FCC Test Report

Report No.: AGC00L110612F1

FCC ID : ZOJDALI

PRODUCT : MOBILE PHONE

BRAND NAME : MOBO

DESIGNATION

MODEL NAME : DALI

CLIENT: MOBO USA CORP

DATE OF ISSUE : July 8, 2011

STANDARD(S) : FCC Part 15 Rules

Attestation of Global Compliance Co., Ltd.

1. CAUTION: This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.

Page 1 of 21

TABLE OF CONTENTS

1. VERIFICATION OF COMPLIANCE	2
2. PRODUCT INFORMATION	3
3. TEST FACILITY	4
4. SUPPORT EQUIPMENT LIST	5
5. SYSTEM DESCRIPTION	5
6 SUMMARY OF TEST RESULTS	6
7. FCC LINE CONDUCTED EMISSION TEST	7
7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST	7
7.2 .LIMITS OF LINE CONDUCTED EMISSION TEST	7
7.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	7
7.4. PROCEDURE OF LINE CONDUCTED EMISSION TEST	8
7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST	9
8. FCC RADIATED EMISSION TEST	
8.1. TEST EQUIPMENT OF RADIATED EMISSION	
8.2. LIMITS OF RADIATED EMISSION TEST	11
8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST	11
8.4 PROCEDURE OF RADIATED EMISSION TEST	11
8.4 PROCEDURE OF RADIATED EMISSION TEST	12
8.5 TEST RESULT OF RADIATED EMISSION TEST	
APPENDIX 1	
PHOTOGRAPHS OF TEST SETUP	
APPENDIX 2	16
PHOTOGRAPHS OF EUT	16

Page 2 of 21

1. VERIFICATION OF COMPLIANCE

Applicant:	MOBO USA CORP
Applicant:	6000 NW 97 AV unit 14 Miami Florida 33178 USA
	SHENZHEN KENXINDA TECHNOLOGY CO., LTD (BAO'AN BRANCH)
Manufacturer:	1-6 FLOOR, NO.105 WORK SHOP & 1-5 FLOOR, NO.104
ivianulacturer.	WORK SHOP, XINWEIHUANING ROAD, DALANG COMMUNITY,
	DALANG STREET, BAO'AN DISTRICT, SHENZHEN P.R.CHINA
Product Designation:	MOBILE PHONE
Brand name:	мово
Model Name:	DALI
FCC ID:	ZOJDALI
Measurement Procedure:	ANSI C63.4: 2003
File Number:	AGC00L110612F1
Date of test:	July 3, 2011 to July 7, 2011
Deviation:	None
Condition of Test Sample:	Normal

The above equipment was tested by Attestation Of Global Compliance Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2003. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Checked By:

Curoky Chen July 8, 2011

Authorized By:

Forrest Lei July 8, 2011

Page 3 of 21

2. PRODUCT INFORMATION

Housing Type: Plastic and metal

EUT Rating Voltage: DC 3.7V by battery(or Charged by adapter)

Adapter Input AC100~240V,50/60Hz

Adapter Output DC5V,500mA

I/O Port Information (⊠Applicable □Not Applicable)

I/O Port of EUT									
I/O Port Type Q'TY Cable Tested with									
USB port	1	1.2 m, unshielded	1						
earphone	1	1.2m, unshielded	1						

Page 4 of 21

3. TEST FACILITY

Facility Attestation of Global Compliance Co., Ltd.

Location: 1F, No.2 Building, Huafeng No.1 Technical, Industrial Park, Sanwei, Xixiang,

Baoan District, Shenzhen, China

Description: The test site is constructed and calibrated to meet the FCC requirements in

documents ANSI C63.4:2003.

Site Filing: The FCC Registration Number is 259865

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4 requirements that meet

industry regulatory agency and accreditation agency requirement.

Page 5 of 21

4. SUPPORT EQUIPMENT LIST

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
PC	Lenovo	B450	N/A	N/A	1.5m
	Lenovo	D+30	19/74	IN/A	unshielded

^{**}Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

5. SYSTEM DESCRIPTION

EUT test procedure:

- 1. Connect EUT and peripheral devices (PC) through USB port.
- 2. Power on the EUT, use the software to transfer data between EUT and PC.
- 3. Make sure the EUT operates normally during the test.

