

# FCC TEST REPORT

Product Name	Dual Band RF Repeater
Model Name	CAE700-DB
Applicant	SOLCOM I&C Co., Ltd.
FCC ID	W2G-CAE700DB

# ESTECH CO., LTD

Rm. 1015 World Venture Center, 426-5 Gasan-dong, Geumcheon-gu, Seoul, 153-803, Korea. Tel:82-2-867-3201, Fax:82-2-867-3204

Report Number: ESTR0901-007 EST-QP-20-01(0) 1 of 49



# **FCC Test Report**

Report Number	ESTR0901-007				
. 1	Company Name	SOLCOM I&C Co., Ltd.			
Applicant	Address	803, Lohas-Tower, 93-4 121-828	803, Lohas-Tower, 93-45, Sangsoo-Dong, Mapo-GU, Seoul, Korea 121-828		
	Product Name	Dual Band RF Repeater	Dual Band RF Repeater		
Product	Model No.	CAE700-DB	Manufacturer	SOLCOM I&C Co., Ltd.	
	Serial No.	NONE	Country of origin	KOREA	
Other	Issued Date	2009-01-15	Tested Date	2008-12-05 ~ 2008-12-23	
Test Result	Pass				
Standard	FCC PART 22 / 24 SubpartE				
Tested by	I.K. Hong/ Engineer (Signature)				
Approved by	Eun-younş	g Son/ Engineering Manage	er (Signate	we)	

# **ESTECH CO., LTD**

Rm. 1015 World Venture Center, 426-5 Gasan-dong, Geumcheon-gu, Seoul, 153-803, Korea. Tel:82-2-867-3201, Fax:82-2-867-3204

- o This is certified that the above mentioned products have been tested for the sample provided by client.
- o No part of this document may not be duplicated or reproduced by any means without the express written permission of Estech Co., Ltd.

Report Number : ESTR0901-007 EST-QP-20-01(0) 2 of 49





# **Contents**

1. General Information	Page 4
2. Laboratory Information	Page 5
3. Summary of Test Results	Page 5
4. RF Output Power	Page 6
5. Occupied Bandwidth	Page 14
6. Spurious and Harmonic Emission at Antenna Terminal	Page 20
7. Field Strength of Spurious Radiation	Page 38
8. Frequency stability	Page 43

Attachment 1 : EUT Test Photographs for CDMA Attachment 2 : EUT Test Photographs for PCS



FCC ID: W2G-CAE700DB

# 1. General Information

# 1.1 EUT Description

FCC ID	W2G-CAE700DB	
Product Name	Dual Band RF Repeater	
Model Name	CAE700-DB	
	Uplink 824MHz ~ 849MHz	
Frequency	Downlink 869MHz ~ 894MHz	
	Uplink 1850MHz ~ 1910MHz	
	Downlink 1930MHz ~ 1990MHz	
Channel	Uplink&Downlink (1013/363/777/25/600/1175)	
Modulation Type	CDMA	
Power Rating	Input: 110~240VAC 50~60Hz	

FCC ID: W2G-CAE700DB

# 2. Laboratory Information

**2.1 Laboratory Name** Estech Co., Ltd.

2.2 Location

**Head Office** Rm. 1015, World Venture Center II, 426-5 Gasan-dong

Geumcheon-gu, Seoul, 153-803. Korea.

EMC Lab(Ichon) 58-1, Osan-Ri, GaNam-Myon, YeoJoo-Gun, KyungKi-Do, Korea EMC Lab(Yanggi) 97-1, Hoiuk-Ri Majang-Myon, Icheon-city, KyungKi-Do, Korea

2.3 Quality System Accredited by KOLAS(ISO/IEC 17025)

2.4 Major Accredited Mark

















# 3. Summary of Test Results

Test Item	Standard	Result
RF Output Power	2.1046	PASS
Occupied Bandwidth	2.1049	PASS
Band Edge	2.1049	PASS
Spurious and Harmonic Emission at Antenna Terminal	2.1051	PASS
Field Strength of Spurious Radiation	2.1053	PASS
Frequency stability	2.1055	PASS
<b>Modulation Characteristics</b>	2.1047	PASS

# 4.3.2 Test Results (Downlink)-Cellular Band-CDMA

	Ch No.	Freq (MHz)	Power Output (dBm)
Low	1013	869.70	9.95
Mid	363	880.89	9.98
High	777	893.31	10.08

FCC ID:

W2G-CAE700DB

# 4.3.3 Test Results (Uplink)-PCS Band

	Ch No.	Freq (MHz)	Power Output (dBm)
Low	25	1851.25	15.07
Mid	600	1880.00	15.03
High	1175	1908.75	14.99

# 4.3.3 Test Results (Downlink)-PCS Band

	Ch No.	Freq (MHz)	Power Output (dBm)
Low	25	1931.25	12.05
Mid	600	1960.00	12.08
High	1175	1988.75	12.03

FCC ID: W2G-CAE700DB

# 4. RF Output Power

#### **4.1 Test Procedure**

Power output shall be measured at the RF outut terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on circuit elements as specified. The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated

#### **4.2 Test Equipments**

The following test equipments are used during tests

Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	Agilent	E4407B	2009-02-28
Spectrum Analyzer	Agilent	E4402B	2009-09-11
Signal Generator	HP	E4432B	2009-02-28

#### 4.3.1 Test Results (Uplink)-Cellular Band-CDMA

#### **Conducted power**

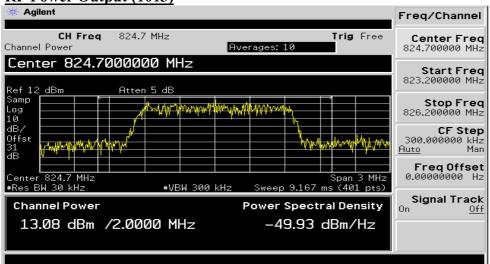
	Ch No.	Freq (MHz)	Power Output (dBm)
Low	1013	824.70	13.08
Mid.	363	835.89	13.01
High	777	848.31	13.01



# 4.4 Test Plot

#### **Uplink**

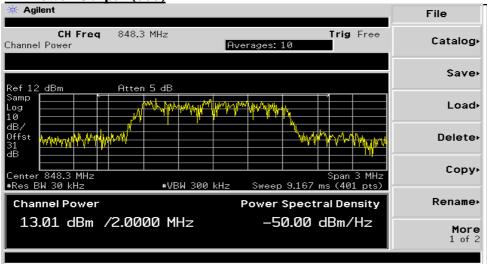
RF Power Output (1013)





