

FCC PART 15 B TEST REPORT

For

GO WORLDWIDE International - F.Z.E

SM - Office - B1-316C, Ajman, UAE.

FCC ID: 2ALSGWEMISTICOONE

	Product Name: MISTICO ONE 4G LTE Smartphone
Lorin Bian	Lorin Bian
RDG1704	411804A
2017-05-2	. 1
Henry Dir	
No.5040, Jinniu Dis	Compliance Laboratories Corp. (Chengdu) Huilongwan Plaza, No.1, Shawan Road, strict, Chengdu, Sichuan, China 65523123, Fax: 028-65525125 lcorp.com
	RDG1704 2017-05- Henry Dir EMC Lea Bay Area No.5040, Jinniu Dis Tel: 028-6

Note: This test report was 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. (Chengdu). Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This report was valid only with a valid digital signature.

TABLE OF CONTENTS

GENERAL INFORMATION	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
Objective	3
RELATED SUBMITTAL(S)/GRANT(S)	3
TEST METHODOLOGY	4
TEST FACILITY	4
SYSTEM TEST CONFIGURATION	5
DESCRIPTION OF TEST CONFIGURATION	5
EUT Exercise Software	
EQUIPMENT MODIFICATIONS	5
LOCAL SUPPORT EQUIPMENT LIST AND DETAILS	
SUPPORT CABLE LIST AND DETAILS	
CONFIGURATION OF TEST SETUP	6
SUMMARY OF TEST RESULTS	7
FCC§15.107 - CONDUCTED EMISSIONS	8
EUT SETUP	8
EMI TEST RECEIVER SETUP	
TEST EQUIPMENT LIST AND DETAILS	
Test Procedure	9
CORRECTED AMPLITUDE & MARGIN CALCULATION	
TEST DATA	10
FCC §15.109 - RADIATED SPURIOUS EMISSIONS	12
EUT SETUP	
EMI Test Receiver Setup	
Test Procedure	
TEST F ROCEDURE TEST EQUIPMENT LIST AND DETAILS	
CORRECTED AMPLITUDE & MARGIN CALCULATION	

GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The *GO WORLDWIDE International - F.Z.E*'s product, model number: *MISTICO ONE 4G LTE (FCC ID: 2ALSGWEMISTICOONE)* (the "EUT") in this report was a *MISTICO ONE 4G LTE Smartphone*, which was measured approximately: 15.4 cm (L) × 7.7 cm (W) × 0.94 cm (H), rated input voltage: DC3.8V battery or DC5.0V Charging from adapter.

Adapter Information:

Model: Magnum One 4G LTE Input: AC100-240V~ 50/60Hz 0.2A

Output: DC5.0V 1000mA

*All measurement and test data in this report was gathered from final production sample, serial number: 170411804 (assigned by the BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2017-04-11, and EUT conformed to test requirement.

Objective

This test report is prepared on behalf of *GO WORLDWIDE International - F.Z.E* in accordance with Part 2, Subpart J, and Part 15-Subparts A and B of the Federal Communications Commission's rules.

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

Related Submittal(s)/Grant(s)

FCC Part 15C DSS submissions with FCC ID: 2ALSGWEMISTICOONE.

FCC Part 15C DTS submissions with FCC ID: 2ALSGWEMISTICOONE.

FCC Part 22H, 24E, 27 PCE submissions with FCC ID: 2ALSGWEMISTICOONE.

Report No.: RDG170411804A Page 3 of 16

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, 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 of the measurements detailed in this Test Report were performed by Bay Area Compliance Laboratories Corp. (Chengdu).

The Bay Area Compliance Laboratories Corp. Chengdu's measurement Uncertainties (calculated for a k=2 Coverage Factor corresponding to approximately 95% Coverage) were as follows:

-For all of the AC Line Conducted Emissions Tests reported herein: ±3.17 dB.

-For of all of the direct Radiated Emissions Tests reported herein are:

30 MHz to 200 MHz: ±4.7 dB; 200 MHz to 1 GHz: ±6.0 dB; 1 GHz to 6 GHz: ±5.13dB; and, 6 GHz to 40 GHz: ±5.47dB.

And the uncertainty will not be taken into consideration for all test data recorded in the report.

