

# FCC PART 15 B, CLASS B TEST REPORT

For

# **DDM Brands LLC**

1616 NW, 84<sup>TH</sup> Ave. Miami, Florida, U.S.A

FCC ID: A4JGO80

Report Type: Product Type:

Class II Permissive Change 2G mobile phone

Test Engineer: Candy Li

Report Number: RSZ140207001-00AA1

**Report Date:** 2014-02-14

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Reviewed By: RF Engineer

**Prepared By:** Bay Area Compliance Laboratories Corp. (Shenzhen)

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**Note**: This test report is prepared for the customer shown above and for the device 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 *DDM Brands LLC*'s product, model number: *EXCLUSIVE Z10(FCC ID: A4JGO80)* or the "EUT" in this report was a *2G mobile phone*, which was measured approximately: 11.31 cm (L) x 5.55 cm (W) x 1.45 cm (H), rated with input voltage: DC 3.7 V rechargeable Li-ion battery. The highest operating frequency is 312MHz.

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\*All measurement and test data in this report was gathered from production sample serial number: 1401126 (Assigned by the applicant). The EUT supplied by the applicant was received on 2014-02-07.

## **Objective**

This test report is prepared on behalf of *DDM Brands LLC* in accordance with Part 2-Subpart J, Part 15-Subparts A and B of the Federal Communication Commissions rules.

The objective of the manufacturer is to determine the compliance of the EUT with FCC Part 15 B.

This is a class II permissive change basing on the original report RSZ140103002-00A with FCC ID: A4JGO80, the changes between the original device and the current one as below:

- 1) Changing the model name: the original one is GO 80, the current one is EXCLUSIVE Z10.
- 2) Changing the color and logo on product appearance, and also the product size. The original one is black with logo "NIU", the current one is black body and silver keyboard with logo "yezz".
- 3) Changing the GSM antenna shape and size.
- 4) Changing the adapter and battery label.

For the changes above, we just performed the item "Radiated Spurious Emissions", and the other test items can be referred to the original report RSZ140103002-00A with FCC ID: A4JGO80 granted on 2014-02-03.

#### Related Submittal(s)/Grant(s)

Part 15.247 DSS, Part 22H 24E PCE submissions with ID: A4JGO80.

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## **Test Facility**

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

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Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) 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 December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

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.

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## **SYSTEM TEST CONFIGURATION**

## **Description of Test Configuration**

The system was configured for testing in a manufacturer testing fashion.

EUT operation mode: Downloading (data transfer with computer)

#### **EUT Exercise Software**

"BurnIn test v5.3" exercise software was used.

## **Special Accessories**

No special accessory.

## **Equipment Modifications**

No modification was made to the EUT tested.

## **Support Equipment List and Details**

Manufacturer	Description	Model	Serial Number
DELL	PC	VOSTRO 220S	127BP2X
DELL	LCD Monitor	E178WFPC	CN-OWY564-64180-7C4-2SQH
DELL	Keyboard	L100	CNORH656658907BL05DC
DELL	Mouse	MOC5UO	G1900NKD
SAST	Modem	AEM-2100	0293
Kingston	Micro SD card	4 GB	/

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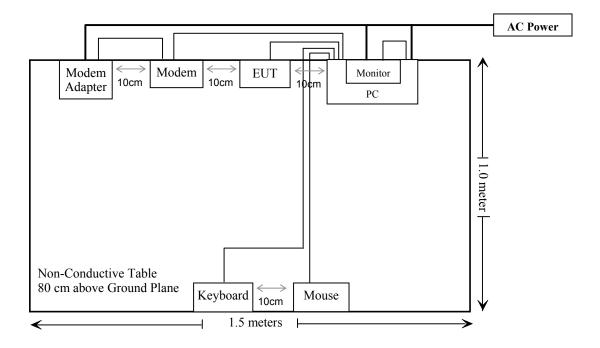
## **External I/O Cable**

Cable Description	Length (m)	From/Port	То
Shielding Detachable USB Cable	1.5	Host PC	Mouse
Shielding Detachable Serial Cable	1.2	Host PC	Modem
Shielding Detachable K/B Cable	1.5	Host PC	Keyboard
Shielding Detachable VGA Cable	1.5	Host PC	LCD Monitor
Unshielding Detachable USB Cable	0.95	EUT	PC

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## **Block Diagram of Test Setup**

Test mode: Downloading



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# SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	AC Line Conducted Emissions	Compliance*
§15.109	Radiated Spurious Emissions	Compliance

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Compliance\*: The test data were referred to the original test report RSZ140103002-00A with FCC ID: A4JGO80, which was granted on 2014-02-03.