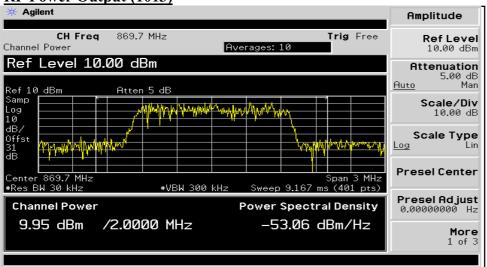


#### RF Power Output (777)

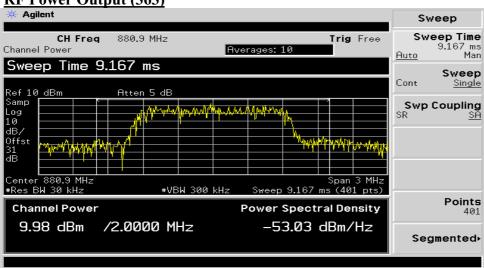




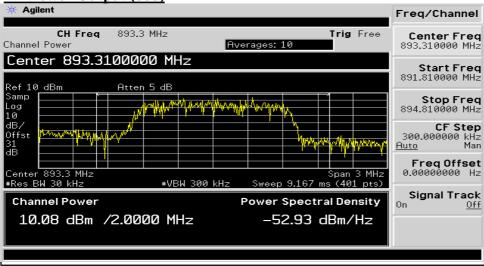
**RF Power Output (1013)** 



RF Power Output (363)



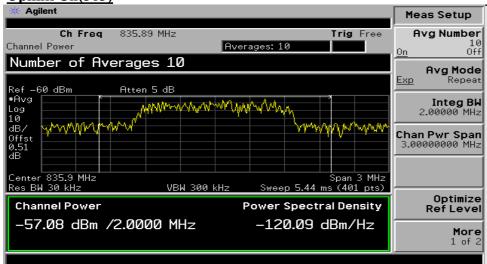




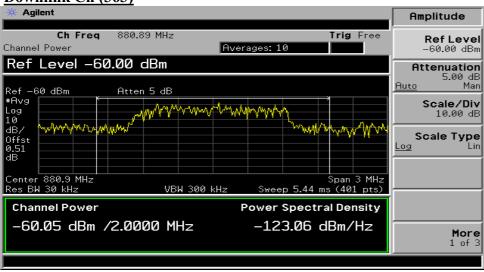


#### **Input Signal Output Power**





#### **Downlink Ch (363)**

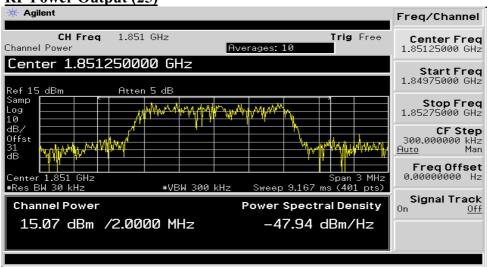




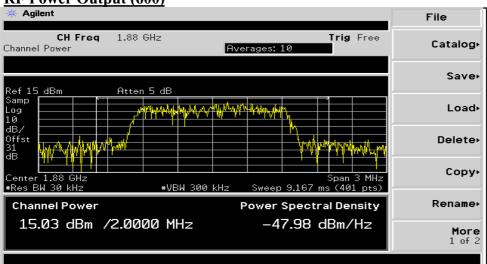
# 4.4 Test Plot

#### **Uplink**

**RF Power Output (25)** 



RF Power Output (600)

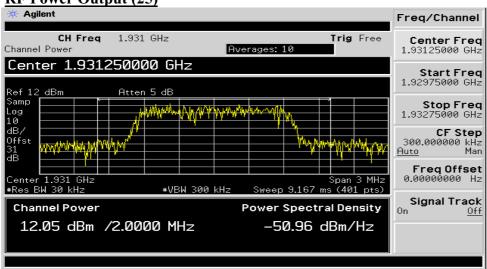


RF Power Output (1175)

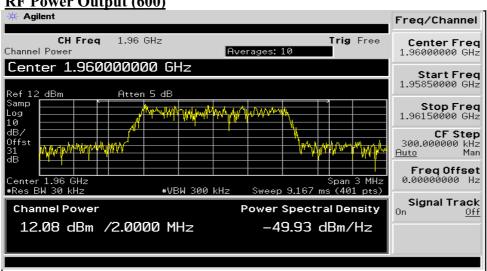




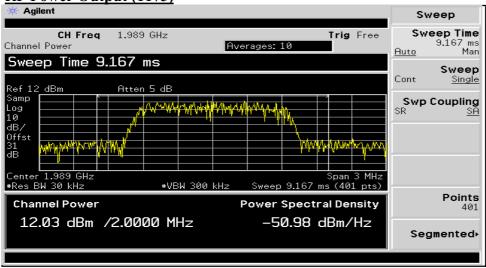
RF Power Output (25)



RF Power Output (600)



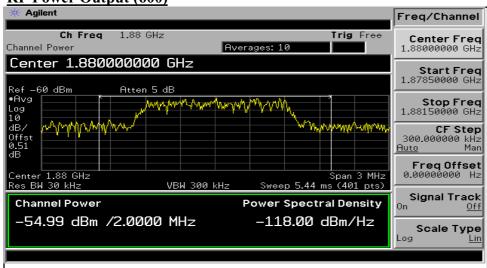




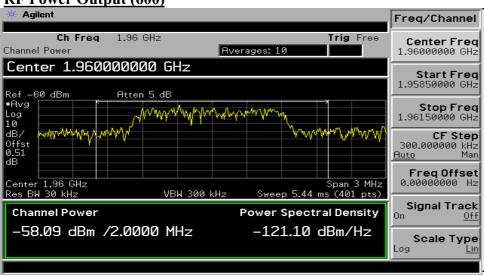


#### **Input Signal Output Power**





#### RF Power Output (600)





# 5. Occupied Bandwidth

#### **5.1 Test Procedure**

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% of the Emission bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled.

#### **5.2 Test Equipments**

The following test equipments are used during tests

Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	Agilent	E4402B	2009-02-28
Spectrum Analyzer	Agilent	E4407B	2009-09-11
Signal Generator	HP	E4432B	2009-02-28

#### 5.3 Test Results

#### (Uplink)-CDMA Band

Channel	Frequency(MHz)	26dB Bandwidth(MHz)
1013	824.70	1.394
363	835.89	1.392
777	848.31	1.391

#### (Downlink)-CDMA Band

Channel	Frequency(MHz)	26dB Bandwidth(MHz)
1013	869.00	1.395
363	880.89	1.386
777	893.31	1.388



# (Uplink)-PCS Band

Channel	Frequency(MHz)	26dB Bandwidth(MHz)
25	1851.25	1.393
600	1880.00	1.392
1175	1908.75	1.387

# (Downlink)-PCS Band

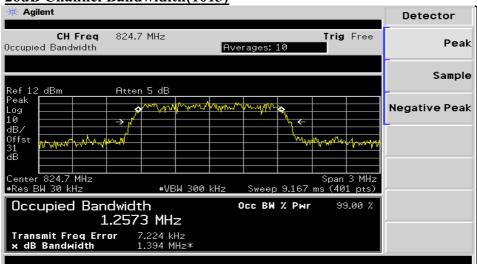
Channel	Frequency(MHz)	26dB Bandwidth(MHz)
25	1931.25	1.383
600	1960.00	1.394
1175	1988.75	1.385