Test Facility

The test site used by BACL to collect test data is located in the No.5040, Huilongwan Plaza, No.1, Shawan Road, Jinniu District, Chengdu, Sichuan, China.

Test site at BACL 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 April 24, 2015. 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.: 560332. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Report No.: RDG170411804A Page 4 of 16

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

EUT Exercise Software

The software "winthrax.exe" was used during test.

Equipment Modifications

No modification was made to the EUT tested.

Local Support Equipment List and Details

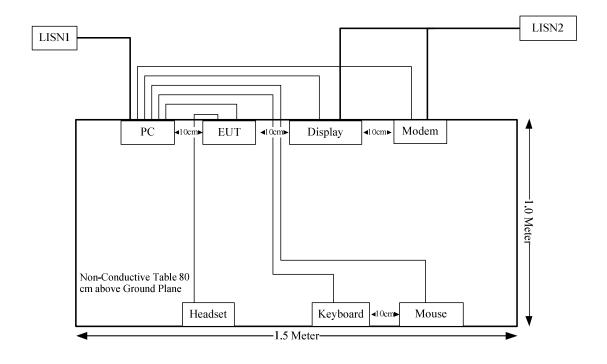
Manufacturer	Description	Model	Serial Number
IBM	PC	8176	99Y7315
DELL	Display	E157FPC	060229-11
ANTER	Modem	EGW802	0508350054-1B
Lenovo	Keyboard	KB-US19EB	IMHYX011071016460
Lenovo	Mouse	MO-5013U	IMJS011041409259

Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	То
Serial Cable	yes	No	1.6	Serial Port of PC	Modem
Mouse Cable	yes	No	1.4	USB Port of PC	Mouse
Keyboard Cable	yes	No	1.3	USB Port of PC	Keyboard
VGA Cable	yes	yes	1.8	VGA Port of PC	Display
USB Cable	yes	No	0.9	USB Port of PC	EUT
Headset Cable	no	no	0.9	Audio Port of EUT	Headset

Report No.: RDG170411804A Page 5 of 16

Configuration of Test Setup



Report No.: RDG170411804A Page 6 of 16

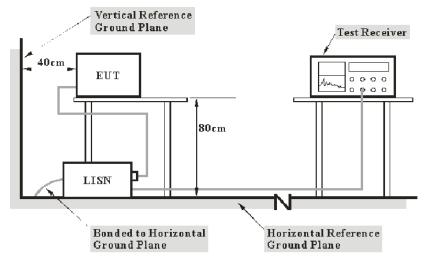
SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Results
§15.107	Conducted Emissions	Compliance
§15.109	Radiated Emissions	Compliance

Report No.: RDG170411804A Page 7 of 16

FCC§15.107 - CONDUCTED EMISSIONS

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 setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class B limits.

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

The PC was connected to the Main LISN with a 120V/60Hz AC power.

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

Report No.: RDG170411804A Page 8 of 16

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS 30	836858/0016	2016-12-02	2017-12-01
Rohde & Schwarz	L.I.S.N.	ENV216	100018	2016-12-02	2017-12-01
Rohde & Schwarz	PULSE LIMITER	ESH3Z2	DE14781	2016-10-31	2017-10-30
SOLAR ELECTRONICS	L.I.S.N.	9252-50-24 -BNC	984413	2016-12-02	2017-12-01
Unknown	Conducted Cable	Unknown	NO.5	2016-11-10	2017-11-09
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

^{*} Statement of Traceability: BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

Test Procedure

During the conducted emission test, the PC was connected to the outlet of the first LISN and the other support equipments were connected to the outlet of the second LISN.

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

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

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

Herein.

V_C: corrected voltage amplitude

V_R: reading voltage amplitude

A_c: attenuation caused by cable loss

VDF: voltage division factor of AMN or ISN

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

Margin = Limit - Corrected Amplitude

Report No.: RDG170411804A Page 9 of 16

Test Data

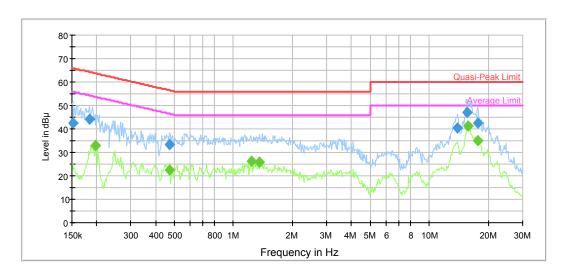
Environmental Conditions

Temperature:	22.5 °C
Relative Humidity:	53 %
ATM Pressure:	97.6 kPa

The testing was performed by Lorin Bian on 2017-05-02.

