



FCC TEST REPORT

Product Name	Dual Band Repeater
Model Name	USHR-0819SS
Applicant	OPISYS.INC
FCC ID	Q4EUSHR-0819SS

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



FCC Test Report

Report Number	ESTR1002-021			
Applicant	Company Name	OPISYS.INC		
	Address	47 Post Irvine CA 92618 USA		
Product	Product Name	Dual Band Repeater		
	Model No.	USHR-0819SS	Manufacturer	Ace Antenna Corp.
	Serial No.	NONE	Country of origin	KOREA
Other	Issued Date	2010-02-25	Tested Date	2010-01-27 ~ 2010-02-25
Test Result	Pass			
Standard	FCC PART 22 / 24 SubpartE			
Tested by	I.K. Hong/ Engineer (Signature)			
Approved by	Tag-Sun Park/Engineering manager (Signature)			
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.				
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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 23
7. Field Strength of Spurious Radiation	Page 40
8. Frequency stability	Page 50

Attachment 1 : EUT Test Photographs



1. General Information

1.1 EUT Description

FCC ID	Q4EUSHR-0819SS
Product Name	Dual Band Repeater
Model Name	USHR-0819SS
Frequency	Uplink 824MHz ~ 849MHz
	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



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

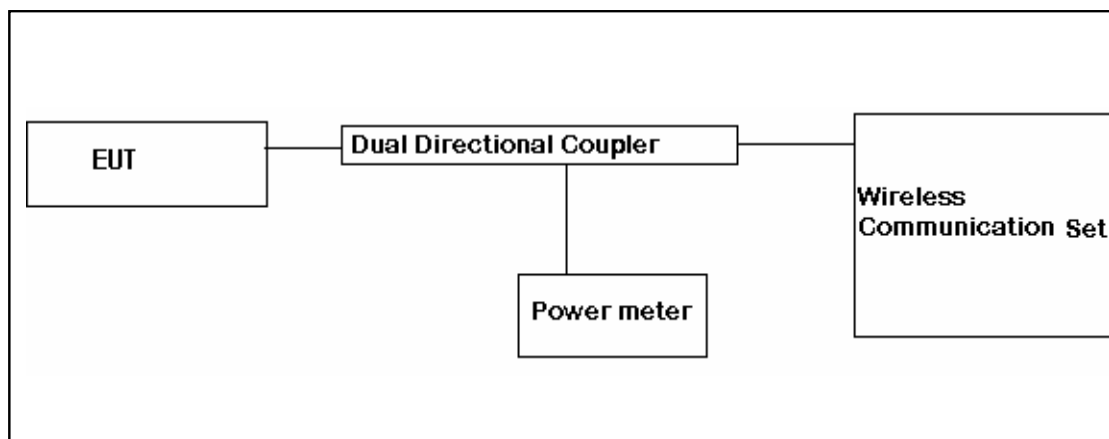
Test Item	Standard	Result
RF Output Power	2.1046	PASS
Occupied Bandwidth	2.1049	PASS
Band Edge	2.1049	PASS
Spurious and Harmonic Emission at Antenna Terminal	2.1051	PASS
Field Strength of Spurious Radiation	2.1053	PASS
Frequency stability	2.1055	PASS
Modulation Characteristics	2.1047	PASS



4. RF Output Power

4.1 Test Procedure according to ANSI/TIA/EIA 603 Clause 2.2.17

1. The EUT was placed on a wooden turn table 3 meters from the receive antenna. The receive antenna height and turn table rotation was adjusted for the highest reading on the receive spectrum analyzer. For CDMA signals, a peak detector is used, with RBW = VBW = 3MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1MHz. A Horn antenna was substituted in place of the EUT. This Horn antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For reading 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.
2. The RF output port of the EUT was connected to the dual directional coupler and Wireless communications test set connected dual directional coupler. The RF Power is measured Power meter. This test was performed three channels (Low, High, Middle).
3. Test setup for RF Conducted measurement



4.2 Test Equipments

The following test equipments are used during tests

Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	Agilent	E4407B	2010-09-10
Spectrum Analyzer	Agilent	E4402B	2010-02-26
Signal Generator	HP	E4432B	2010-04-10

4.3.1 Test Results (Uplink)-Cellular Band-CDMA

Conducted power

	Ch No.	Freq (MHz)	Power Output (dBm)
Low	1013	824.70	11.98
Mid.	363	835.89	12.26
High	777	848.31	11.94



4.3.2 Test Results (Downlink)-Cellular Band-CDMA

	Ch No.	Freq (MHz)	Power Output (dBm)
Low	1013	869.70	11.88
Mid	363	880.89	12.00
High	777	893.31	11.91

4.3.3 Test Results (Uplink)-PCS Band-CDMA

	Ch No.	Freq (MHz)	Power Output (dBm)
Low	25	1851.25	11.98
Mid	600	1880.00	12.11
High	1175	1908.75	11.92

4.3.3 Test Results (Downlink)-PCS Band

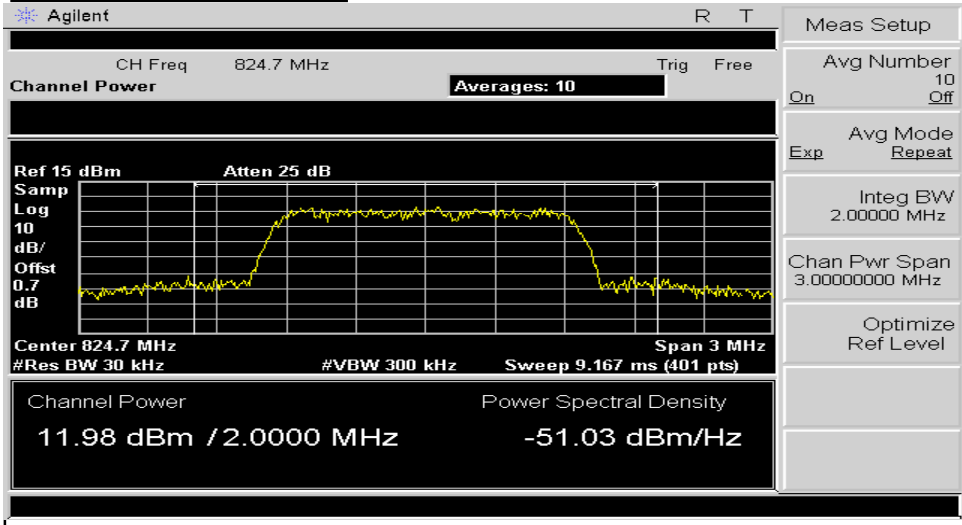
	Ch No.	Freq (MHz)	Power Output (dBm)
Low	25	1931.25	11.95
Mid	600	1960.00	11.98
High	1175	1988.75	11.92



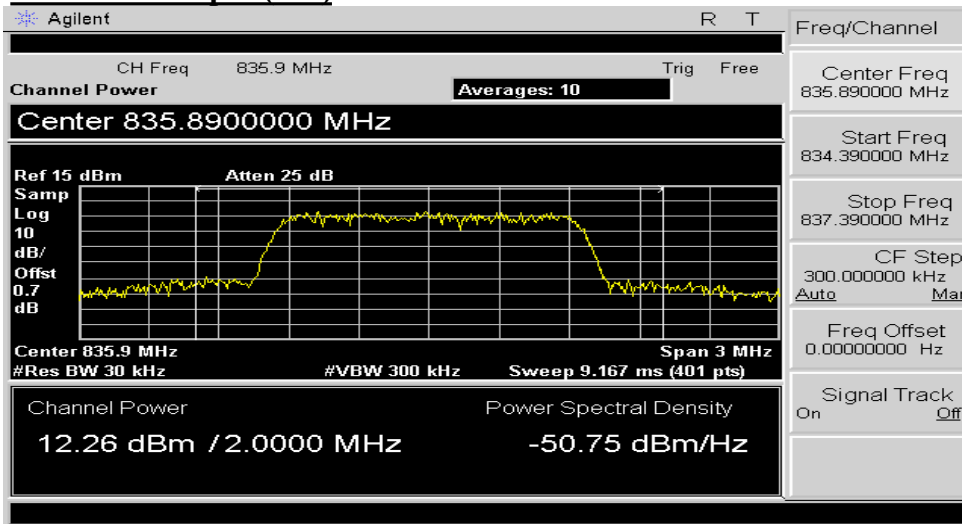
4.4 Test Plot

Uplink

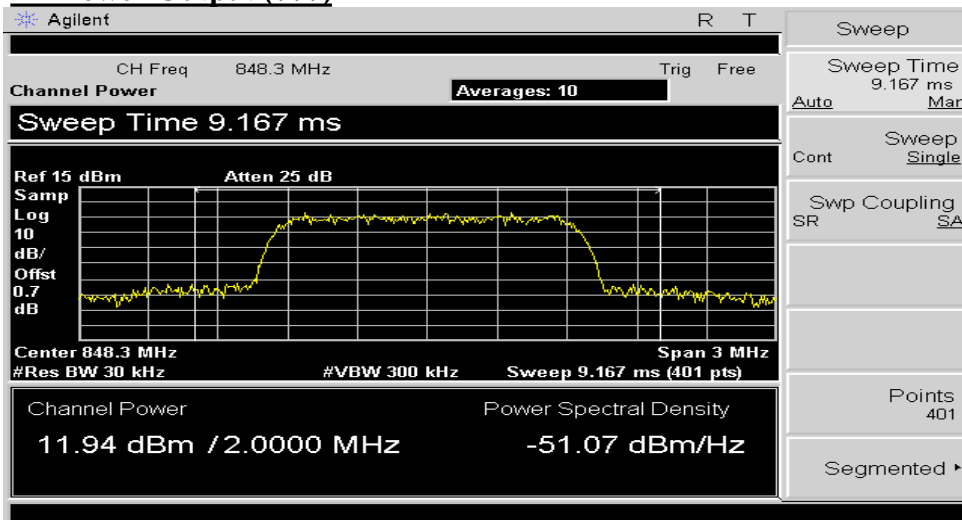
RF Power Output (1013)



RF Power Output (363)



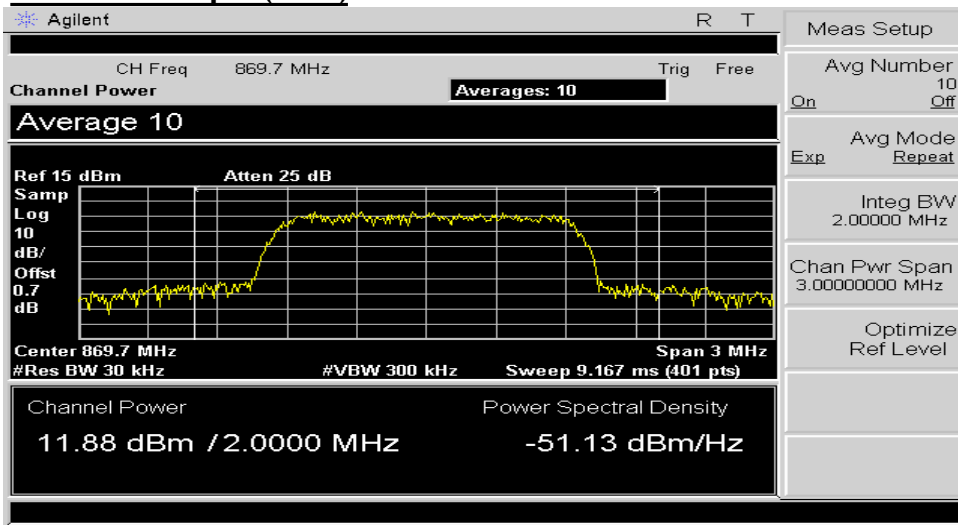
RF Power Output (777)



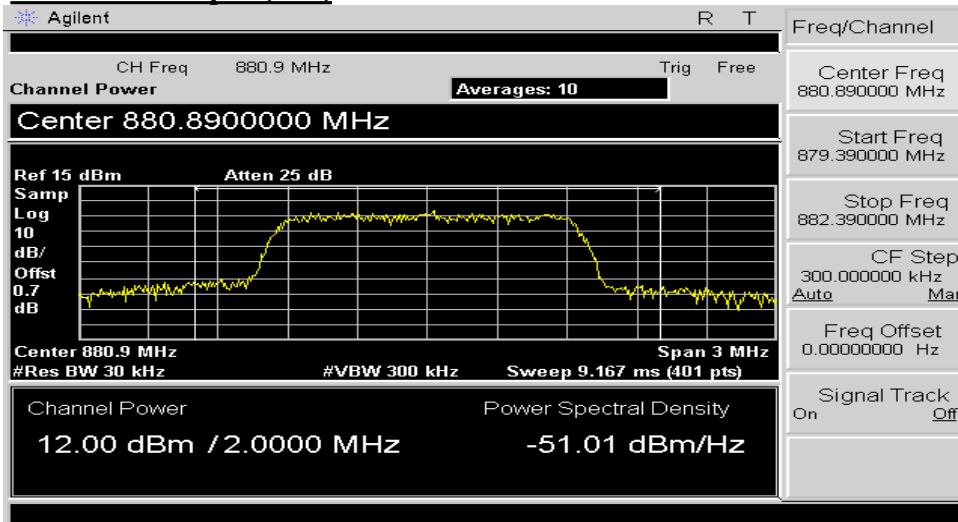


Downlink

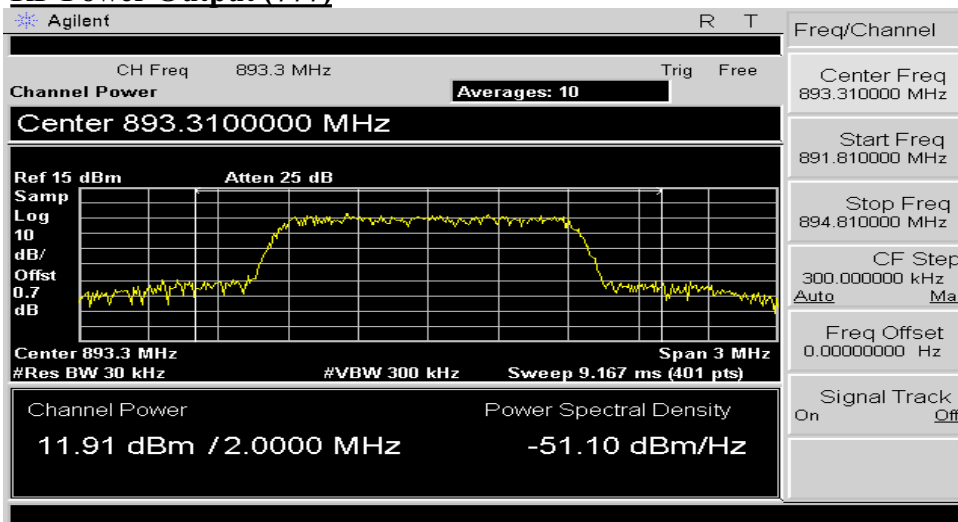
RF Power Output (1013)



RF Power Output (363)



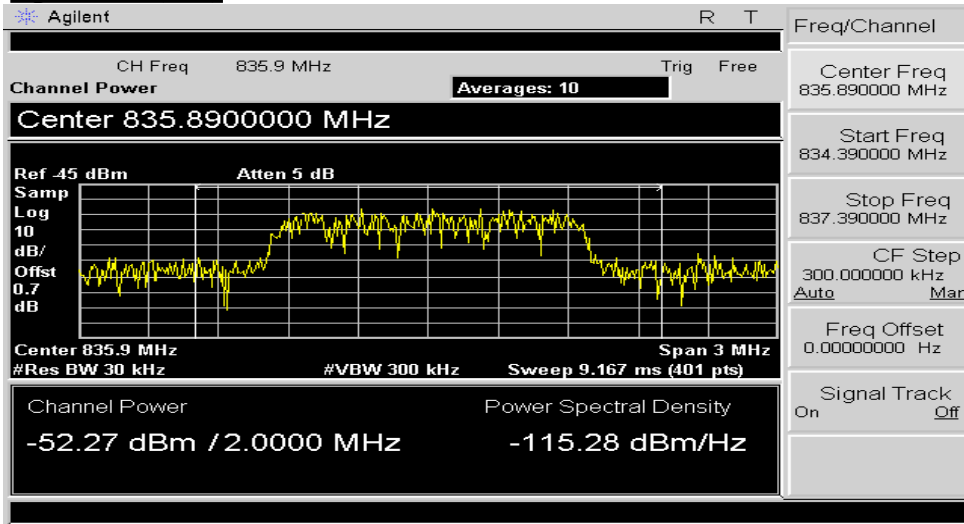
RF Power Output (777)



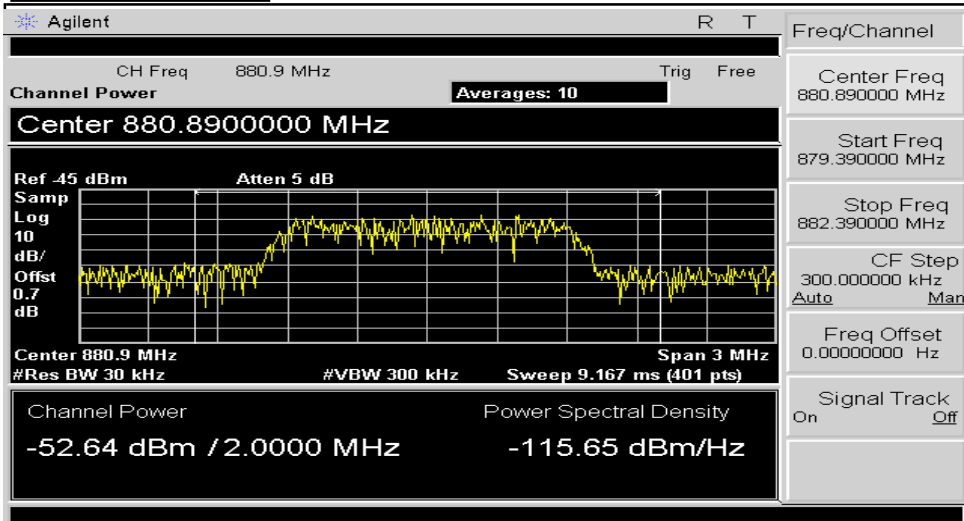


Input Signal Output Power

Uplink Ch(363)



Downlink Ch (363)

