# RF TEST REPORT



Report No.: 15070274-FCC-R1
Supersede Report No.: N/A

Applicant	Social Mobile Telecommunications			
Product Name	PHONE			
Model No.	FB305			
Serial No.	FB305 SENIOR			
Test Standard	FCC Part 22(H), FCC Par	t 24(E); ANSI/TI	AC603 D: 2010	
Test Date	April 16 to April 30, 2015			
Issue Date	May 07, 2015			
Test Result	Pass Fail			
Equipment compl	ed with the specification	V		
Equipment did no	comply with the specificat	ion 🗖		
Wiky.	Tam Chri	s You		
Wiky.Jaı Test Engir				

This test report may be reproduced in full only

Test result presented in this test report is applicable to the tested sample only

#### Issued by:

#### SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park
South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
Phone: +86 0755 2601 4629801 Email: China@siemic.com.cn



Test Report	15070274-FCC-R1
Page	2 of 42

# **Laboratories Introduction**

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

### **Accreditations for Conformity Assessment**

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety



Test Report	15070274-FCC-R1
Page	3 of 42

This page has been left blank intentionally.



Test Report	15070274-FCC-R1
Page	4 of 42

# **CONTENTS**

1.	REPORT REVISION HISTORY	5			
2.	CUSTOMER INFORMATION	5			
3.	TEST SITE INFORMATION	5			
4.	EQUIPMENT UNDER TEST (EUT) INFORMATION	6			
5.	TEST SUMMARY	8			
6.	MEASUREMENTS, EXAMINATION AND DERIVED RESULTS	9			
6.1	RF EXPOSURE (SAR)	9			
6.2	RF OUTPUT POWER	10			
6.3	PEAK-AVERAGE RATIO	14			
6.4	MODULATION CHARACTERISTIC	16			
6.5	S.5 OCCUPIED BANDWIDTH17				
6.6	SPURIOUS EMISSIONS AT ANTENNA TERMINALS	20			
6.7	SPURIOUS RADIATED EMISSIONS	23			
6.8	BAND EDGE	26			
6.9	FREQUENCY STABILITY	29			
ANI	NEX A. TEST INSTRUMENT	32			
ANI	NEX B. EUT AND TEST SETUP PHOTOGRAPHS	33			
ANI	NEX C. TEST SETUP AND SUPPORTING EQUIPMENT	38			
ANI	NEX C.II. EUT OPERATING CONKITIONS	40			
ANI	ANNEX D. USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PARTLIST41				
ANI	NEX E. DECLARATION OF SIMILARITY	42			



Test Report	15070274-FCC-R1
Page	5 of 42

# 1. Report Revision History

Report No.	Report Version	Description	Issue Date
15070274-FCC-R1	NONE	Original	May 07, 2015

# 2. Customer information

Applicant Name	Social Mobile Telecommunications
Applicant Add	16400 NW 2nd Ave. #201 Miami, Florida 33169
Manufacturer	SMT TELECOMM HK LIMITED
Manufacturer Add	Unit C 8/F, CHARMHILL CTR 50 HILLWOOD RD TST KL

# 3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES	
	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park	
Lab Address	South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong	
	China 518108	
FCC Test Site No.	718246	
IC Test Site No.	4842E-1	
Test Software	Radiated Emission Program-To Shenzhen v2.0	



Test Report	15070274-FCC-R1
Page	6 of 42

# 4. Equipment under Test (EUT) Information

L	escription	of EU	١:	PHONE	

Main Model: FB305

Serial Model: FB305 SENIOR

Date EUT received: April 15 2015

Test Date(s): April 16 to April 30, 2015

Equipment Category : PCE

GSM850: -0.5 dBi

Antenna Gain: PCS1900: 0 dBi

Bluetooth: 0.5dBi

GSM / GPRS: GMSK Type of Modulation:

Bluetooth: GFSK, π /4DQPSK, 8DPSK

GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz

RF Operating Frequency (ies): PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz

Bluetooth: 2402-2480 MHz

Maximum Conducted GSM850: 31.90dBm

AV Power to Antenna: PCS1900: 28.14 dBm

GSM850: 24.86 dBm / ERP ERP/EIRP:

PCS1900: 22.83 dBm / EIRP

GSM 850: 124CH

Number of Channels: PCS1900: 299CH

Bluetooth: 79CH

Port: Power Port, Earphone Port, USB Port

Input Power: Battery:



Test Report	15070274-FCC-R1
Page	7 of 42

Model: BP305

Spec: 3.7V 1000mAh

Adapter:

