# **FCC Test Report**

Report No.: AGC05U111001F1

FCC ID : ZGRCLIMA

PRODUCT : GSM Mobile Phone

BRAND NAME : Ice Mobile

MODEL NAME : CLIMA II

**DESIGNATION** 

**CLIENT** : Dynamics Hong Kong Limited

**DATE OF ISSUE** : Nov.04, 2011

**STANDARD(S)** : FCC Part 15 Rules

# Attestation of Global Compliance Co., Ltd.

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Report No.: AGC05U111001F1 Page 1 of 22

# **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	11
8.1. TEST EQUIPMENT OF RADIATED EMISSION	
8.2. LIMITS OF RADIATED EMISSION TEST	
8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST	
8.4 PROCEDURE OF RADIATED EMISSION TEST	11
8.4 PROCEDURE OF RADIATED EMISSION TEST	
8.5 TEST RESULT OF RADIATED EMISSION TEST	13
APPENDIX 1	15
PHOTOGRAPHS OF TEST SETUP	15
APPENDIX 2	16
PHOTOGRAPHS OF FUT	16

Page 2 of 22

#### 1. VERIFICATION OF COMPLIANCE

	Dynamics Hong Kong Limited						
Applicant:	Room A4,3/F,Friend's House ,No.6A Carnarvon Road,						
	Tsim Sha Tsui,Kowloon,Hong Kong						
	Shenzhen Telacom Science & Technology Co., Ltd						
Manufacturer:	Room A4,3/F,Friend's House ,No.6A Carnarvon Road,						
	Tsim Sha Tsui,Kowloon,Hong Kong						
Product Designation:	GSM Mobile Phone						
Brand name:	Ice Mobile						
Model Name:	Clima II						
FCC ID:	ZGRCLIMA						
Measurement Procedure:	ANSI C63.4: 2003						
File Number:	AGC05U111001F1						
Date of test:	Oct.29, 2011 to Nov.02, 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.

Tested By:

Curoky Chen Nov.04, 2011

Reviewed By:

Forrest Lei Nov.04, 2011

Approved By:

Solger Zhang Nov.04, 2011

Page 3 of 22

#### 2. PRODUCT INFORMATION

Housing Type: Plastic and metal

**EUT Rating Voltage:** DC 3.7V by battery

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									
USB port	1	0.9 m, unshielded	1						
earphone	1	1.2m, unshielded	1						

Page 4 of 22

#### 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 22

#### 4. SUPPORT EQUIPMENT LIST

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
PC	Lenovo	SL410K	LR-LGVPM	N/A	1.5m unshielded

<sup>\*\*</sup>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 22

# **6 SUMMARY OF TEST RESULTS**

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

Page 7 of 22

#### 7. FCC LINE CONDUCTED EMISSION TEST

#### 7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST

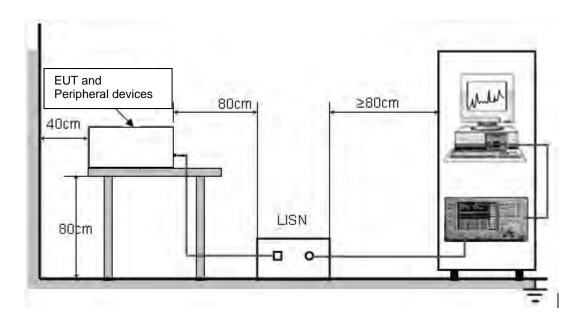
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	H.P.	8546A	N/A	06/27/2011	06/26/2012
LISN	EMCO	3825/2	N/A	06/27/2011	06/26/2012

#### 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

<sup>\*\*</sup>Note: 1. The lower limit shall apply at the transition frequency.

#### 7.3. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



<sup>2.</sup> The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

Page 8 of 22

#### 7.4. procedure of line conducted emission test

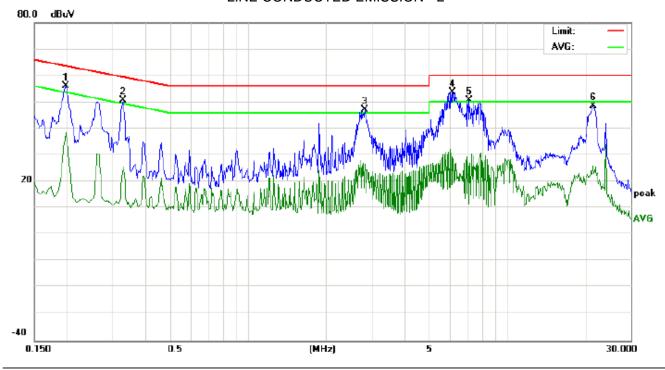
- The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground 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 connect to 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.