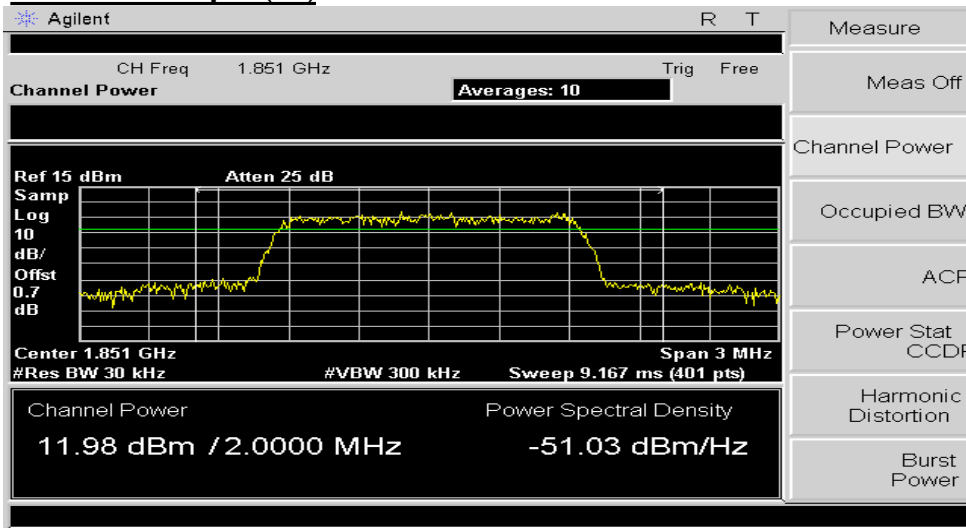




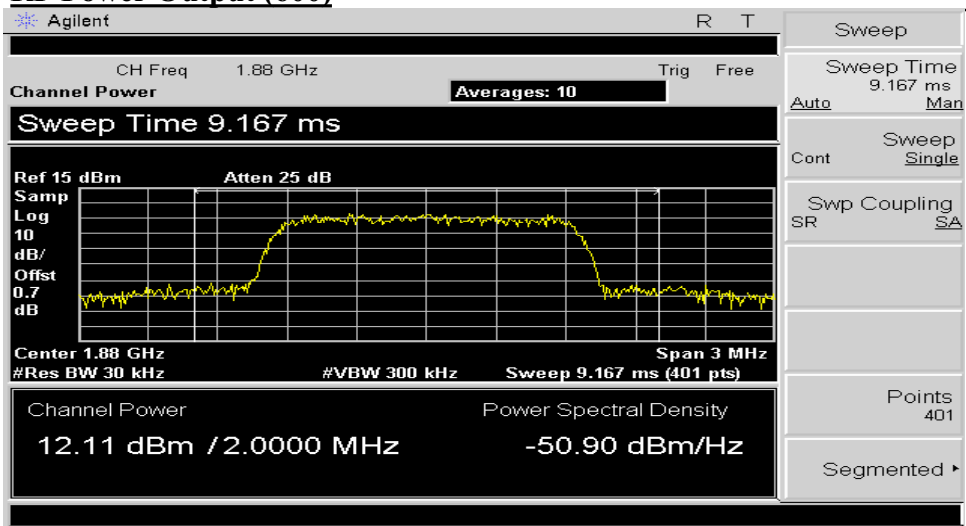
4.4 Test Plot

Uplink

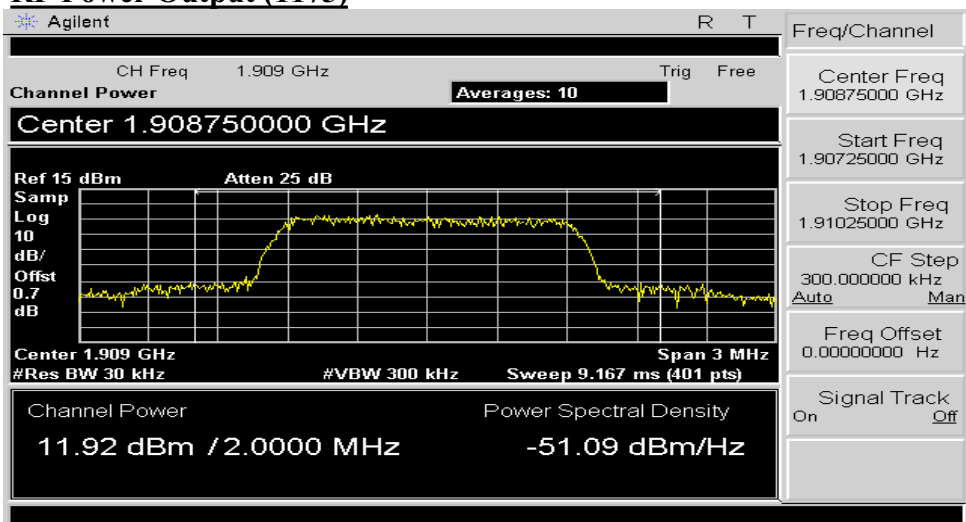
RF Power Output (25)



RF Power Output (600)



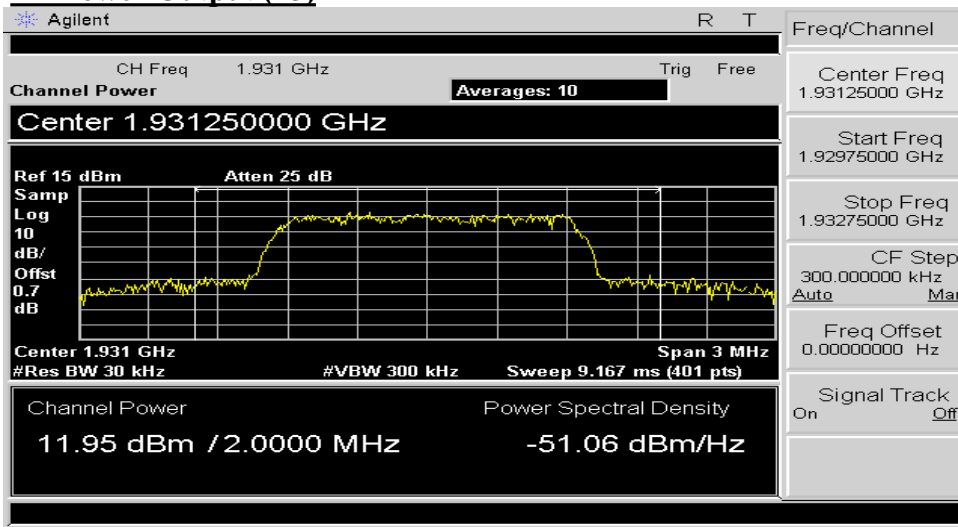
RF Power Output (1175)



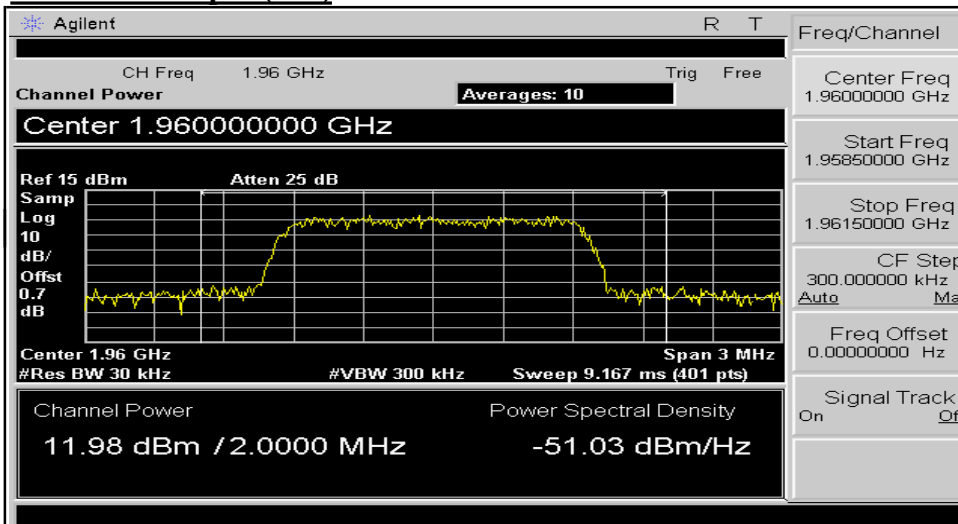


Downlink

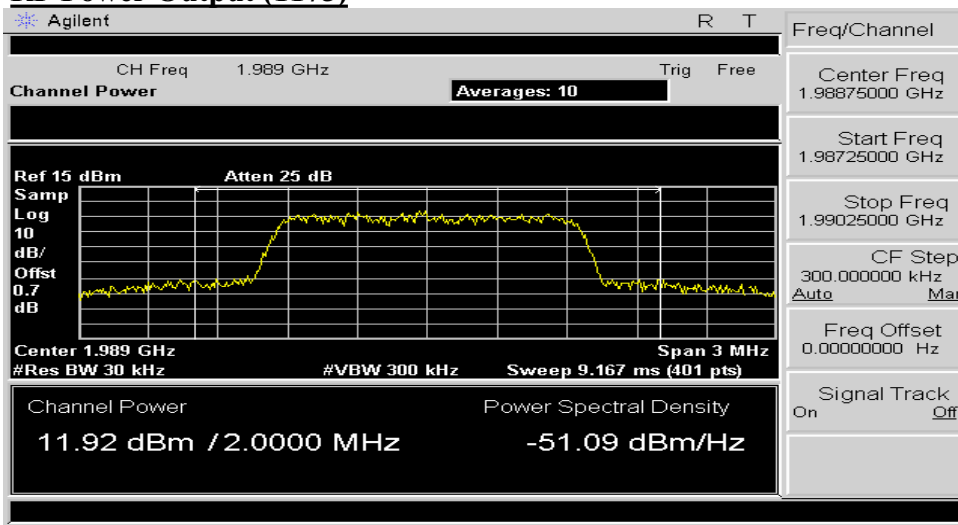
RF Power Output (25)



RF Power Output (600)



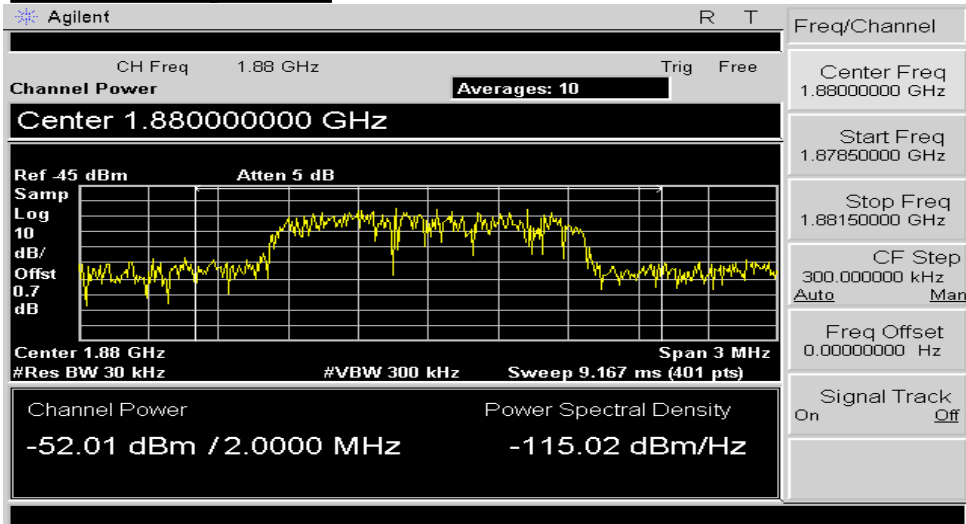
RF Power Output (1175)



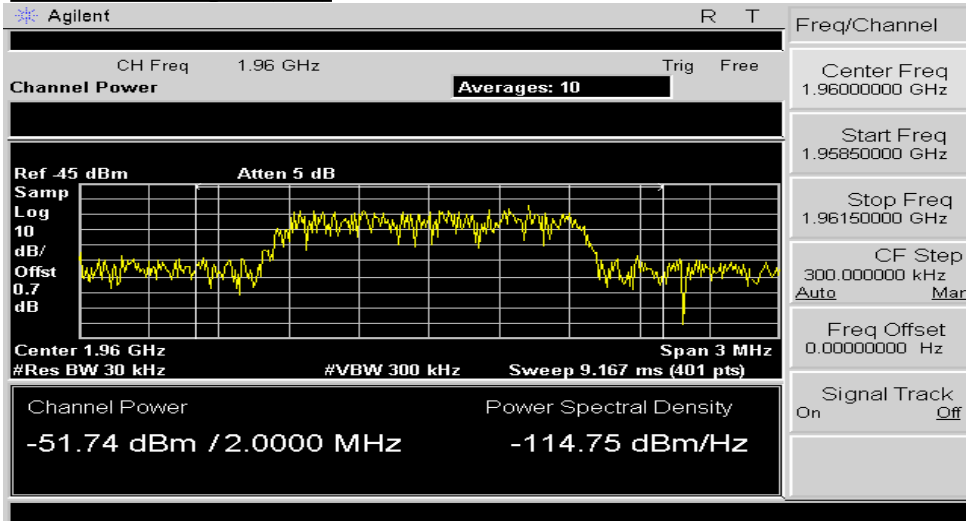


Input Signal Output Power

RF Power Output (600)



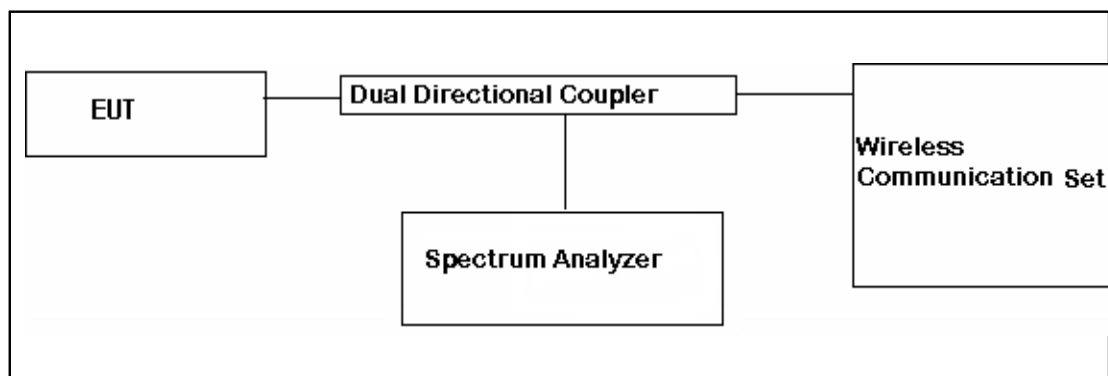
RF Power Output (600)



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	2010-02-26
Spectrum Analyzer	Agilent	E4407B	2010-09-10
Signal Generator	HP	E4432B	2010-04-10

5.3 Test Results

(Uplink)-Cellular Band

Channel	Frequency(MHz)	26dB Bandwidth(MHz)
1013	824.70	1.406
363	835.89	1.407
777	848.31	1.406

(Downlink)-Cellular Band

Channel	Frequency(MHz)	26dB Bandwidth(MHz)
1013	869.00	1.397
363	880.89	1.414
777	893.31	1.399



(Uplink)-PCS Band

Channel	Frequency(MHz)	26dB Bandwidth(MHz)
25	1851.25	1.409
600	1880.00	1.406
1175	1908.75	1.410

(Downlink)-PCS Band

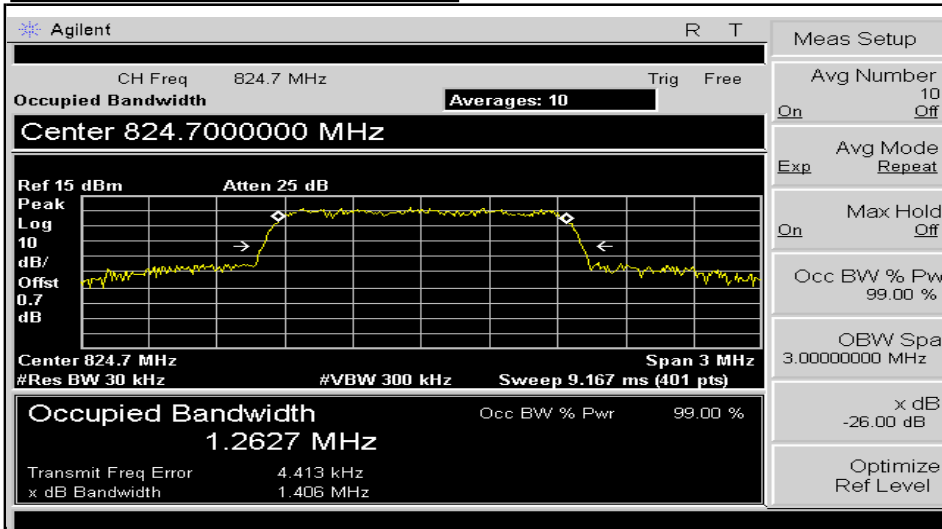
Channel	Frequency(MHz)	26dB Bandwidth(MHz)
25	1931.25	1.401
600	1960.00	1.409
1175	1988.75	1.408



