FCC Test Report

Report No.: AGC00697151101FE07

FCC ID : 2AGMM00079

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION: MOBILE PHONE

BRAND NAME : ACCELLORIZE

MODEL NAME : 00079

CLIENT: WEAFORLA TECHNOLOGY CO., LTD.

DATE OF ISSUE : Nov.16, 2015

STANDARD(S) : FCC Part 15 Rules

REPORT VERSION: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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.



Report No.: AGC00697151101FE07 Page 2 of 26

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Nov.16, 2015	Valid	Original Report

Report No.: AGC00697151101FE07 Page 3 of 26

TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY	4
2. SYSTEM DESCRIPTION	5
3. MEASUREMENT UNCERTAINTY	5
4. PRODUCT INFORMATION	6
5. SUPPORT EQUIPMENT	7
6. TEST FACILITY	8
7. FCCLINE CONDUCTED EMISSION TEST	
7.1. LIMITS OF LINE CONDUCTED EMISSION TEST	
7.2. BLOCK DIAGRAM OF TEST SETUP	10
7.3. PROCEDURE OF LINE CONDUCTED EMISSION TEST	11
7.4. TEST RESULT OF LINE CONDUCTED EMISSION TEST	12
8. FCC RADIATED EMISSION TEST	14
8.1. LIMITS OF RADIATED EMISSION TEST	
8.2. BLOCK DIAGRAM OF TEST SETUP	14
8.3. PROCEDURE OF RADIATED EMISSION TEST	
8.4. TEST RESULT OF RADIATED EMISSION TEST	
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	18
APPENDIX B: PHOTOGRAPHS OF EUT	20

Page 4 of 26

1. VERIFICATION OF CONFORMITY

Applicant	WEAFORLA TECHNOLOGY CO., LTD.
Address	31B BUILDING, HUAQIANG GARDEN, FUHONG ROAD, FUTIAN DISTRICT, SHENZHEN, CHINA
Manufacturer	WEAFORLA TECHNOLOGY CO., LTD.
Address	31B BUILDING, HUAQIANG GARDEN, FUHONG ROAD, FUTIAN DISTRICT, SHENZHEN, CHINA
Product Designation	MOBILE PHONE
Brand Name	ACCELLORIZE
Test Model	00079
Date of test	Nov.05, 2015 to Nov.13, 2015
Deviation	None
Condition of Test Sample	Normal
Report Template	AGCRT-US-IT/AC

The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2009. 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.

Tested By	Matt Zhang		
	Matt Zhang(Zhang Liang)	Nov.16, 2015	
Reviewed By	Boresie		
	Bart Xie(Xie Xiaobin)	Nov.16, 2015	
Approved By	solya slang		
	Solger Zhang(Zhang Hongyi) Authorized Officer	Nov.16, 2015	

Page 5 of 26

2. 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

TEST MODE DESCRIPTION				
NO.	TEST MODE DESCRIPTION	WORST		
1	USB (connection for data transferring)	V		
N.L. d.				

Note:

- 1.V means EMI worst mode
- 2. Other modes have been verified through VOC mode.
- 3. USB cable is provided by AGC-Lab.

3. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Conducted measurement: +/- 2.75dB Radiated measurement: +/- 3.2Db

Summary Of Test Results

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

Page 6 of 26

4. PRODUCT INFORMATION

Housing Type	plastics
Adapter Input	AC100-240V, 50-60Hz, 0.2A
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	0.8m, unshielded	1		
Earphone Port	1				

Note: The adapter provided by the laboratory

Page 7 of 26

5. SUPPORT EQUIPMENT

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
Notebook	Lenovo	B460	WB03928113	1	1.5m unshielded

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

Page 8 of 26

6. TEST FACILITY

Site	Site Dongguan Precise Testing Service Co., Ltd.	
Location Building D, Baoding Technology Park, Guangming Road2, Dongcheng District Dongguan, Guangdong, China,		
FCC Registration No.	371540	
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009.	

