# **FCC Test Report**

Report No.: AGC09W110601F1

FCC ID : ZP7Q8

PRODUCT : GSM MOBILE PHONE

**DESIGNATION** . GSW MOBILE 1 HOL

**BRAND NAME** : ICE

MODEL NAME : Q8

**CLIENT** : CELL CITY INC.

**DATE OF ISSUE** : July 2, 2011

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

# Attestation of Global Compliance Co., Ltd.

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#### 1. VERIFICATION OF COMPLIANCE

Angliand	CELL CITY INC.						
Applicant:	18009 SW 54th St., Miramar, Florida 33029, USA						
	FREETEK INTERNATIONAL CO.,LTD						
Manufacturer:	UNIT D, 15/F, TAI PING IND. CTR., BLK 2, 55 TING KOK RD., TAI PO, HK						
Product Designation:	GSM MOBILE PHONE						
Brand name:	ICE						
Model Name:	Q8						
FCC ID:	ZP7Q8						
Measurement Procedure:	ANSI C63.4: 2003						
File Number:	AGC09W110601F1						
Date of test:	June 29, 2011 to June 30, 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 2, 2011

Authorized By:

Forrest Lei July 2, 2011

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# 2. PRODUCT INFORMATION

Housing Type: Plastic

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

Adapter Input AC110~240V,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 w									
USB port	1	1m, unshielded	1						
Earphone port	1	1m, unshielded	1						
DC input port	1	N/A	1						

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# 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.

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# 4. SUPPORT EQUIPMENT LIST

Device Type	Manufacturer Model Name Serial No.		Serial No.	Data Cable	Power Cable
PC	Lenovo	B450	N/A	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

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# **6 SUMMARY OF TEST RESULTS**

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

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# 7. FCC LINE CONDUCTED EMISSION TEST

# 7.1. TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST

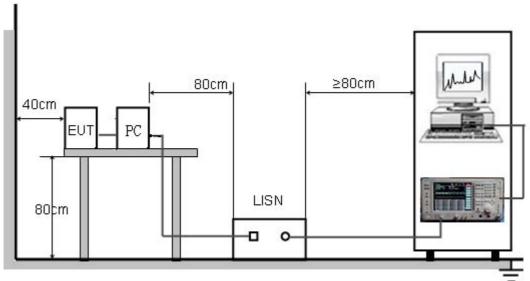
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due	
Spectrum Analyzer	Agilent	E4440A	N/A	06/27/2011	06/26/2012	
EMI Test Receiver	H.P.	8546A	N/A	06/27/2011	06/26/2012	
LISN	EMCO	3825/2	N/A	06/27/2011	06/26/2012	

# 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

<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

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#### 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.

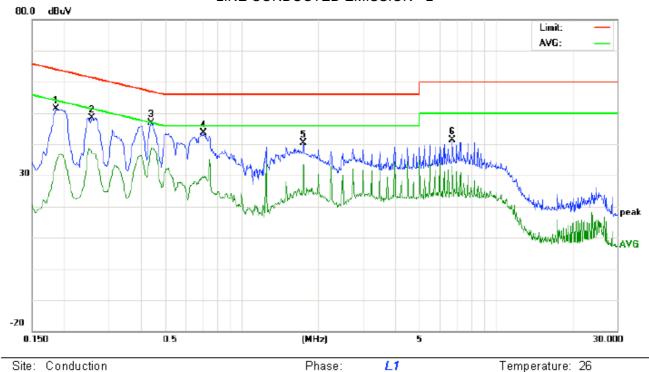
The test data of the worst case condition(s) was reported on the Summary Data page.

Humidity: 60 %

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# 7.5 TEST RESULT OF LINE CONDUCTED EMISSION TEST

# LINE CONDUCTED EMISSION - L



Site: Conduction Limit: FCC Class B Conduction(QP)

EUT: GSM MOBILE PHONE

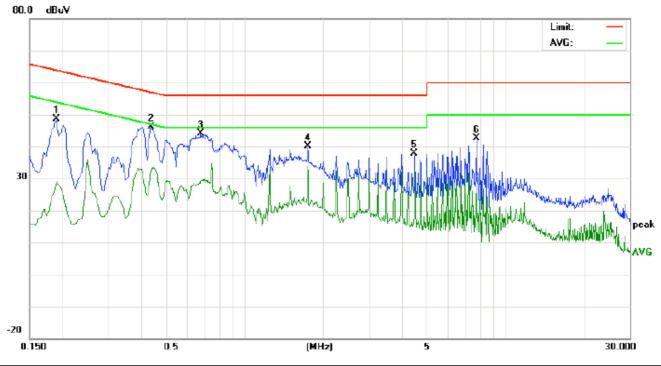
M/N: Q8 Mode: USB Note:

No.	Freq.		iding_L (dBu√)		Correct Factor		asuren (dBuV)			nit u∨)	Mar (d	rgin IB)	P/F	Comment
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1864	41.06		23.95	10.20	51.26		34.15	64.19	54.19	-12.93	-20.04	Р	
2	0.2580	38.09		26.84	10.27	48.36		37.11	61.49	51.49	-13.13	-14.38	Р	
3	0.4420	36.61		28.50	10.36	46.97		38.86	57.02	47.02	-10.05	-8.16	Р	
4	0.7100	33.26		19.02	10.34	43.60		29.36	56.00	46.00	-12.40	-16.64	Р	
5	1.7500	30.14		23.26	10.30	40.44		33.56	56.00	46.00	-15.56	-12.44	Р	
6	6.7539	30.93		22.43	10.33	41.26		32.76	60.00	50.00	-18.74	-17.24	Р	

Power:

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# 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: Q8 Mode: USB Note:

No.	Freq.		ading_L (dBu√)		Correct Factor	1	asuren (dBuV)			mit u∨)		Margin (dB)		Comment
	(MHz)	Peak	QP	AVG	dΒ	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1900	38.35		18.91	10.20	48.55		29.11	64.03	54.03	-15.48	-24.92	Р	
2	0.4380	35.87		22.10	10.36	46.23		32.46	57.10	47.10	-10.87	-14.64	Р	
3	0.6820	33.72		18.45	10.34	44.06		28.79	56.00	46.00	-11.94	-17.21	Р	
4	1.7500	29.89		23.56	10.30	40.19		33.86	56.00	46.00	-15.81	-12.14	Р	
5	4.4980	27.57		23.02	10.21	37.78		33.23	56.00	46.00	-18.22	-12.77	Р	
6	7.7500	32.24		20.04	10.34	42.58		30.38	60.00	50.00	-17.42	-19.62	Р	

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# 8. FCC RADIATED EMISSION TEST

# 8.1. TEST EQUIPMENT OF RADIATED EMISSION

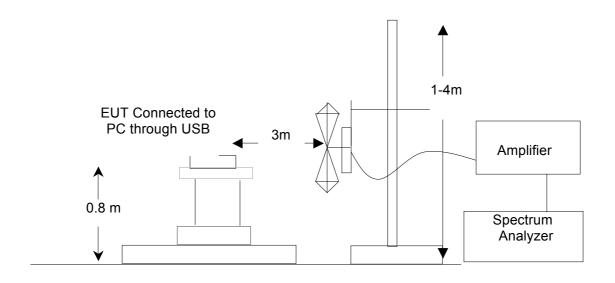
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due	
PSA SERIES	4 OU ENT	E44404	110 44 40 4000	00/07/0044	00/00/0040	
SPECTRUM ANALYZER	AGILENT	E4440A	US41421290	06/27/2011	06/26/2012	
ANTENNA	A.H.	SAS-521-4	128	06/27/2011	06/26/2012	
HORN ANTENNA	EM	EM-AH-10180	N/A	06/27/2011	06/26/2012	
AMPLIFIER	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

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

# 8.3 BLOCK DIAGRAM OF RADIATED EMISSION TEST



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#### **8.4 PROCEDURE OF RADIATED EMISSION TEST**

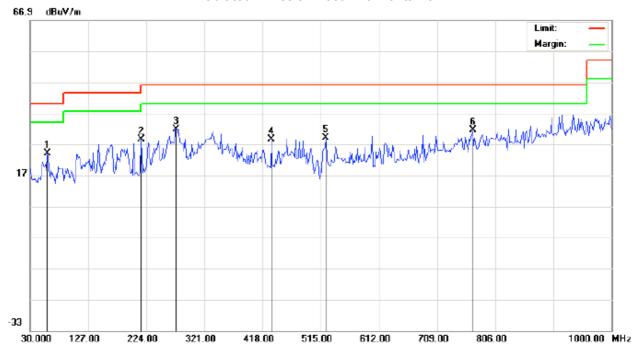
1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the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

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# 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 %