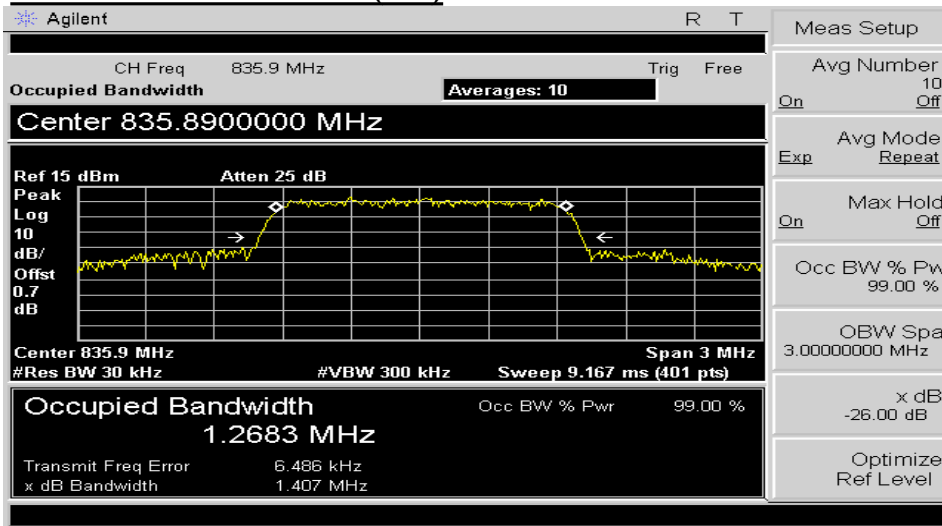
5.4 Test Plot

Uplink

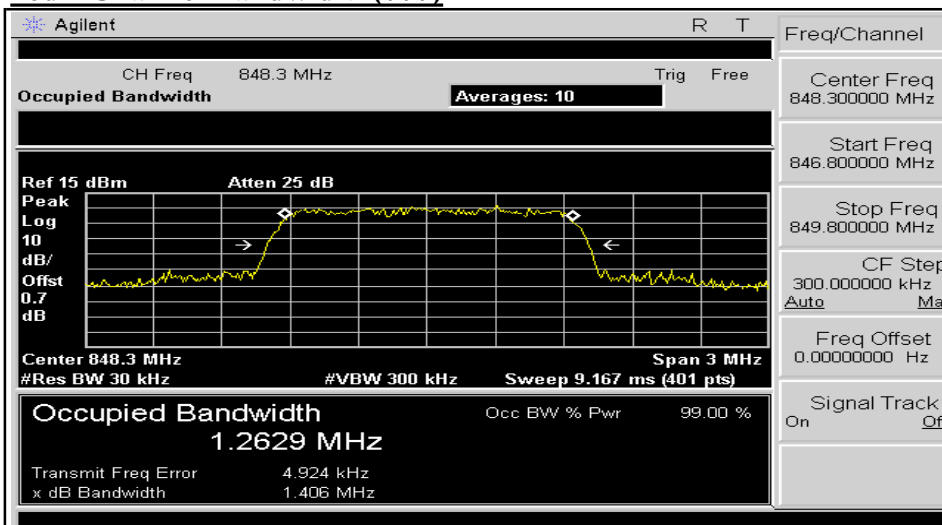
26dB Channel Bandwidth(1013)



26dB Channel Bandwidth(363)



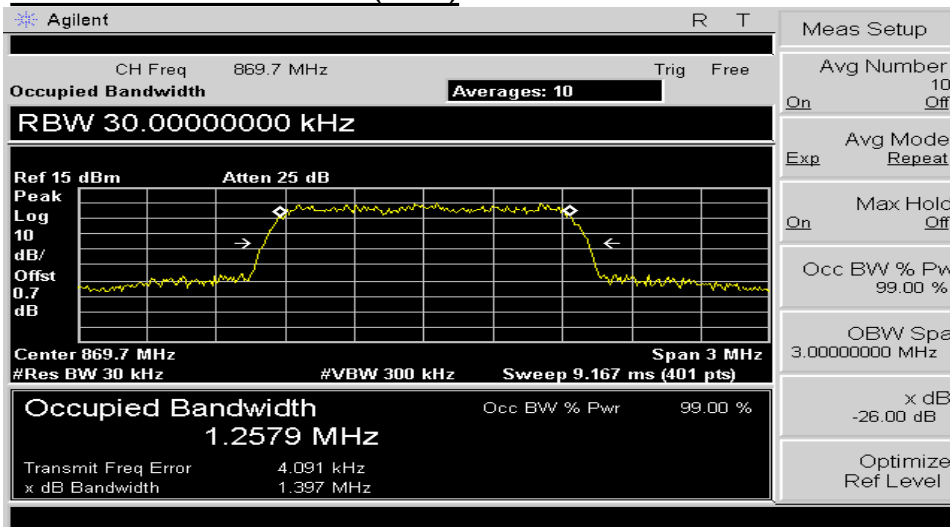
26dB Channel Bandwidth(777)



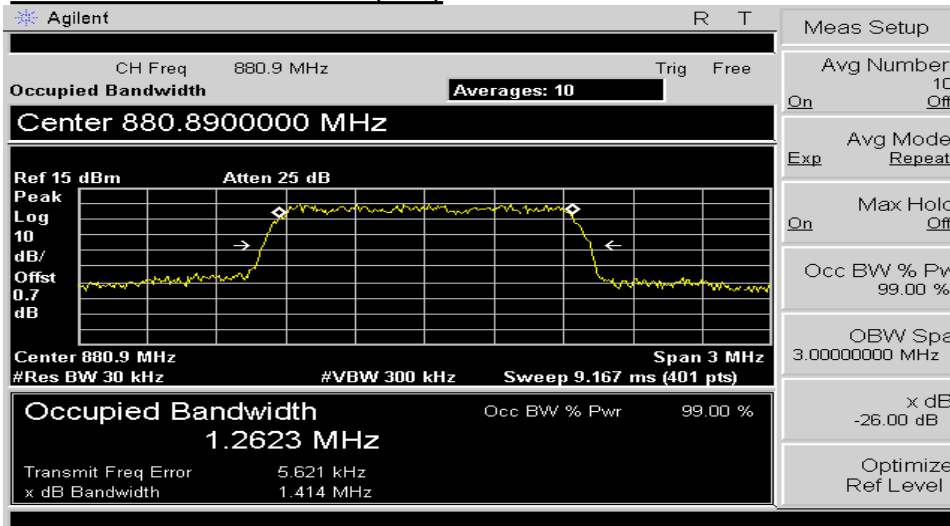


Downlink

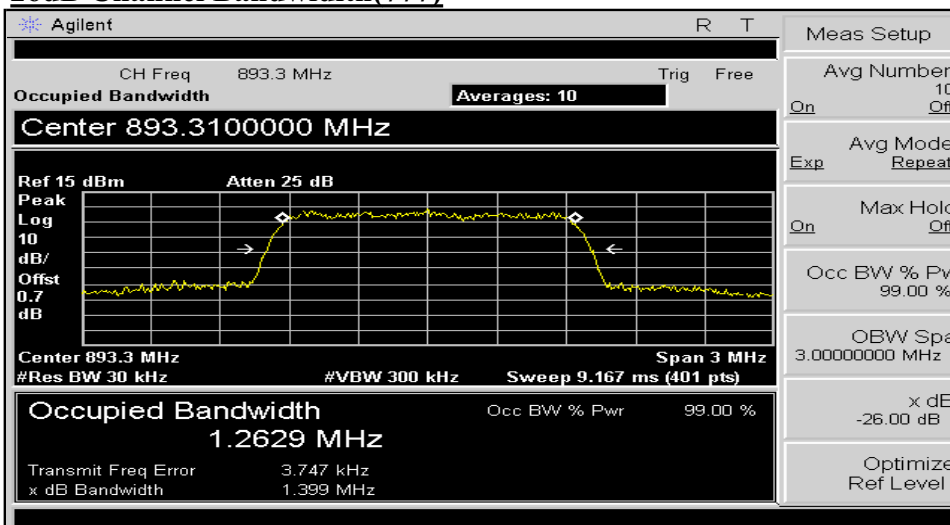
26dB Channel Bandwidth(1013)



26dB Channel Bandwidth(363)



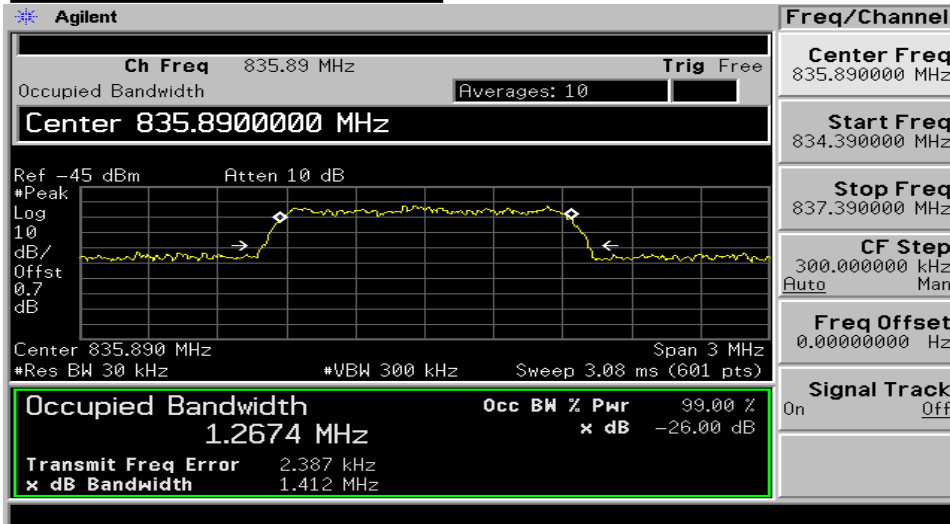
26dB Channel Bandwidth(777)



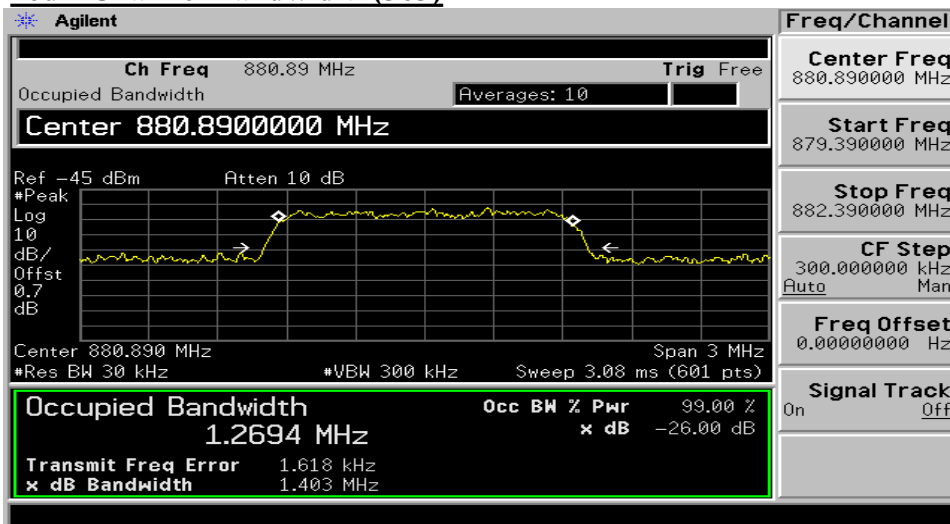


Input Signal Bandwidth

26dB Channel Bandwidth(363)



26dB Channel Bandwidth(363)

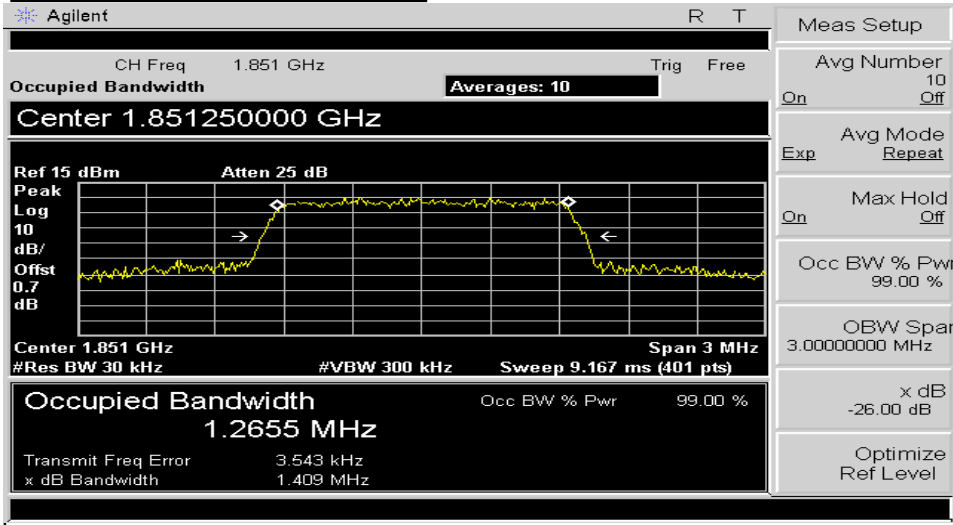




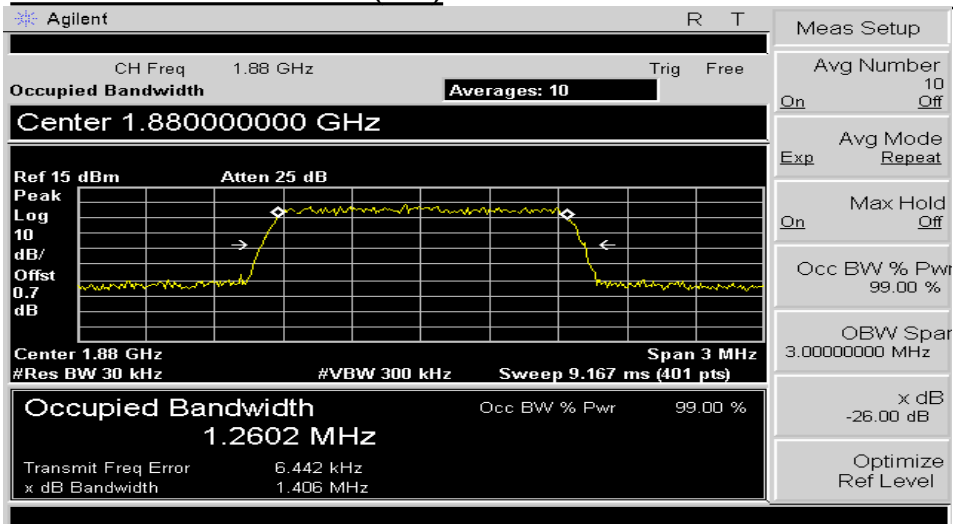
5.4 Test Plot

Uplink

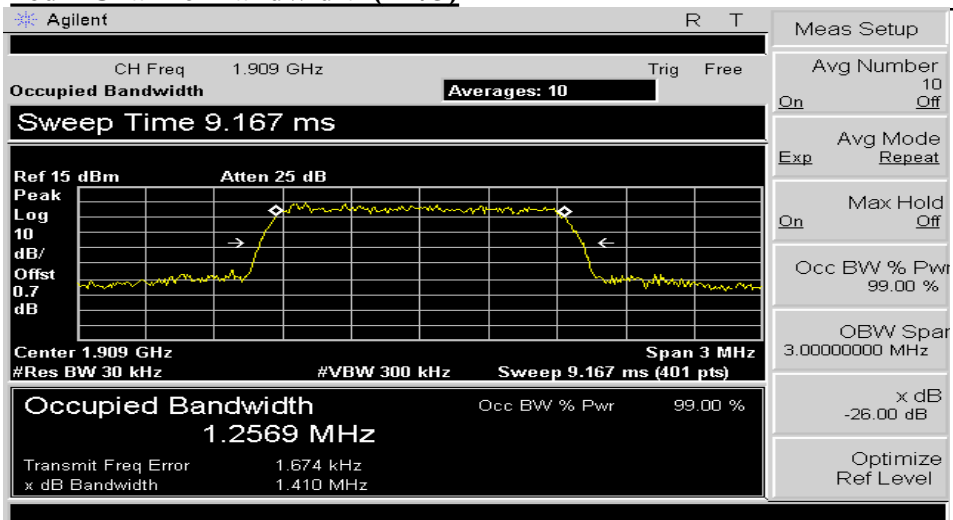
26dB Channel Bandwidth(25)



26dB Channel Bandwidth(600)



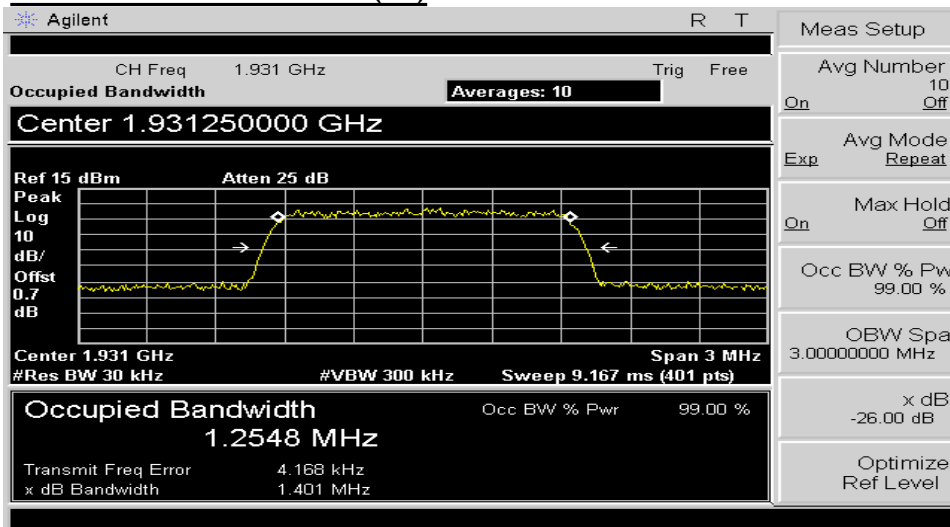
26dB Channel Bandwidth(1175)