Test Mode

1. USB connection for date transferring

Page 6 of 21

6 SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.107	Conduction Emission	Compliant
§15.109	Radiated Emission	Compliant

Page 7 of 21

7. FCC LINE CONDUCTED EMISSION TEST

7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST

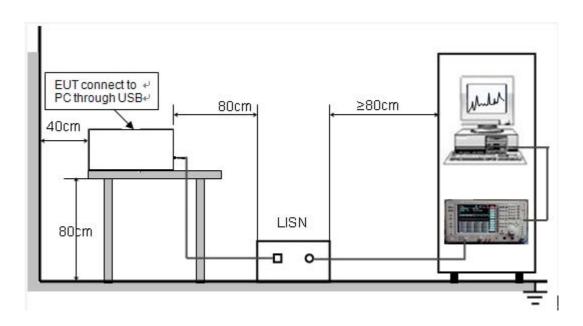
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	Agilent	E4440A	N/A	06/27/2011	06/26/2012
EMI Test Receiver	H.P.	8546A	N/A	06/27/2011	06/26/2012
LISN	EMCO	3825/2	N/A	06/27/2011	06/26/2012

7.2 .LIMITS OF LINE CONDUCTED EMISSION TEST

_	Maximum RF	Line Voltage
Frequency	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

^{**}Note: 1. The lower limit shall apply at the transition frequency.

7.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



^{2.} The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

Page 8 of 21

7.4. procedure of line conducted emission test

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V power by PC which received 120V/60Hz power from socket under the turntable through a LISN.
- 5) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 6) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 7) During the above scans, the emissions were maximized by cable manipulation.
- 8) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.
- 9) Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

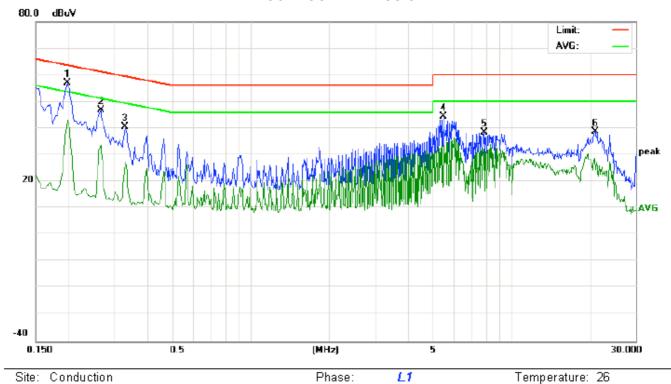
The test data of the worst case condition(s) was reported on the Summary Data page.

Humidity: 60 %

Page 9 of 21

7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION - L



Power:

Site: Conduction

Limit: FCC Class B Conduction(QP)

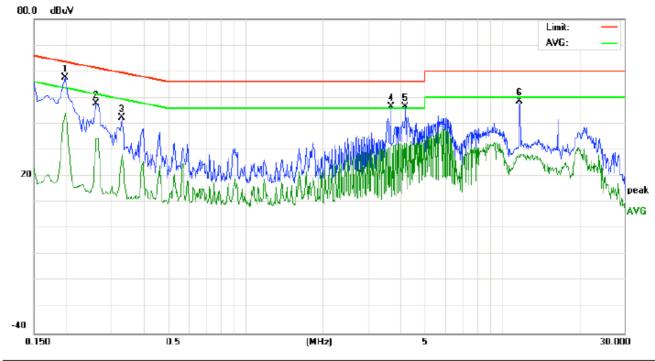
EUT: MOBILE PHONE

M/N: DALI Mode: USB Note:

No.	Freq.	Rea	iding_L (dBu√)		Correct Factor	Мє	asurer (dBuV)			mit uV)	Mai (d	rgin IB)	P/F	Comment
	(MHz)	Peak	QP	AVG	dΒ	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1980	46.70		32.85	10.21	56.91		43.06	63.69	53.69	-6.78	-10.63	Р	
2	0.2660	36.65		23.40	10.28	46.93		33.68	61.24	51.24	-14.31	-17.56	Р	
3	0.3300	30.27		17.12	10.30	40.57		27.42	59.45	49.45	-18.88	-22.03	Р	
4	5.4940	34.17		23.37	10.25	44.42		33.62	60.00	50.00	-15.58	-16.38	Р	
5	7.8780	28.04		21.72	10.34	38.38		32.06	60.00	50.00	-21.62	-17.94	Р	
6	20.9700	28.76		14.37	10.13	38.89		24.50	60.00	50.00	-21.11	-25.50	Р	