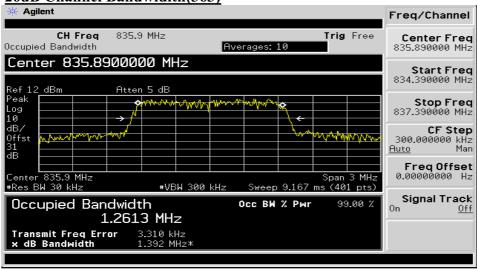
#### **5.4 Test Plot**

#### **Uplink**

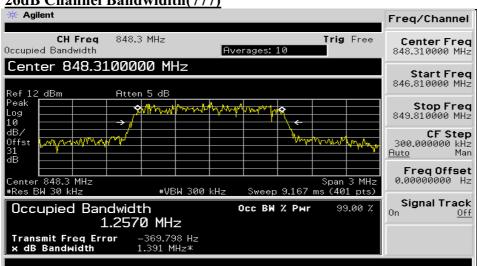
26dB Channel Bandwidith(1013)



26dB Channel Bandwidith(363)

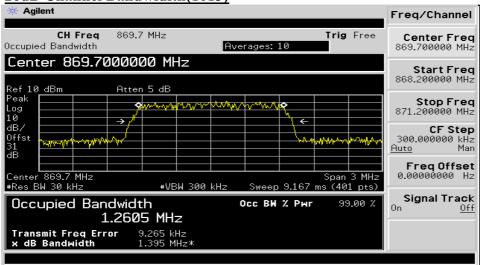


26dB Channel Bandwidith(777)

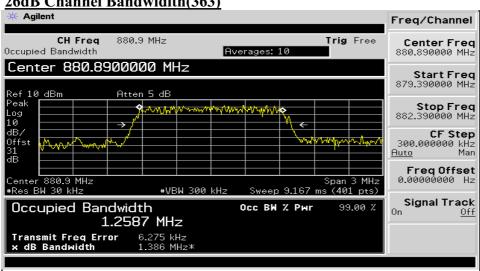




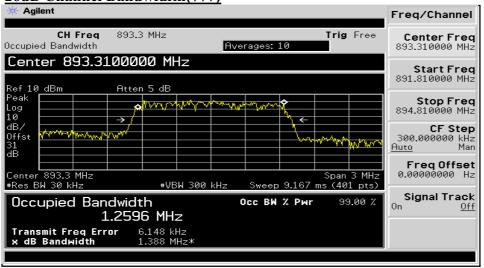
26dB Channel Bandwidith(1013)



26dB Channel Bandwidith(363)



26dB Channel Bandwidith(777)

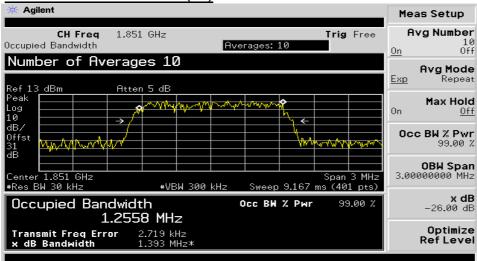




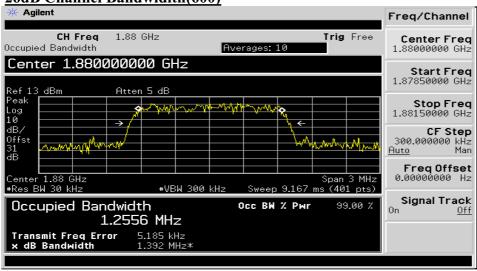
#### 5.4 Test Plot

#### **Uplink**

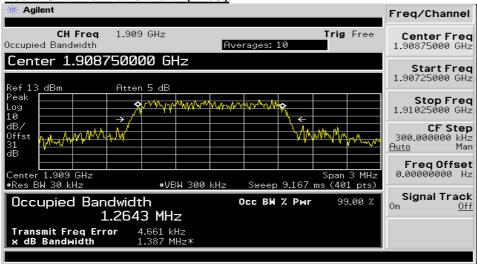
**26dB Channel Bandwidith(25)** 



26dB Channel Bandwidith(600)

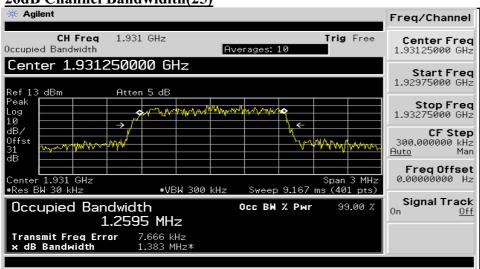


26dB Channel Bandwidith(1175)

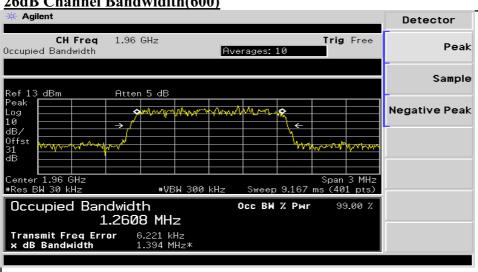




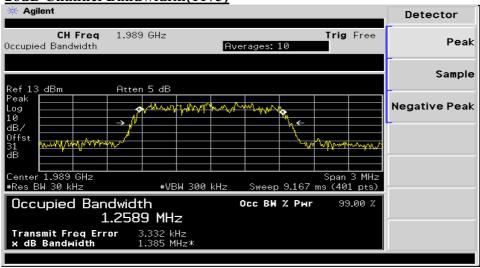
26dB Channel Bandwidith(25)



26dB Channel Bandwidith(600)



**26dB Channel Bandwidith(1175)** 



# 6. Spurious and Harmonic Emission at Antenna Terminal

#### **6.1 Test Procedure**

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to 10GHz. Set the RES BW to 1% of the emission bandwidth to show compliance with the -13dBm, limit, in the 1MHz bands immediately outside and adjacent to the top and bottom edges of the frequency block.

FCC ID: W2G-CAE700DB

For the Out-of-Band measurements a 1MHz RBW was used to scan from 10MHz to 10xfo of the fundamental carrier for all frequency block. A display line was placed at -13dBm to show compliance for spurious, and harmonics.

22.917(f): Mobile emission in base frequency range. The mean power of any emissions appearing in the base station frequency range from cellular mobile transmitter operated must be attenuated to a level not to exceed - 80dBm at the transmit antenna connector.

#### **6.2 Test Equipments**

The following test equipments are used during tests

Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	Agilent	E4402B	2009-02-28
Spectrum Analyzer	Agilent	E4407B	2009-09-11
Signal Generator	HP	E4432B	2009-02-28

#### 6.3 Test Results (Uplink)

CDMA(Spurious Emission: Band Edge)

Channel	Frequency	Result	Limit	Margin
1013	824.70	-23.98	-13.00	10.98
777	848.31	-17.29	-13.00	4.29

#### CDMA (Spurious Emission: Out of Band)

Channel	Frequency	Result	Limit	Margin
1013	824.70	-34.34	-13.00	21.34
363	835.89	-29.60	-13.00	16.60
777	848.31	-30.20	-13.00	17.20

Report Number: ESTR0901-007 EST-QP-20-01(0) 20 of 49



#### 6.4 Test Results (Downlink)

CDMA(Spurious Emission: Band Edge)

Channel	Frequency	Result	Limit	Margin
1013	1931.25	-36.94	-13.00	23.94
777	1988.75	-31.93	-13.00	18.93

CDMA (Spurious Emission: Out of Band)

Channel	Frequency	Result	Limit	Margin
1013	1931.25	-26.97	-13.00	13.97
363	1960.00	-27.07	-13.00	14.07
777	1988.75	-27.09	-13.00	14.09