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## FCC §15.109 - RADIATED SPURIOUS EMISSIONS

## **Applicable Standard**

FCC §15.109

### **Measurement Uncertainty**

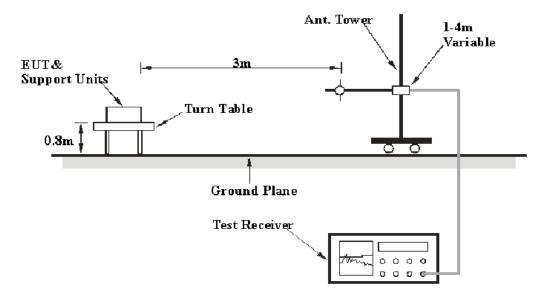
All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

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Based on CISPR 16-4-2:2011, the expended combined standard uncertainty of radiation emissions at Bay Area Compliance Laboratories Corp. (Shenzhen) is shown in below table. And the uncertainty will not be taken into consideration for the test data recorded in the report

Frequency	Polarity	Measurement uncertainty	
30 MHz~200 MHz	Horizontal	4.62 dB (k=2, 95% level of confidence)	
30 MHZ~200 MHZ	Vertical	4.54 dB (k=2, 95% level of confidence)	
200 MH 1 CH	Horizontal	4.84 dB (k=2, 95% level of confidence)	
200 MHz~1 GHz	Vertical	5.91 dB (k=2, 95% level of confidence)	
1 GHz~6 GHz	Horizontal/Vertical	4.68 dB (k=2, 95% level of confidence)	
Above 6 GHz	Horizontal/Vertical	4.92 dB (k=2, 95% level of confidence)	

## **EUT Setup**



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2009. The specification used was the FCC Part 15.109 Class B limits.

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The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

The host PC was connected to a 120 VAC/60 Hz power source.

## **EMI Test Receiver Setup**

The system was investigated from 30 MHz to 2 GHz.

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

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 CHz	1MHz	3 MHz	/	PK
Above 1 GHz	1MHz	10 Hz	/	Ave.

#### **Test Procedure**

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz and PK and average detector modes for frequencies above 1 GHz.

## **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
HP	Amplifier	8447E	1937A01046	2013-09-30	2014-09-30
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2013-09-17	2014-09-17
Sunol Sciences	Broadband Antenna	JB1	A040904-2	2011-11-28	2014-11-27
Mini	Amplifier	ZVA-183-S+	5969001149	2013-04-03	2014-04-03
A.H. System	Horn Antenna	SAS-200/571	135	2012-02-11	2015-02-10
Rohde & Schwarz	Signal Analyzer	FSIQ26	8386001028	2013-11-12	2014-11-12
R&S	Auto test Software	EMC32	V9.10		

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

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## **Corrected Amplitude & Margin Calculation**

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

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Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7 dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

## **Test Results Summary**

According to the data in the following table, the EUT complied with the FCC §15.109 Class B, with the worst margin reading of:

### 5.60 dB at 56.324000 MHz in the Vertical polarization mode

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

$$L_{\rm m} + U_{(L{\rm m})} \leq L_{\rm lim} + U_{\rm cispr}$$

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

#### **Test Data**

#### **Environmental Conditions**

Temperature:	16 ℃
Relative Humidity:	56 %
ATM Pressure:	101.0 kPa

The testing was performed by Candy Li on 2014-02-14.

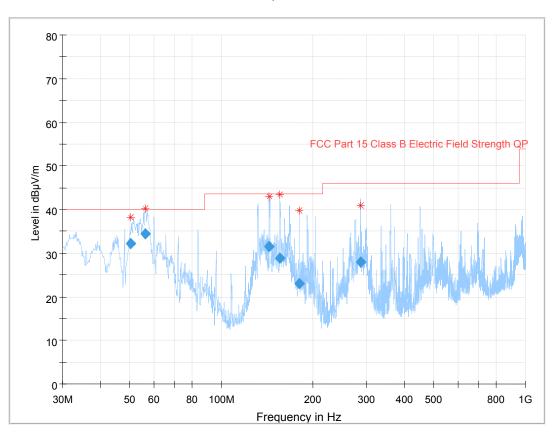
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EUT Operation Mode: Downloading

## 30 MHz ~ 1 GHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude (dBµV/m)	Antenna Height (cm)	Antenna Polarity	Turntable Position (Degree)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
50.455750	32.19	106.0	V	0.0	-19.8	40.00	7.81
56.324000	34.40	101.0	V	40.0	-20.5	40.00	5.60
143.987250	31.52	100.0	V	313.0	-14.1	43.50	11.98
155.984500	28.88	163.0	V	335.0	-14.7	43.50	14.62
180.021875	23.00	100.0	V	152.0	-15.6	43.50	20.50
288.043750	27.88	142.0	Н	333.0	-13.2	46.00	18.12

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## **Above 1 GHz:**

Frequency (MHz)	Receiver			Rx An	tenna	Corrected	Corrected	FCC Pa	rt 15B
	Reading (dBµV)	Detector (PK/QP/Ave.)	Turntable Degree	Height	Polar (H/V)	Factor	Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
1386.2	50.37	PK	187	1.3	Н	0.68	51.05	74	22.95
1386.2	37.96	Ave.	187	1.3	Н	0.68	38.64	54	15.36
1386.2	49.01	PK	359	1.7	V	0.68	49.69	74	24.31
1386.2	35.25	Ave.	359	1.7	V	0.68	35.93	54	18.07

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## Note:

- 1) Correction Factor=Antenna factor (RX) + cable loss amplifier factor
- 2) Corrected Amplitude = Correction Factor + Reading
- 3) Margin = Limit Corrected Amplitude

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

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