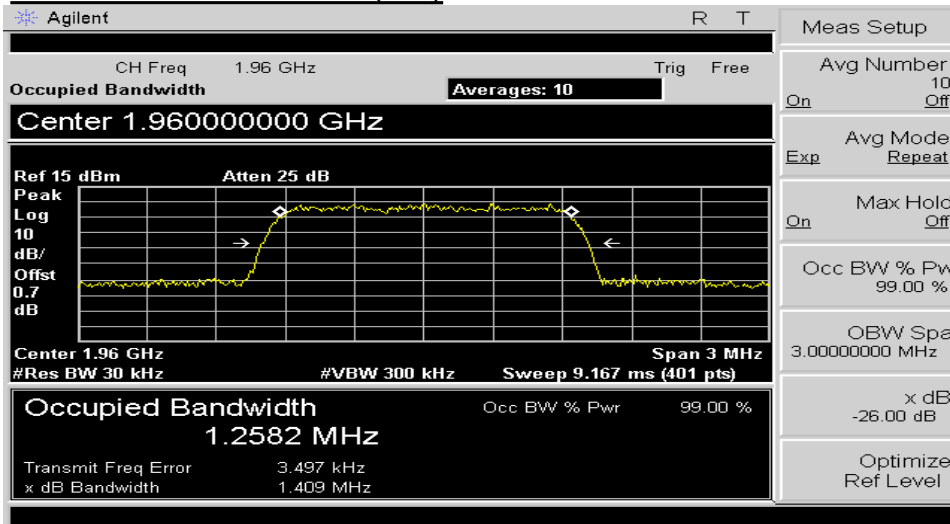


Downlink

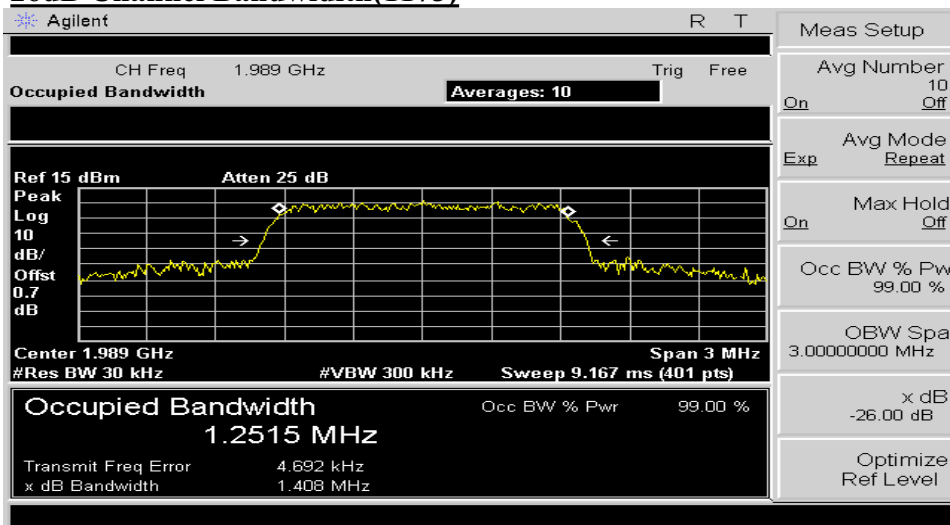
26dB Channel Bandwidth(25)



26dB Channel Bandwidth(600)



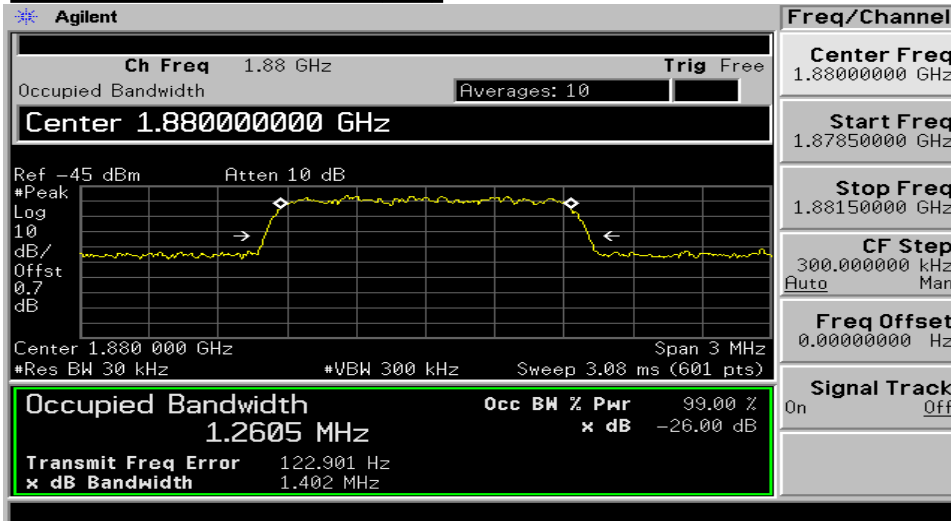
26dB Channel Bandwidth(1175)



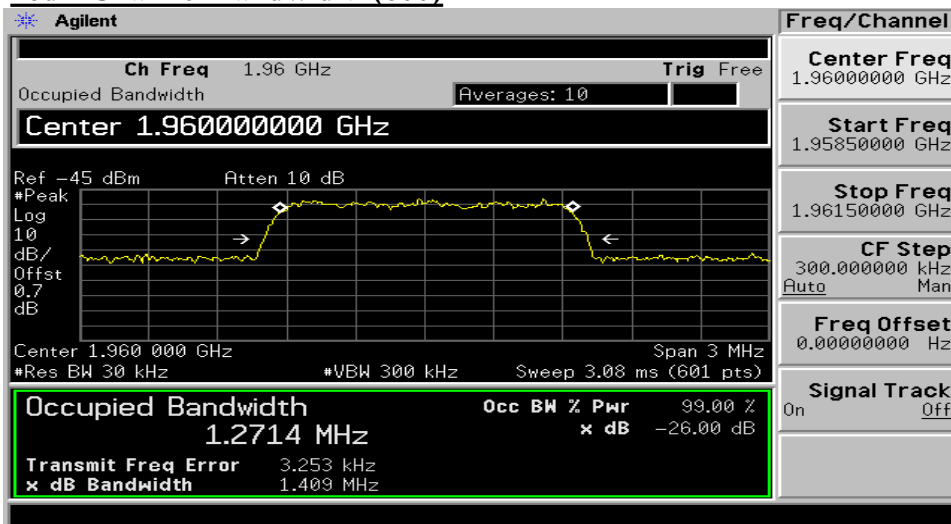


Input Signal Bandwidth

26dB Channel Bandwidth(600)



26dB Channel Bandwidth(600)



6.4 Test Results (Downlink)

CDMA(Spurious Emission: Band Edge)-Cellular

Channel	Frequency	Result	Limit	Margin
1013	1931.25	-18.22	-13.00	5.22
777	1988.75	-17.73	-13.00	4.73

CDMA (Spurious Emission: Out of Band)-Cellular

Channel	Frequency	Result	Limit	Margin
1013	1931.25	-41.68	-13.00	28.68
363	1960.00	-41.05	-13.00	28.05
777	1988.75	-41.01	-13.00	28.01

6.4 Test Results (Uplink)

CDMA(Spurious Emission: Band Edge)-PCS

Channel	Frequency	Result	Limit	Margin
25	824.70	-44.44	-13.00	31.44
1175	848.31	-46.38	-13.00	33.38

CDMA (Spurious Emission: Out of Band)-PCS

Channel	Frequency	Result	Limit	Margin
25	824.70	-41.80	-13.00	28.80
600	835.89	-41.29	-13.00	28.29
1175	848.31	-41.75	-13.00	28.75

6.4 Test Results (Downlink)

CDMA(Spurious Emission: Band Edge)-PCS

Channel	Frequency	Result	Limit	Margin
25	869.70	-45.75	-13.00	32.75
1175	893.31	-45.08	-13.00	32.08

CDMA (Spurious Emission: Out of Band)-PCS

Channel	Frequency	Result	Limit	Margin
25	869.70	-41.75	-13.00	28.75
600	880.89	-43.62	-13.00	30.62
1175	893.31	-43.56	-13.00	30.56

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.

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	2010-02-26
Spectrum Analyzer	Agilent	E4407B	2010-09-10
Signal Generator	HP	E4432B	2010-04-10

6.3 Test Results (Uplink)

CDMA(Spurious Emission: Band Edge)-Cellular

Channel	Frequency	Result	Limit	Margin
1013	824.70	-20.87	-13.00	7.87
777	848.31	-14.93	-13.00	1.93

CDMA (Spurious Emission: Out of Band)-Cellular

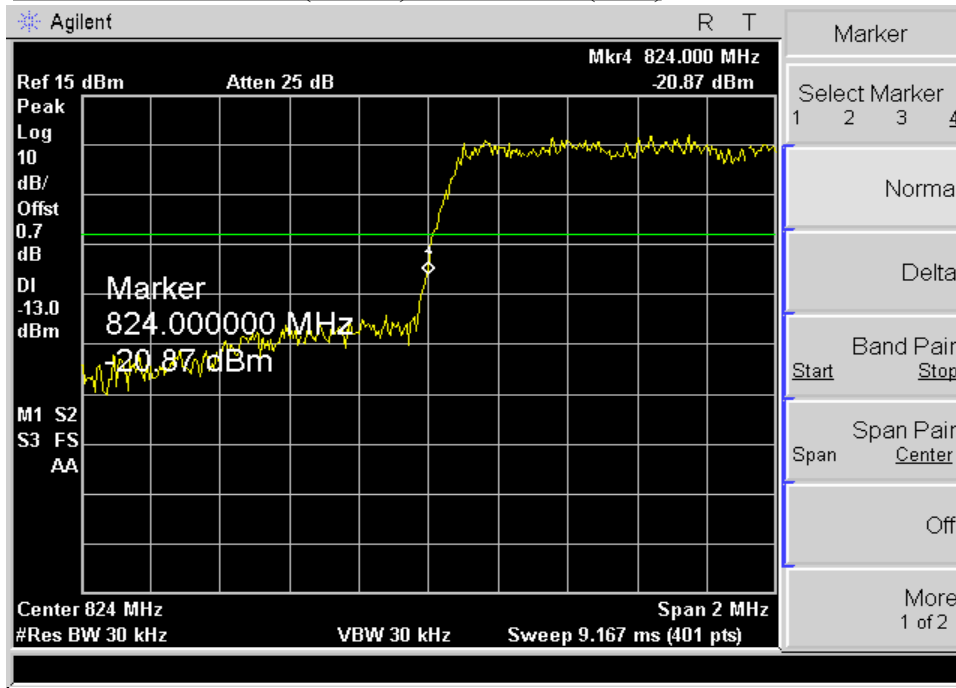
Channel	Frequency	Result	Limit	Margin
1013	824.70	-34.56	-13.00	21.56
363	835.89	-33.16	-13.00	20.16
777	848.31	-35.38	-13.00	22.38



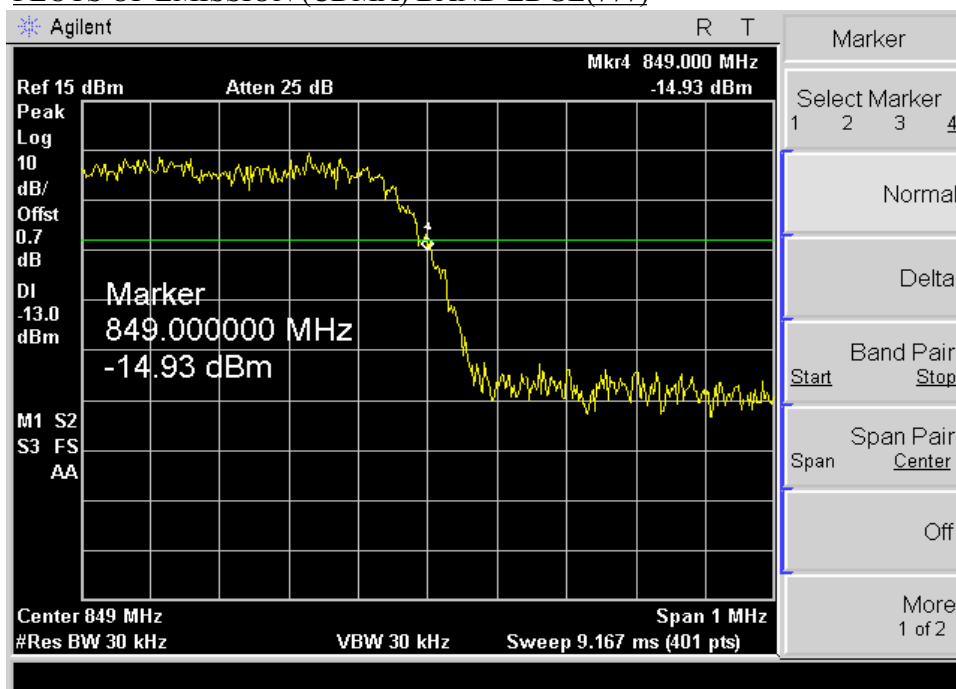
6.5 Test Plot

Uplink

PLOTS OF EMISSION (CDMA) BAND EDGE(1013)



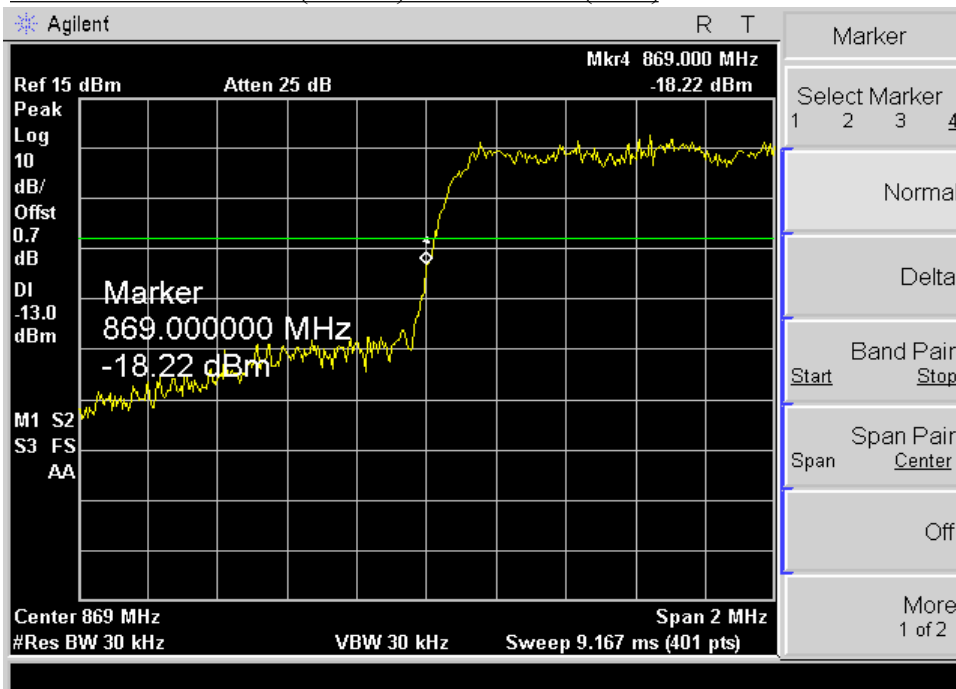
PLOTS OF EMISSION (CDMA) BAND EDGE(777)



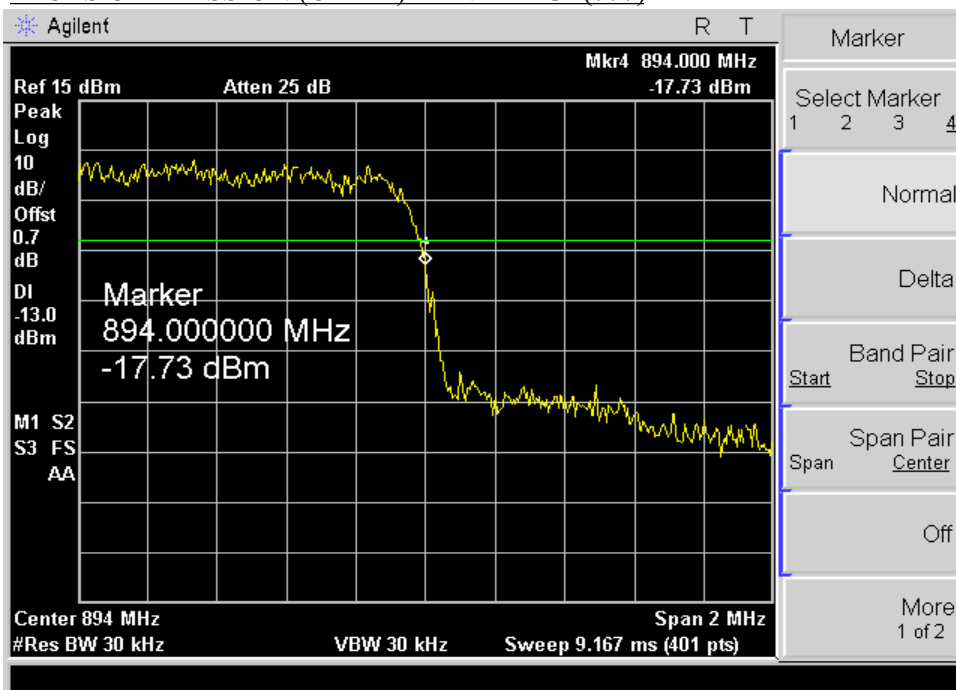


Downlink

PLOTS OF EMISSION (CDMA) BAND EDGE(1013)



PLOTS OF EMISSION (CDMA) BAND EDGE(777)