#### 6.4 Test Results (Upnlink)

PCS(Spurious Emission: Band Edge)

Channel	Frequency	Result	Limit	Margin
25	824.70	-52.10	-13.00	39.10
1175	848.31	-52.73	-13.00	39.73

PCS (Spurious Emission: Out of Band)

Channel	Frequency	Result	Limit	Margin
25	824.70	-26.34	-13.00	13.34
600	835.89	-27.49	-13.00	14.49
1175	848.31	-26.75	-13.00	13.75

#### 6.4 Test Results (Downlink)

PCS(Spurious Emission: Band Edge)

Channel	Frequency	Result	Limit	Margin
25	869.70	-44.93	-13.00	31.93
1175	893.31	-48.03	-13.00	35.03

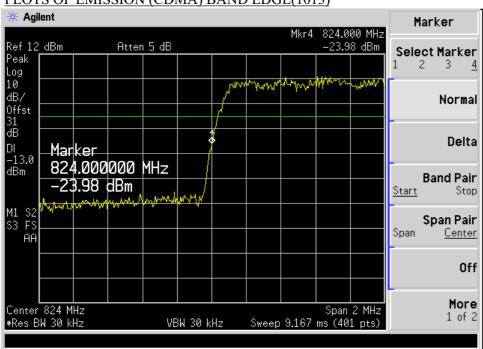
PCS (Spurious Emission: Out of Band)

Channel	Frequency	Result	Limit	Margin
25	869.70	-27.82	-13.00	14.82
600	880.89	-28.00	-13.00	15.00
1175	893.31	-25.54	-13.00	12.54

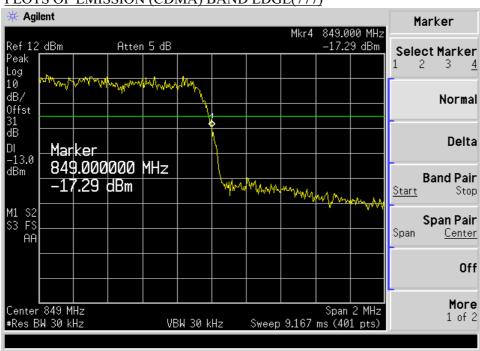
6.5 Test Plot

#### **Uplink**

#### PLOTS OF EMISSION (CDMA) BAND EDGE(1013)

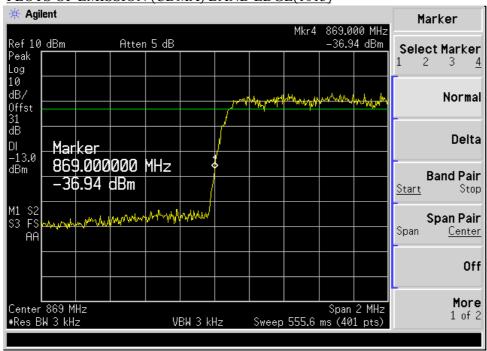


#### PLOTS OF EMISSION (CDMA) BAND EDGE(777)

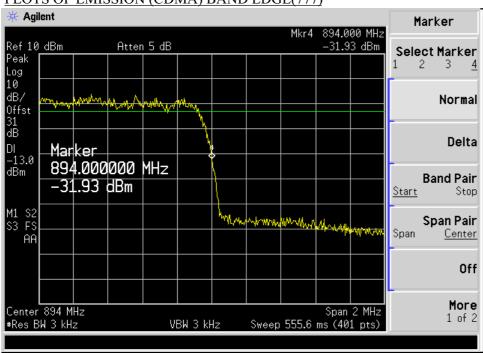




#### PLOTS OF EMISSION (CDMA) BAND EDGE(1013)



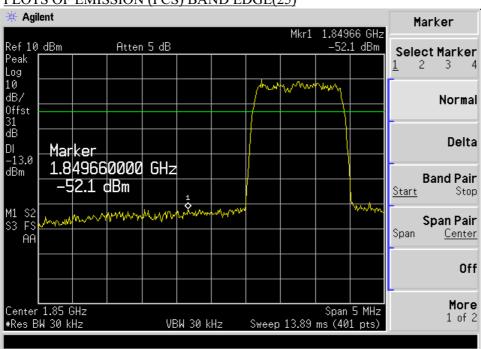
#### PLOTS OF EMISSION (CDMA) BAND EDGE(777)



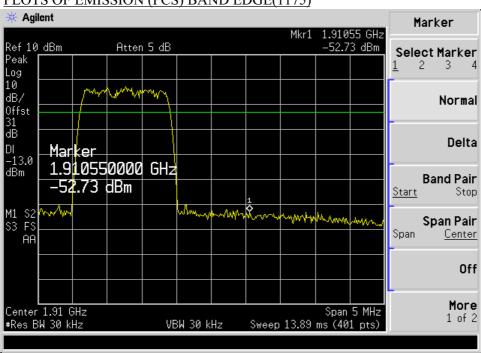
6.5 Test Plot

#### **Uplink**

#### PLOTS OF EMISSION (PCS) BAND EDGE(25)

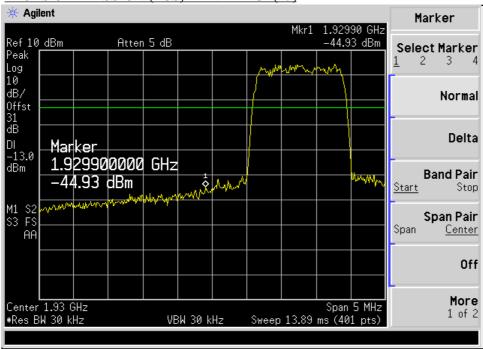


#### PLOTS OF EMISSION (PCS) BAND EDGE(1175)

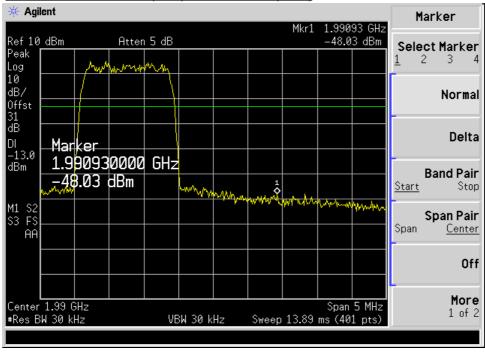




#### PLOTS OF EMISSION (PCS) BAND EDGE(25)



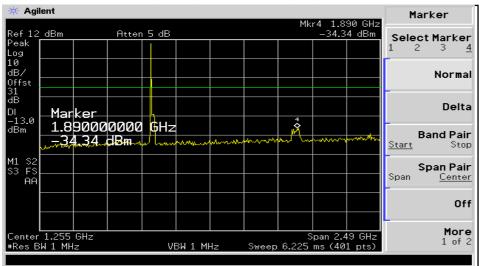
#### PLOTS OF EMISSION (PCS) BAND EDGE(1175)



