

# FCC 47 CFR PART 15 SUBPART C AND RSS-210 TEST REPORT

For

**Applicant: Social Mobile Telecommunications** 

801 NE 167th St. Suite#314, North Miami Beach.

Address : FL 33162, USA

**Product Name: Mobile Phone** 

Model Name: Drive

**Brand Name: Social** 

FCC ID: Z6RSMDRIVE

IC Certification number: 11423A-DRIVE

Report No.: DPH131004F05

Date of Issue: November 4, 2013

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Revision History				
Issue Date Reason for Revision				
1.0 November 5, 2013 First edition				

# 1. VERIFICATION OF CONFORMITY

Equipment Under Test:	Mobile Phone
Brand Name:	Social
Model Number:	Drive
Series Model Name:	N/A
Difference description:	N/A
FCC ID:	Z6RSMDRIVE
IC Certification number:	11423A-DRIVE
Applicant:	Social Mobile Telecommunications
	801 NE 167th St. Suite#314, North Miami Beach. FL 33162, USA
Manufacturer: SHENZHEN SAGAMOBILE CO.,LTD	
	RM.7A Benyuan Building, No.6015,Shennan Rd., Futian district, Shenzhen, China
Technical Standards:	47 CFR Part 15 Subpart C
	RSS-210
File Number:	DPH131004F05
Date of test:	October 20, 2013- November 02, 2013
Date of issue:	November 04, 2013
Condition of Test Sample:	Normal
Test Result:	PASS

The above equipment was tested by Top-cert. For compliance with the requirements set forth in FCC rules and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

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

Tested by (+ signature):

Rex Luo

Test Engineer

Approved by (+ signature):

Joe Jia

Joe Jia

Manager

# 2. GENERAL INFORMATION

# 2.1 Product Information

Description:	Mobile Phone
Brand Name:	Social
Model Name:	Drive
Frequency Range:	2412MHz-2462MHz
Number of Channels:	11 Channels
Modulation Technique:	IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mpbs) IEEE 802.11g mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mpbs)
Power Supply:	DC 3.6V by Battery DC 5V by AC/DC adapter
Temperature Range:	-20°C ~ +50°C

# NOTE:

1. For more detailed features description about the EUT, please refer to User's Manual.

# 2.2 Objective

The objective of the report is to perform tests according to 47 CFR Part 15 Subpart C for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 15(10-1-09 Edition)	Radio Frequency Devices
2	RSS-210 Issue 8, December 2010	Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment

### 2.3 Test Standards and Results

Test items and the results are as bellow:

No.	Section	Description	Result	Date of Test
1	15.247(a)(2)	6dB Bandwidth	PASS	2013-10-30
2	15.247(b)(3)	Peak Output Power	PASS	2013-10-30
3	15.247(d)	conducted spurious emission	PASS	2013-10-30
4	15.247(d)	Band Edge	PASS	2013-10-30
5	15.247(e)	Power Spectral Density	PASS	2013-10-30
6	15.207	Conducted Emission	PASS	2013-11-02
7	15.247(d) 15.205 15.209	Radiated Emission	PASS	2013-11-02

Note: 1. The test result judgment is decided by the limit of measurement standard

2. The information of measurement uncertainty is available upon the customer's request.

#### 2.4 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35°C

- Humidity: 30-60 %

- Atmospheric pressure: 86-106 kPa

# 3. TEST FACILITY

# 3. 1 Test Facility

Test Site:	NTEK Testing Technology Co., Ltd.
Location:	1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China
Description:	There is one 3m semi-anechoic an area test sites and two line conducted labs for final test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4 and CISPR 16 requirements.  The FCC Registration Number is 238937.
	The IC Registration Number is 9270A-1  The CNAS Registration Number is CNAS L5516.

#### 3.2 General Test Procedures

# **Conducted Emissions**

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4:2009, Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

#### Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4:2009.

# 3.3 FCC Part 15.205 Restricted Bands of Operations

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	( <sup>2</sup> )
13.36 13.41			

<sup>&</sup>lt;sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasipeak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

<sup>&</sup>lt;sup>2</sup> Above 38.6

# 4. TEST EQUIPMENT LIST

**Instrumentation:** The following list contains equipment used at MOST for testing. The equipment conforms to the CISPR 16-1/ANSI C63.2 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10 kHz to 1.0 GHz or above.

No.	Equipment	Manufacturer	Model No.	S/N	Calibration due date
1	Test Receiver	Rohde & Schwarz	ESCI	100492	2014/4/21
2	L.I.S.N.	Rohde & Schwarz ENV216 100093		100093	2014/4/21
3	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2014/3/14
4	Terminator	Hubersuhner	50Ω	No.1	2014/3/14
5	RF Cable	SchwarzBeck	N/A	No.1	2014/3/14
6	Test Receiver	Rohde & Schwarz	ESPI	101202	2014/3/14
7	Test Antenna – Horn	Schwarzbeck	BBHA 9120C		N/A
8	Test Antenna – Bi-Log	Test Antenna – Bi-Log Schwarzbeck			N/A
9	Power Splitter	Weinschel	Weinschel 1506A NW521		N/A
10	Spectrum Analyzer	Agilent 4408B MY41440460		N/A	
11	Cable	Resenberger	N/A	NO.1	2014/4/21
12	Cable	SchwarzBeck	N/A	NO.2	N/A
13	Cable	SchwarzBeck	N/A	NO.3	2014/4/21
14	Signal Generator	IFR	2032	203002/100	2014/4/21
15	Universal Radio Communication Tester	ROHDE&SCHWARZ	CMU200	0304789	2014/3/14
16	Telecommunication Antenna	European Antennas	PSA 75301R/170	0304213	N/A
17	DC Power Supply	Good Will	GPS-3030DD	EF920938	2014/4/21
18	Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2014/4/15

**NOTE:** Equipments listed above have been calibrated and are in the period of validation.

# 5. TEST REQUIREMENTS

### 5.1 6dB Bandwidth

### 5.1.1 Definition

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

# 5.1.2 Test Description

The EUT is powered by the Battery, is coupled to the Spectrum Analyzer (SA) through the Attenuator/DC Block. The path loss as the factor is calibrated to correct the reading. During the measurement, the EUT is activated and is set to operate at maximum power. The RF load attached to the EUT antenna terminal is 500hm.

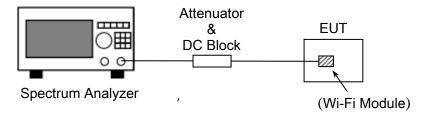


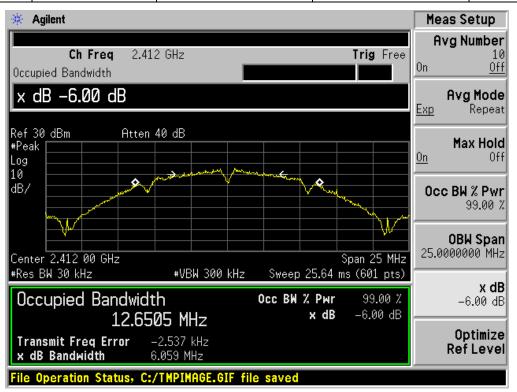
Figure 1: RF Test Setup

#### 5.1.3 Test Result

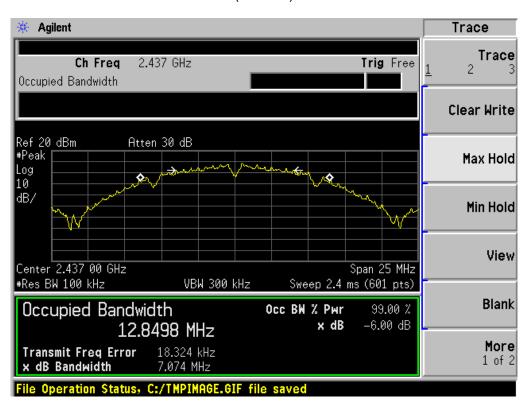
The lowest, middle and highest channels are selected to perform testing to record the 6 dB bandwidth of the Module.

