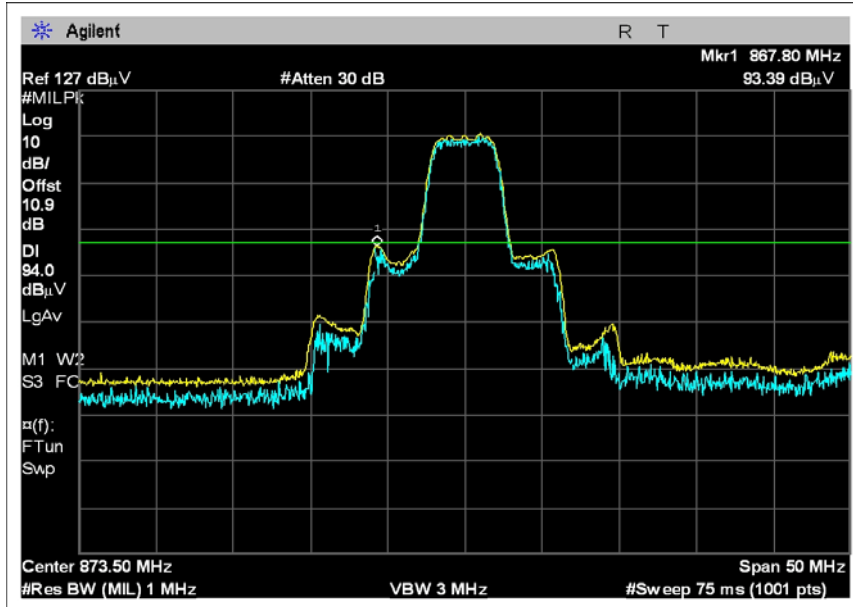
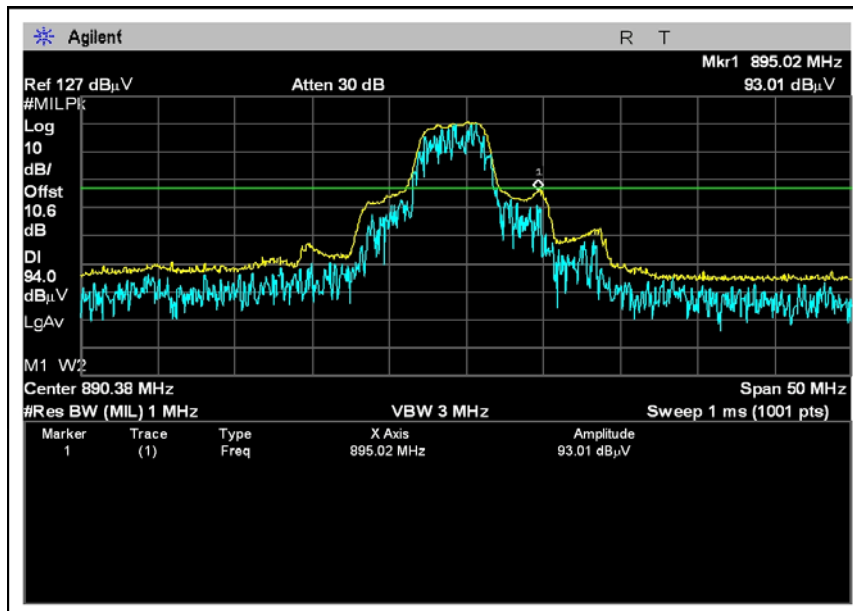