ALL TEST EQUIPMENT LIST

FOR RADIATED EMISSION TEST (BELOW 1GHZ)

	OKTO BUTTED EMILED TO TEST (BELLOW TOTAL)						
Radiated Emission Test Site							
Name of Equipment Manufacturer		Model Number	Serial Number	Last Calibration	Due Calibration		
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2015	July 3, 2016		
Trilog Broadband Antenna (25M-1GHz)	SCHWARZBECK	VULB9160	9160-3355	July 4, 2015	July 3, 2016		
Signal Amplifier	SCHWARZBECK	BBV 9475	9745-0013	July 4, 2015	July 3, 2016		
RF Cable	SCHWARZBECK	AK9515E	96221	July 4, 2015	July 3, 2016		
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 6, 2015	June 5, 2016		
MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A		
Active loop antenna (9K-30MHz)	Schwarzbeck	FMZB1519	1519-038	June 6, 2015	June 5, 2016		
Spectrum analyzer	Agilent	E4407B	MY46185649	June 6, 2015	June 5, 2016		

FOR RADIATED EMISSION TEST (1GHZ ABOVE)

Radiated Emission Test Site						
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration	
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2015	July 3, 2016	
Horn Antenna (1G-18GHz)	SCHWARZBECK	BBHA9120D	9120D-1246	July 11, 2015	July 10, 2016	
Spectrum Analyzer	Agilent	E4411B	MY4511453	July 4, 2015	July 3, 2016	
Signal Amplifier	SCHWARZBECK	BBV 9718	9718-269	July 7, 2015	July 6, 2016	
RF Cable	SCHWARZBECK	AK9515H	96220	July 8, 2015	July 7, 2016	
3m Anechoic Chamber	CHENGYU	966	PTS-001	June 6, 2015	June 5, 2016	

Page 9 of 26

MULTI-DEVICE Positioning Controller	Max-Full	MF-7802	MF780208339	N/A	N/A	
Horn Ant (18G-40GHz)	Schwarzbeck	BBHA 9170	9170-181	June 6, 2015	June 5, 2016	

	Conducted Emission Test Site												
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration								
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2015	July 3, 2016								
Artificial Mains Network	Narda	L2-16B	000WX31025	July 8, 2015	July 7, 2016								
Artificial Mains Network (AUX)	Narda	L2-16B	000WX31026	July 8, 2015	July 7, 2016								
RF Cable	SCHWARZBECK	AK9515E	96222	July 4, 2015	July 3, 2016								
Shielded Room	CHENGYU	843	PTS-002	June 6,2015	June 5,2016								

Page 10 of 26

7. FCCLINE CONDUCTED EMISSION TEST

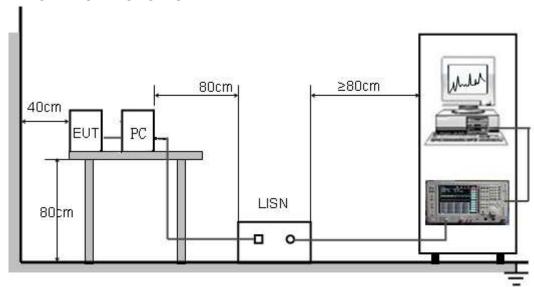
7.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Eroguanov	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.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

7.2. BLOCK DIAGRAM OF TEST SETUP



Page 11 of 26

7.3. 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.

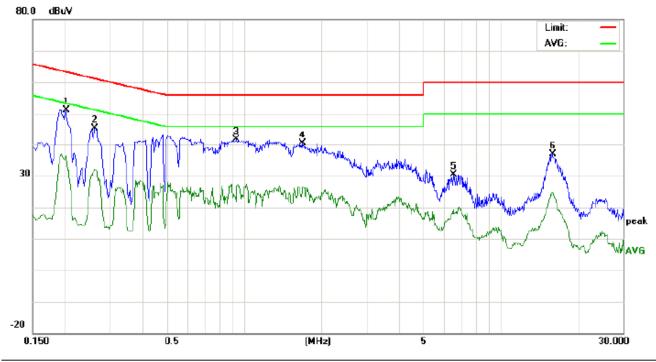
- (2) Support equipment, if needed, was placed as per ANSI C63.4.
- (3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- (4) The EUT received DC5V power from PC with receive AC120V/60Hz power from a LISN.
- (5) The EUT test program was started. Emissions were measured 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 (mode 1) was reported on the Summary Data page.