Page 9 of 22

#### 7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST

#### LINE CONDUCTED EMISSION - L



Site: Conduction Phase: L1 Temperature: 26
Limit: FCC Class B Conduction(QP) Power: Humidity: 60 %

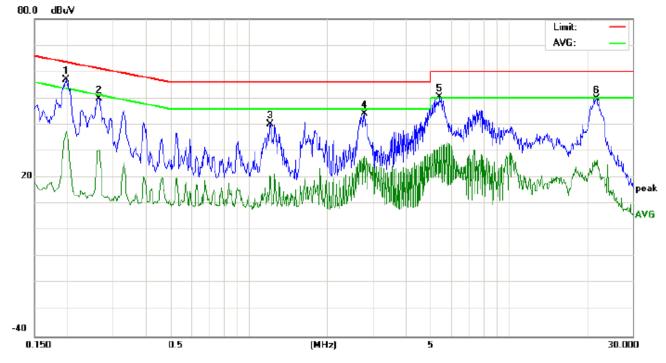
EUT: GSM Mobile Phone

M/N: Clima II Mode: USB Note:

No.	Freq.		ading_L (dBuV)		Correct Factor	1	asuren (dBuV)		ı	nit uV)	Mai (d	rgin IB)	P/F	Comment
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1980	46.01		28.22	10.21	56.22		38.43	63.69	53.69	-7.47	-15.26	Р	
2	0.3300	40.43		15.39	10.30	50.73		25.69	59.45	49.45	-8.72	-23.76	Р	
3	2.8340	36.74		16.30	10.51	47.25		26.81	56.00	46.00	-8.75	-19.19	Р	
4	6.1379	43.33		19.08	10.29	53.62		29.37	60.00	50.00	-6.38	-20.63	Р	
5	7.1257	40.52		15.61	10.35	50.87		25.96	60.00	50.00	-9.13	-24.04	Р	
6	21.5820	38.38		14.64	10.12	48.50		24.76	60.00	50.00	-11.50	-25.24	Р	

Page 10 of 22

#### LINE CONDUCTED EMISSION - N



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

EUT: GSM Mobile Phone

M/N: Clima II Mode: USB Note:

No.	Freq.		iding_L (dBuV)		Correct Factor	ı	Measuremen (dBuV)		Limit (dBuV)		Margin (dB)		P/F	Comment
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1980	46.75		27.35	10.21	56.96		37.56	63.69	53.69	-6.73	-16.13	Р	
2	0.2644	39.64		19.98	10.28	49.92		30.26	61.29	51.29	-11.37	-21.03	Р	
3	1.2096	29.83		10.09	10.37	40.20		20.46	56.00	46.00	-15.80	-25.54	Р	
4	2.7820	33.74		17.53	10.50	44.24		28.03	56.00	46.00	-11.76	-17.97	Р	
5	5.4138	40.33		21.22	10.25	50.58		31.47	60.00	50.00	-9.42	-18.53	Р	
6	21.7300	39.64		14.80	10.12	49.76		24.92	60.00	50.00	-10.24	-25.08	Р	

Page 11 of 22

#### 8. FCC RADIATED EMISSION TEST

## 8.1. TEST EQUIPMENT OF RADIATED EMISSION

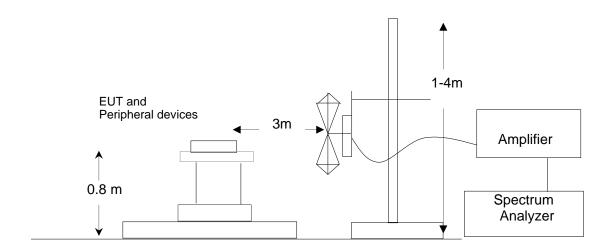
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
PSA SERIES	A OU ENT	E 4 4 4 0 A	11044404000	00/07/0044	00/00/0040
SPECTRUM ANALYZER	AGILENT	E4440A	US41421290	06/27/2011	06/26/2012
ANTENNA	A.H.	SAS-521-4	128	06/27/2011	06/26/2012
HORN ANTENNA	EM	EM-AH-10180	N/A	06/27/2011	06/26/2012
AMPLIFIER	EM	EM30180	0607030	06/27/2011	06/26/2012
POSITIONING				00/07/00/	00/00/00/0
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

<sup>\*\*</sup>Note: The lower limit shall apply at the transition frequency.