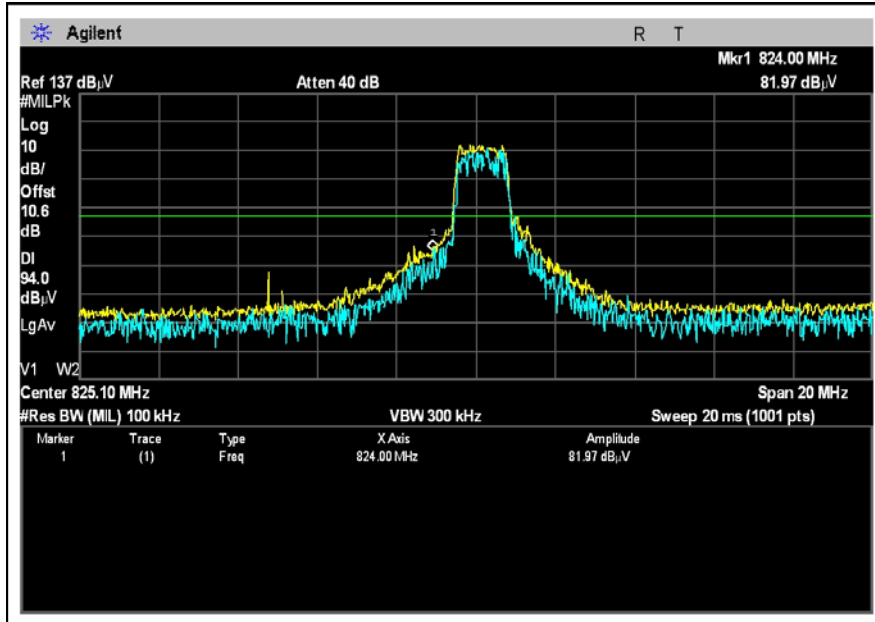
BLOCK EDGE DOWNLINK - WCDMA LOW CHANNEL



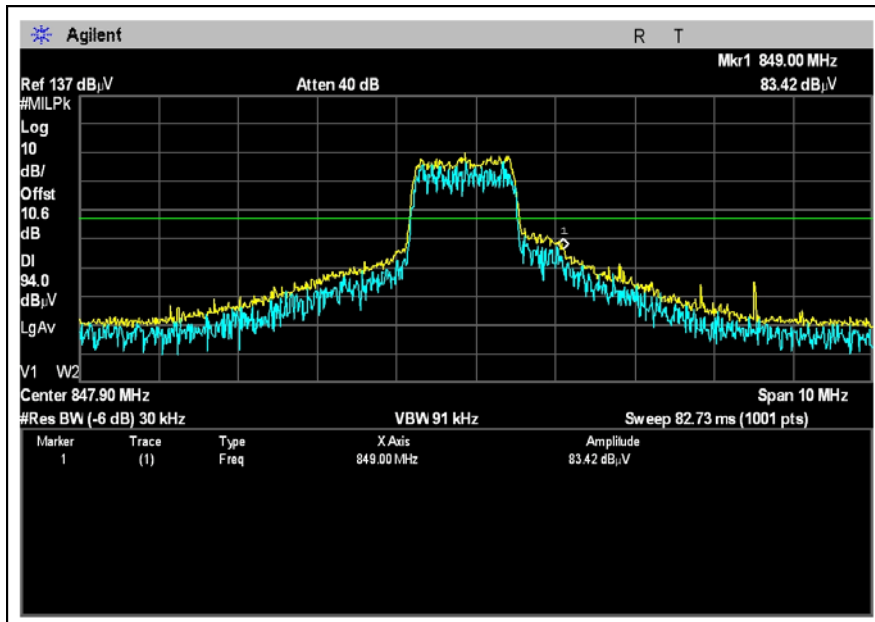
BLOCK EDGE DOWNLINK - WCDMA HIGH CHANNEL