Model: PC305

Input: AC 100-240V; 50/60Hz 0.15A Max

Output: DC 5.0V;500mA

Trade Name : Senior

GPRS Multi-slot class 8/10/12

FCC ID 2ACLMFB305



Test Report	15070274-FCC-R1
Page	8 of 42

# 5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result	
§ 1.1307; § 2.1093	RF Exposure (SAR)	Compliance	
§2.1046; § 22.913(a); § 24.232(c);	DE Output Power	Camplianas	
§ 27.50(c.10)	RF Output Power	Compliance	
§ 24.232 (d)	Peak-Average Ratio	Compliance	
§ 2.1047	Modulation Characteristics	Compliance	
§ 2.1049; § 22.905; § 22.917;	000/ 9, 26 dB Occurried Bandwidth	Compliance	
§ 24.238;	99% & -26 dB Occupied Bandwidth	Compliance	
§ 2.1051; § 22.917(a);	Spurious Emissions at Antonna Terminal	Compliance	
§ 24.238(a);	Spurious Emissions at Antenna Terminal	Compliance	
§ 2.1053; § 22.917(a);	Field Strength of Spurious Padiation	Compliance	
§ 24.238(a);	Field Strength of Spurious Radiation	Compliance	
§ 22.917(a); § 24.238(a);	Out of band emission, Band Edge	Compliance	
\$ 2.4055. \$ 22.255. \$ 24.225.	Frequency stability vs. temperature	Compliance	
§ 2.1055; § 22.355; § 24.235;	Frequency stability vs. voltage		

Note: Testing was performed by configuring EUT to maximum output power status, the declared output power class for different

#### **Measurement Uncertainty**

Emissions					
Test Item Description					
Band Edge and Radiated Spurious Emissions	Confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	+5.6dB/-4.5dB			
-	-	-			



Test Report	15070274-FCC-R1
Page	9 of 42

# 6. MEASUREMENTS, EXAMINATION AND DERIVED RESULTS

## 6.1 RF Exposure (SAR)

Test Result: Pass

The EUT is a portable device, thus requires SAR evaluation;

Please refer to RF Exposure Evaluation Report: 15070274-SAR-FCC



Test Report	15070274-FCC-R1
Page	10 of 42

# 6.2 RF Output Power

Temperature	26°C
Relative Humidity	52%
Atmospheric Pressure	1008mbar
Test date :	April 28, 2015
Tested By :	Wiky.Jam

#### Requirement(s):

Requirement(s):			1					
Spec	Item Requirement Applica							
§22.913 (a)	a)	a) ERP:38.45dBm						
§24.232 (c)	b)	EIRP:33dBm						
Test Setup		Base Station EUT						
	Fo	or Conducted Power:						
	-	The transmitter output port was connected to base stat	ion.					
	-	Set EUT at maximum power through base station.						
	-	- Select lowest, middle, and highest channels for each band and						
	different test mode.							
	For ERP/EIRP:							
	- The transmitter was placed on a wooden turntable, and it was							
	transmitting into a non-radiating load which was also placed on the							
Test Procedure		turntable.						
	- The measurement antenna was placed at a distance of 3 meters							
	from the EUT. During the tests, the antenna height and							
	polarization as well as EUT azimuth were varied in order to identify							
		the maximum level of emissions from the EUT. The test was						
	performed by placing the EUT on 3-orthogonal axis.							
	- The frequency range up to tenth harmonic of the fundamental							
	frequency was investigated.							
	- Remove the EUT and replace it with substitution antenna. A signal							
		generator was connected to the substitution antenna by	y a non-					



Test Report	15070274-FCC-R1
Page	11 of 42

	radiating cable. The absolute levels of the spurious emissions were measured by the substitution.				
	- Spurious emissions in dB = 10 log (TX power in Watts/0.001) –				
	the absolute level				
	- Spurious attenuation limit in dB = 43 + 10 Log10 (power out in				
	Watts.				
Remark					
Result	Pass				
Test Data Yes	N/A				
Test Plot Yes	(See below) V/A				



Test Report	15070274-FCC-R1
Page	12 of 42

#### **Conducted Power**

#### **GSM Mode:**

Burst Average Power (dBm);								
Band	GSM850				PCS1900			
Channel	128	190	251	Tune up Power tolerant	512	661	810	Tune up Power tolerant
Frequency (MHz)	824.2	836.6	848.8	1	1850.2	1880	1909.8	1
GSM Voice (1 uplink),GMSK	31.81	31.90	31.80	31±1	28.03	28.14	28.07	28±1
GPRS Multi-Slot Class 8 (1 uplink),GMSK	30.92	30.91	30.86	30±1	27.20	27.36	27.53	28±1
GPRS Multi-Slot Class 10 (2 uplink) GMSK	29.71	29.92	29.83	30±1	26.21	26.31	26.65	27±1
GPRS Multi-Slot Class 12 (4 uplink) GMSK (4 uplink),GMSK	28.07	28.02	27.85	28±1	25.49	25.37	25.75	25±1

Remark:

GPRS, CS1 coding scheme.

Multi-Slot Class 8 , Support Max 4 downlink, 1 uplink , 5 working link

Multi-Slot Class 10 , Support Max 4 downlink, 2 uplink , 5 working link

Multi-Slot Class 12 , Support Max 4 downlink, 4 uplink , 5 working link

Note: Since GSM mode has higher power, so the test items below were not performed to GPRS and EGPRS mode.