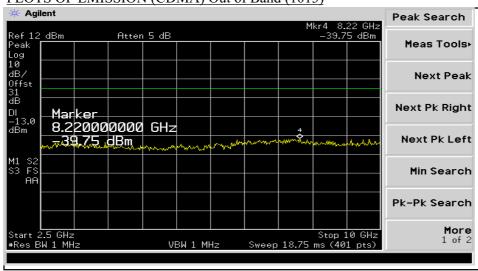


# <u>Uplink</u>

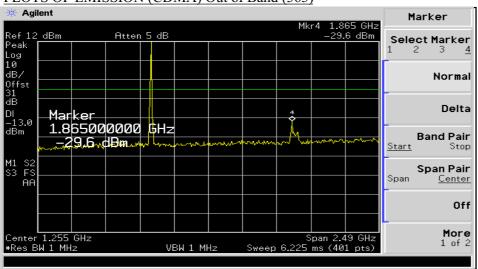
#### PLOTS OF EMISSION (CDMA) Out of Band (1013)



#### PLOTS OF EMISSION (CDMA) Out of Band (1013)



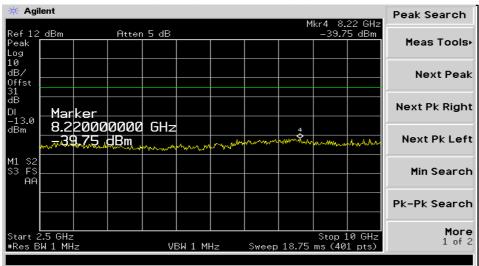
#### PLOTS OF EMISSION (CDMA) Out of Band (363)



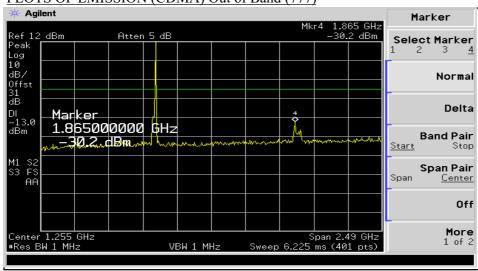


# **Uplink**

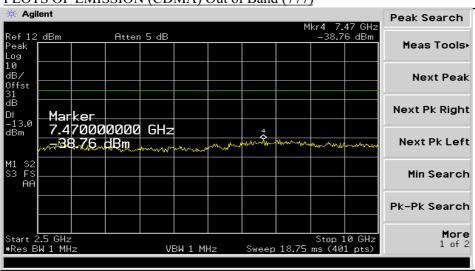
#### PLOTS OF EMISSION (CDMA) Out of Band (363)



#### PLOTS OF EMISSION (CDMA) Out of Band (777)

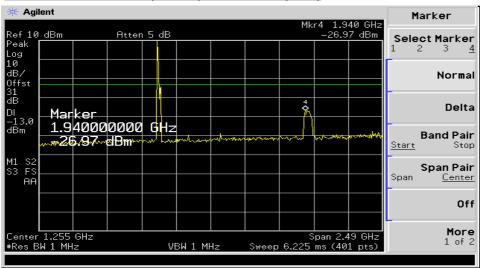


#### PLOTS OF EMISSION (CDMA) Out of Band (777)

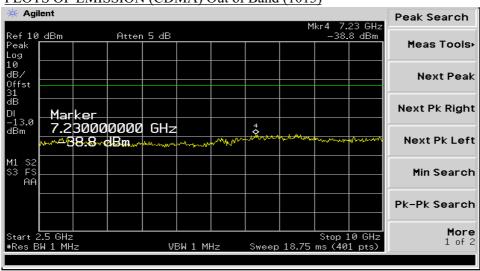




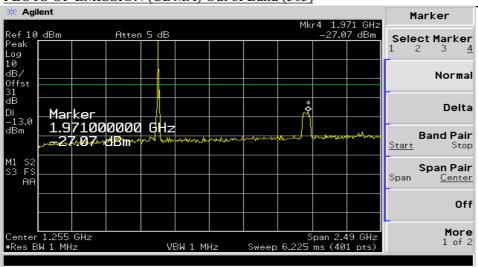
#### PLOTS OF EMISSION (CDMA) Out of Band (1013)



#### PLOTS OF EMISSION (CDMA) Out of Band (1013)

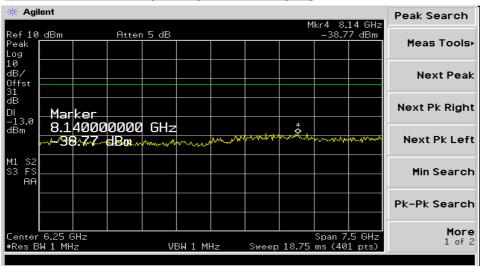


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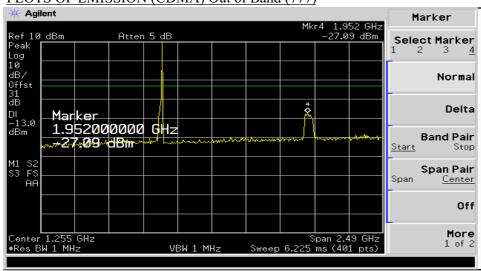




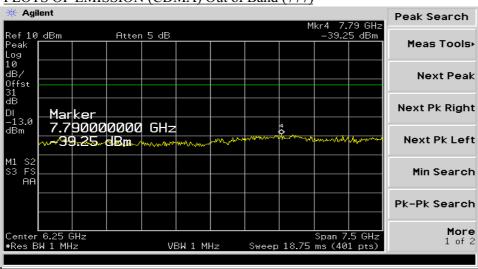
#### PLOTS OF EMISSION (CDMA) Out of Band (363)



#### PLOTS OF EMISSION (CDMA) Out of Band (777)



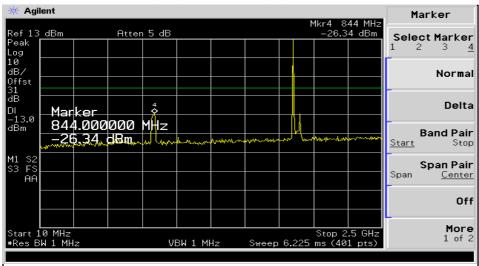
#### PLOTS OF EMISSION (CDMA) Out of Band (777)



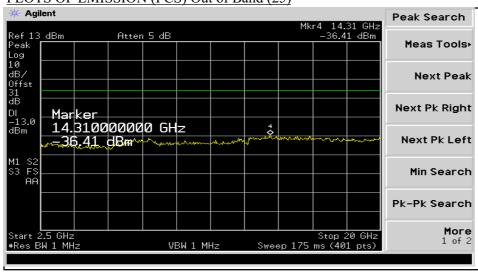


# **Uplink**

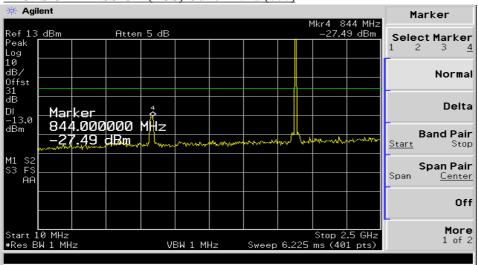
#### PLOTS OF EMISSION (PCS) Out of Band (25)