Page 12 of 26

7.4. TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION TEST-L



Site: Conduction Phase: L1 Temperature: 22.9
Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 53.2 %

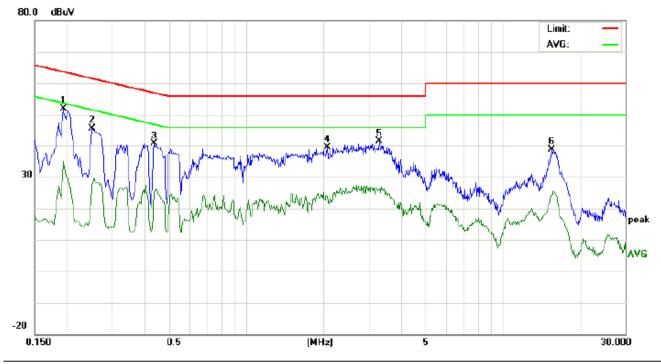
EUT: MOBILE PHONE

M/N: 00079 Mode: USB Note:

No.	No. Freq.	Reading_Level (dBuV)		Correct Measurement Factor (dBuV)				Margin (dB)		Comment				
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG	P/F	00111110111
1	0.2020	40.99		26.09	10.22	51.21		36.31	63.52	53.52	-12.31	-17.21	Р	
2	0.2620	35.13		21.90	10.27	45.40		32.17	61.36	51.36	-15.96	-19.19	Р	
3	0.9380	31.29		16.44	10.39	41.68		26.83	56.00	46.00	-14.32	-19.17	Р	
4	1.6860	30.09		14.59	10.32	40.41		24.91	56.00	46.00	-15.59	-21.09	Р	
5	6.5540	20.17		8.74	10.31	30.48		19.05	60.00	50.00	-29.52	-30.95	Р	
6	15.9180	26.80		14.84	10.11	36.91		24.95	60.00	50.00	-23.09	-25.05	Р	

Page 13 of 26

LINE CONDUCTED EMISSION TEST-N



Site: Conduction Phase: N Temperature: 22.9
Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 53.2 %

EUT: MOBILE PHONE

M/N: 00079 Mode: USB Note:

No.	Freq.		Reading_Level (dBuV)		Correct Factor	Measurement (dBuV)		Limit (dBuV)		Margin (dB)		P/F	Comment	
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1940	41.56		24.65	10.21	51.77		34.86	63.86	53.86	-12.09	-19.00	Р	
2	0.2500	35.32		16.40	10.27	45.59		26.67	61.75	51.75	-16.16	-25.08	Р	
3	0.4380	30.22		15.02	10.36	40.58		25.38	57.10	47.10	-16.52	-21.72	Р	
4	2.0660	29.22		13.71	10.25	39.47		23.96	56.00	46.00	-16.53	-22.04	Р	
5	3.3020	30.97		15.34	10.53	41.50		25.87	56.00	46.00	-14.50	-20.13	Р	
6	15.5180	28.53		14.24	10.11	38.64		24.35	60.00	50.00	-21.36	-25.65	Р	

RESULT: PASS

Page 14 of 26

8. FCC RADIATED EMISSION TEST

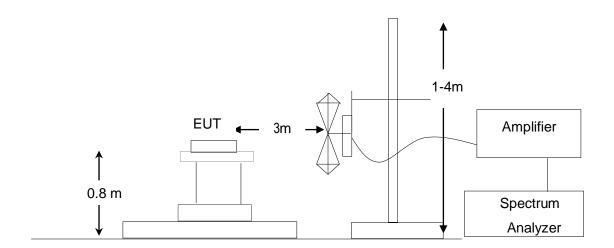
8.1. LIMITS OF RADIATED EMISSION TEST

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.

8.2. BLOCK DIAGRAM OF TEST SETUP

System Diagram of Connections between EUT and Simulators



Page 15 of 26

8.3. 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.