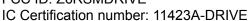
#### 802.11b Test Mode

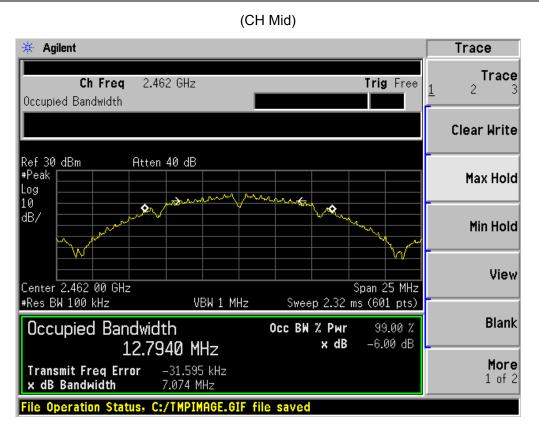
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limits (kHz)	Result
1	2412	6.059	≥500	PASS
6	2437	7.074	≥500	PASS
11	2462	7.074	≥500	PASS



(CH Low)



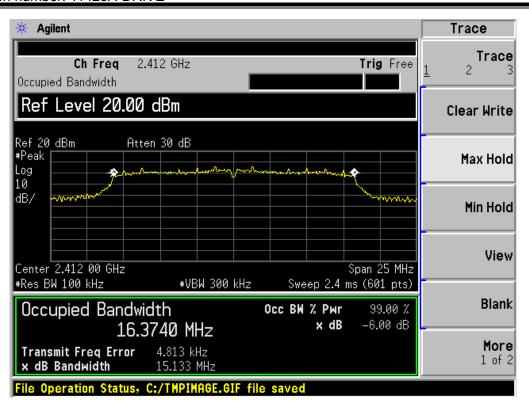




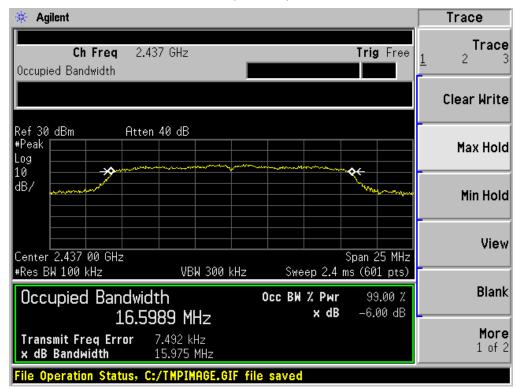
(CH High)

# 802.11g Test Mode

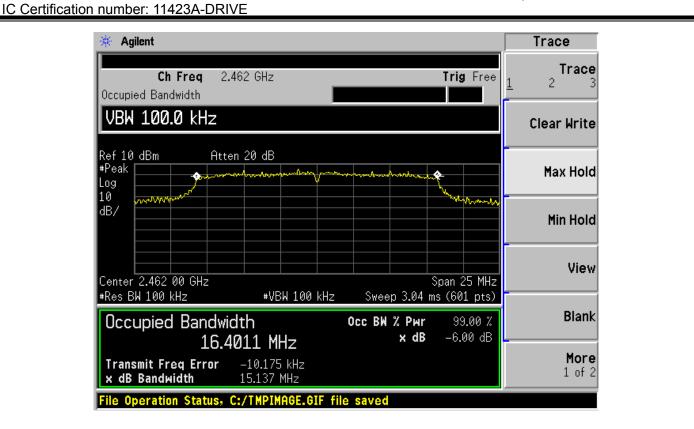
Channel	Frequency (MHz)	Frequency (MHz) 6 dB Bandwidth (MHz)		Result
1	2412	16.6250	≥500	PASS
6	2437	16.6250	≥500	PASS
11	2462	16.6250	≥500	PASS







(CH Mid)



(CH High)

FCC ID: Z6RSMDRIVE Report No.: DPH131004F05

#### IC Certification number: 11423A-DRIVE

# 5.2 Peak Output Power

### 5.2.1 Definition

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power.

# 5.2.2 Test Description

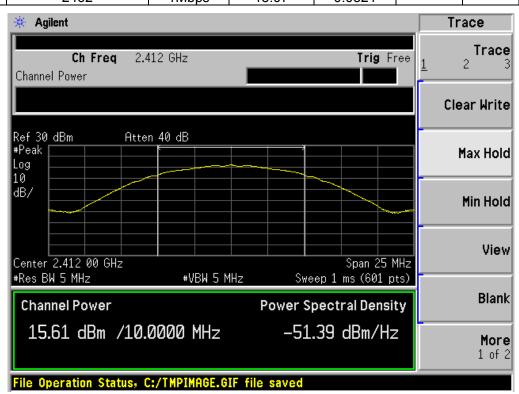
See section 5.1.2 of this report.

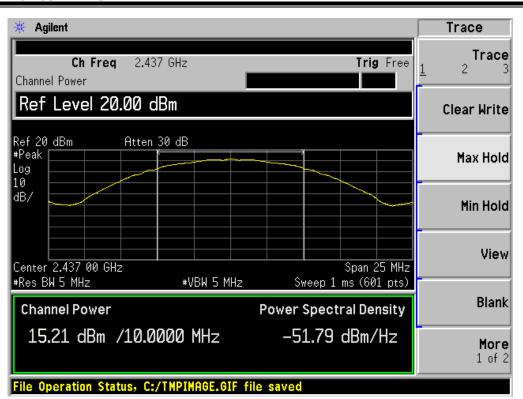
#### 5.2.3 Test Result

The lowest and highest data rate are selected to perform testing to verify the conducted RF output peak power of the Module. Only the maximum conducted RF output peak power recorded in the report.