#### 8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST



Page 12 of 22

#### 8.4 PROCEDURE OF RADIATED EMISSION TEST

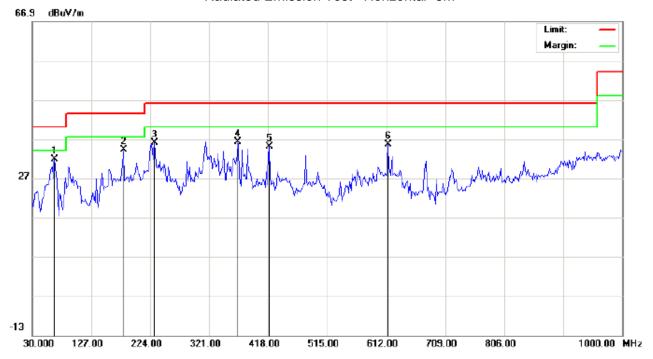
1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the 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 connect to 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.

Page 13 of 22

#### 8.5 TEST RESULT OF RADIATED EMISSION TEST

#### Radiated Emission Test -Horizontal -3m



Site: site #1 Polarization: Horizontal Temperature: 26

Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

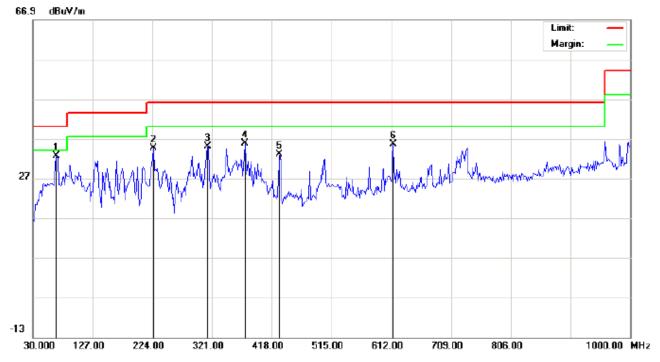
EUT: GSM Mobile Phone Distance: 3m

M/N: Clima II 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	dB		cm	degree	
1	*	67.1833	28.97	2.74	31.71	40.00	-8.29	peak			
2		180.3499	16.09	18.05	34.14	43.50	-9.36	peak			
3		230.4667	20.35	15.58	35.93	46.00	-10.07	peak			
4		367.8833	17.02	19.16	36.18	46.00	-9.82	peak			
5		419.6166	13.58	21.43	35.01	46.00	-10.99	peak			
6		615.2332	10.64	25.03	35.67	46.00	-10.33	peak			

Page 14 of 22

#### Radiated Emission Test -Vertical -3m



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

EUT: GSM Mobile Phone Distance: 3m

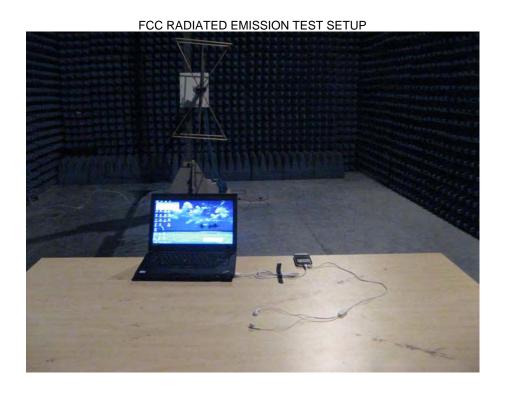
M/N: Clima II Mode: USB Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBuV/m	dBu∀/m	dB		cm	degree	
1	*	68.7997	28.85	3.78	32.63	40.00	-7.37	peak			
2		225.6167	21.80	12.87	34.67	46.00	-11.33	peak			
3		314.5332	16.99	17.95	34.94	46.00	-11.06	peak			
4		374.3500	16.55	19.20	35.75	46.00	-10.25	peak			
5		430.9331	11.50	21.46	32.96	46.00	-13.04	peak			
6		615.2332	10.52	25.03	35.55	46.00	-10.45	peak			