Test Report	15070274-FCC-R1
Page	13 of 42

#### **ERP & EIRP**

## ERP for Cellular Band (Part 22H)

Frequency (MHz)	Substituted level (dBm)	Antenna Polarization	Antenna Gain correction (dBi)	Cable Loss (dB)	Absolute Level (dBm)	Limit (dBm)
824.2	18.22	V	6.8	0.53	24.49	38.45
824.2	16.37	Н	6.8	0.53	22.64	38.45
836.6	18.53	V	6.8	0.53	24.80	38.45
836.6	16.64	Н	6.8	0.53	22.91	38.45
848.8	18.49	V	6.9	0.53	24.86	38.45
848.8	16.48	Н	6.9	0.53	22.85	38.45

## EIRP for PCS Band (Part 24E)

Frequency (MHz)	Substituted level (dBm)	Antenna Polarization	Antenna Gain correction (dBi)	Cable Loss (dB)	Absolute Level (dBm)	Limit (dBm)
1850.2	15.79	V	7.88	0.85	22.82	33
1850.2	14.55	Н	7.88	0.85	21.58	33
1880	15.28	V	7.88	0.85	22.31	33
1880	14.63	Н	7.88	0.85	21.66	33
1909.8	15.82	V	7.86	0.85	22.83	33
1909.8	14.79	Н	7.86	0.85	21.80	33



Test Report	15070274-FCC-R1
Page	14 of 42

# 6.3 Peak-Average Ratio

Temperature	26°C
Relative Humidity	52%
Atmospheric Pressure	1008mbar
Test date :	April 28, 2015
Tested By :	Wiky.Jam

#### Requirement(s):

Requirement(s)			
Spec	Item	Requirement	Applicable
§24.232(d)	a)	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.	<b>V</b>
Test Setup	B	EUT Spectrum Analyzer	
Test Procedure	According with KDB 971168  1. The signal analyzer's CCDF measurement profile is enabled 2. Frequency = carrier center frequency 3. Measurement BW > Emission bandwidth of signal 4. The signal analyzer was set to collect one million samples to generate the CCDF curve 5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power		
Remark			
Result	<b>▼</b> Pa	ss Fail	

Test Data	Yes	□ <sub>N/A</sub>
Test Plot	Yes (See below)	✓ <sub>N/A</sub>



Test Report	15070274-FCC-R1
Page	15 of 42

#### PCS1900

Channel	Frequency	Peak power	Average power	PK-AV
Onamici	rrequeries	(dBm)	(dBm)	POWER(dBm)
512	1850.2	29.13	28.21	0.92
661	1880	29.23	28.14	1.09
810	1909.8	29.35	28.33	1.02



Test Report	15070274-FCC-R1
Page	16 of 42

## 6.4 Modulation Characteristic

According to FCC § 2.1047(d), Part 22H, 24E there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.



Test Report	15070274-FCC-R1
Page	17 of 42

# 6.5 Occupied Bandwidth

Temperature	26°C
Relative Humidity	52%
Atmospheric Pressure	1008mbar
Test date :	April 28, 2015
Tested By :	Wiky.Jam

#### Requirement(s):

Spec	Item	Requirement	Applicable
§2.1049,	a)	99% Occupied Bandwidth(kHz)	<b>V</b>
§22.917,			
§22.905	b)	26 dB Bandwidth(kHz)	<b>V</b>
§24.238			_
Test Setup	B	EUT Spectrum Analyzer	
	-	The EUT was connected to Spectrum Analyzer and Base	Station via
Test		power divider.	
Procedure	-	The 99% and 26 dB occupied bandwidth (BW) of the mide	dle channel
		for the highest RF powers.	
Remark			
Result	Pa	rail Fail	

Test Data

Yes

N/A

Test Plot

Yes (See below)



Test Report	15070274-FCC-R1
Page	18 of 42

# Cellular Band (Part 22H) result

Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Bandwidth (kHz)
128	824.2	246.163	321.087
190	836.6	247.410	320.026
251	848.8	247.743	325.998

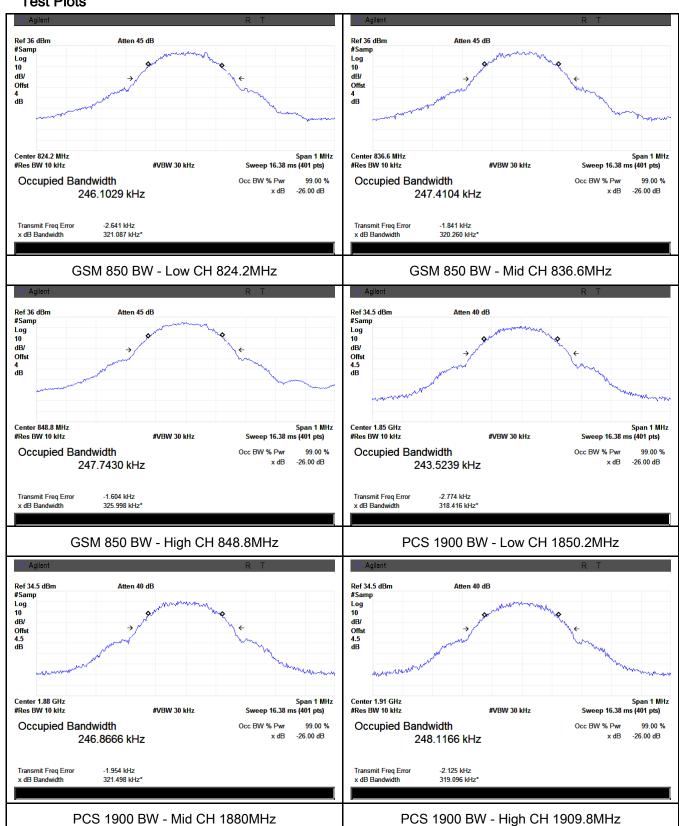
# PCS Band (Part 24E) result

Channel	Frequency	99% Occupied	26 dB Bandwidth
	(MHz)	Bandwidth (kHz)	(kHz)
512	1850.2	243.524	318.416
661	1880.0	246.867	321.498
810	1909.8	248.117	319.096