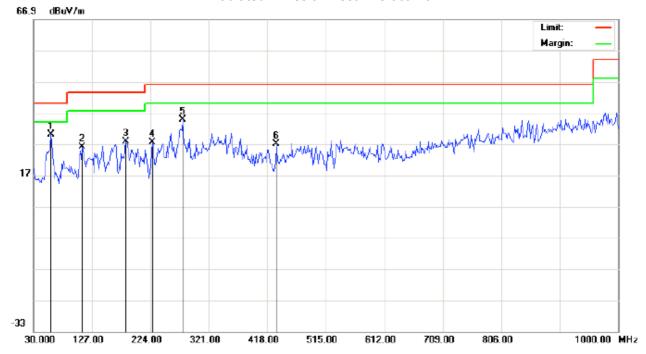
EUT: GSM MOBILE PHONE Distance: 3m

M/N: Q8 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		59.1000	5.25	18.84	24.09	40.00	-15.91	peak			
2		215.9167	15.67	12.93	28.60	43.50	-14.90	peak			
3	*	274.1167	14.50	17.21	31.71	46.00	-14.29	peak			
4		432.5500	6.94	21.47	28.41	46.00	-17.59	peak			
5		523.0833	8.75	20.27	29.02	46.00	-16.98	peak		·	
6		768.8167	3.63	27.81	31.44	46.00	-14.56	peak			

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# 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: Q8 Mode: USB Note:

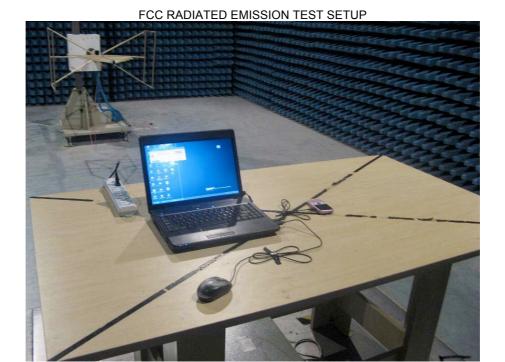
No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	59.1000	11.25	18.84	30.09	40.00	-9.91	peak			
2		110.8332	10.19	15.90	26.09	43.50	-17.41	peak			
3		183.5833	11.21	16.66	27.87	43.50	-15.63	peak			
4		227.2333	12.35	15.22	27.57	46.00	-18.43	peak			
5		277.3500	17.60	17.20	34.80	46.00	-11.20	peak			
6		432.5500	5.44	21.47	26.91	46.00	-19.09	peak		·	

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# **APPENDIX 1 PHOTOGRAPHS OF TEST SETUP**

FCC LINE CONDUCTED EMISSION TEST SETUP

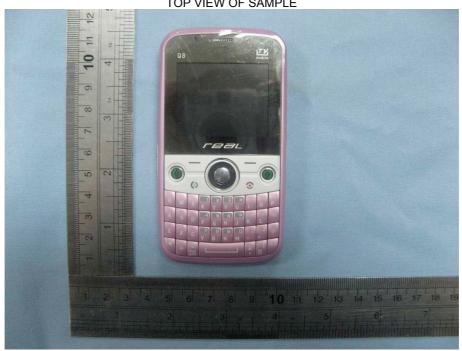




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# **APPENDIX 2 PHOTOGRAPHS OF EUT**

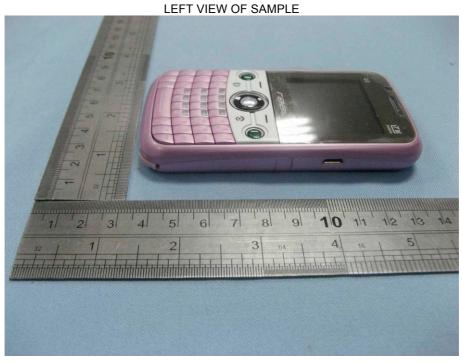
TOP VIEW OF SAMPLE







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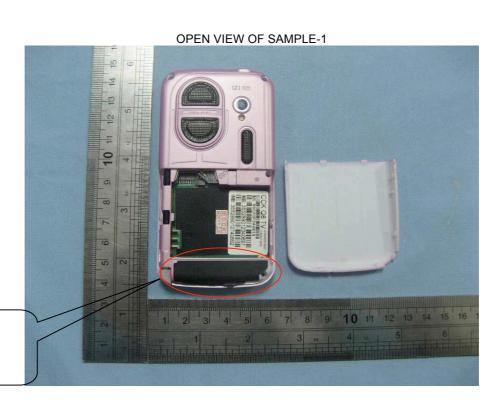
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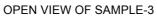


GSM Antenna

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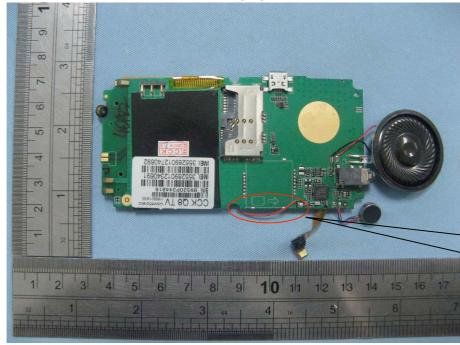


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INTERNAL VIEW OF SAMPLE - 1



INTERNAL VIEW OF SAMPLE - 2



Bluetooth Antenna

----END OF REPORT----