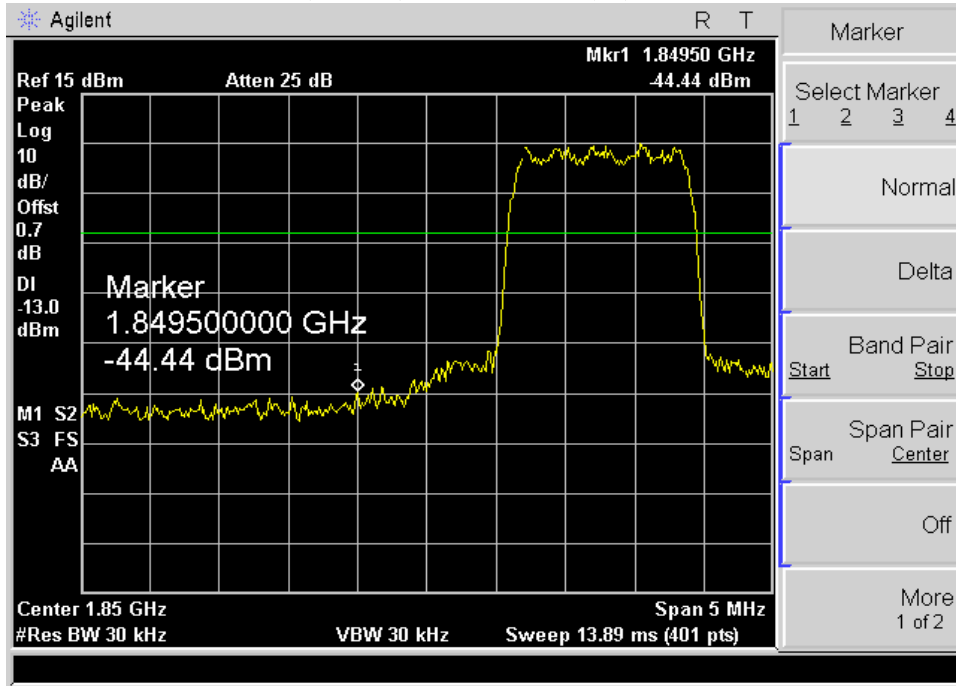




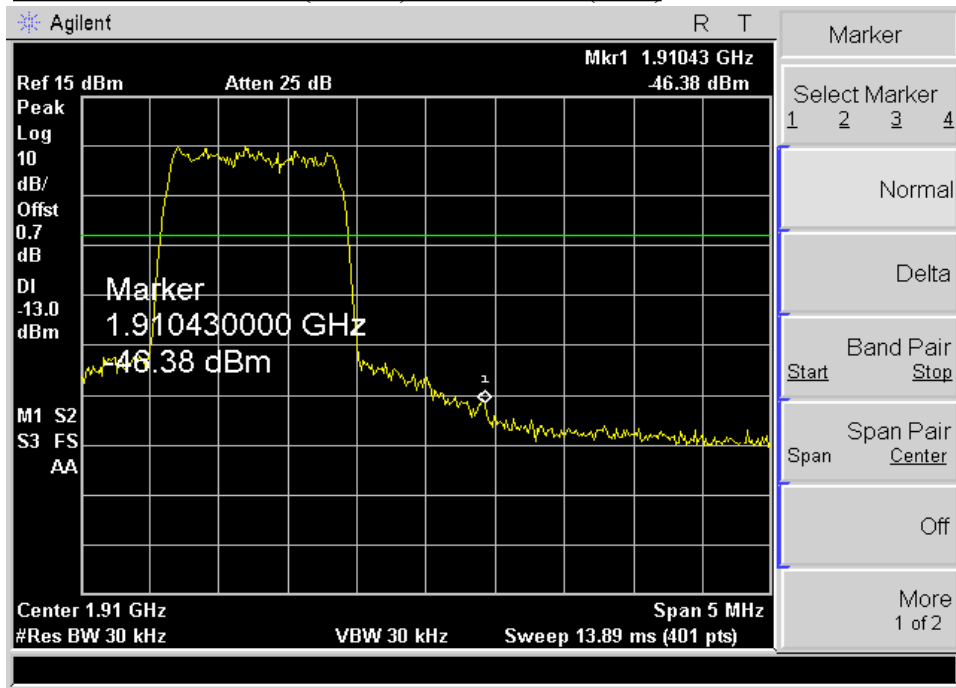
6.5 Test Plot

Uplink

PLOTS OF EMISSION (CDMA) BAND EDGE(25)



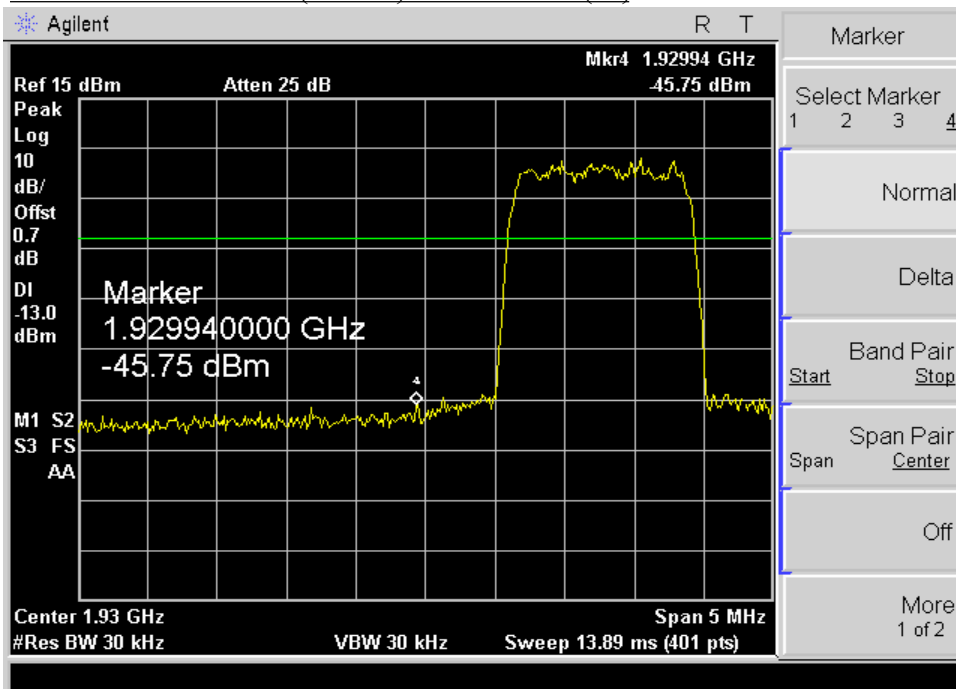
PLOTS OF EMISSION (CDMA) BAND EDGE(1175)



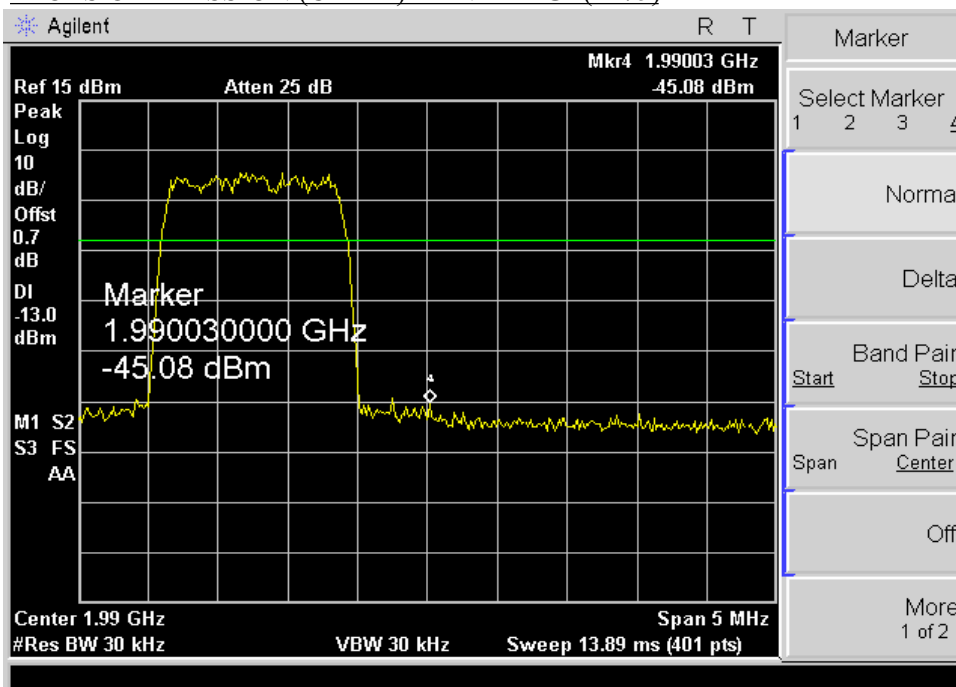


Downlink

PLOTS OF EMISSION (CDMA) BAND EDGE(25)



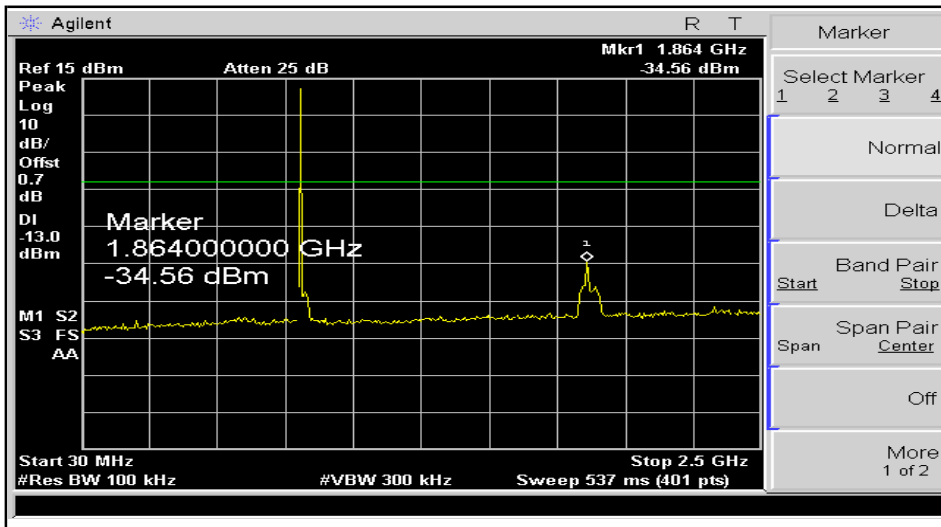
PLOTS OF EMISSION (CDMA) BAND EDGE(1175)



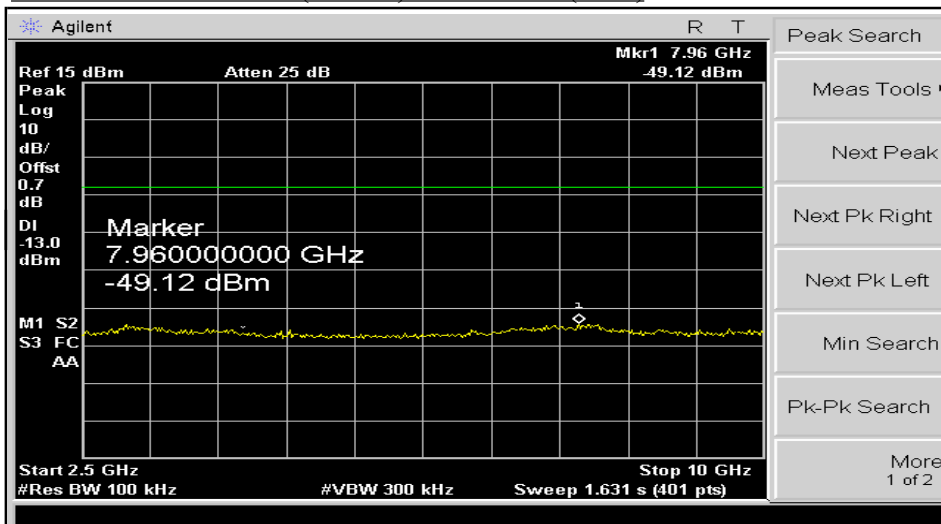


Uplink

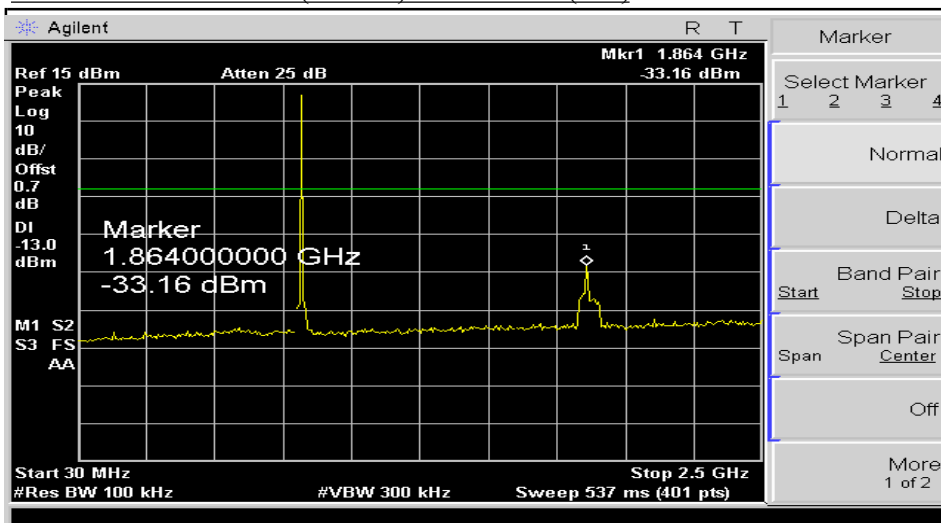
PLOTS OF EMISSION (CDMA) Out of Band (1013)



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



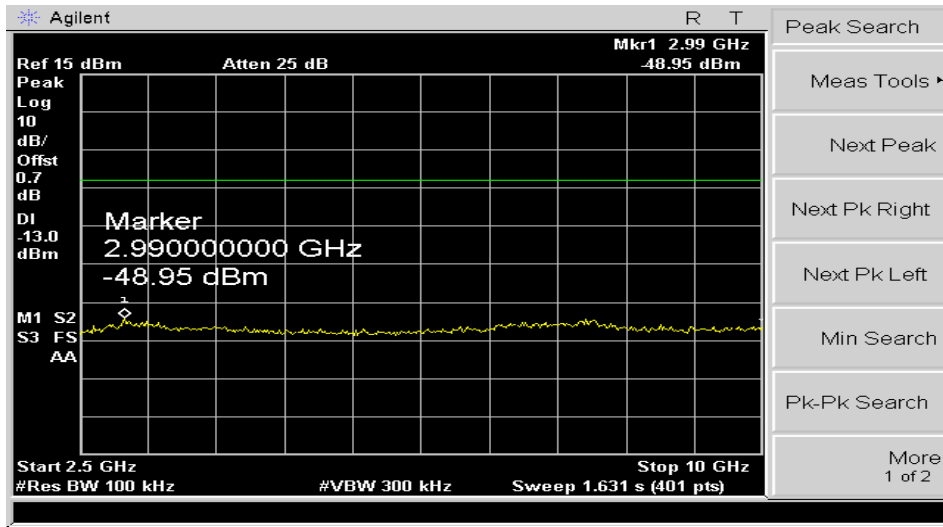
PLOTS OF EMISSION (CDMA) Out of Band (363)



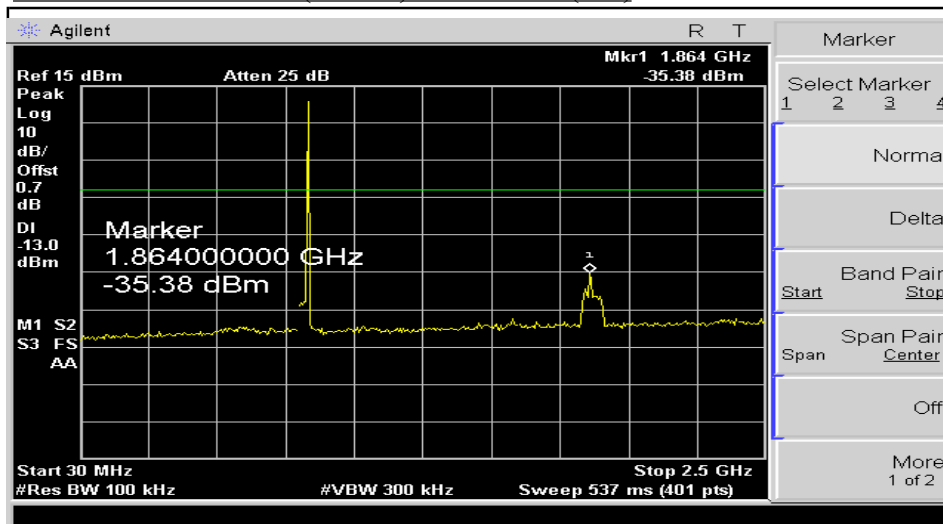


Uplink

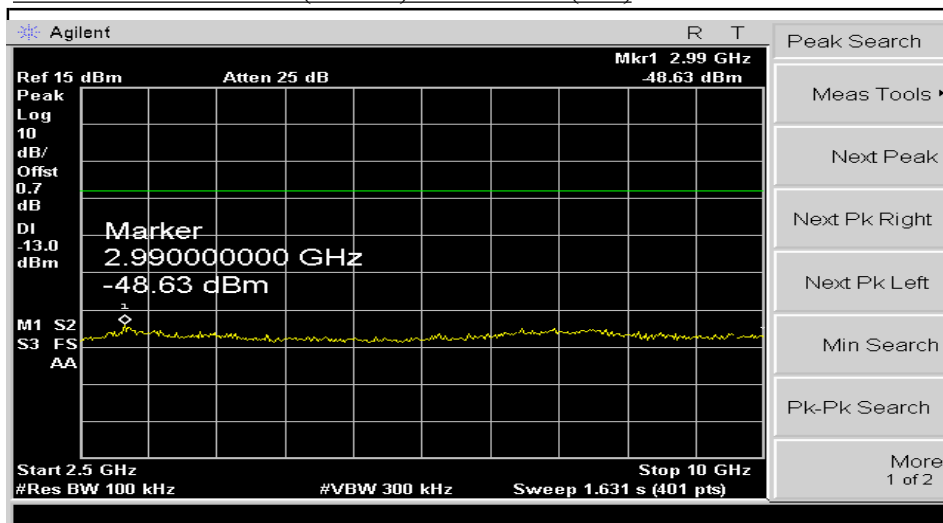
PLOTS OF EMISSION (CDMA) Out of Band (363)



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



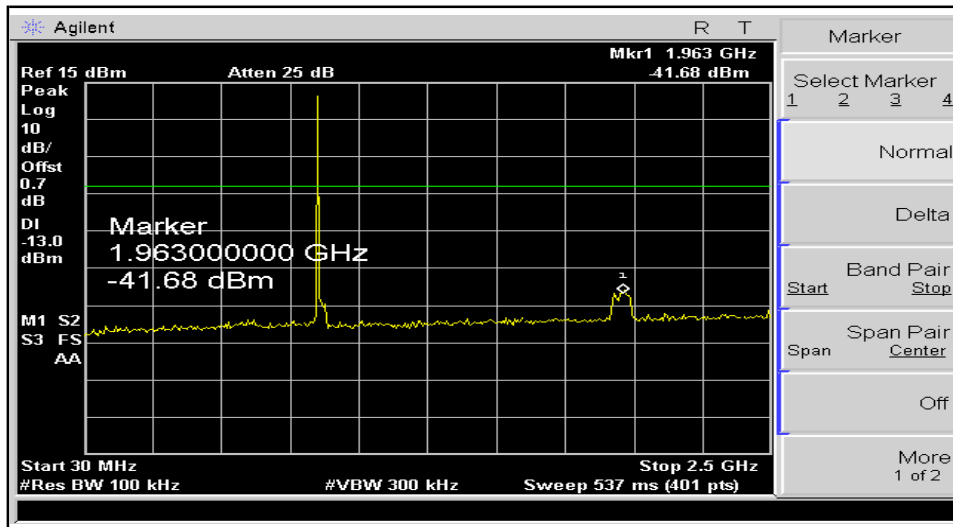
PLOTS OF EMISSION (CDMA) Out of Band (777)