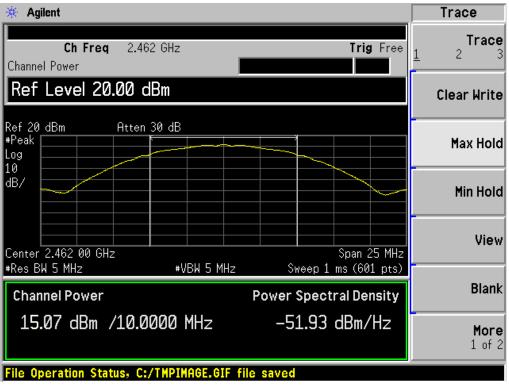
#### 802.11b Test Mode

Channel	Frequency (MHz)	Rate		Output Peak wer	Lim	nit	Verdict
		(Mbps)	dBm	W	dBm	W	
1	2412	1Mbps	15.61	0.0364			PASS
6	2437	1Mbps	15.21	0.0332	30	1	PASS
11	2462	1Mbps	15.07	0.0321			PASS









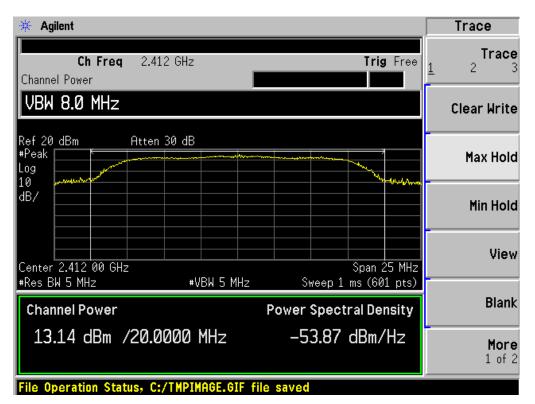
(CH High)

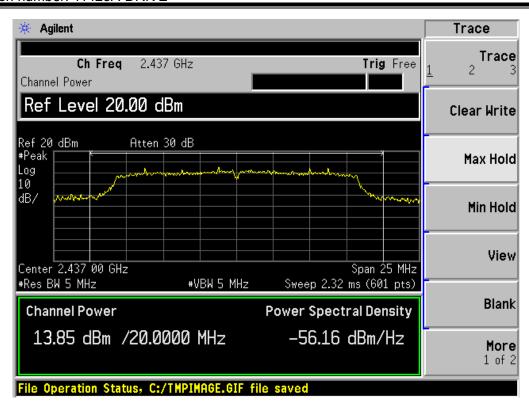
FCC ID: Z6RSMDRIVE Report No.: DPH131004F05

# IC Certification number: 11423A-DRIVE

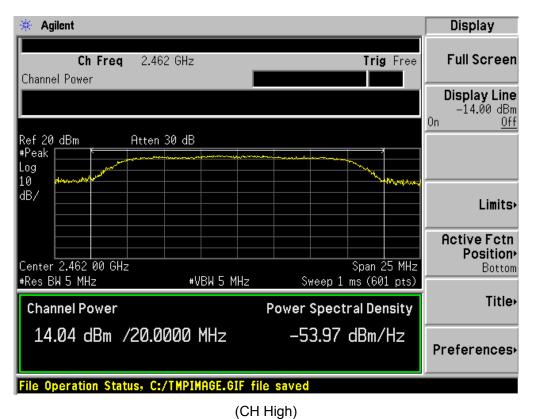
# 802.11g Test Mode

Channel	Frequency (MHz)	Rate (Mbps)		Output Peak wer	Lir	Verdict	
			dBm	W	dBm		W
1	2412	6Mbps	13.14	0.0206			PASS
6	2437	6Mbps	13.85	0.0243	30	1	PASS
11	2462	6Mbps	14.04	0.0254			PASS









# 5.3 Conducted Spurious Emission

#### 5.3.1 Definition

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

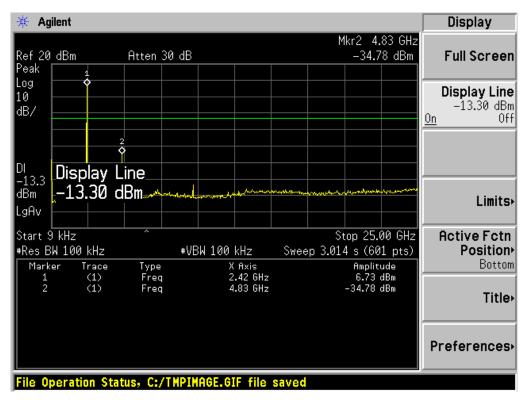
# 5.3.2 Test Description

See section 5.1.2 of this report.

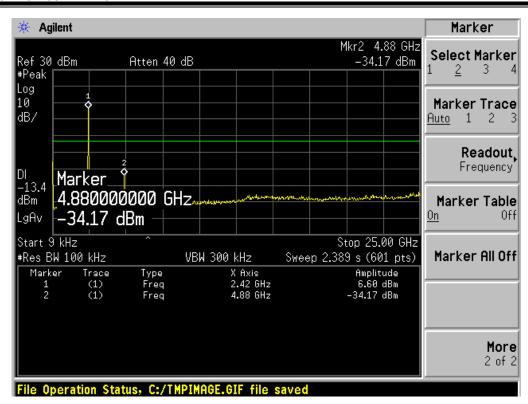
#### 5.3.3 Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions.

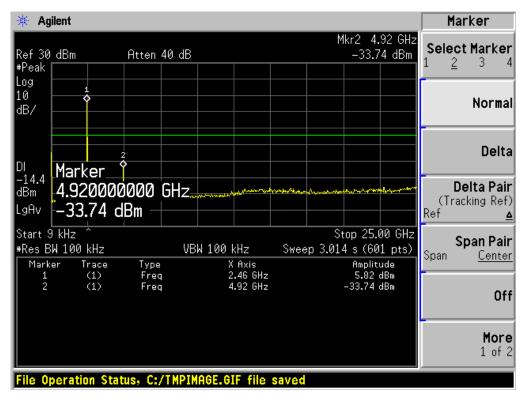
### 802.11b Test Mode



(CH Low, 30MHz to 25GHz)



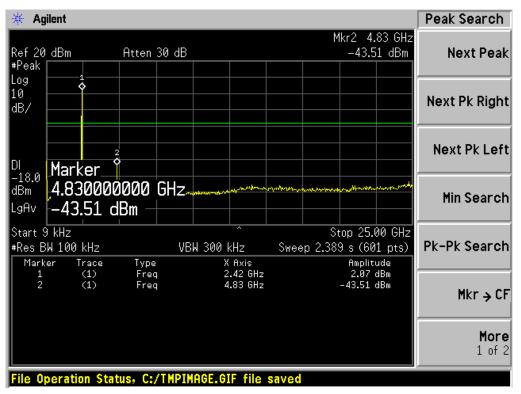
(CH Mid, 30MHz to 25GHz)



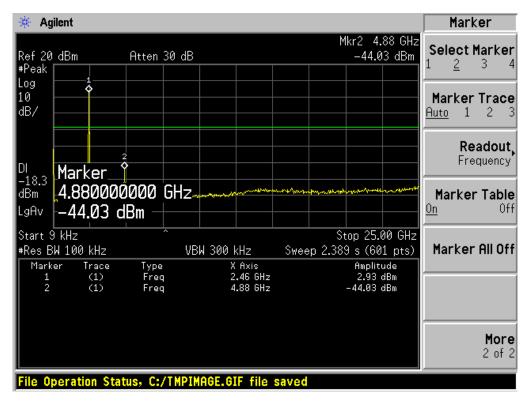
(CH High, 30MHz to 25GHz)

Note: The power of the Module transmitting frequency should be ignored.