#### PLOTS OF EMISSION (PCS) Out of Band (25)



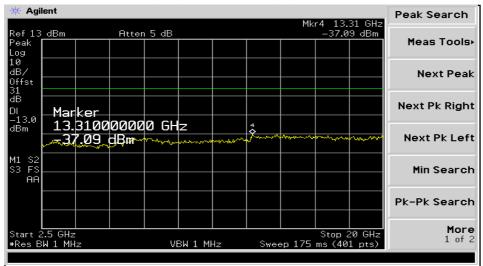
#### PLOTS OF EMISSION (PCS) Out of Band (600)



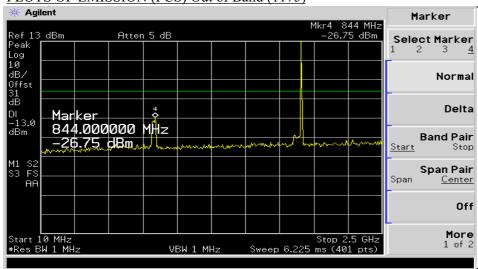


#### Uplink

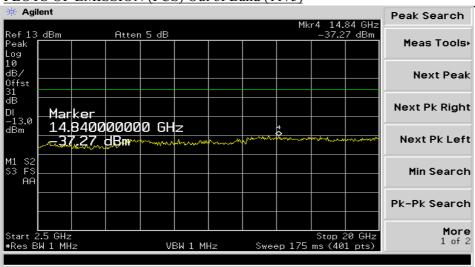
#### PLOTS OF EMISSION (PCS) Out of Band (600)



#### PLOTS OF EMISSION (PCS) Out of Band (1175)

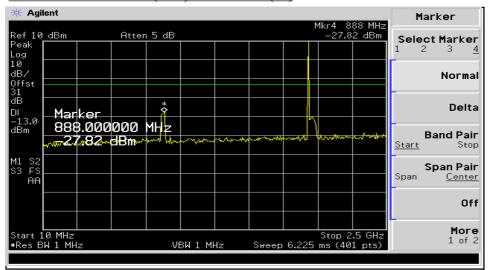


#### PLOTS OF EMISSION (PCS) Out of Band (1175)

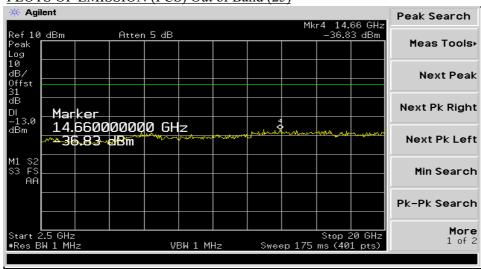




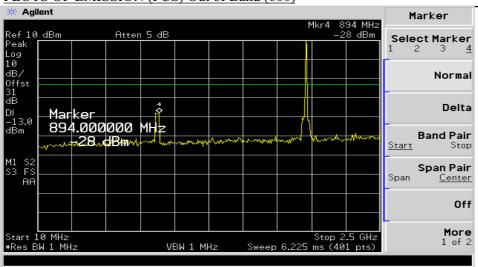
#### PLOTS OF EMISSION (PCS) Out of Band (25)



#### PLOTS OF EMISSION (PCS) Out of Band (25)

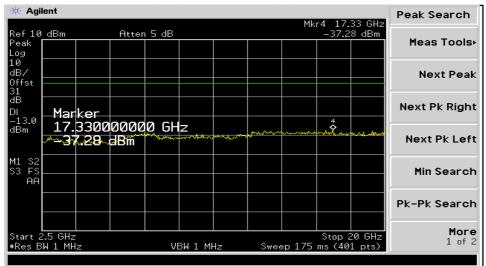


#### PLOTS OF EMISSION (PCS) Out of Band (600)

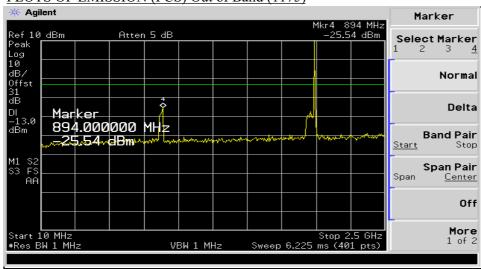




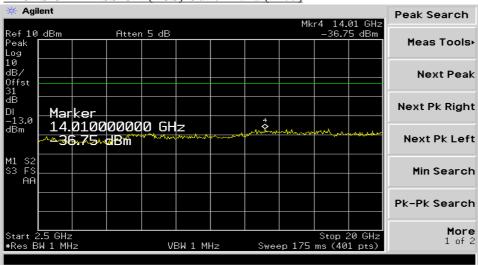
#### PLOTS OF EMISSION (PCS) Out of Band (600)



#### PLOTS OF EMISSION (PCS) Out of Band (1175)



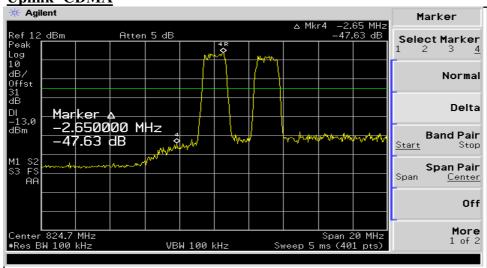
#### PLOTS OF EMISSION (PCS) Out of Band (1175)