Test Report	15070274-FCC-R1
Page	19 of 42

#### **Test Plots**





Test Report	15070274-FCC-R1
Page	20 of 42

# 6.6 Spurious Emissions at Antenna Terminals

Temperature	26°C
Relative Humidity	52%
Atmospheric Pressure	1008mbar
Test date :	April 28, 2015
Tested By :	Wiky.Jam

#### Requirement(s):

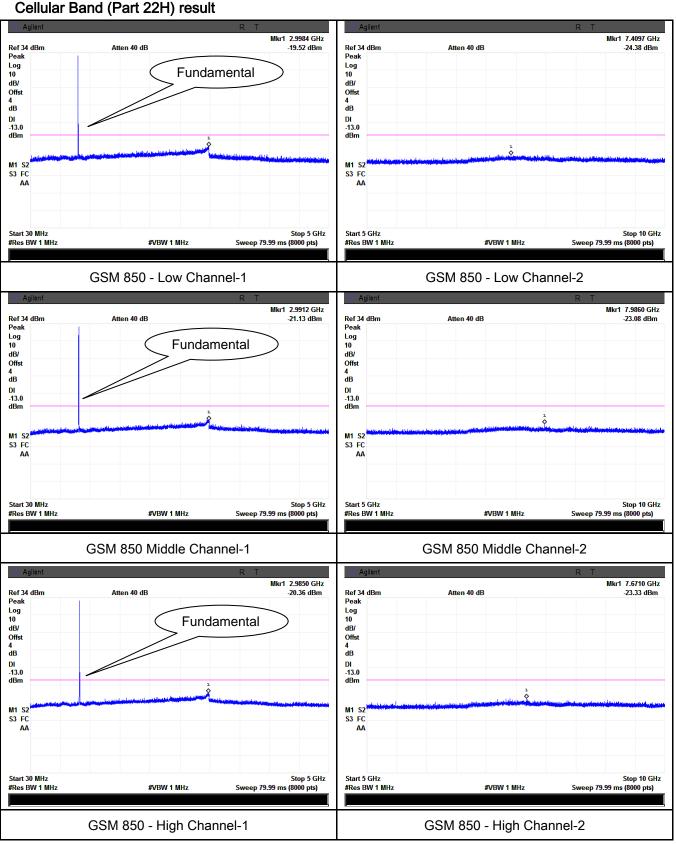
Spec	Item	Requirement	Applicable
§2.1051, §22.917(a)& §24.238(a)	a)	The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB	<b>(</b>
Test Setup		Base Station Spectrum Analyzer	
Test Procedure	-	The EUT was connected to Spectrum Analyzer and Base via power divider.  The Band Edges of low and high channels for the highest powers were measured.  Setting RBW as roughly BW/100.	
Remark			
Result	<b>☑</b> Pa	ss Fail	

Test Data	Yes	$\square_{N/A}$
Test Plot	Yes (See below)	□ <sub>N/A</sub>



Test Report	15070274-FCC-R1
Page	21 of 42

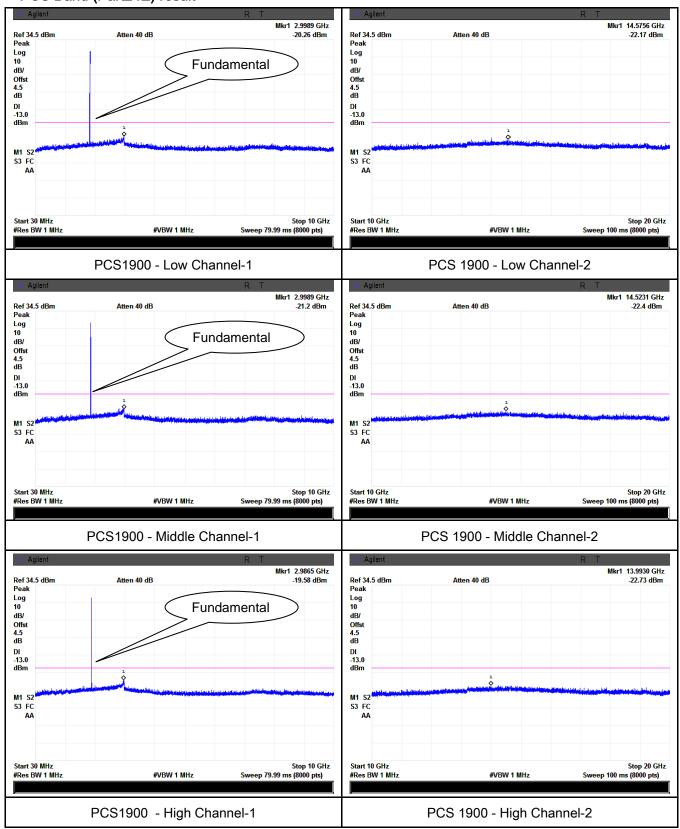
# Test Plots Cellular Band (Part 22H) result