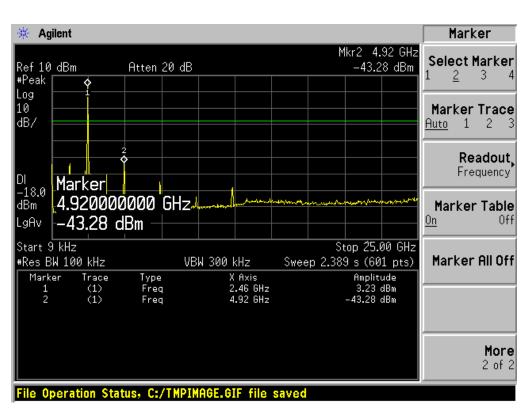
# 802.11g Test Mode



(CH Low, 30MHz to 25GHz)



(CH Mid, 30MHz to 25GHz)



(CH High, 30MHz to 25GHz)

Note: The power of the Module transmitting frequency should be ignored.

# 5.4 Band Edge

#### 5.4.1 Definition

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

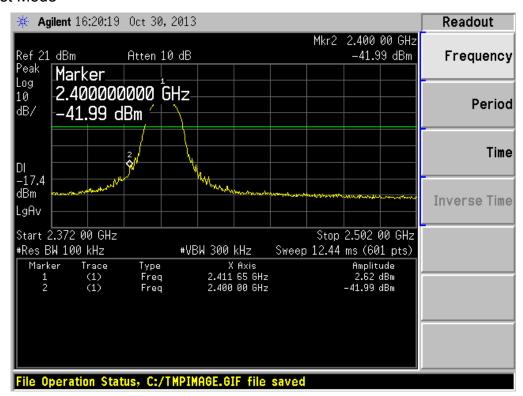
# 5.4.2 Test Description

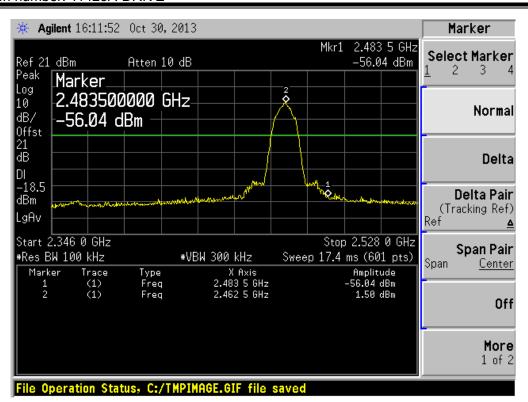
See section 5.1.2 of this report.

#### 5.4.3 Test Result

The EUT operates at continuous transmit test mode. The test data of the lowest and highest channels are tested to verify the band edge emissions.

### 802.11b Test Mode

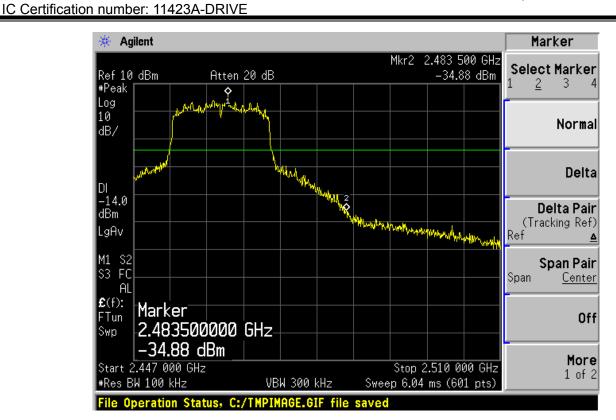




(CH High)

# 802.11g Test Mode





# 5.5 Power Spectral Density (PSD)

### 5.5.1 Definition

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

# 5.5.2 Test Description

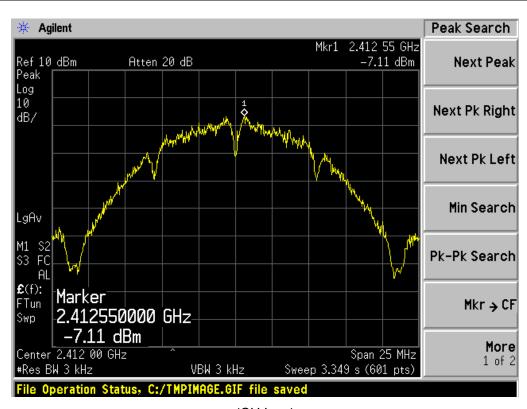
See section 5.1.2 of this report.

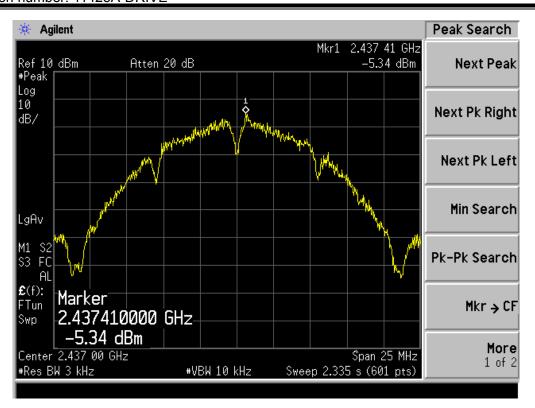
### 5.5.3 Test Result

The lowest, middle and highest channels are tested to verify the power spectral density.

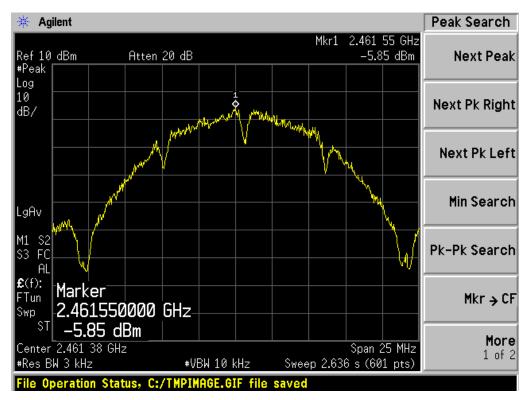
### 802.11b Test Mode

Channel	Frequency (MHz)	PSD (dBm)	Limits(dBm)	Result
1	2412	-7.11	≤8	PASS
6	2437	-5.34	≤8	PASS
11	2462	-5.85	≤8	PASS





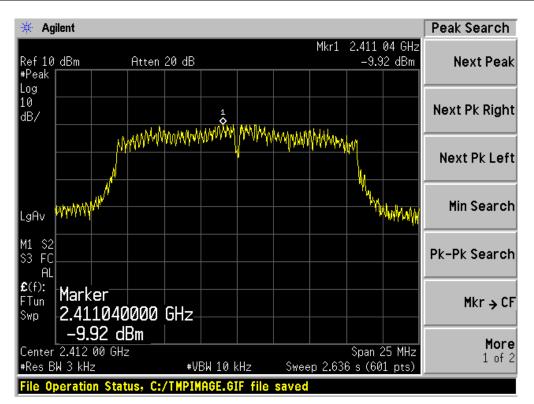




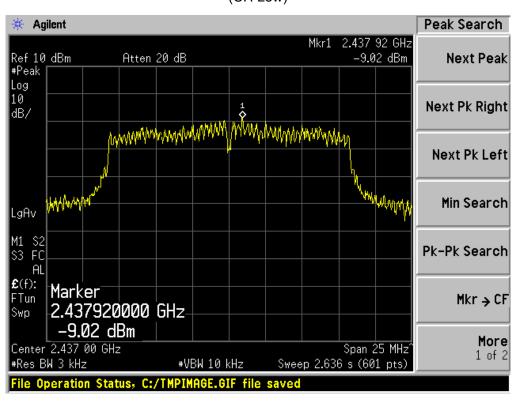
(CH High)

