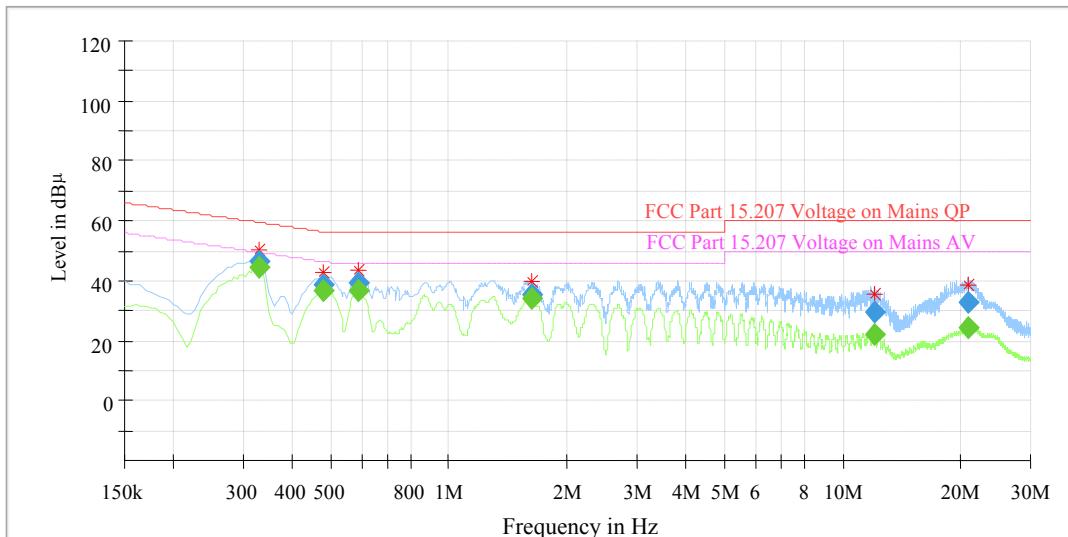
Environmental Conditions

Temperature:	27.0°C
Relative Humidity:	50 %
ATM Pressure:	101.0 kPa

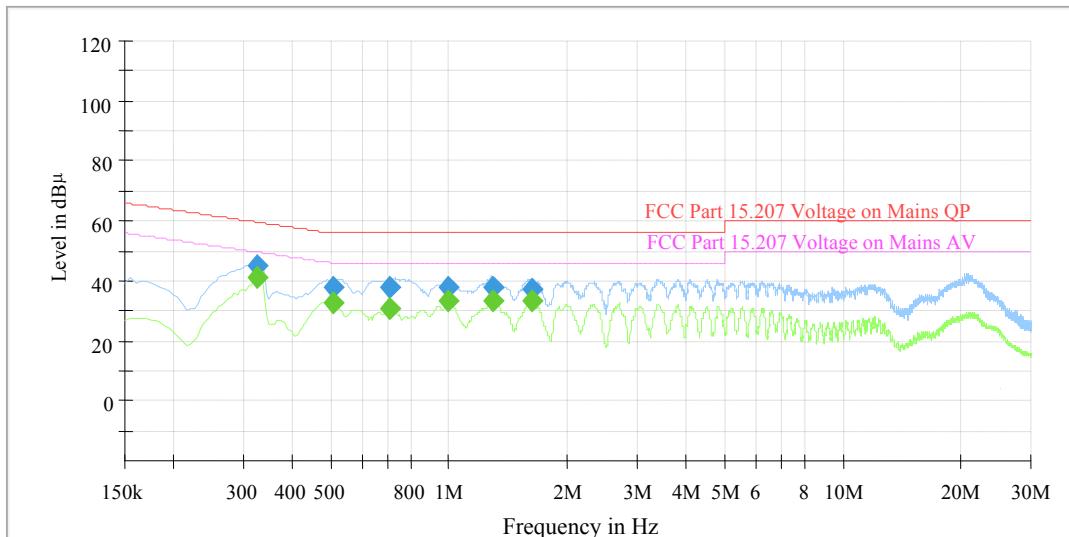
The testing was performed by Ada Yu on 2016-10-19.

Test mode: Transmitting

AC 120V/60 Hz, Line



Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.330000	---	43.49	9.000	L1	10.3	5.96	49.45	Compliance
0.330000	45.34	---	9.000	L1	10.3	14.11	59.45	Compliance
0.480000	---	35.55	9.000	L1	10.3	10.79	46.34	Compliance
0.480000	37.96	---	9.000	L1	10.3	18.38	56.34	Compliance
0.590000	---	19.76	9.000	L1	10.3	26.24	46.00	Compliance
0.590000	38.15	---	9.000	L1	10.3	17.85	56.00	Compliance
1.625000	---	32.84	9.000	L1	10.3	13.16	46.00	Compliance
1.625000	34.52	---	9.000	L1	10.3	21.48	56.00	Compliance
11.990000	---	22.38	9.000	L1	10.4	27.62	50.00	Compliance
11.990000	28.57	---	9.000	L1	10.4	31.43	60.00	Compliance
20.805000	---	23.42	9.000	L1	10.5	26.58	50.00	Compliance
20.805000	31.86	---	9.000	L1	10.5	28.14	60.00	Compliance

AC 120V/ 60 Hz, Neutral:

Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB μ V)	Comment
0.325000	---	40.96	9.000	N	10.3	8.62	49.58	Compliance
0.325000	44.61	---	9.000	N	10.3	14.97	59.58	Compliance
0.510000	---	32.79	9.000	N	10.3	13.21	46.00	Compliance
0.510000	37.43	---	9.000	N	10.3	18.57	56.00	Compliance
0.710000	---	30.24	9.000	N	10.3	15.76	46.00	Compliance
0.710000	37.67	---	9.000	N	10.3	18.33	56.00	Compliance
0.995000	---	33.15	9.000	N	10.3	12.85	46.00	Compliance
0.995000	37.69	---	9.000	N	10.3	18.31	56.00	Compliance
1.290000	---	33.36	9.000	N	10.3	12.64	46.00	Compliance
1.290000	37.70	---	9.000	N	10.3	18.30	56.00	Compliance
1.615000	---	32.94	9.000	N	10.4	13.06	46.00	Compliance
1.615000	37.21	---	9.000	N	10.4	18.79	56.00	Compliance

Note:

1) Correction Factor =LISN/ISN VDF (Voltage Division Factor) + Cable Loss + Pulse Limiter Attenuation

The corrected factor has been input into the transducer of the test software.

2) Corrected Amplitude = Reading + Correction Factor

3) Margin = Limit – Corrected Amplitude

******* END OF REPORT *******