Test Report	15070274-FCC-R1
Page	22 of 42

#### PCS Band (Part24E) result





Test Report	15070274-FCC-R1
Page	23 of 42

# 6.7 Spurious Radiated Emissions

Temperature	26°C
Relative Humidity	52%
Atmospheric Pressure	1008mbar
Test date :	April 28, 2015
Tested By :	Wiky.Jam

#### Requirement(s):

Requirement(s):			
Spec	Item	Requirement	Applicable
		The power of any emission outside of the authorized	
§2.1053,		operating frequency ranges must be attenuated below the	
§22.917 &	a)	transmitter power (P) by a factor of at least 43 + 10 log (P)	•
§24.238		dB. The spectrum is scanned from 30 MHz up to a frequency	
		including its 10th harmonic.	
Test setup		Ant. Tower  Support Units  Turn Table  Ground Plane  Test Receiver	
Test Procedure	radi 2. The Dur vari was 3. Rer con of th Sar	transmitter was placed on a wooden turntable, and it was transmitter transmitter was placed on a wooden turntable.  It measurement antenna was placed at a distance of 3 meters from the tests, the antenna height and polarization as well as EUT at ed in order to identify the maximum level of emissions from the EUs performed by placing the EUT on 3-orthogonal axis.  Inove the EUT and replace it with substitution antenna. A signal genected to the substitution antenna by a non-radiating cable. The ante spurious emissions were measured by the substitution.  The Field Strength = Raw Amplitude (dBµV/m) — Amplifier Gain (dBor (dB) + Cable Loss (dB) + Filter Attenuation (dB, if used)	the EUT. azimuth were JT. The test nerator was bsolute levels
Remark			
Result	Pas	ss Fail	



Test Report	15070274-FCC-R1
Page	24 of 42

~	VΔc
	res

N/A

Test Plot

✓<sub>N/A</sub>

## Cellular Band (Part 22H) result

#### Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1648.4	-44.26	V	7.95	0.78	-37.09	-13	-24.09
1648.4	-47.05	Н	7.95	0.78	-39.88	-13	-26.88
382.4	-58.11	V	6.7	0.29	-51.7	-13	-38.7
755.9	-53.44	Н	7.1	0.43	-46.77	-13	-33.77

#### Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1673.2	-43.59	V	7.95	0.78	-36.42	-13	-23.42
1673.2	-46.76	Н	7.95	0.78	-39.59	-13	-26.59
381.9	-57.86	V	6.7	0.29	-51.45	-13	-38.45
756.2	-52.29	Н	7.1	0.43	-45.62	-13	-32.62

#### High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1697.6	-44.37	V	7.95	0.78	-37.2	-13	-24.2
1697.6	-46.91	Н	7.95	0.78	-39.74	-13	-26.74
383.3	-57.99	V	6.7	0.29	-51.58	-13	-38.58
757.4	-52.72	Н	7.1	0.43	-46.05	-13	-33.05



Test Report	15070274-FCC-R1
Page	25 of 42

## PCS Band (Part24E) result

#### Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3700.4	-47.81	V	10.25	2.73	-40.29	-13	-27.29
3700.4	-49.03	Н	10.25	2.73	-41.51	-13	-28.51
383.5	-57.82	V	6.7	0.29	-51.41	-13	-38.41
757.1	-52.46	Н	7.1	0.43	-45.79	-13	-32.79

#### Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3760	-48.12	V	10.25	2.73	-40.6	-13	-27.6
3760	-48.93	Н	10.25	2.73	-41.41	-13	-28.41
381.6	-56.83	V	6.7	0.29	-50.42	-13	-37.42
754.6	-51.74	Н	7.1	0.43	-45.07	-13	-32.07

## High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3819.6	-47.43	V	10.36	2.73	-39.8	-13	-26.8
3819.6	-48.64	Н	10.36	2.73	-41.01	-13	-28.01
383.5	-58.44	V	6.7	0.29	-52.03	-13	-39.03
756.4	-53.13	Н	7.1	0.43	-46.46	-13	-33.46



Test Report	15070274-FCC-R1
Page	26 of 42

# 6.8 Band Edge

Temperature	26°C
Relative Humidity	52%
Atmospheric Pressure	1008mbar
Test date :	April 28, 2015
Tested By :	Wiky.Jam

#### Requirement(s):

Requirement(s)	Requirement(s).					
Spec	Item	Requirement	Applicable			
§22.917(a) §24.238(a)	a)	The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P)				
		dB.				
Test setup		Base Station Spectrum Analyzer EUT				
Procedure	-	<ul> <li>The EUT was connected to Spectrum Analyzer and Base Station via power divider.</li> <li>The Band Edges of low and high channels for the highest RF powers were measured. Setting RBW as roughly BW/100.</li> </ul>				
Remark						
Result	<b>☑</b> Pa	ss Fail				