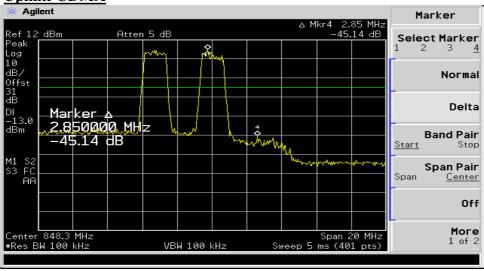


#### **Inter-modulation Signal**



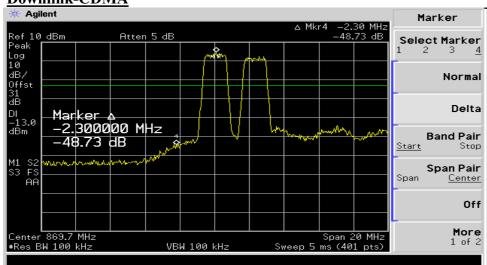


#### **Uplink-CDMA**

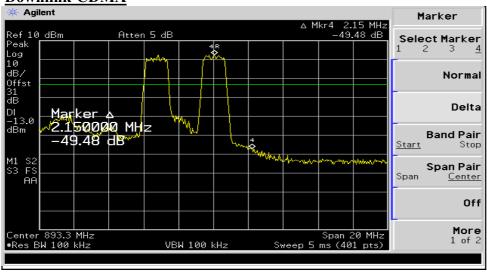








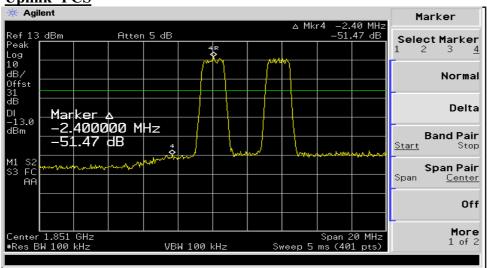
#### **Downlink-CDMA**



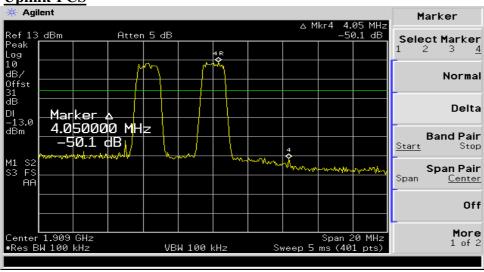


#### **Inter-modulation Signal**



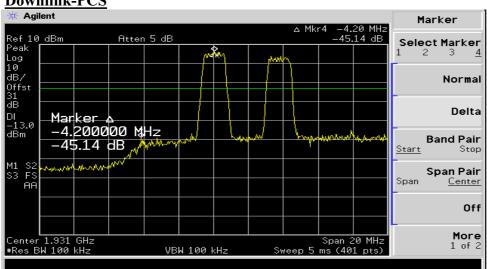


# **Uplink-PCS**

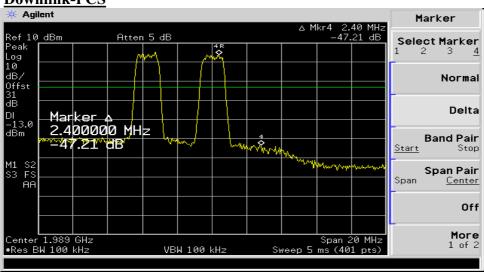




#### **Downlink-PCS**



### **Downlink-PCS**





### 7. Field Strength of Spurious Radiation

#### 7.1 Test Procedure

Radiation and harmonic emission are measured at our 3 meters test range. The equipment under test is placed on a wooden turntable 3 meters from the receive antenna. The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer (or receiver). Horn Antenna was substituted in place of the EUT. This Horn Antenna was driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer reading. This level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

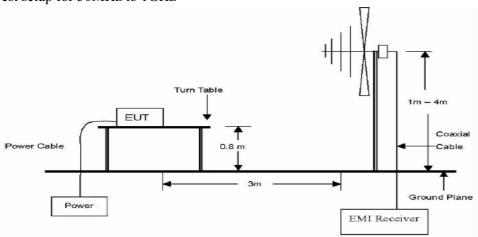
#### 7.2 Test Equipments

The following test equipments are used during tests

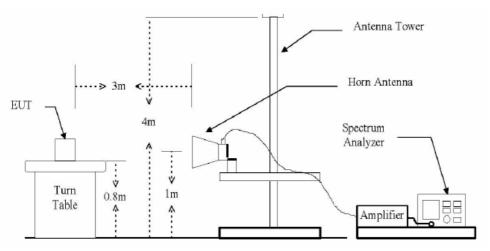
	<u> </u>		
Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	ADVANTEST	R3273	2009-06-09
Signal Generator	HP	83620B	2009-09-12
Pre Amplifier	HP	8449B	2009-03-07
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2009-06-13
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2009-06-13

#### 7.3 Test Setup

Test setup for 30MHz to 1GHz



### Test setup for above1GHz



Report Number: ESTR0901-007 EST-QP-20-01(0) 38 of 49

### 7.4 Test Results

### **Uplink**

**CDMA(Ch1013)** 

Frequency	Receiver		Factor(dB)	EIRP(	(dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV)	AG(dBi)	CL(dB)	SG Reading	Result		Γοιατιίγ
1735.40	43.40	10.22	11.40	-57.10	-56.13	-13.00	Н

CDMA(Ch363)

CD IVIII CHE							
Frequency	Receiver	Correction	Factor(dB)	EIRP(	(dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV)	AG(dBi)	CL(dB)	SG Reading	Result	Lilliu(dDill)	Polanty
1761.78	43.40	10.33	11.50	-56.40	-55.42	-13.00	Н

CDMA(Ch777)

Frequency	Receiver	Correction	Factor(dB)	EIRP(	(dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV)	AG(dBi)	CL(dB)	SG Reading	Result	Lillin(GDIII)	1 Olanty
1786.62	44.20	10.34	11.60	-55.60	-54.71	-13.00	Н

#### Remark

- \* The TX signal isn't detected from 3nd harmonics.
- \* EIRP = SG Reading + AG(dBi)-CL(dB)
- \* ERP = SG Reading + AG(dBi)-CL(dB)+2.15(dB)

# **Downlink**

**CDMA(Ch1013)** 

CDMM(CIII)	<u> </u>						
Frequency	Receiver	Correction	Factor(dB)	ERP(	dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV	AG(dBi)	CL(dB)	SG Reading	Result	Lillill(ubili)	Polatily
1649.40	44.61	9.79	11.60	-57.20	-56.86	-13.00	Н

CDMA(Ch363)

CDMM(CH30	<u>,</u>						
Frequency	Receiver	Correction	Factor(dB)	ERP(	dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV	AG(dBd)	CL(dB)	SG Reading	Result	Lillin(abin)	Folanty
1671.78	44.59	9.94	11.70	-57.10	-56.71	-13.00	Н

CDMA(Ch777)

Frequency	Receiver	Correction	Factor(dB)	ERP(	dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV	AG(dBd)	CL(dB)	SG Reading	Result	Lillin(abili)	Polatily
1696.62	44.70	10.11	11.80	-57.00	-56.54	-13.00	V

<sup>\*</sup> The TX signal isn't detected from 3nd harmonics.

<sup>\*</sup> EIRP = SG Reading + AG(dBi)-CL(dB)

<sup>\*</sup> ERP = SG Reading + AG(dBi)-CL(dB)+2.15(dB)

### 7.4 Test Results

### **Uplink**

PCS(Ch25)

1 C5(CH25)							
Frequency	Receiver	Correction	Factor(dB)	EIRP(	(dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV)	AG(dBi)	CL(dB)	SG Reading	Result	Lilliu(dDill)	Polanty
3702.50	43.80	10.22	18.30	-45.40	-53.48	-13.00	Н

FCC ID:

W2G-CAE700DB

PCS(Ch600)

1 68(6H600	<u> </u>						
Frequency	Receiver	Correction	Factor(dB)	EIRP(	(dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV)	AG(dBi)	CL(dB)	SG Reading	Result	Lillin(GDIII)	Polatily
3760.00	44.20	10.33	18.30	-45.70	-53.67	-13.00	Н

PCS(Ch1175)

Frequency	Receiver	Correction	Factor(dB)	EIRP	(dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV)	AG(dBi)	CL(dB)	SG Reading	Result	Lilliu(GDIII)	Polanty
3817.50	43.50	12.73	18.40	-45.70	-51.37	-13.00	Н

<sup>\*</sup> The TX signal isn't detected from 3nd harmonics.

<sup>\*</sup> EIRP = SG Reading + AG(dBi)-CL(dB)

<sup>\*</sup> ERP = SG Reading + AG(dBi)-CL(dB)+2.15(dB)

# **Downlink**

### PCSCh25)

Frequency	Receiver	Correction	Factor(dB)	ERP(	dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV	AG(dBi)	CL(dB)	SG Reading	Result	Lillin(dDill)	1 Clarity
3862.50	44.20	12.66	19.20	-44.20	-50.74	-13.00	Н

# **PCS(Ch600)**

Frequency	Receiver	Correction	Factor(dB)	ERP(	dBm)	Limit(dBm)	Polarity
(MHz)	Reading(dBuV	AG(dBd)	CL(dB)	SG Reading	Result	Emin(GBin)	lolanty
3920.00	43.70	12.67	19.00	-44.10	-50.43	-13.00	Н

### PCS(Ch1175)

Frequency	Receiver	Correction	Factor(dB)	B) ERP(dBm)		Limit(dBm) Polarity	
(MHz)	Reading(dBuV	AG(dBd)	CL(dB)	SG Reading	Result	Lillill(dDill)	Polanty
3977.50	43.70	12.61	19.10	-43.90	-50.39	-13.00	V

<sup>\*</sup> The TX signal isn't detected from 3nd harmonics.