Test Mode: Downloading

AC120V, 60Hz, Line:

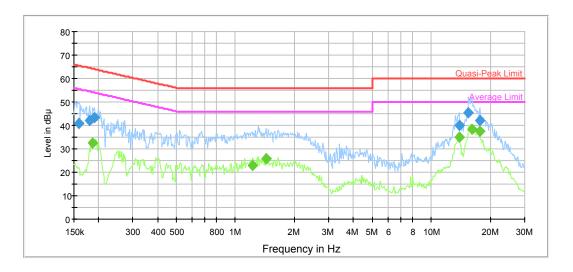


Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.151200	42.6	9.000	L1	19.7	23.3	65.9	Compliance
0.184529	44.1	9.000	L1	19.7	20.2	64.3	Compliance
0.472507	33.3	9.000	L1	19.7	23.2	56.5	Compliance
13.968003	40.4	9.000	L1	20.0	19.6	60.0	Compliance
15.616430	47.0	9.000	L1	20.1	13.0	60.0	Compliance
17.739864	42.5	9.000	L1	20.1	17.5	60.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.196675	33.0	9.000	L1	19.7	20.7	53.7	Compliance
0.472507	22.5	9.000	L1	19.7	24.0	46.5	Compliance
1.239175	26.1	9.000	L1	19.7	19.9	46.0	Compliance
1.363512	26.0	9.000	L1	19.7	20.0	46.0	Compliance
15.741362	41.2	9.000	L1	20.1	8.8	50.0	Compliance
17.739864	35.1	9.000	L1	20.1	14.9	50.0	Compliance

Report No.: RDG170411804A Page 10 of 16

AC120V, 60Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.158604	40.9	9.000	N	19.7	24.6	65.5	Compliance
0.180171	42.1	9.000	N	19.7	22.4	64.5	Compliance
0.190505	43.1	9.000	N	19.6	20.9	64.0	Compliance
13.857146	39.9	9.000	N	19.9	20.1	60.0	Compliance
15.492490	45.4	9.000	N	19.9	14.6	60.0	Compliance
17.739864	42.2	9.000	N	19.9	17.8	60.0	Compliance

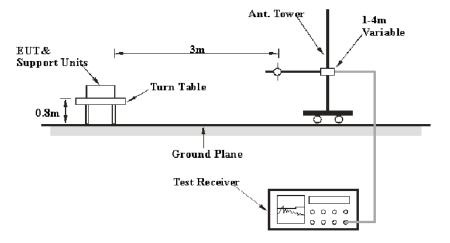
Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.187494	32.4	9.000	N	19.6	21.7	54.1	Compliance
1.229340	22.9	9.000	N	19.6	23.1	46.0	Compliance
1.430284	26.0	9.000	N	19.7	20.0	46.0	Compliance
13.857146	35.0	9.000	N	19.9	15.0	50.0	Compliance
16.122185	38.3	9.000	N	19.9	11.7	50.0	Compliance
17.739864	37.7	9.000	N	19.9	12.3	50.0	Compliance

Report No.: RDG170411804A Page 11 of 16

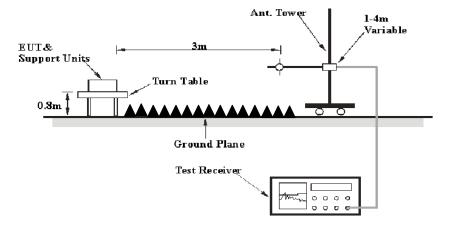
FCC §15.109 - RADIATED SPURIOUS EMISSIONS

EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed at the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

Report No.: RDG170411804A Page 12 of 16

EMI Test Receiver Setup

The system was investigated from 30 MHz to 13.5 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	120 kHz	300 kHz	120 kHz	QP	
Above 1 GHz	1 MHz	3 MHz	/	Peak	
	1 MHz	10 Hz	/	AVG	

Test Procedure

During the radiated emissions, the PC was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