Page 10 of 21

LINE CONDUCTED EMISSION - N



Site: Conduction Phase: N Temperature: 26
Limit: FCC Class B Conduction(QP) Power: Humidity: 60 %

EUT: MOBILE PHONE

M/N: DALI Mode: USB Note:

No.	Freq.	Rea	ding_L (dBu√)		Correct Factor	1	asurer (dBuV)			mit u∨)	Mai (d	rgin IB)	P/F	Comment
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1980	47.30		33.87	10.21	57.51		44.08	63.69	53.69	-6.18	-9.61	Р	
2	0.2620	37.50		24.02	10.27	47.77		34.29	61.36	51.36	-13.59	-17.07	Р	
3	0.3300	31.95		18.69	10.30	42.25		28.99	59.45	49.45	-17.20	-20.46	Р	
4	3.6980	35.97		20.70	10.48	46.45		31.18	56.00	46.00	-9.55	-14.82	Р	
5	4.2220	36.31		19.18	10.33	46.64		29.51	56.00	46.00	-9.36	-16.49	Р	
6	11.6980	38.50		18.22	10.13	48.63		28.35	60.00	50.00	-11.37	-21.65	Р	

Page 11 of 21

8. FCC RADIATED EMISSION TEST

8.1. TEST EQUIPMENT OF RADIATED EMISSION

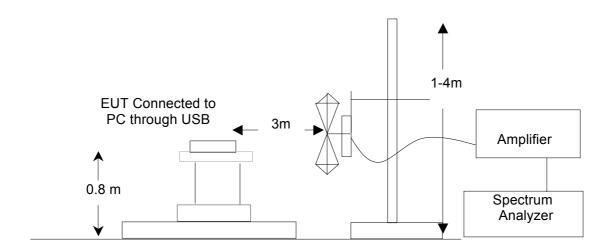
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due	
PSA SERIES	A OU FAIT	E44404	11044404000	00/07/0044	00/00/0040	
SPECTRUM ANALYZER	AGILENT	E4440A	US41421290	06/27/2011	06/26/2012	
ANTENNA	A.H.	SAS-521-4	128	06/27/2011	06/26/2012	
HORN ANTENNA	EM	EM-AH-10180	N/A	06/27/2011	06/26/2012	
AMPLIFIER	EM	EM30180	0607030	06/27/2011	06/26/2012	
POSITIONING						
CONTROLLER	MF	MF-7802	MF780208147	06/27/2011	06/26/2012	

8.2. LIMITS OF RADIATED EMISSION TEST

Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBuV/m/ Q.P.)
30~88	3	40.0
88~216	3	43.5
216~960	3	46.0
Above 960	3	54.0

^{**}Note: The lower limit shall apply at the transition frequency.

8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST



Page 12 of 21

8.4 PROCEDURE OF RADIATED EMISSION TEST

1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received DC 5V by PC which received 120V/60Hz power from socket under the turntable through a LISN.
- 5) The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 7) The test mode(s) were scanned during the test.
- 8) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and Q.P./Peak reading is presented.

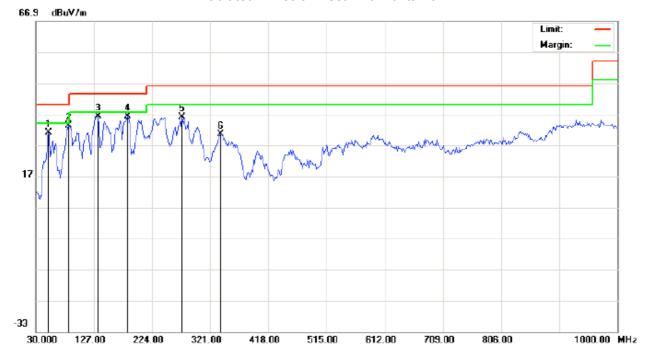
Temperature: 26

Humidity: 60 %

Page 13 of 21

8.5 TEST RESULT OF RADIATED EMISSION TEST

Radiated Emission Test -Horizontal -3m



Site: site #1 Polarization: Horizontal
Limit: FCC Class B 3M Radiation Power:

EUT: MOBILE PHONE Distance: 3m

M/N: DALI Mode: USB Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dΒ		cm	degree	
1		51.0167	17.66	13.25	30.91	40.00	-9.09	peak			
2	*	84.9667	22.11	11.25	33.36	40.00	-6.64	peak			
3		133.4667	22.47	13.73	36.20	43.50	-7.30	peak			
4		183.5833	19.58	16.66	36.24	43.50	-7.26	peak			
5		274.1166	18.81	17.21	36.02	46.00	-9.98	peak			
6		338.7832	11.71	18.94	30.65	46.00	-15.35	peak			

Page 14 of 21

Radiated Emission Test - Vertical - 3m



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

EUT: MOBILE PHONE Distance: 3m

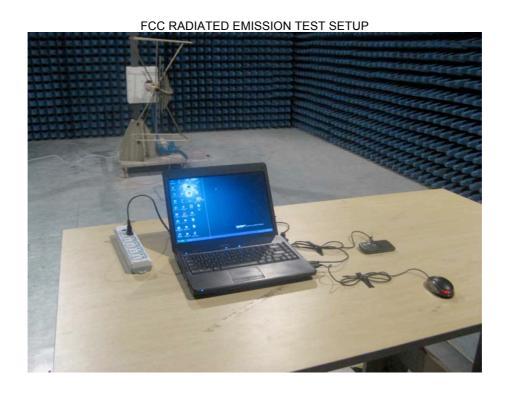
M/N: DALI Mode: USB Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBu∀/m	dBuV/m	dB		cm	degree	
1		89.8165	21.60	12.09	33.69	43.50	-9.81	peak			
2		127.0000	22.09	13.63	35.72	43.50	-7.78	peak			
3	*	181.9667	17.37	18.36	35.73	43.50	-7.77	peak			
4		235.3163	16.64	16.42	33.06	46.00	-12.94	peak			
5		298.3666	17.48	17.02	34.50	46.00	-11.50	peak			
6		384.0500	17.75	19.56	37.31	46.00	-8.69	peak			

Report No.: AGC00L110612F1 Page 15 of 21

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP





Page 16 of 21

APPENDIX 2 PHOTOGRAPHS OF EUT

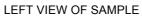
TOP VIEW OF SAMPLE



BOTTOM VIEW OF SAMPLE



Page 17 of 21





RIGHT VIEW OF SAMPLE



Page 18 of 21

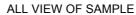




BACK VEIW OF SAMPLE



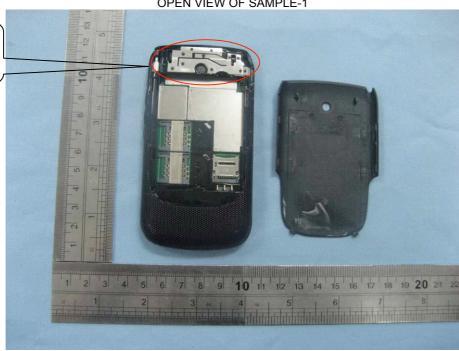
Page 19 of 21



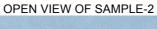


OPEN VIEW OF SAMPLE-1

GSM Antenna



Page 20 of 21

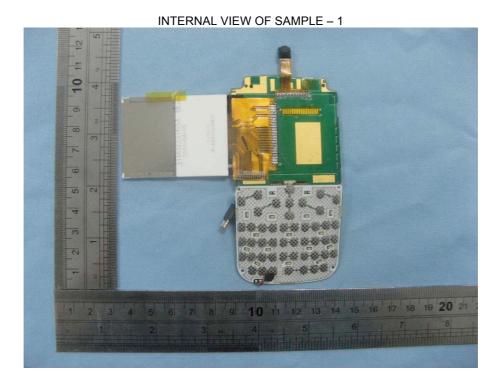


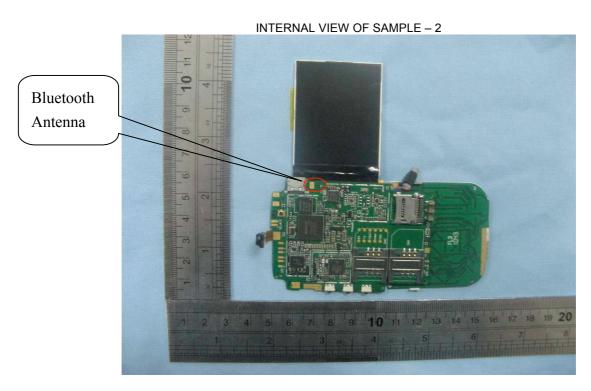


OPEN VIEW OF EUT-3



Page 21 of 21





----END OF REPORT----