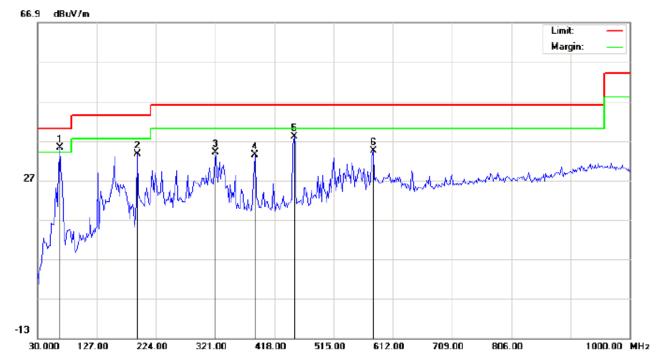
- (2) Support equipment, if needed, was placed as per ANSI C63.4.
- (3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- (4) The EUT received DC 5V power from PC with receive AC120V/60Hz power from socket under the turntable through a LISN.
- (5) The antenna was placed 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.

The test data of the worst case condition (mode 1) was reported on the Summary Data page.

Page 16 of 26

8.4. TEST RESULT OF RADIATED EMISSION TEST

Radiated Emission Test at 3m Distance-Horizontal



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

EUT: MOBILE PHONE

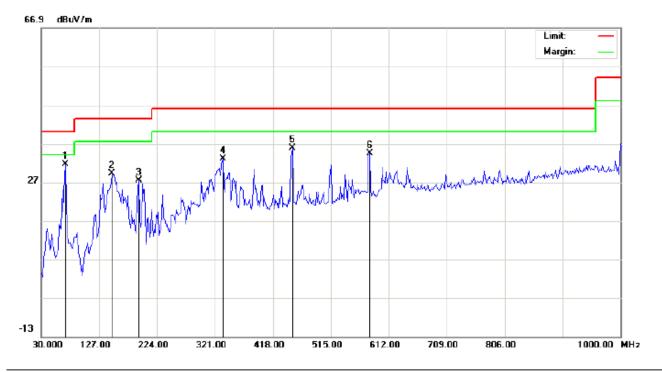
M/N: 00079 Mode: USB Note: Polarization: *Horizontal* Temperature: 22.7 Power: AC 120V/60Hz Humidity: 53.6 %

Distance: 3m

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	67.1833	24.73	10.51	35.24	40.00	-4.76	peak			
2		193.2833	21.90	11.69	33.59	43.50	-9.91	peak			
3		321.0000	17.18	16.81	33.99	46.00	-12.01	peak			
4		385.6667	14.47	18.98	33.45	46.00	-12.55	peak			
5		450.3333	17.32	20.59	37.91	46.00	-8.09	peak		·	
6		579.6667	11.18	23.22	34.40	46.00	-11.60	peak		·	

Page 17 of 26

Radiated Emission Test at 3m Distance-Vertical



Site: site #1 Polarization: Vertical Temperature: 22.7
Limit: FCC Class B 3M Radiation Power: AC 120V/60Hz Humidity: 53.6 %

EUT: MOBILE PHONE Distance: 3m

M/N: 00079 Mode: USB Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	70.4167	27.47	4.16	31.63	40.00	-8.37	peak			
2		148.0167	13.89	15.25	29.14	43.50	-14.36	peak			
3		193.2833	16.79	10.70	27.49	43.50	-16.01	peak			
4		333.9333	15.43	17.67	33.10	46.00	-12.90	peak			
5		450.3333	15.15	20.59	35.74	46.00	-10.26	peak		·	
6		579.6667	11.80	22.63	34.43	46.00	-11.57	peak		·	

RESULT: PASS

Note: All Other modes above 1GHz have more than 20db margin, no recording in the report Measurement = Reading + Factor, Over = Measurement – Limit.