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

The data was recorded in the Quasi-peak detection mode for below 1 GHz, peak and average detection mode above 1 GHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date	
Agilent	Amplifier	8447D	2944A10442	2016-12-02	2017-12-01	
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2016-12-02	2017-12-01	
Sunol Sciences	Broadband Antenna	JB3	A121808	2016-04-10	2019-04-09	
Rohde & Schwarz	Spectrum Analyzer	FSEM30	100018	2016-12-02	2017-12-01	
ETS	Horn Antenna	3115	003-6076	2016-12-02	2017-12-01	
Mini-circuits	Amplifier	ZVA-183-S+	771001215	2017-05-20	2018-05-19	
EMCT	Semi-Anechoic Chamber	966	966-1	2015-04-24	2018-04-23	
Unknown	RF Cable (below 1GHz)	Unknown	NO.1	2016-11-10	2017-11-09	
Unknown	RF Cable (below 1GHz)	Unknown	NO.4	2016-11-10	2017-11-09	
Unknown	RF Cable (above 1GHz)	Unknown	NO.2	2016-11-10	2017-11-09	

^{*} Statement of Traceability: BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

Report No.: RDG170411804A Page 13 of 16

Corrected Amplitude & Margin Calculation

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

Corrected Amplitude = Meter Reading + Antenna Loss + 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 Data

Environmental Conditions

Temperature:	20.8°C		
Relative Humidity:	56 %		
ATM Pressure:	96.3 kPa		

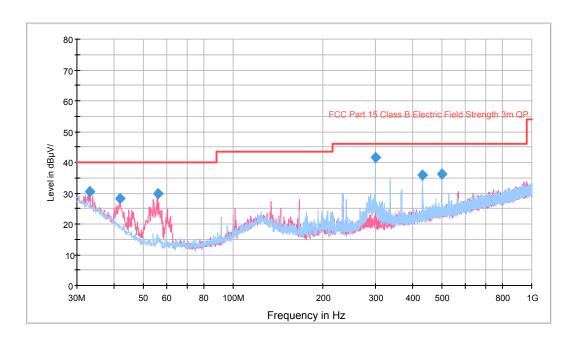
^{*} The testing was performed by Lorin Bian on 2017-05-23.

Test Result: Compliance

Report No.: RDG170411804A Page 14 of 16

Test Mode: Downloading

1) Below 1GHz:



Frequency (MHz)	QuasiPeak (dBµV/m)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
33.031250	30.5	150.0	V	136.0	-0.9	9.5	40.0
41.882500	28.3	100.0	V	110.0	-7.8	11.7	40.0
55.947500	29.8	100.0	V	23.0	-13.7	10.2	40.0
299.538750	41.5	100.0	Н	106.0	-5.5	-2.5	46.0
432.065000	35.9	150.0	Н	44.0	-3.4	10.1	46.0
499.116250	36.2	150.0	Н	4.0	-2.2	9.8	46.0

Report No.: RDG170411804A Page 15 of 16

2) 1-13.5 GHz:

Frequency	Rec	eiver	Rx A	ntenna	Cable	Amplifier	Corrected	Limit	Margin
(MHz)	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB)	loss (dB)	Gain (dB)	Amplitude (dBµV/m)	(dBµV/m)	(dB)
1198	52.53	PK	Н	23.31	2.25	26.62	51.47	74.00	22.53
1198	41.35	AV	Н	23.31	2.25	26.62	40.29	54.00	13.71
2158	44.91	PK	Н	24.36	3.03	26.84	45.46	74.00	28.54
2158	33.83	AV	Н	24.36	3.03	26.84	34.38	54.00	19.62
2638	37.48	PK	Н	23.48	3.11	26.76	37.31	74.00	36.69
2638	26.96	AV	Н	23.48	3.11	26.76	26.79	54.00	27.21
1420	44.78	PK	V	23.89	2.56	26.41	44.82	74.00	29.18
1420	34.12	AV	V	23.89	2.56	26.41	34.16	54.00	19.84
1840	43.21	PK	V	24.64	2.93	26.66	44.12	74.00	29.88
1840	31.97	AV	V	24.64	2.93	26.66	32.88	54.00	21.12
2998	39.34	PK	V	24.20	3.43	26.41	40.56	74.00	33.44
2998	27.63	AV	V	24.20	3.43	26.41	28.85	54.00	25.15

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

Report No.: RDG170411804A Page 16 of 16