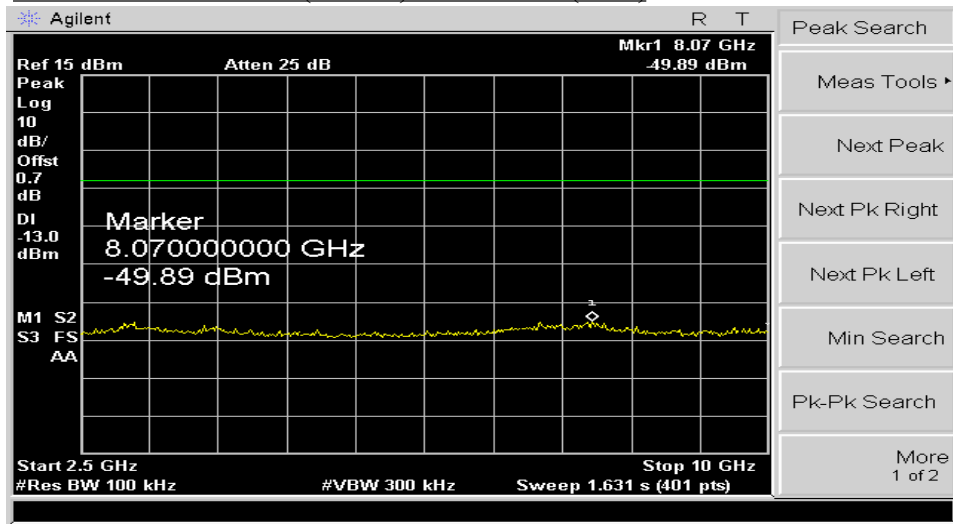


Downlink

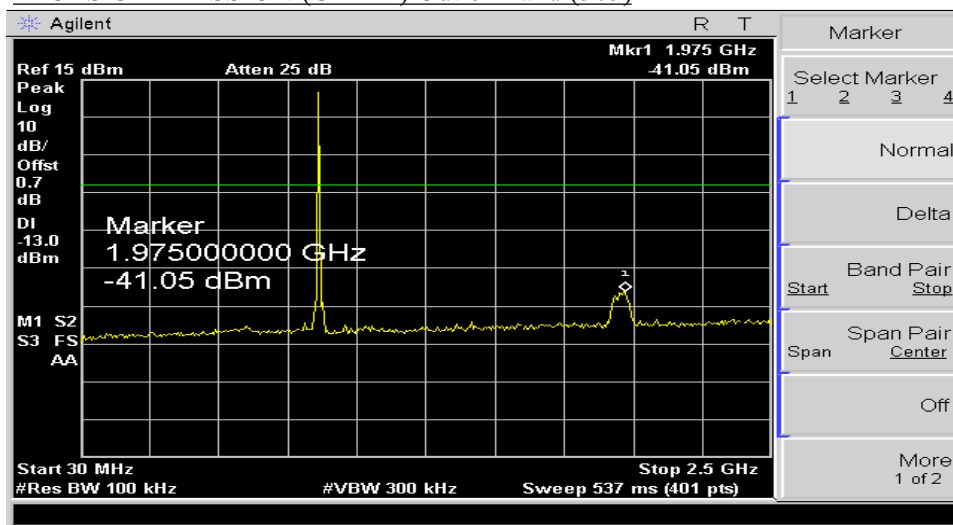
PLOTS OF EMISSION (CDMA) Out of Band (1013)



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



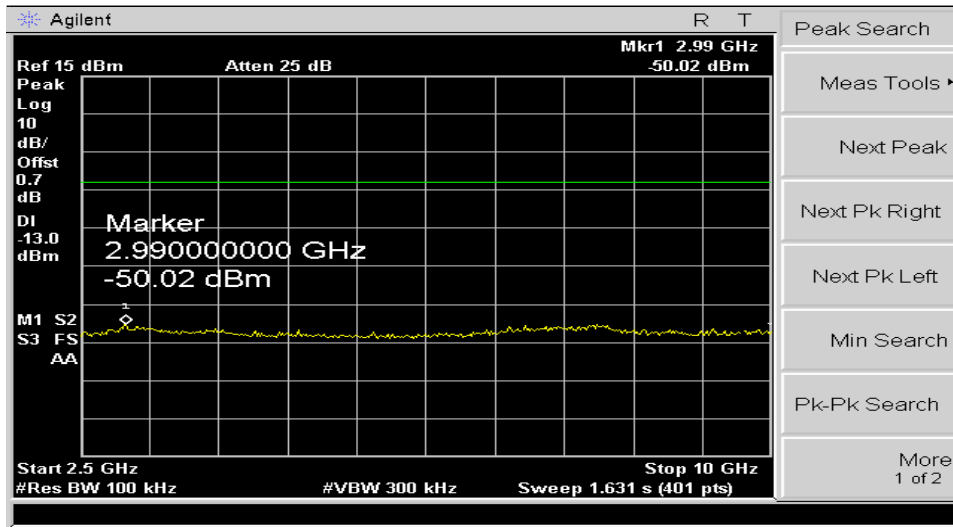
PLOTS OF EMISSION (CDMA) Out of Band (363)



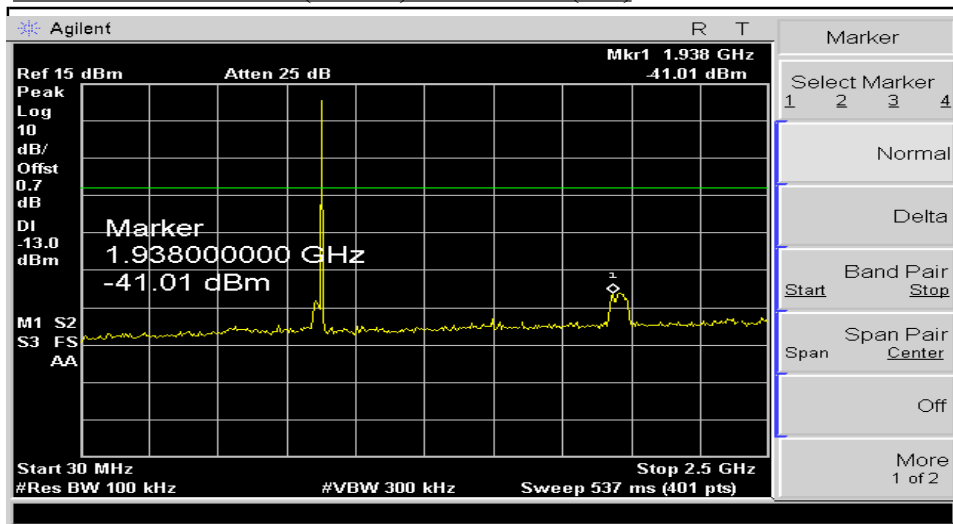


Downlink

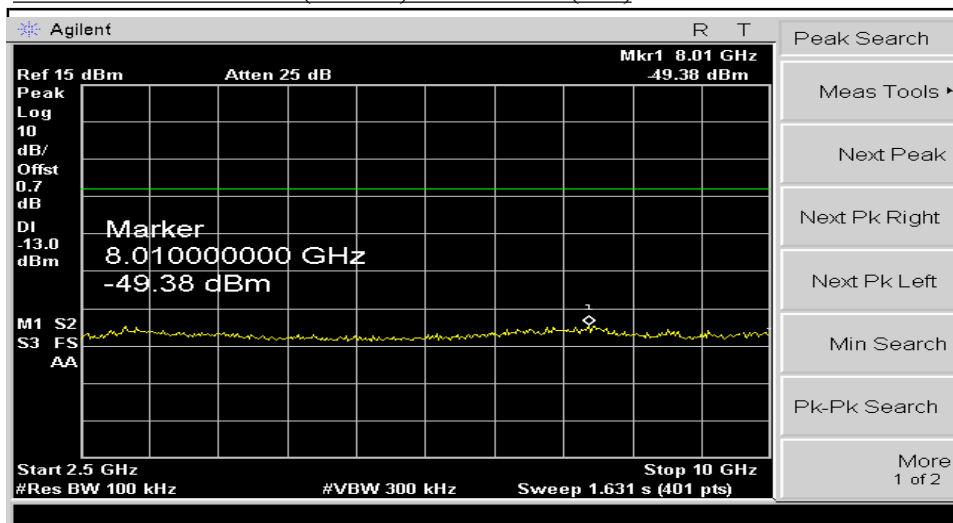
PLOTS OF EMISSION (CDMA) Out of Band (363)



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



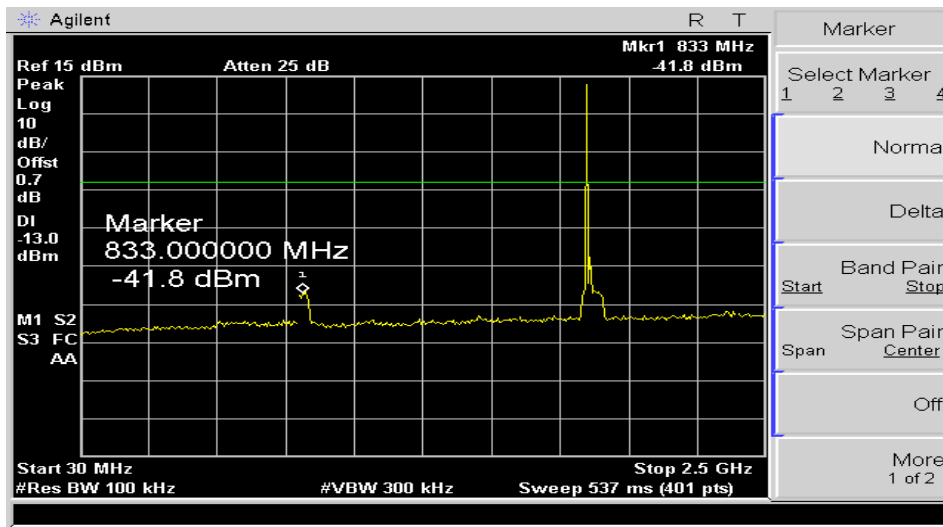
PLOTS OF EMISSION (CDMA) Out of Band (777)



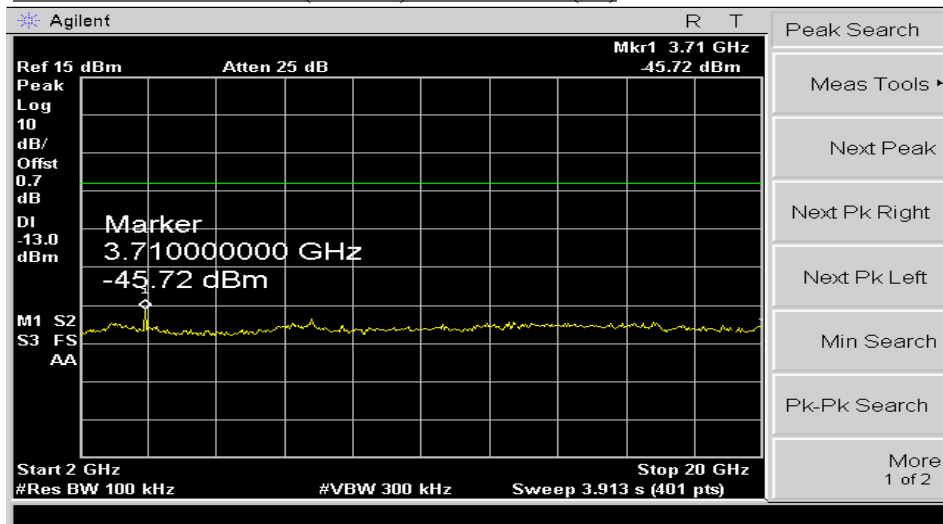


Uplink

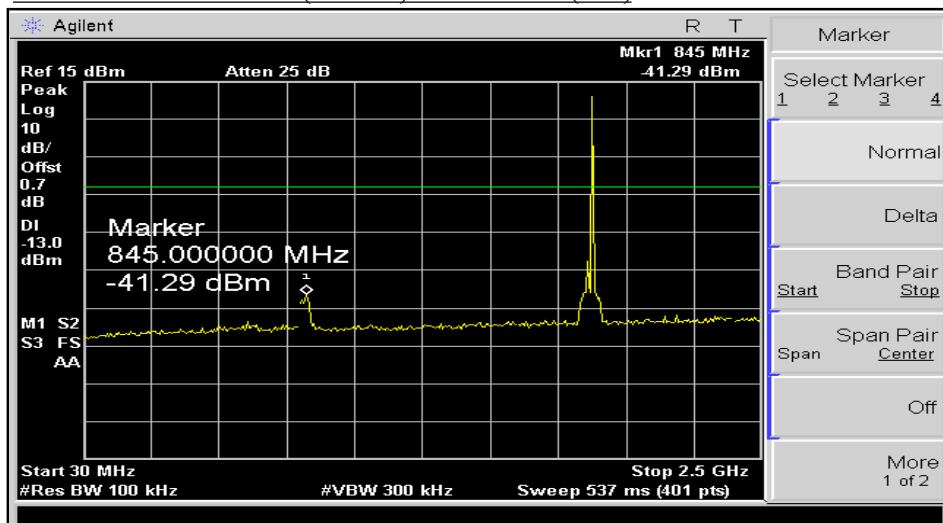
PLOTS OF EMISSION (CDMA) Out of Band (25)



PLOTS OF EMISSION (CDMA) Out of Band (25)



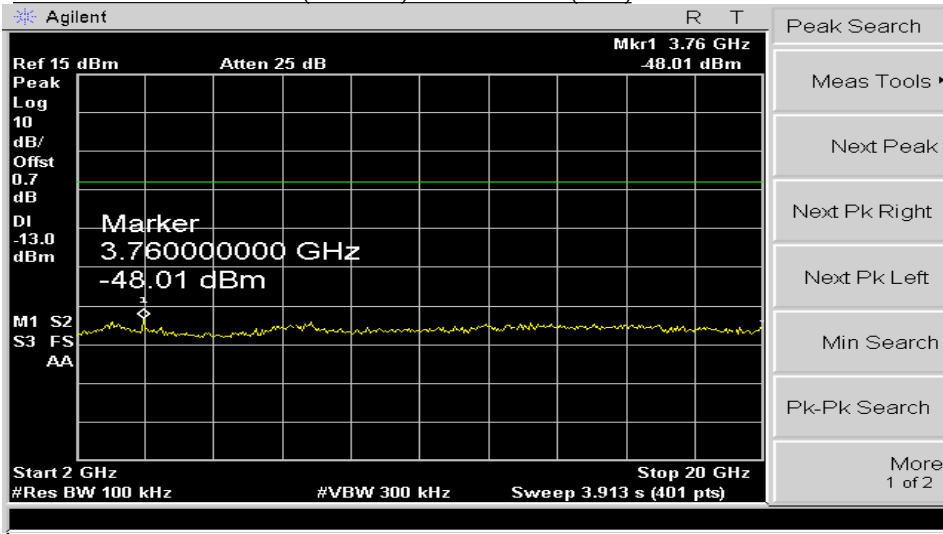
PLOTS OF EMISSION (CDMA) Out of Band (600)



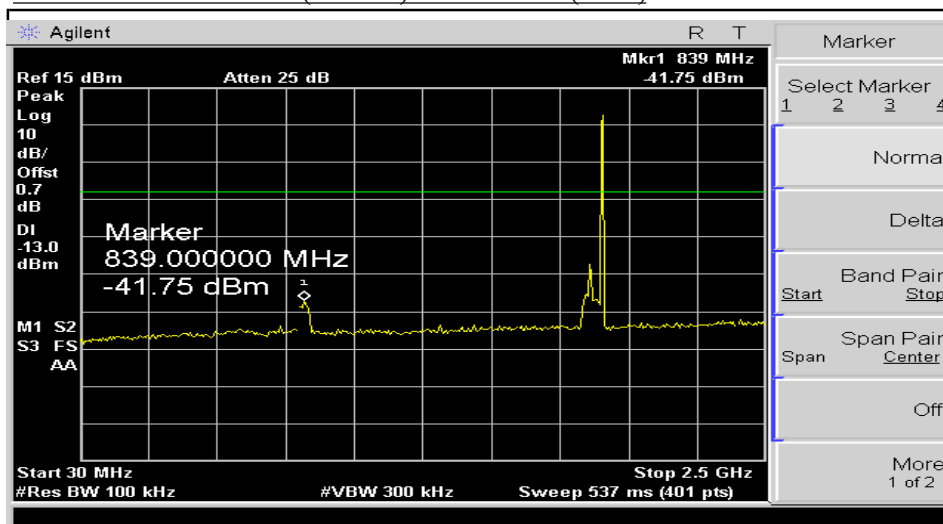


Uplink

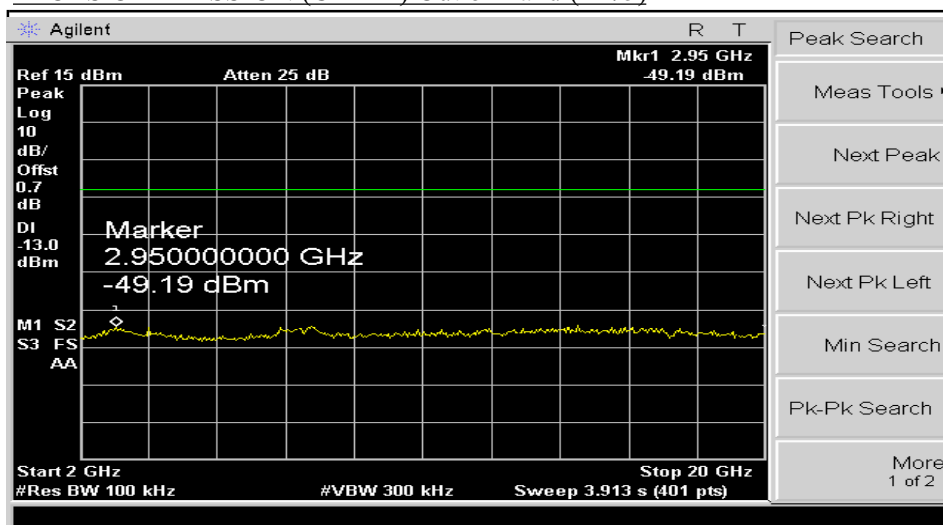
PLOTS OF EMISSION (CDMA) Out of Band (600)



PLOTS OF EMISSION (CDMA) Out of Band (1175)