Test Data	Yes	□ <sub>N/A</sub>
Test Plot	Yes (See below)	□ <sub>N/A</sub>



Test Report	15070274-FCC-R1
Page	27 of 42

# Cellular Band (Part 22H) result

Frequency (MHz)	Emission (dBm)	Limit (dBm)
823.9937	-14.10	-13
849.0212	-14.29	-13

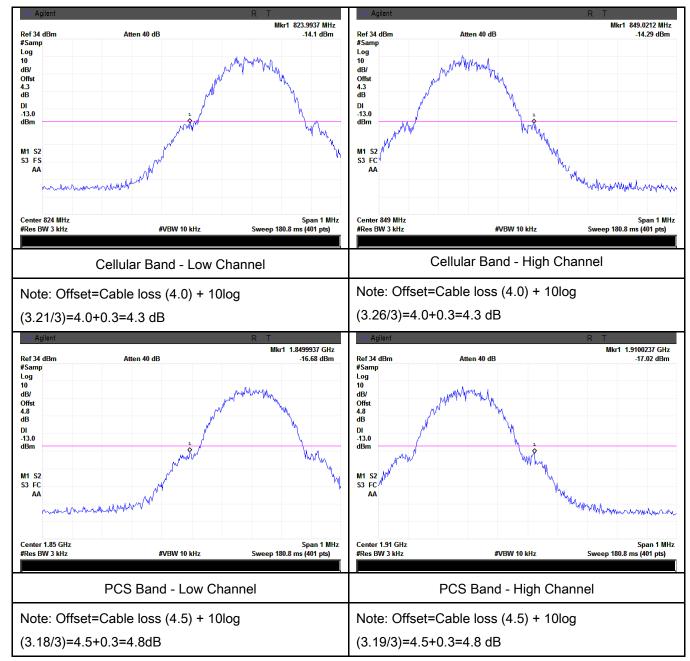
## PCS Band (Part24E) result

Frequency (MHz)	Emission (dBm)	Limit (dBm)
1849.9937	-16.68	-13
1910.0237	-17.02	-13



Test Report	15070274-FCC-R1
Page	28 of 42

#### **Test Plots**





Test Report	15070274-FCC-R1
Page	29 of 42

# 6.9 Frequency Stability

Temperature	26°C
Relative Humidity	50%
Atmospheric Pressure	1008mbar
Test date :	April 28, 2015
Tested By :	Wiky.Jam

#### Requirement(s):

Spec	Item	n Requirement Applicable				
·		According to §22.3 the Public Mobile S tolerances given in Frequency Toleran Services Frequency	Services mus Table below	et be maintained w	rithin the	
\$0.40FF		Range	fixed	watts	watts	
§2.1055,		(MHz)	(ppm)	(ppm)	(ppm)	
§22.355 &	a)	25 to 50	20.0	20.0	50.0	<b>V</b>
§24.235	'	50 to 450	5.0	5.0	50.0	
		450 to 12	2.5	5.	5.0	
		821 to 896	1.5	2.5	2.5	
		928 to 29.	5.0	N/A	N/A	
		929 to 960.	1.5	N/A	N/A	
		2110 to 2220	10.0	N/A	N/A	
		According to §24.2	35, the frequ	ency stability sha	Il be sufficient to	
		ensure that the fun	damental en	nissions stay withi	n the authorized	
		frequency block.				
Test setup	Base Station EUT  Thermal Chamber					



Test Report	15070274-FCC-R1
Page	30 of 42

	A communication link was established between EUT and base station. The
	frequency error was monitored and measured by base station under variation
Procedure	of ambient temperature and variation of primary supply voltage.
	Limit: The frequency stability of the transmitter shall be maintained within
	±0.00025% (±2.5ppm) of the center frequency.
Remark	
Result	Pass Fail

Test Data	Yes	□ <sub>N/A</sub>
Test Plot	Yes (See below)	✓ <sub>N/A</sub>



Test Report	15070274-FCC-R1
Page	31 of 42

# Cellular Band (Part 22H) result

Middle Channel, f₀ = 836.6 MHz				
Temperature (°C)	Power Supplied (V <sub>DC</sub> )	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-10		-10	-0.0120	2.5
0	3.7	-17	-0.0203	2.5
10		-23	-0.0275	2.5
20		-8	-0.0096	2.5
30		-5	-0.0060	2.5
40		-14	-0.0167	2.5
50		-12	-0.0143	2.5
55		-13	-0.0155	2.5
25	4.2	-20	-0.0239	2.5
25	3.5	-13	-0.0155	2.5

#### PCS Band (Part 24E) result

. 30 24	1 (1 dit 2+2) 100dit				
	Middle Channel, f₀ = 1880 MHz				
Temperature (°C)	Power Supplied (V <sub>DC</sub> )	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)	
-10		-25	-0.0133	2.5	
0		-27	-0.0144	2.5	
10	3.7	-14	-0.0074	2.5	
20		-29	-0.0154	2.5	
30		-13	-0.0069	2.5	
40		-12	-0.0064	2.5	
50		-15	-0.0080	2.5	
55		-24	-0.0128	2.5	
0.5	4.2	-13	-0.0069	2.5	
25	3.5	-26	-0.0138	2.5	