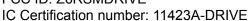
# 802.11g Test Mode

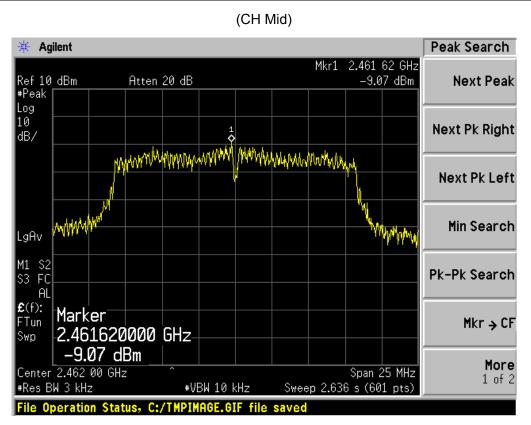
Channel	Frequency (MHz)	PSD (dBm)	Limits(dBm)	Result
1	2412	-9.92	≤8	PASS
6	2437	-9.02	≤8	PASS
11	2462	-9.07	≤8	PASS



(CH Low)







### 5.6 Conducted Emission

#### 5.6.1 Definition

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a  $50 \mu H/50$  ohms line impedance stabilization network (LISN).

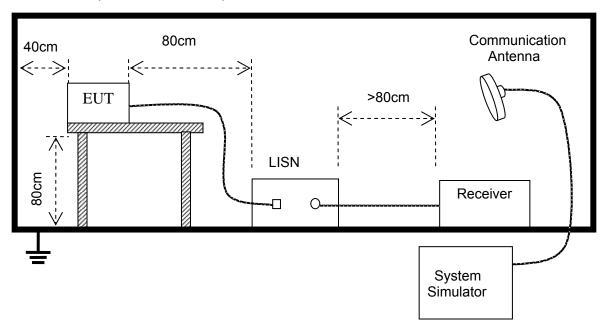
Fraguency	Maximum RF Line Voltage					
Frequency	Q.P.( dBuV)	Average( dBuV)				
150kHz-500kHz	66-56	56-46				
500kHz-5MHz	56	46				
5MHz-30MHz	60	50				

#### 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 0.50 MHz

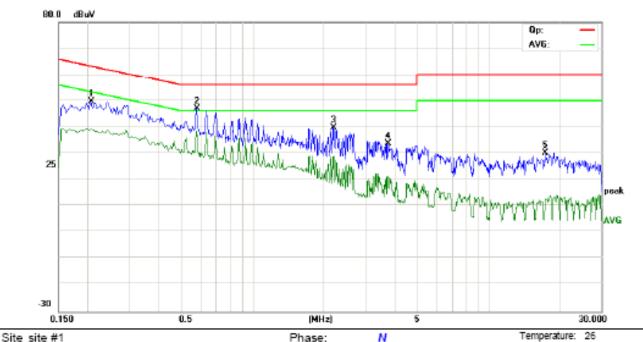
# **5.6.2 Test Description**

The EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply. The path loss as the factor is calibrated to correct the reading. During the measurement, the EUT is activated and is set to operate at maximum power.



# 5.6.3 Test Result

#### Conducted Emission Measurement



Limit: FCC Part15 B Class B QP

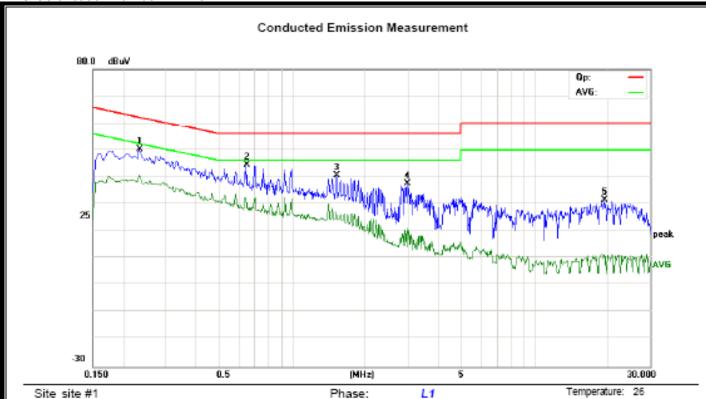
EUT: GSM Mobile Phone

M/N: Mode: wifi Note: 
 Phase:
 N
 Temperature:
 26

 Power:
 AC 120V/60Hz
 Humidity:
 60 %

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dΒ	dBu∨	dBuV	dB	Detector	Comment
1	0.2060	37.60	11.96	49.56	63.37	-13.81	peak	
2 ×	0.5780	36.73	10.00	46.73	56.00	-9.27	peak	
3	2.1980	30.64	9.20	39.84	56.00	-16.16	peak	
4	3.7220	22.94	10.72	33.66	56.00	-22.34	peak	
5	17.3820	21.18	9.00	30.18	60.00	-29.82	peak	

<sup>\*:</sup>Maximum data x:Over limit !:over margin



Limit: FCC Part15 B Class B QP

EUT: GSM Mobile Phone

M/N: Mode: wifi Note: Power: AC 120V/60Hz Humidity: 60 %

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBu∀	dB	Detector	Comment
1	0.2340	38.42	11.77	50.19	62.31	-12.12	peak	
2 ×	0.6460	34.28	10.00	44.28	56.00	-11.72	peak	
3	1.5220	30.99	9.48	40.47	56.00	-15.53	peak	
4	2.9740	27.45	9.97	37.42	56.00	-18.58	peak	
5	19.4020	22.34	9.00	31.34	60.00	-28.66	peak	

<sup>\*:</sup>Maximum data x:Over limit !:over margin

### 5.7 Radiated Emission

#### 5.7.1 Definition

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

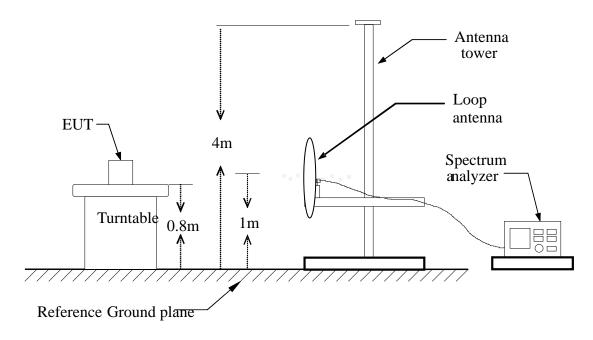
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

As shown in FCC section 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

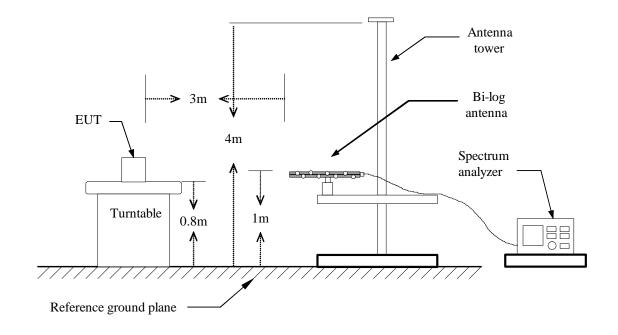
# **Test Description**

# A. Test Setup:

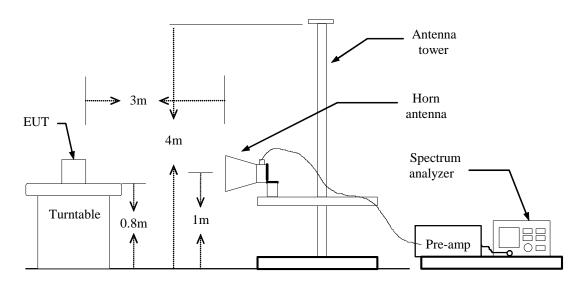
5.7.2



# Blow 1GHz:



#### **Above 1GHz:**



### **B.** Test procedures

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Set the spectrum analyzer in the following setting as:

Below 1GHz: RBW=100 kHz / VBW=300 kHz / Sweep=AUTO

Above 1GHz: (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

7. Repeat above procedures until the measurements for all frequencies are complete.

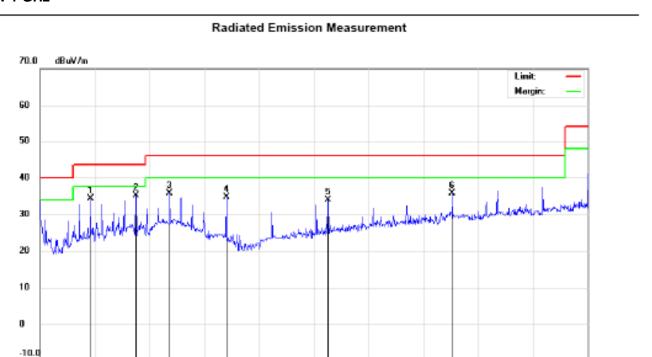
# 5.7.3 Test Result

# Form 9 KHz to 30MHz:

Freq.	Ant. Pol	Peak	Ant. / CL	Actual Fa	Peak	Peak
(MHz)	H/V	Reading	CF	Actual Fs	Limit	Margin
		(dBuV)	(dB)	Peak	(dBuV/m)	(dB)
				(dBuV/m)		
	Н					
	Н					
	Н					
N/A						>20
	V					
	V					
	V					
N/A						>20

-Note: No test data was detected in below 30MHz.

### **Below 1 GHz**



Site site #1

30,000

Limit: FCC Part15 B 3M Radiation

127.00

224.00

321.00

418.00

EUT:

Note:

M/N: Mode: WIFI Polarization: Vertical

612.00

Power: AC 120V/60Hz

515.00

Temperature: 26

Humidity: 61%

1000.00 MHz

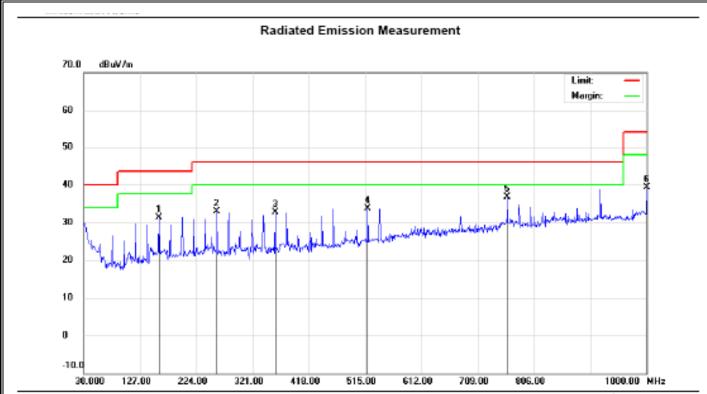
Distance:

806.00

709.00

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		119.2400	16.93	17.42	34.35	43.50	-9.15	peak			
2	×	199.7500	17.78	17.38	35.16	43.50	-8.34	peak			
3		259.8900	18.15	17.60	35.75	46.00	-10.25	peak			
4		359.8000	16.49	18.30	34.79	46.00	-11.21	peak			
5		540.2200	11.64	22.20	33.84	46.00	-12.16	peak			
6		760.4100	10.04	25.62	35.66	46.00	-10.34	peak			

<sup>\*:</sup>Maximum data x:Over limit !:over margin



Site site #1

Limit: FCC Part15 B 3M Radiation

EUT: M/N:

Mode: WIFI

Note:

					F	
						6
: ماماسل	Lagerranida	eproposition	*	wile-de-elevabride	سيار	Ž
515.	00 <b>6</b> 12	.00 709.	00 806.	00	1000.00	MHz
Polari	zation:	Horizonta	I	Ten	perature:	26
Powe	r: AC 120V	/60Hz		Hun	nidity:	61 %

Distance:

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dΒ	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		159.9800	14.03	17.30	31.33	43.50	-12.17	peak			
2		259.8900	15.32	17.60	32.92	46.00	-13.08	peak			
3		359.8000	14.39	18.30	32.69	46.00	-13.31	peak			
4		519.8500	11.82	21.79	33.61	46.00	-12.39	peak			
5	×	760.4100	11.01	25.62	36.63	46.00	-9.37	peak			
6		1000.000	10.89	28.50	39.39	54.00	-14.61	peak			

<sup>\*:</sup>Maximum data x:Over limit !:over margin

IC Certification number: 11423A-DRIVE

## **Above 1 GHz**

Operation Mode:TX/ IEEE 802.11b/CH LowTest Date:2013-11-2Temperature:20°CHumidity:65 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Readin g	Readin g	CF	Actu	ai rs	Limit	Limit	Margin
		dBuV	dBuV	dB)	Peak	Peak AV		dBuV/m	dB
					dBuV/m dBuV/m				
4824.5	V	45.97	22.18	23.16	69.13	45.34	74.00	54.00	-8.66
N/A	Н								
4824.5	Η	45.86	20.68	23.16	69.02	43.84	74.00	54.00	-10.16
N/A	Η								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

IC Certification number: 11423A-DRIVE

Operation Mode:TX/ IEEE 802.11b/CH MidTest Date:2013-11-2Temperature:20°CHumidity:65 % RH

Freq.	Ant. Pol	Peak	AV	Ant. /	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Reading	Reading	CF			Limit	Limit	Margin
		dBuV	dBuV	dB	Peak	AV	dBuV/m	dBuV/m	dB
					dBuV/m	dBuV/m			
4874.5	V	43.09	22.69	24.04	67.13	46.73	74.00	54.00	-7.27
N/A	V								
4874.5	Н	44.47	21.64	24.04	68.51	45.68	74.00	54.00	-8.32
N/A	Н								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

IC Certification number: 11423A-DRIVE

Operation Mode: TX/ IEEE 802.11b/CH High Test Date: 2013-11-2

**Temperature:** 20°C **Humidity:** 65 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	ual Fs	Peak	AV	AV
(MHz)	H/V	Reading	Reading	CF			Limit	Limit	Margin
		dBuV	dBuV	dB	Peak AV		dBuV/m	dBuV/m	dB
					dBuV/m	dBuV/m			
4924.5	V	44.28	21.58	24.86	69.14	46.44	74.00	54.00	-7.56
N/A	V								
4924.5	Н	43.43	22.28	24.86	68.29	47.14	74.00	54.00	-6.86
N/A	Н								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