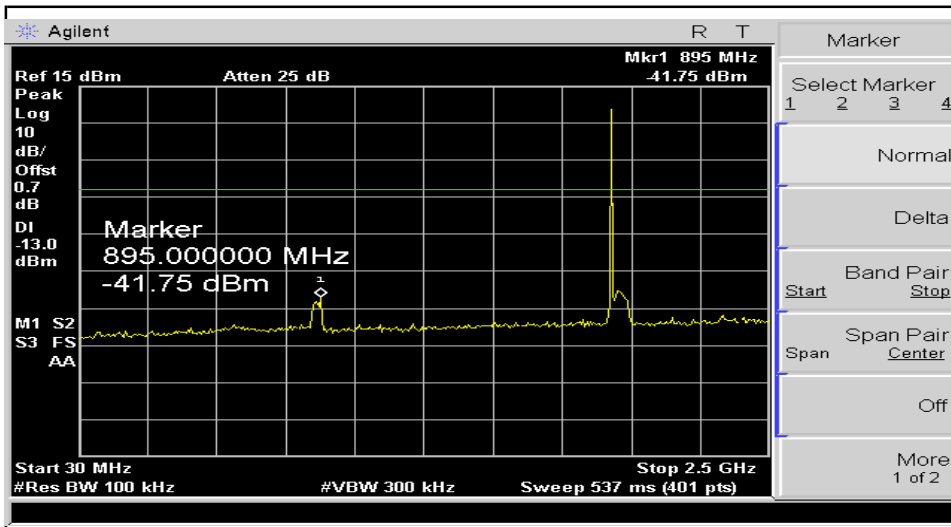
PLOTS OF EMISSION (CDMA) Out of Band (1175)



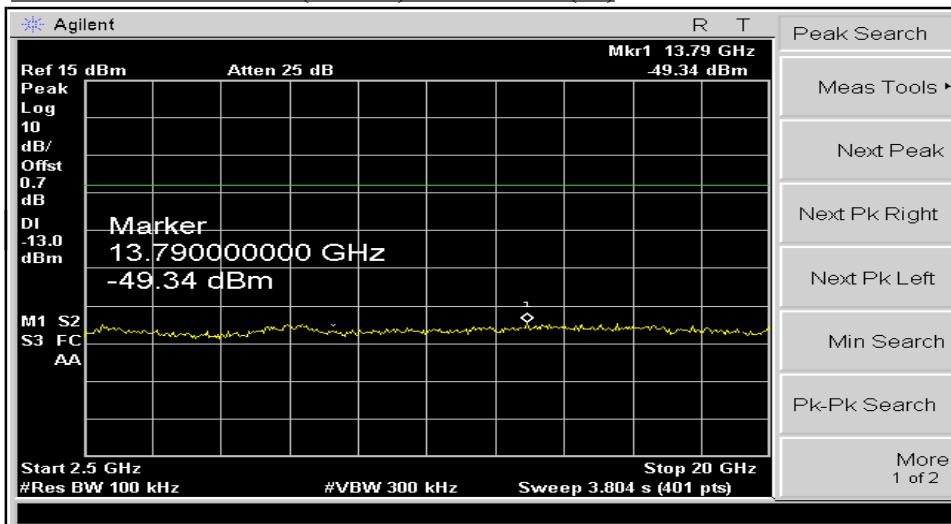


Downlink

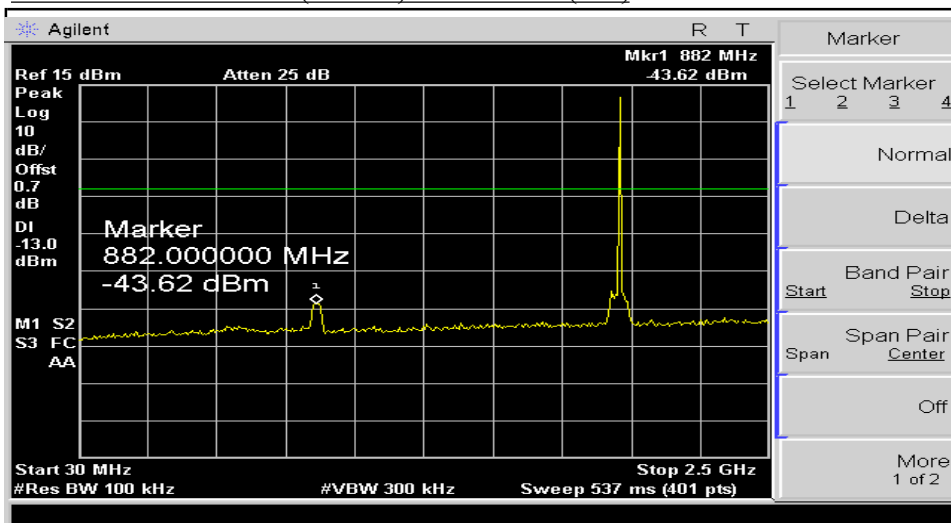
PLOTS OF EMISSION (CDMA) Out of Band (25)



PLOTS OF EMISSION (CDMA) Out of Band (25)



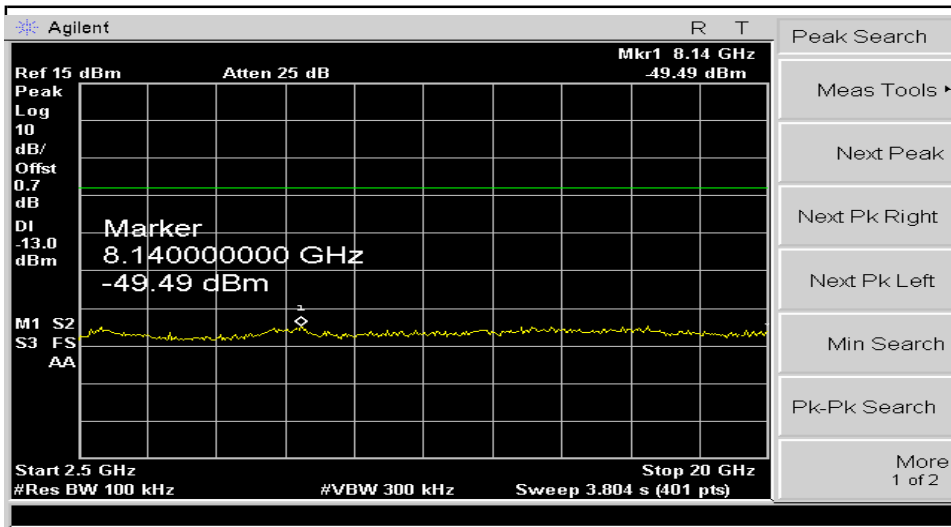
PLOTS OF EMISSION (CDMA) Out of Band (600)



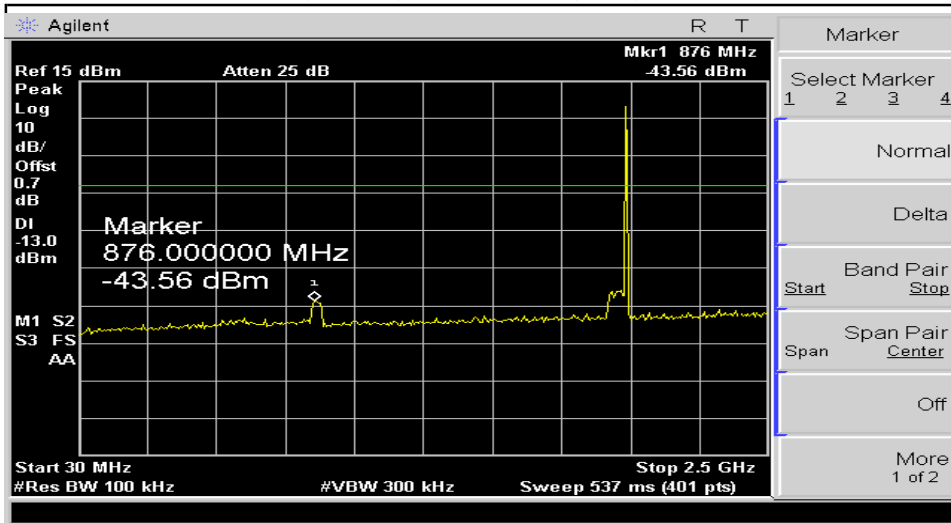


Downlink

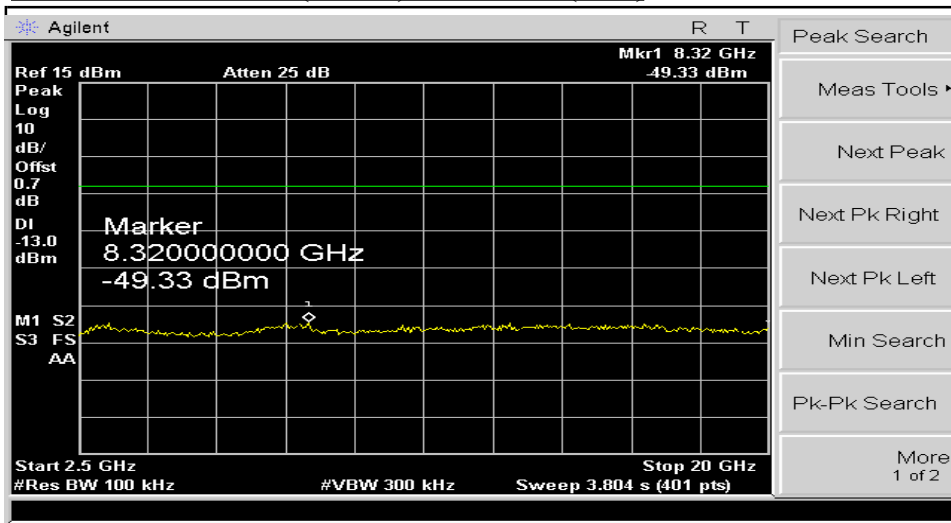
PLOTS OF EMISSION (CDMA) Out of Band (600)



PLOTS OF EMISSION (CDMA) Out of Band (1175)



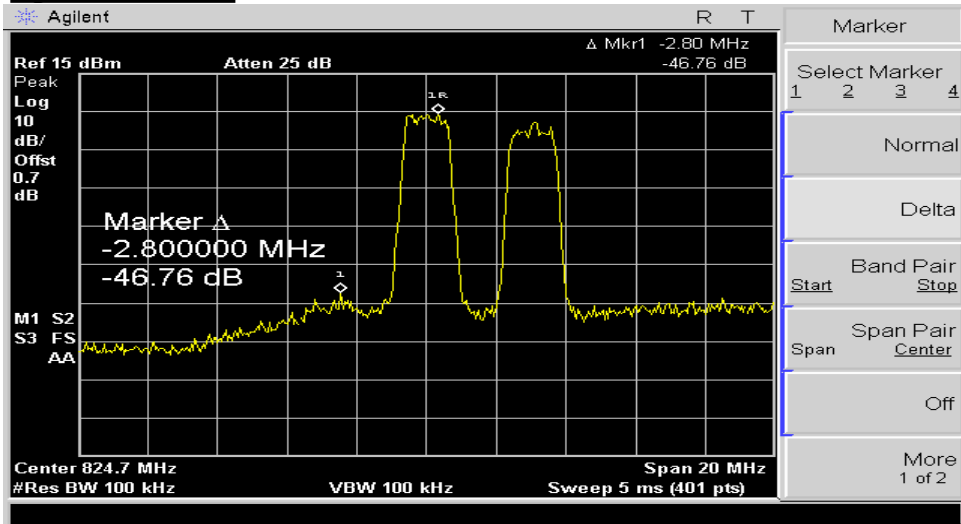
PLOTS OF EMISSION (CDMA) Out of Band (1175)