<sup>\*</sup> EIRP = SG Reading + AG(dBi)-CL(dB)

<sup>\*</sup> ERP = SG Reading + AG(dBi)-CL(dB)+2.15(dB)



# 8. Frequency stability

#### **8.1 Test Procedure**

The frequency stability of the transmitter is measured by:

- a) **Temperature:** The temperature is varied from -30  $^{\circ}$ C to +60  $^{\circ}$ C using an environmental chamber.
- **b) Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the voltage normally at the input to the device or at the power supply terminals if cables are not normally supplied.
- \* The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 1$  ppm of the center frequency.

FCC ID: W2G-CAE700DB

#### 8.2 Test Equipments

The following test equipments are used during tests

Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	Agilent	E4407B	2009-02-28
Spectrum Analyzer	Agilent	E4402B	2009-09-11
DC Power Supply	INTERACT	AK-5007	2009-02-28
Tem/Hum Chamber	Myung Technology	SM-150-2	2009-03-03
Signal Generator	HP	E4432B	2009-02-28

Report Number: ESTR0901-007 EST-QP-20-01(0) 43 of 49

### **8.3 Test Results**

# **Uplink-CDMA**

Operting Frequency: 835,890,000

Channel: 363

Reference Voltage: 110.00 VAC

Deviatin Limit: 0.00010

Voltage	Power	Temperature	Frequency	Deviation
(%)	(VAC)	(℃)	(Hz)	
100		+20°C(Ref)	835,890,009	0.000009
100	110.0	-30	835,890,011	0.000011
100		-20	835,889,996	0.000004
100		-10	835,889,994	0.000006
100		0	835,890,011	0.000011
100		10	835,890,010	0.000010
100		20	835,889,997	0.000003
100		25	835,889,994	0.000006
100		30	835,889,995	0.000005
100		40	835,889,994	0.000006
100		50	835,890,005	0.000005
100		60	835,890,007	0.000007
85	93.5	20	835,890,009	0.000009
115	126.5	20	835,890,006	0.000006
EndPoint	85.0	20	835,890,007	0.000007

FCC ID:

W2G-CAE700DB

Report Number : ESTR0901-007 EST-QP-20-01(0) 44 of 49

# **Downlink-CDMA**

Operting Frequency: 880,890,000

Channel: 363

Reference Voltage: 110.00 VAC

Deviatin Limit: 0.00010

Voltage	Power	Temperature	Frequency	Deviation
(%)	(VAC)	(℃)	(Hz)	
100		+20°C(Ref)	880,889,995	0.000005
100		-30	880,890,005	0.000005
100		-20	880,890,012	0.000012
100		-10	880,890,008	0.000008
100	1	0	880,889,997	0.000003
100		10	880,889,995	0.000005
100	110.0	20	880,889,993	0.000007
100		25	880,890,005	0.000005
100		30	880,890,008	0.000008
100		40	880,890,011	0.000011
100		50	880,889,985	0.000015
100		60	880,890,003	0.000003
85	93.5	20	880,890,005	0.000005
115	126.5	20	880,890,002	0.000002
EndPoint	85.0	20	880,890,010	0.000010

Report Number : ESTR0901-007 EST-QP-20-01(0) 45 of 49

# **Uplink-PCS**

Operting Frequency: 1,880,000,000

Channel: 600

Reference Voltage: 110.00 VAC

Deviatin Limit: 0.00010

Voltage	Power	Temperature	Frequency	Deviation
(%)	(VAC)	(℃)	(Hz)	
100		+20°C(Ref)	1,880,000,005	0.000000
100		-30	1,880,000,006	0.000001
100		-20	1,880,000,007	0.000001
100		-10	1,879,999,995	0.000001
100		0	1,879,999,996	0.000001
100	110.0	10	1,879,999,992	0.000001
100	110.0	20	1,879,999,998	0.000000
100		25	1,879,999,991	0.000001
100		30	1,880,000,005	0.000001
100		40	1,880,000,006	0.000001
100		50	1,880,000,008	0.000001
100		60	1,880,000,009	0.000001
85	93.5	20	1,879,999,994	0.000002
115	126.5	20	1,879,999,993	0.000001
EndPoint	85.0	20	1,879,999,994	0.000001

# **Uplink-PCS**

Operting Frequency: 1,880,000,000

Channel: 600

Reference Voltage: 110.00 VAC

Deviatin Limit: 0.00010

Voltage	Power	Temperature	Frequency	Deviation
(%)	(VAC)	(℃)	(Hz)	
100		+20°C(Ref)	1,879,999,993	0.000000
100		-30	1,879,999,994	0.000001
100		-20	1,879,999,992	0.000001
100		-10	1,880,000,005	0.000001
100	1	0	1,880,000,004	0.000001
100	4400	10	1,880,000,007	0.000001
100	110.0	20	1,879,999,994	0.000000
100		25	1,879,999,991	0.000001
100		30	1,879,999,992	0.000001
100		40	1,879,999,991	0.000001
100		50	1,879,999,994	0.000001
100		60	1,880,000,005	0.000001
85	93.5	20	1,880,000,006	0.000002
115	126.5	20	1,880,000,008	0.000001
EndPoint	85.0	20	1,880,000,010	0.000001

48 of 49

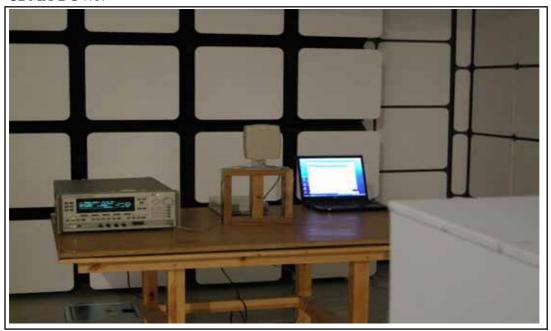


# **Attachment 1 : EUT Test Photographs**

# **CDMA-UP**



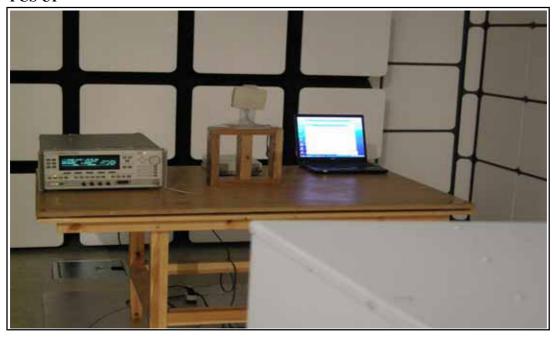
### **CDMA-DOWN**





# **Attachment 2 : EUT Test Photographs**

# PCS UP



### **PCS DOWN**