IC Certification number: 11423A-DRIVE

Operation Mode:TX/ IEEE 802.11g/CH LowTest Date:2013-11-2Temperature:20°CHumidity:65 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Reading	Readin g	CF	Actu	ai i s	Limit	Limit	Margin
		dBuV	dBuV	dB)	Peak	AV	dBuV/m	dBuV/m	dB
					dBuV/m	dBuV/m			
4824.5	<b>V</b>	42.58	19.62	23.16	65.74	42.78	74.00	54.00	-11.22
N/A	V								
				•					
4824.5	Н	43.55	21.26	23.16	66.71	44.42	74.00	54.00	-9.58
N/A	Н								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

IC Certification number: 11423A-DRIVE

Operation Mode:TX/ IEEE 802.11g/CH MidTest Date:2013-11-2Temperature:20°CHumidity:65 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Readin g	Readin g	CF	Actu	ai rs	Limit	Limit	Margin
		dBuV	dBuV	dB)	Peak AV		dBuV/m	dBuV/m	dB
					dBuV/m	dBuV/m			
4874.5	V	42.24	23.55	24.04	66.28	47.59	74.00	54.00	-6.41
N/A	V								
4874.5	Η	43.30	23.85	24.04	67.34	47.89	74.00	54.00	-6.11
N/A	Η								

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

IC Certification number: 11423A-DRIVE

Operation Mode:TX/ IEEE 802.11g/CH HighTest Date:2013-11-2Temperature:20°CHumidity:65 % RH

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Readin g	Readin g	CF	Actu	ai rs	Limit	Limit	Margin
		dBuV	dBuV	dB)	Peak AV		dBuV/m	dBuV/m	dB
					dBuV/m	dBuV/m			
4924.5	V	42.78	21.46	24.86	67.64	46.32	74.00	54.00	-7.68
N/A	V								
4924.5	Н	43.49	20.82	24.86	68.35	45.68	74.00	54.00	-8.32
N/A	Н								

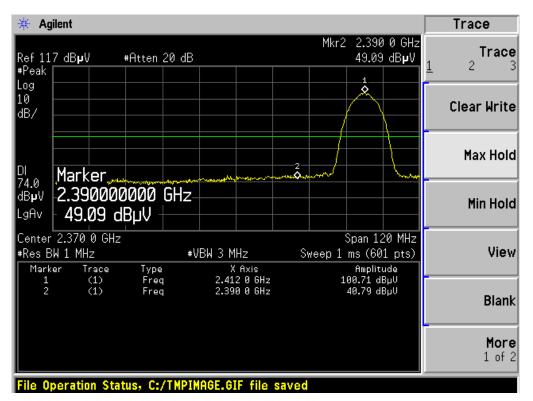
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

# IC Certification number: 11423A-DRIVE

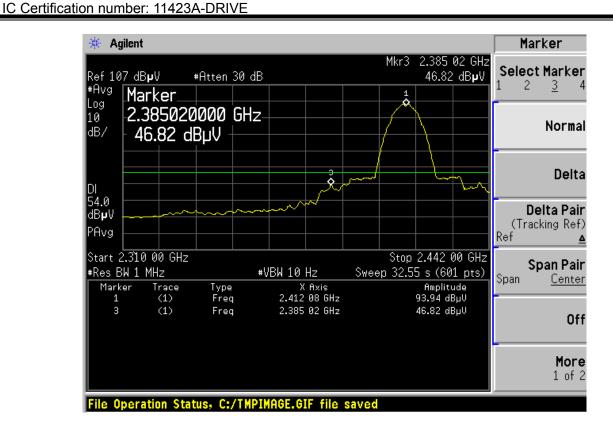
Test Range of "2.31GHz to 2.5GHz"

## 802.11b Test Mode

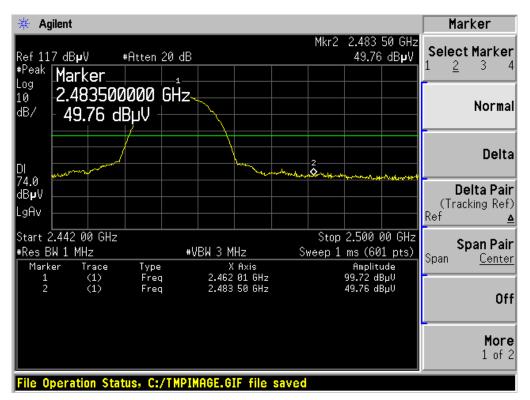
Fre. (MHz)	Measured Level (dBuV)	Limit (dBuV)	Margin (dB)	Height (cm)	Azimuth (deg)	Polarization	Detector
2390.00	49.09	74.00	24.91	100.00	90.00	Vertical	Peak
2390.00	46.82	54.00	7.18	100.00	90.00	Vertical	Average
2483.50	49.76	74.00	24.24	100.00	90.00	Vertical	Peak
2403.50	36.55	54.00	17.45	100.00	90.00	Vertical	Average



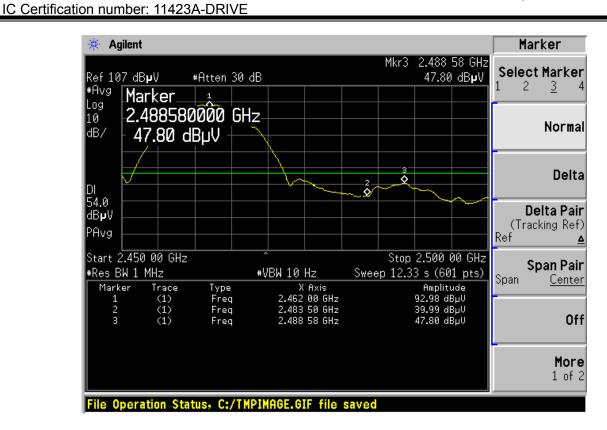
(CH Low, Peak)



(CH Low, Average)



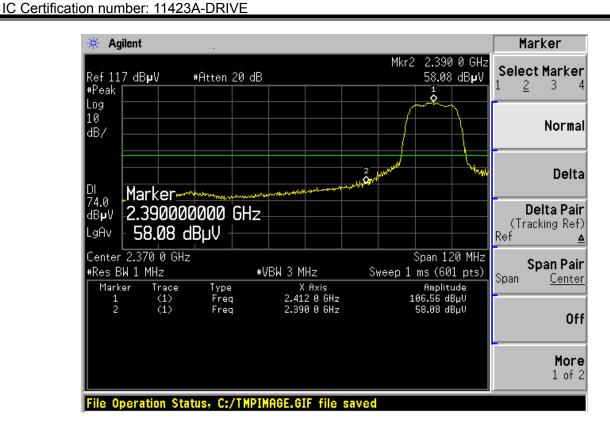
(CH High, Peak)



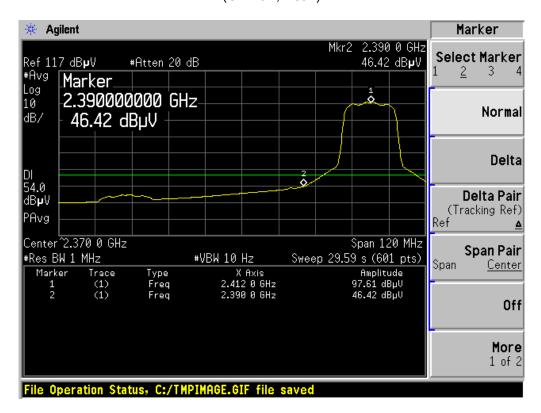
(CH High, Average)