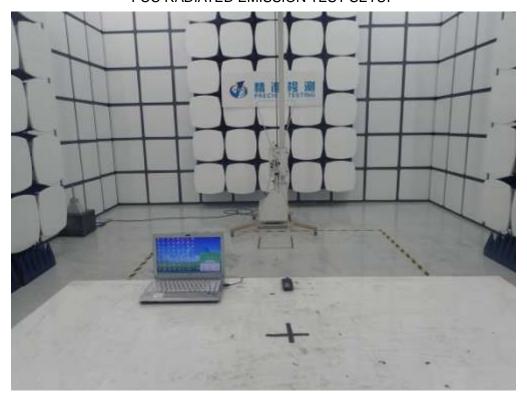
Page 18 of 26

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

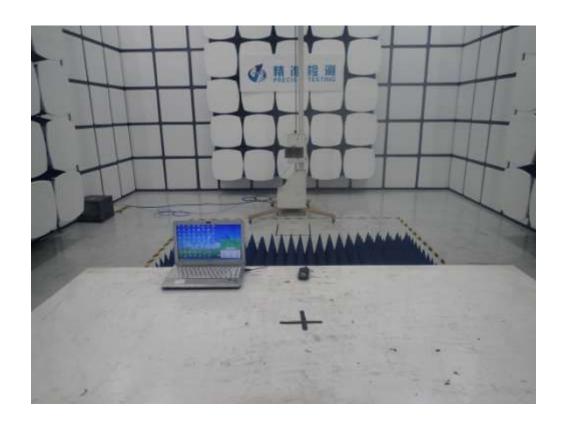
FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP



Report No.: AGC00697151101FE07 Page 19 of 26



Page 20 of 26

APPENDIX B: PHOTOGRAPHS OF EUT

TOTAL VIEW OF EUT



TOP VIEW OF EUT



Report No.: AGC00697151101FE07 Page 21 of 26

BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



Report No.: AGC00697151101FE07 Page 22 of 26

BACK VIEW OF EUT



LEFT VIEW OF EUT



Page 23 of 26

RIGHT VIEW OF EUT



OPEN VIEW OF EUT-1



Page 24 of 26

OPEN VIEW OF EUT-2

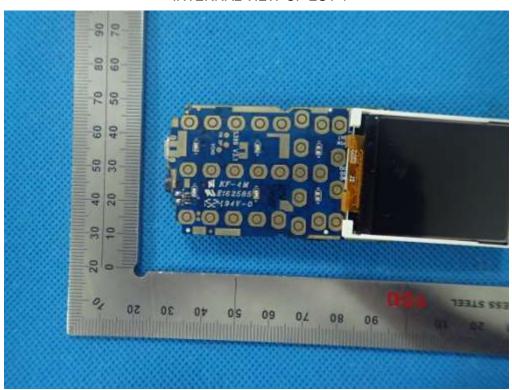


OPEN VIEW OF EUT-3

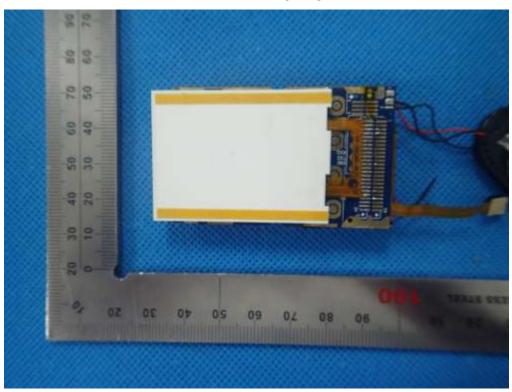


Report No.: AGC00697151101FE07 Page 25 of 26

INTERNAL VIEW OF EUT-1

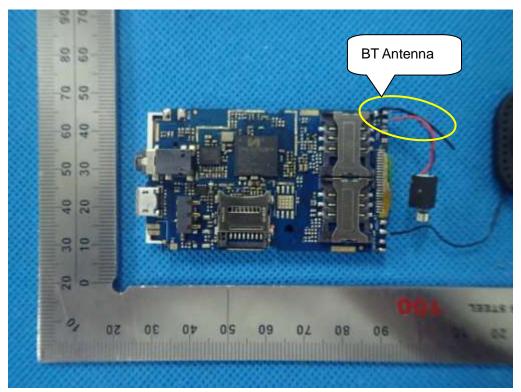


INTERNAL VIEW OF EUT-2



Report No.: AGC00697151101FE07 Page 26 of 26

INTERNAL VIEW OF EUT-3



----END OF REPORT----