Report No.: AGC05U111001F1 Page 15 of 22

## **APPENDIX 1** PHOTOGRAPHS OF TEST SETUP

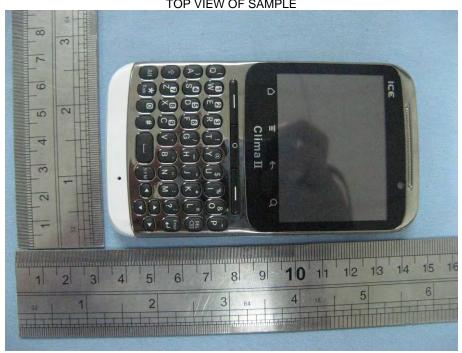




Page 16 of 22

## **APPENDIX 2 PHOTOGRAPHS OF EUT**

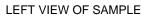
TOP VIEW OF SAMPLE







Page 17 of 22

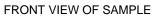




RIGHT VIEW OF SAMPLE



Page 18 of 22





BACK VEIW OF SAMPLE



Page 19 of 22

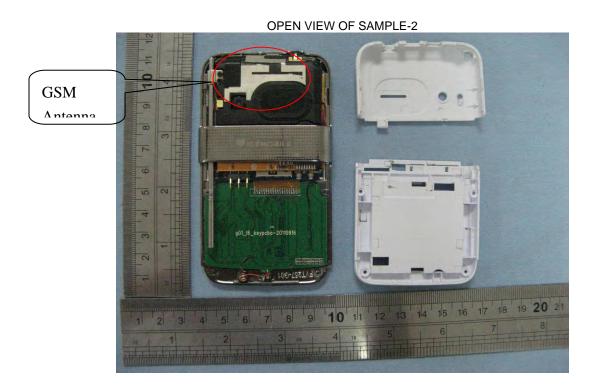


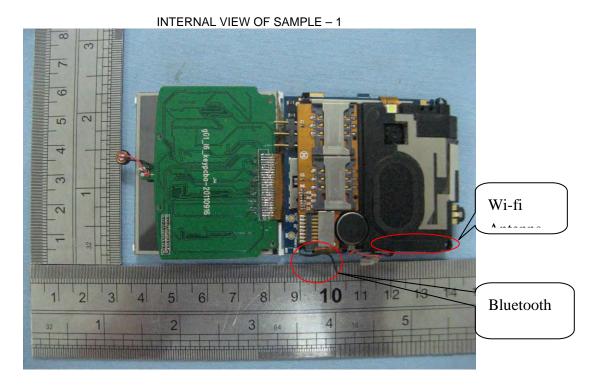


OPEN VIEW OF SAMPLE-1

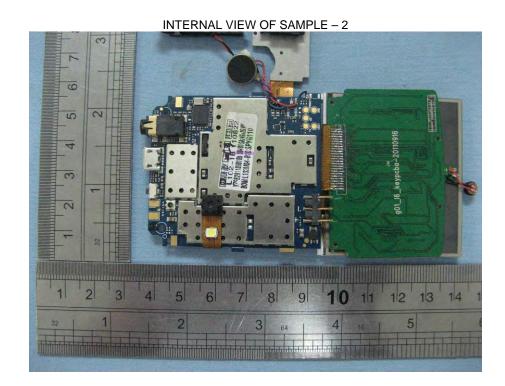


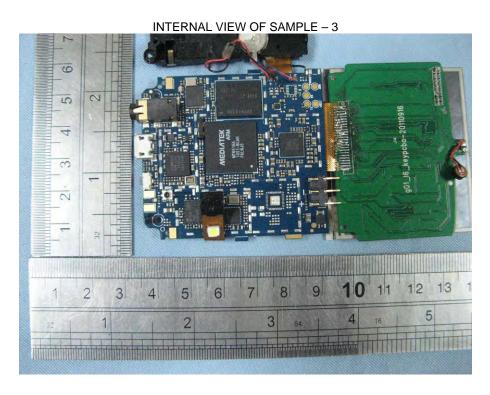
Page 20 of 22



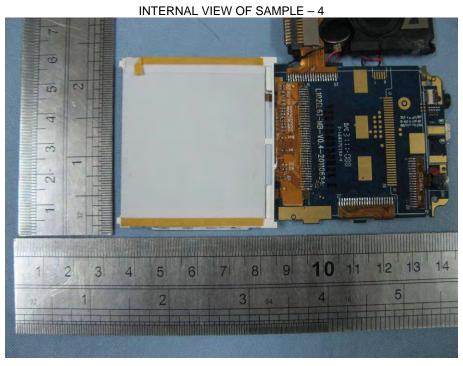


Page 21 of 22





Page 22 of 22



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