## 802.11g Test Mode

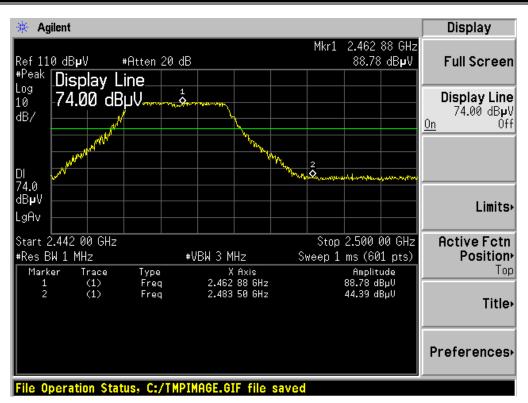
Fre. (MHz)	Measured Level (dBuV)	Limit (dBuV)	Margin (dB)	Height (cm)	Azimuth (deg)	Polarization	Detector
	58.08	74.00	15.92	200.00	135.00	Vertical	Peak
2390.00	46.42	54.00	7.58	200.00	135.00	Vertical	Average
2483.50	44.39	74.00	29.61	200.00	135.00	Vertical	Peak
2403.30	34.01	54.00	19.99	200.00	135.00	Vertical	Average



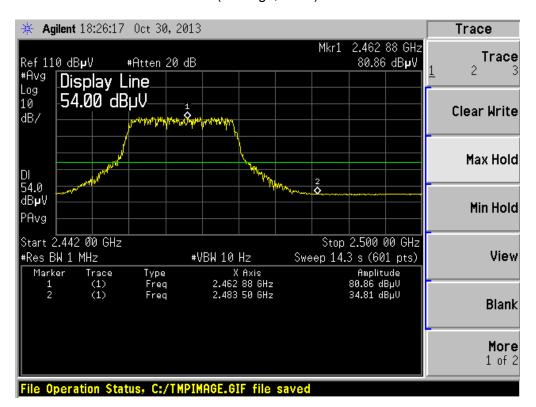
(CH Low, Peak)



(CH Low, Average)



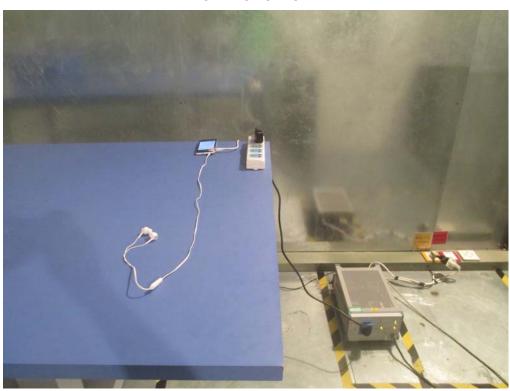
(CH High, Peak)



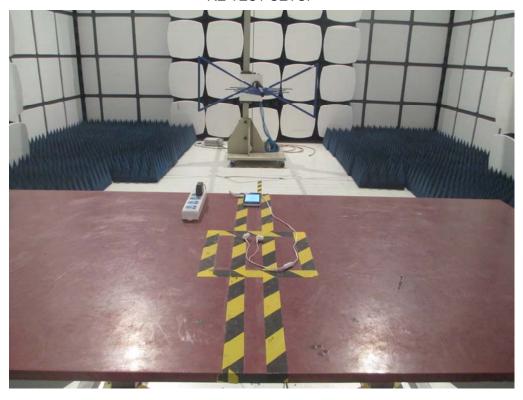
(CH High, Average)

FCC ID: Z6RSMDRIVE Report No.: DPH131004F05 IC Certification number: 11423A-DRIVE **APPENDIX 1** PHOTOGRAPHS OF TEST SETUP

# CE TEST SETUP



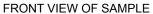
RE TEST SETUP







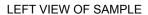
FCC ID: Z6RSMDRIVE Report No.: DPH131004F05 IC Certification number: 11423A-DRIVE **APPENDIX 2 PHOTOGRAPHS OF EUT** 





**BACK VIEW OF SAMPLE** 

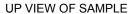






RIGHT VIEW OF SAMPLE







DOWN VIEW OF SAMPLE



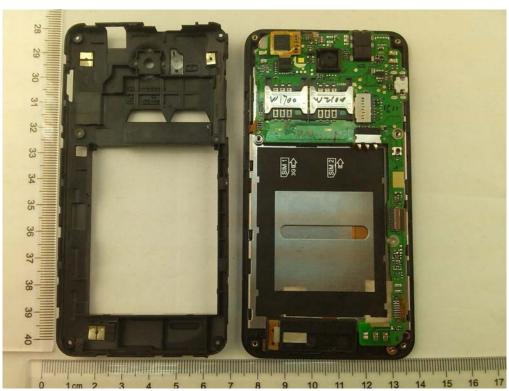
## PHOTO OF ACCESSORY



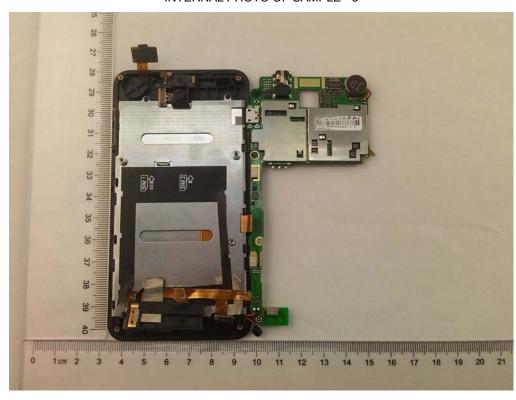
INTERNAL PHOTO OF SAMPLE - 1



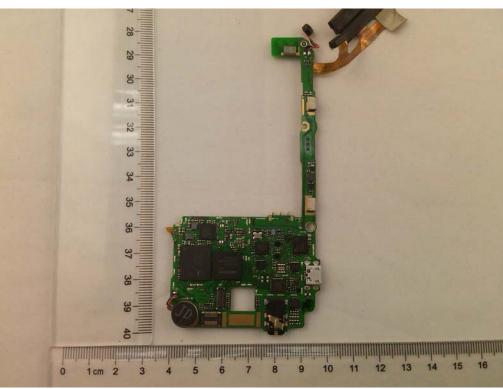
## INTERNAL PHOTO OF SAMPLE -2



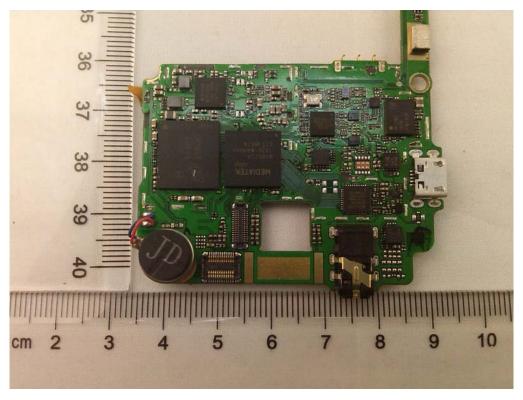
INTERNAL PHOTO OF SAMPLE - 3



## INTERNAL PHOTO OF SAMPLE - 4



INTERNAL PHOTO OF SAMPLE - 5



-----END OF REPORT-----