Test Report	15070274-FCC-R1
Page	32 of 42

# Annex A. TEST INSTRUMENT

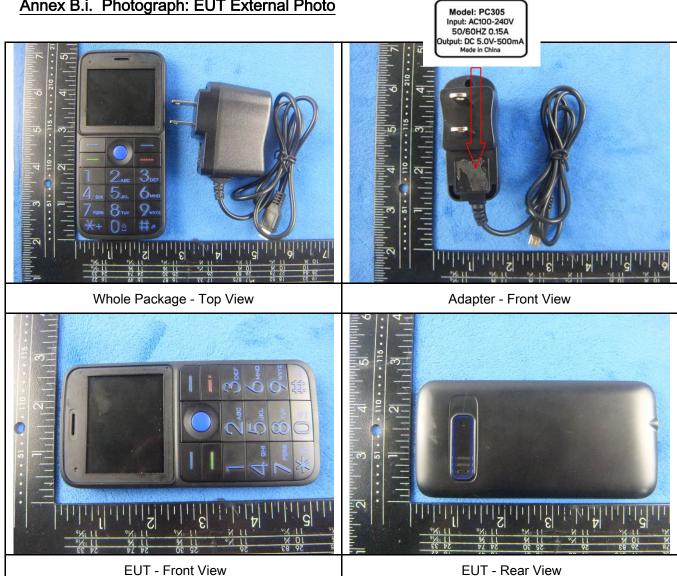
Instrument	Model	Serial#	Cal Date	Cal Due	In use
RF Conducted Test					
Agilent ESA-E SERIES SPECTRUM ANALYZER	E4407B	MY45108319	09/17/2014	09/16/2015	<b>\</b>
Power Splitter	1#	1#	09/02/2014	09/01/2015	~
Universal Radio Communication Tester	CMU200	121393	09/26/2014	09/25/2015	<b>&gt;</b>
Temperature/Humidity Chamber	UHL-270	001	10/10/2014	10/09/2015	<u>&lt;</u>
DC Power Supply	E3640A	MY40004013	09/18/2014	09/17/2015	•
Radiated Emissions					
EMI test receiver	ESL6	100262	09/18/2014	09/17/2015	•
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	09/02/2014	09/01/2015	<u>\</u>
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/25/2015	03/24/2016	V
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/22/2014	09/21/2015	<b>\</b>
Bilog Antenna (30MHz~2GHz)	JB1	A112017	09/22/2014	09/21/2015	<u>&lt;</u>
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71259	09/25/2014	09/24/2015	<b>(</b>
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71283	09/25/2014	09/24/2015	<u>&lt;</u>
SYNTHESIZED SIGNAL GENERATOR	8665B	3744A01293	09/18/2014	09/17/2015	<b>\</b>
Tunable Notch Filter	3NF- 800/1000-S	AA4	09/02/2014	09/01/2015	<b>&gt;</b>
Tunable Notch Filter	3NF- 1000/2000-S	AM 4	09/02/2014	09/01/2015	V



Test Report	15070274-FCC-R1
Page	33 of 42

## Annex B. EUT And Test Setup Photographs

#### Annex B.i. Photograph: EUT External Photo





Test Report	15070274-FCC-R1
Page	34 of 42



EUT - Top View



EUT - Bottom View



EUT - Left View

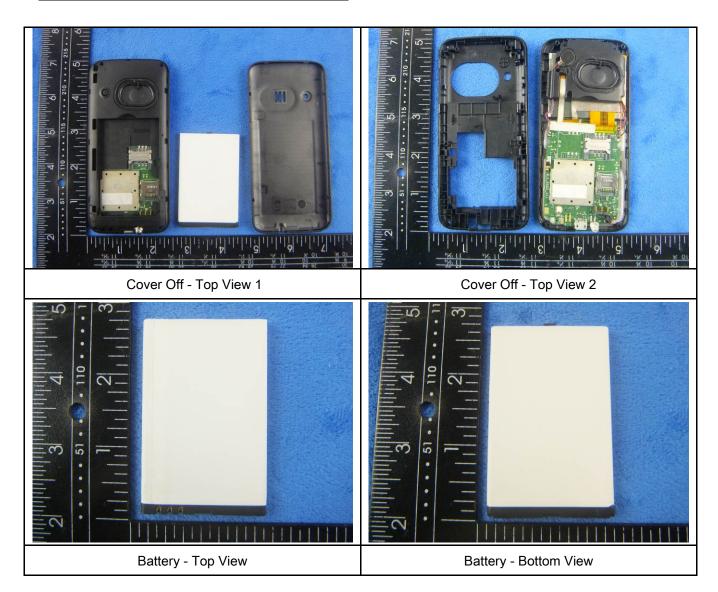


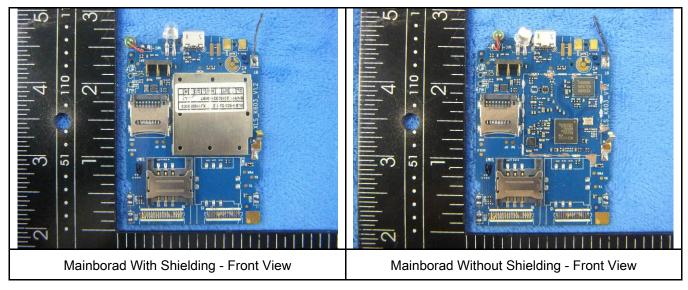
**EUT - Right View** 



Test Report	15070274-FCC-R1
Page	35 of 42

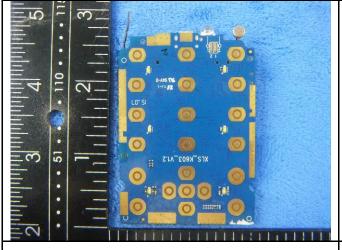
#### Annex B.ii. Photograph: EUT Internal Photo