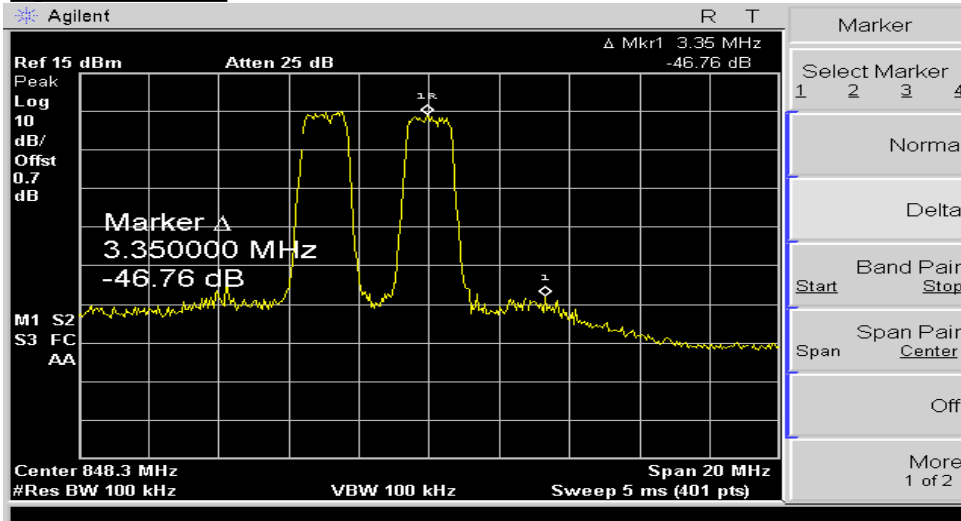


Inter-modulation Signal

Uplink -Cellural

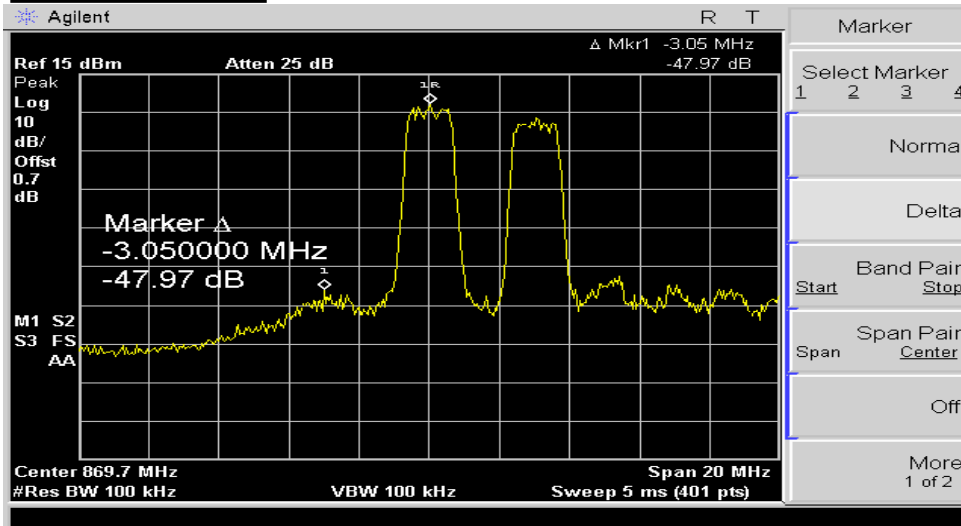


Uplink-Cellural

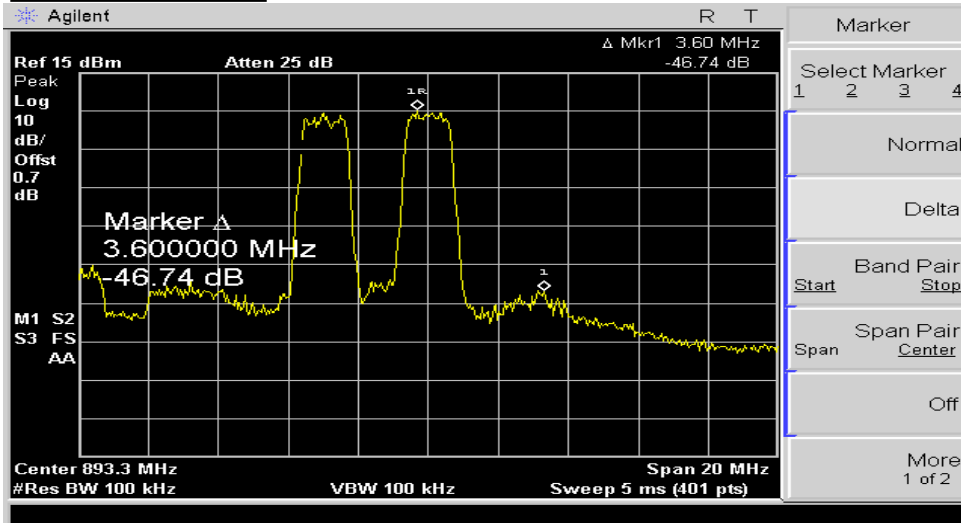




Downlink-Cellular



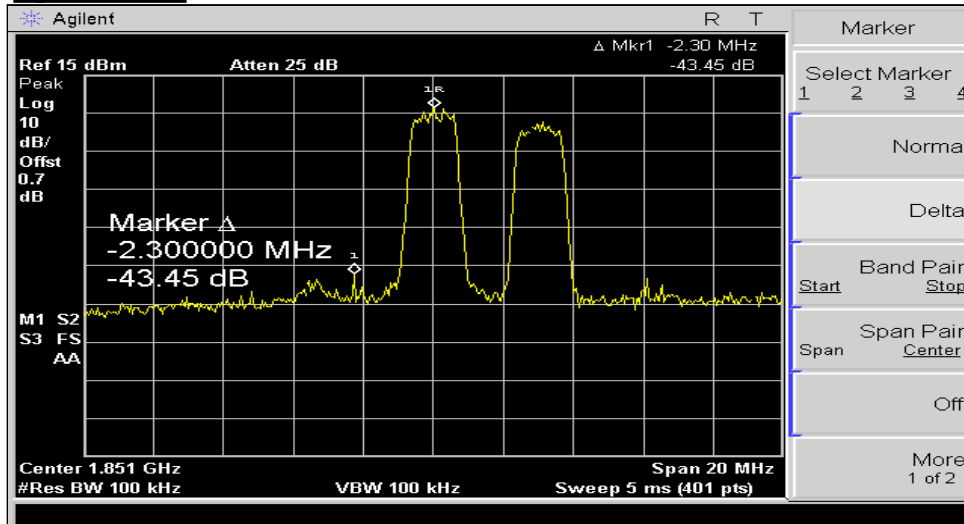
Downlink-Cellular



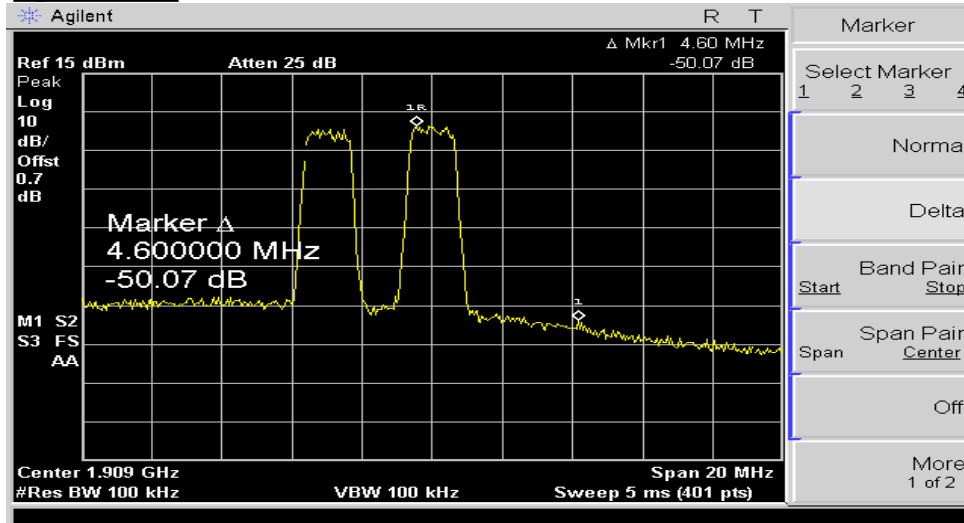


Inter-modulation Signal

Uplink -PCS

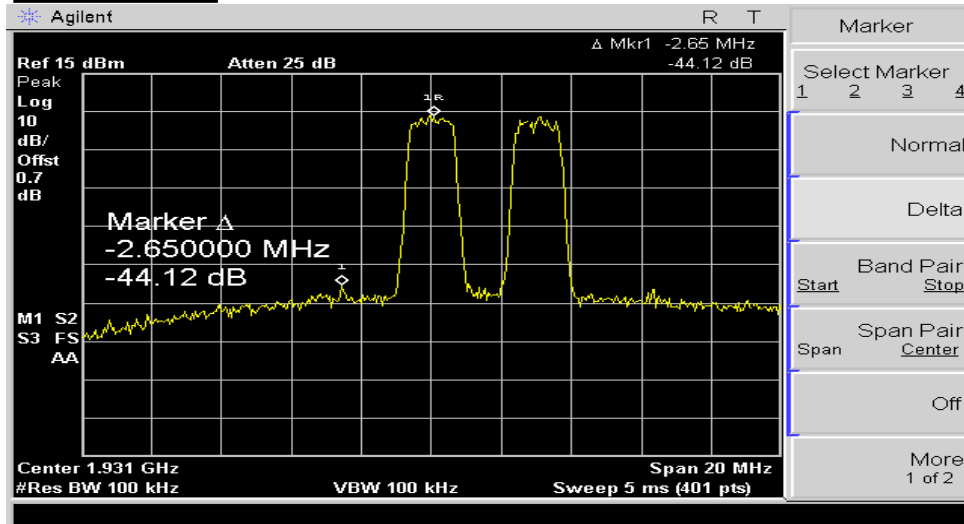


Uplink-PCS

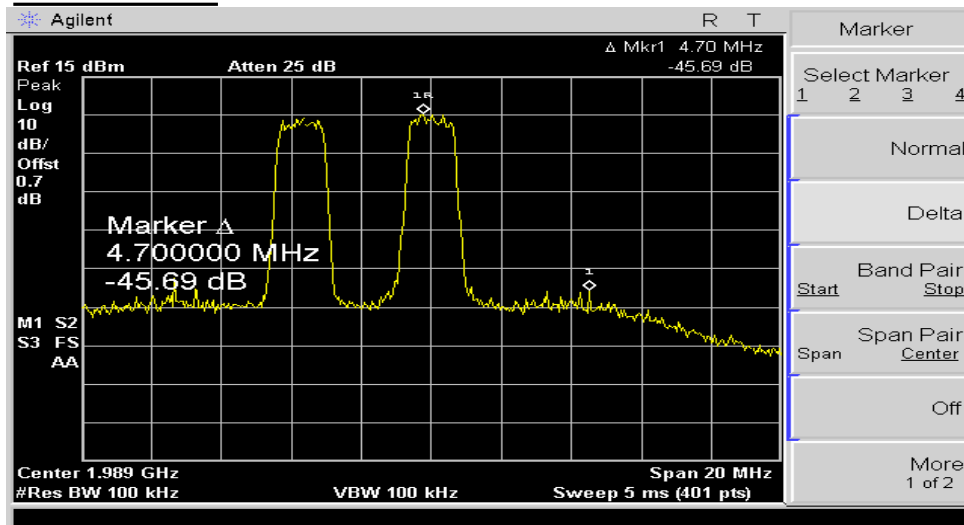




Downlink-PCS



Downlink-PCS



7. Field Strength of Spurious Radiation

7.1 Test Procedure according to ANSI/TIA/EIA 603 Clause 3.2.12 & FCC 22.917(h)

Radiation and harmonic emission are measured outdoors 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). A half wave dipole was substituted in place of the EUT. This dipole 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.

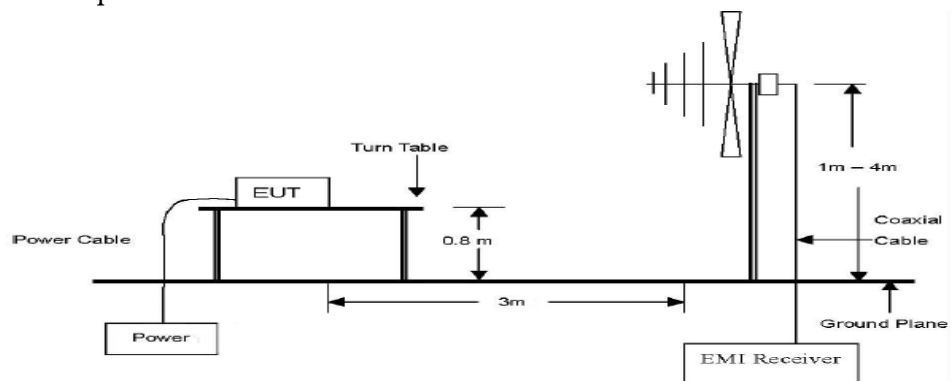
7.2 Test Equipments

The following test equipments are used during tests

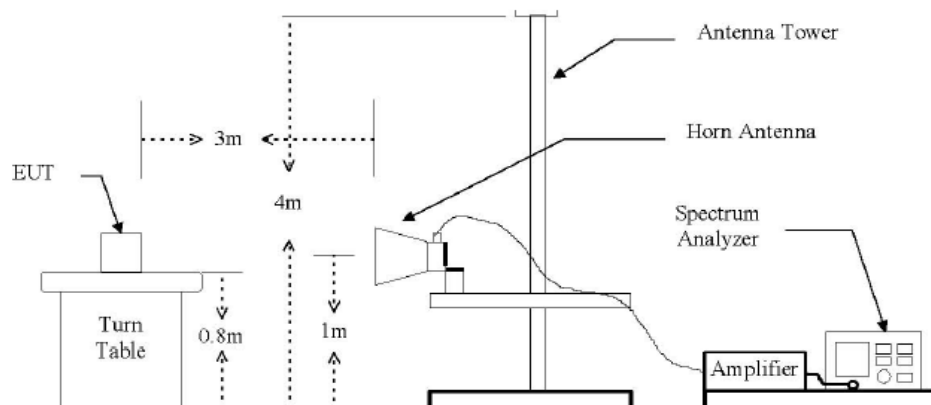
Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	Rohde & Schwarz	ESPI	2011-01-19
Signal Generator	HP	83618B	2010-09-08
Power Meter	HP	EPM-442A	2011-02-01
Power Sensor	HP	8481A	2011-02-01
Pre Amplifier	HP	8449B	2011-02-01
Attenuator	JFW	50FH-010-5	2011-02-01
Attenuator	HP	8491B	2011-02-01
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2010-06-19
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2010-06-19

7.3 Test Setup

Test setup for 30MHz to 1GHz



Test setup for above 1GHz





7.3 Test Results

Uplink

CDMA(Ch1013)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		EIRP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
1649.40	33.22	9.79	11.60	-68.50	-68.16	-13.00	v

CDMA(Ch363)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		EIRP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
1671.78	36.80	9.94	11.70	-64.90	-64.51	-13.00	V

CDMA(Ch777)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		EIRP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
1696.62	35.23	10.11	11.80	-66.50	-66.04	-13.00	V

Remark

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



Downlink

CDMA(Ch1013)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		ERP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
1739.40	35.01	10.22	11.40	-65.50	-64.53	-13.00	V

CDMA(Ch363)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		ERP(dBm)		Limit(dBm)	Polarity
		AG(dBd)	CL(dB)	SG Reading	Result		
1761.78	35.11	10.33	11.50	-65.40	-64.42	-13.00	V

CDMA(Ch777)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		ERP(dBm)		Limit(dBm)	Polarity
		AG(dBd)	CL(dB)	SG Reading	Result		
1786.62	34.91	10.34	11.60	-65.20	-64.31	-13.00	V

Remark

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



7.3 Test Results

Uplink

PCS(Ch25)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		EIRP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
3702.50	35.01	10.22	18.30	-54.20	-62.28	-13.00	V

PCS(Ch600)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		EIRP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
3760.00	34.60	10.33	18.30	-55.30	-63.27	-13.00	V

PCS(Ch1175)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		EIRP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
3817.50	34.13	12.73	18.40	-55.10	-60.77	-13.00	V

Remark

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



Downlink

PCSC25)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		ERP(dBm)		Limit(dBm)	Polarity
		AG(dBi)	CL(dB)	SG Reading	Result		
3862.50	34.83	12.66	19.20	-53.60	-60.14	-13.00	V

PCS(Ch600)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		ERP(dBm)		Limit(dBm)	Polarity
		AG(dBd)	CL(dB)	SG Reading	Result		
3920.00	35.00	12.67	19.00	-52.80	-59.13	-13.00	V

PCS(Ch1175)

Frequency (MHz)	Receiver Reading(dBuV)	Correction Factor(dB)		ERP(dBm)		Limit(dBm)	Polarity
		AG(dBd)	CL(dB)	SG Reading	Result		
3977.50	43.70	12.61	19.10	-54.00	-60.49	-13.00	V

Remark

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

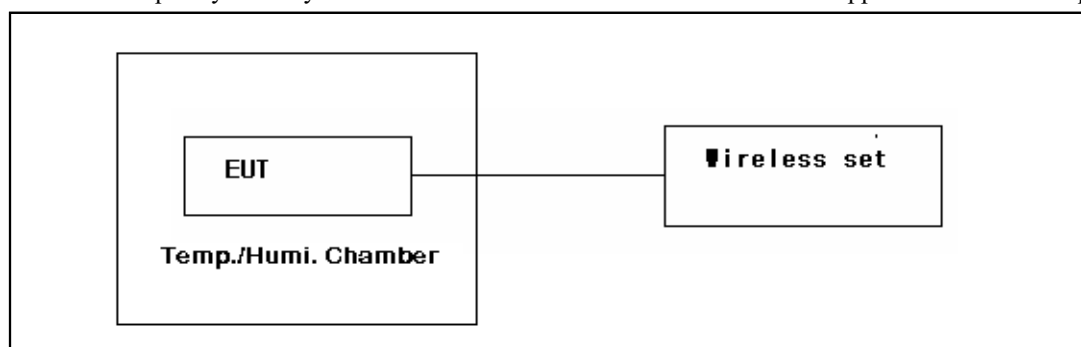
8. Frequency stability

8.1 Test Procedure

The frequency stability of the transmitter is measured by:

- a) **Temperature:** The temperature is varied from -30 °C to +60 °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 ± 2.5 ppm of the center frequency.



8.2 Test Equipments

The following test equipments are used during tests

Equipment	Manufacturer	Model	Next Cal.
Spectrum Analyzer	Agilent	E4407B	2010-09-10
Spectrum Analyzer	Agilent	E4402B	2010-02-28
DC Power Supply	INTERACT	AK-5007	2010-02-26
Tem/Hum Chamber	Myung Technology	SM-150-2	2011-02-09
Signal Generator	HP	E4432B	2010-04-10



8.3 Test Results

Uplink-Cellular

Operating Frequency :	835,890,000	
Channel :	363	
Reference Voltage :	110.00	VAC
Deviation Limit :	0.00010	

Voltage (%)	Power (VAC)	Temperature (°C)	Frequency (Hz)	Deviation
100	110.0	+20 °C (Ref)	835,890,010	0.000010
100		-30	835,890,016	0.000016
100		-20	835,890,005	0.000005
100		-10	835,889,991	0.000009
100		0	835,890,005	0.000005
100		10	835,890,007	0.000007
100		20	835,890,005	0.000005
100		25	835,890,009	0.000009
100		30	835,889,991	0.000009
100		40	835,890,008	0.000008
100		50	835,890,011	0.000011
100		60	835,890,006	0.000006
85	93.5	20	835,889,992	0.000008
115	126.5	20	835,890,006	0.000006
EndPoint	85.0	20	835,889,993	0.000007



Downlink-Cellular

Operating Frequency :	880,890,000	
Channel :	363	
Reference Voltage :	110.00	VAC
Deviation Limit :	0.00010	

Voltage (%)	Power (VAC)	Temperature (°C)	Frequency (Hz)	Deviation
100	110.0	+20 °C (Ref)	880,889,994	0.000006
100		-30	880,889,991	0.000009
100		-20	880,890,005	0.000005
100		-10	880,890,007	0.000007
100		0	880,889,991	0.000009
100		10	880,889,992	0.000008
100		20	880,890,009	0.000009
100		25	880,889,992	0.000008
100		30	880,890,007	0.000007
100		40	880,890,009	0.000009
100		50	880,889,990	0.000010
100		60	880,890,008	0.000008
85	93.5	20	880,890,009	0.000009
115	126.5	20	880,890,005	0.000005
EndPoint	85.0	20	880,890,009	0.000009



Uplink-PCS

Operting Frequency :	1,880,000,000	
Channel :	600	
Reference Voltage :	110.00	VAC
Deviatin Limit :	0.00010	

Voltage (%)	Power (VAC)	Temperature (°C)	Frequency (Hz)	Deviation
100	110.0	+20 °C (Ref)	1,879,999,993	0.000000
100		-30	1,879,999,994	0.000001
100		-20	1,879,999,991	0.000001
100		-10	1,879,999,996	0.000001
100		0	1,879,999,991	0.000001
100		10	1,879,999,992	0.000001
100		20	1,879,999,993	0.000000
100		25	1,879,999,991	0.000001
100		30	1,879,999,991	0.000001
100		40	1,879,999,990	0.000001
100		50	1,879,999,997	0.000001
100		60	1,879,999,996	0.000001
85	93.5	20	1,879,999,991	0.000002
115	126.5	20	1,879,999,992	0.000001
EndPoint	85.0	20	1,879,999,991	0.000001



Uplink-PCS

Operting Frequency :	1,880,000,000	
Channel :	600	
Reference Voltage :	110.00	VAC
Deviatin Limit :	0.00010	

Voltage (%)	Power (VAC)	Temperature (°C)	Frequency (Hz)	Deviation
100	110.0	+20 °C (Ref)	1,879,999,994	0.000000
100		-30	1,879,999,992	0.000001
100		-20	1,879,999,990	0.000001
100		-10	1,880,000,007	0.000001
100		0	1,879,999,992	0.000001
100		10	1,879,999,994	0.000001
100		20	1,880,000,007	0.000000
100		25	1,880,000,010	0.000001
100		30	1,879,999,993	0.000001
100		40	1,880,000,006	0.000001
100		50	1,880,000,007	0.000001
100		60	1,879,999,995	0.000001
85	93.5	20	1,879,999,995	0.000002
115	126.5	20	1,879,999,992	0.000001
EndPoint	85.0	20	1,879,999,991	0.000001

Attachment 1 : EUT Test Photographs

CDMA-UP

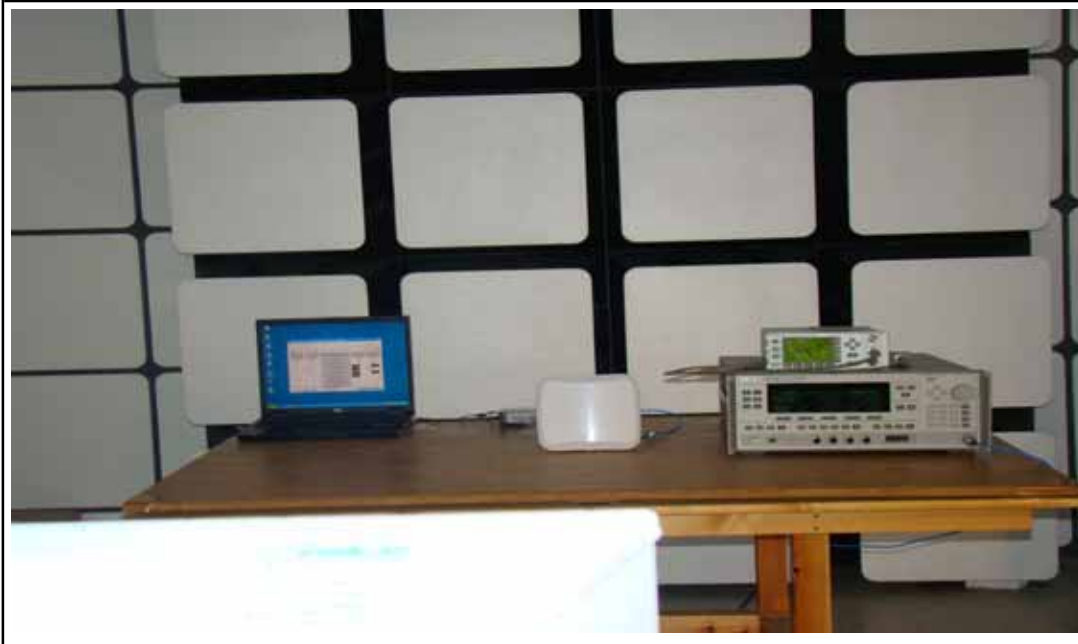


CDMA-DOWN



Attachment 1 : EUT Test Photographs

PCS UP



PCS DOWN