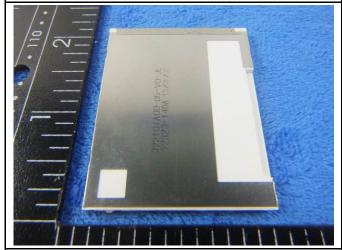


Test Report	15070274-FCC-R1
Page	36 of 42



Mainborad - rear View

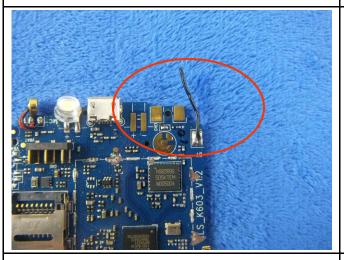
LCD - Front View





LCD - Rear View

**GSM Antenna View** 



BT - Antenna View

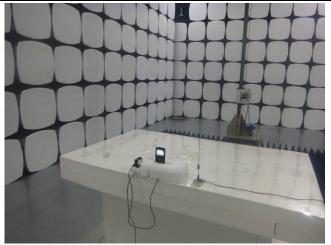


Test Report	15070274-FCC-R1	
Page	37 of 42	

# Annex B.iii. Photograph: Test Setup Photo



Radiated Spurious Emissions Test Setup Below 1GHz



Radiated Spurious Emissions Test Setup Above 1GHz

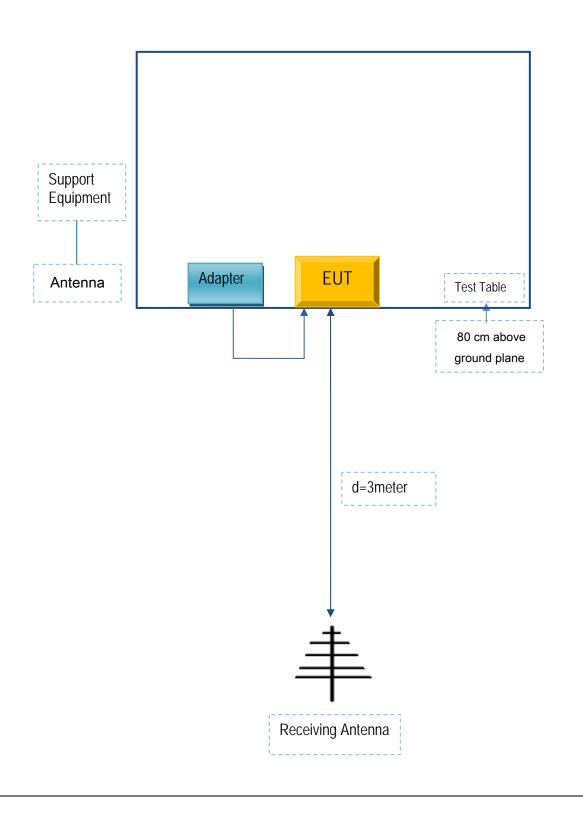


Test Report	15070274-FCC-R1	
Page	38 of 42	

# Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

## Annex C.ii. TEST SET UP BLOCK

**Block Configuration Diagram for Radiated Emissions** 





Test Report	15070274-FCC-R1
Page	39 of 42

## Annex C. il. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Manufacturer	Equipment Description	Model	Calibration Date	Calibration Due Date
N/A	N/A	N/A	N/A	N/A



Test Report	15070274-FCC-R1
Page	40 of 42

## Annex C.ii. EUT OPERATING CONKITIONS

The following is the description of how the EUT is exercised during testing.

Test	Description Of Operation
Emissions Testing	The EUT was communicating with base station and set to work at maximum output power.
Others Testing	The EUT was communicating with base station and set to work at maximum output power.



Test Report	15070274-FCC-R1	
Page	41 of 42	

# Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see attachment



Test Report	15070274-FCC-R1	
Page	42 of 42	

#### Annex E. DECLARATION OF SIMILARITY

# **Social Mobile Telecommunications**

To: SIEMIC ,775 Montague Expressway, Milpitas, CA 95035,USA

# **Declaration Letter**

Dear Sir,

For our business issue and marketing requirement, we would like to list 2 model numbers on the FCC certificates and reports, as following:

Model No.: FB305, FB305 SENIOR

We declare that, all the model PCB ,Antenna and Appearance shape , accessories are the same . The difference of these is listed as below:

Main Model No	Serial Model No	Difference	
FB305	FB305 SENIOR	Different model name	

Thank you!

Signature:

Printed name/title: Freddy Morcos / Manager

ferm nand

Address: 16400 NW 2nd Ave. #201 Miami, Florida 33169