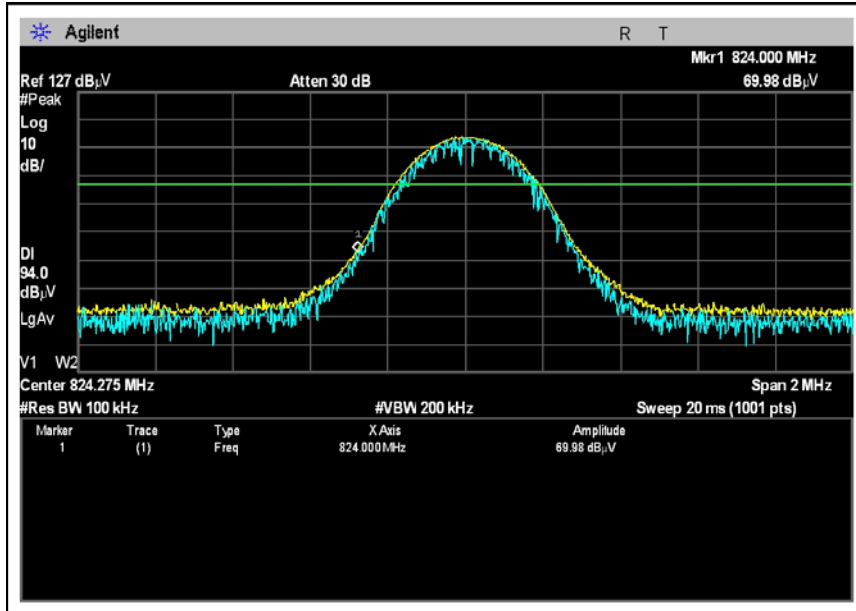
BLOCK EDGE UPLINK - CDMA LOW CHANNEL



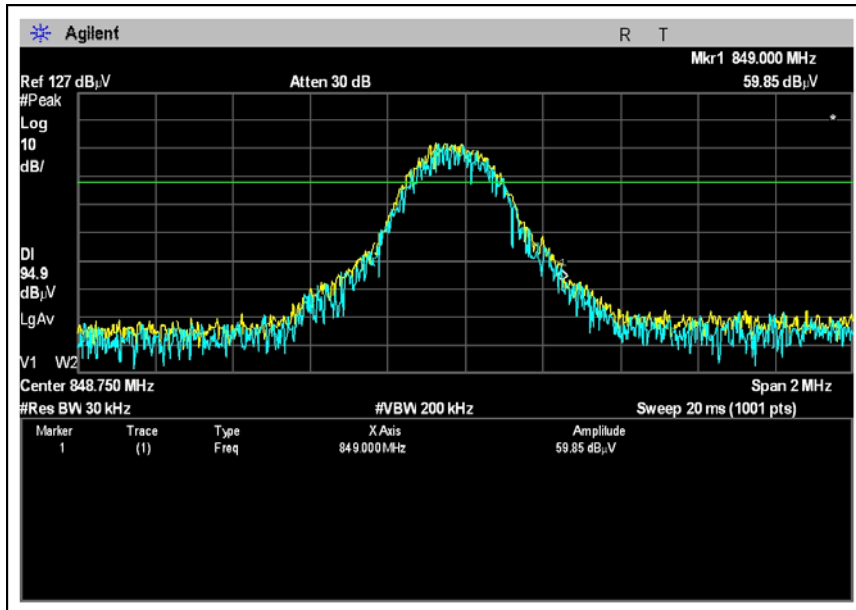
BLOCK EDGE UPLINK - CDMA HIGH CHANNEL



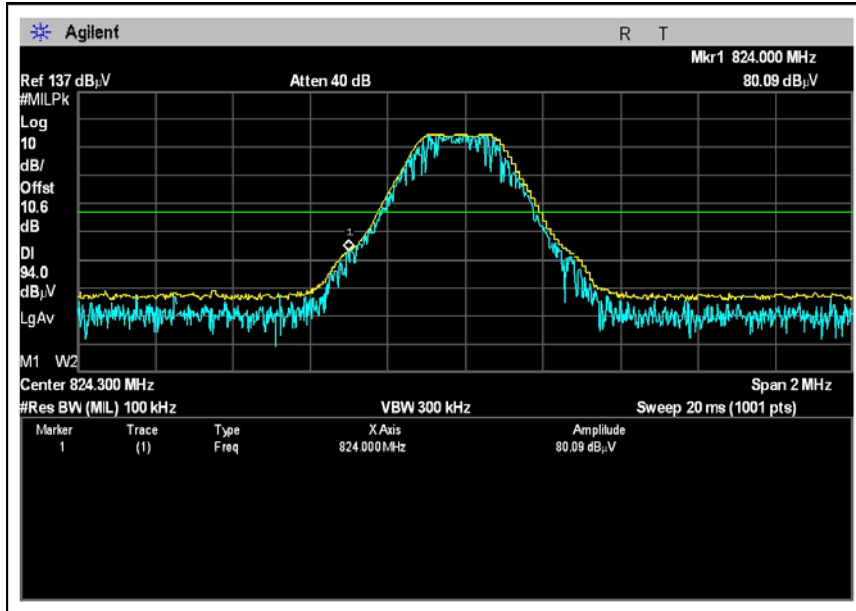
BLOCK EDGE UPLINK - EDGE LOW CHANNEL



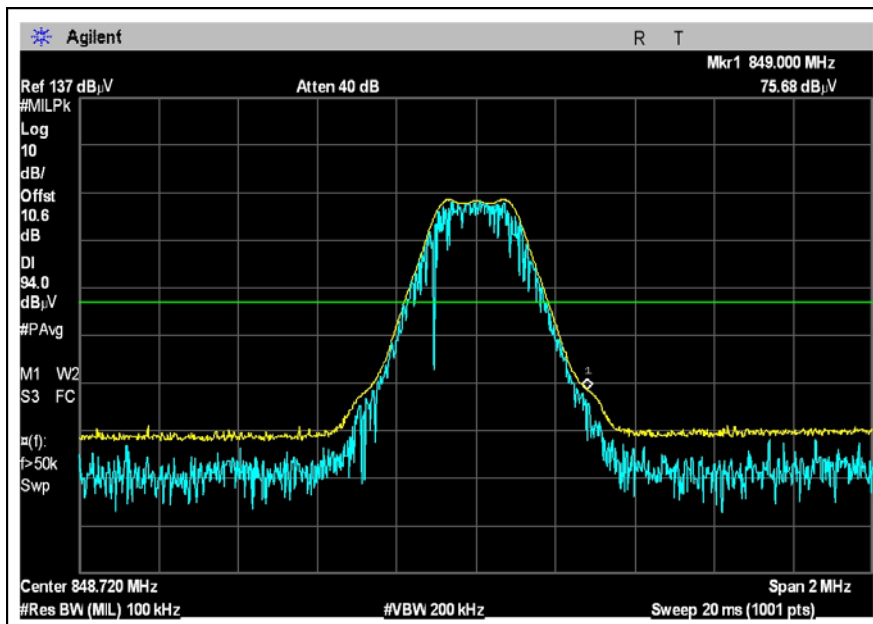
BLOCK EDGE UPLINK - EDGE HIGH CHANNEL



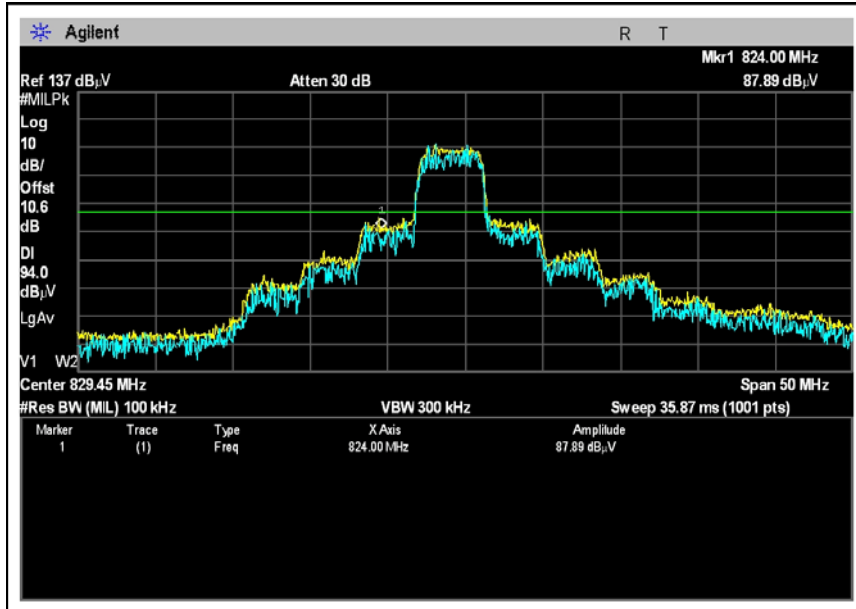
BLOCK EDGE UPLINK - GSM LOW CHANNEL



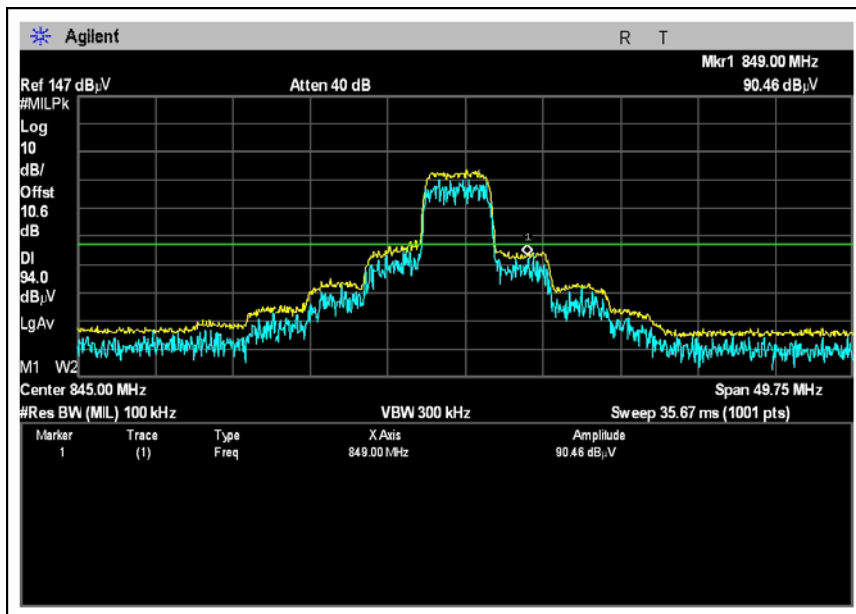
BLOCK EDGE UPLINK - GSM HIGH CHANNEL



BLOCK EDGE UPLINK - WCDMA LOW CHANNEL



BLOCK EDGE UPLINK - WCDMA HIGH CHANNEL



INPUT AND OUTPUT PLOTS

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	08/07/2008	08/07/2010	02660
Wilson 50-75 Ohm Adapter	None	10/14/2008	10/14/2010	C00013
Cable 3' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03012
HP 8491A 10dB Attenuator	2708A47453	11/30/2006	11/30/2008	P01350
10 dB 10W Attenuator	None	11/30/2006	11/30/2008	P02229

Equipment Under Test (= EUT):*

Function	Manufacturer	Model #	S/N
Signal Boost In-Building Wireless Cellular/PCS Amplifier*	Wilson Electronics	271247-50	80124799021181716

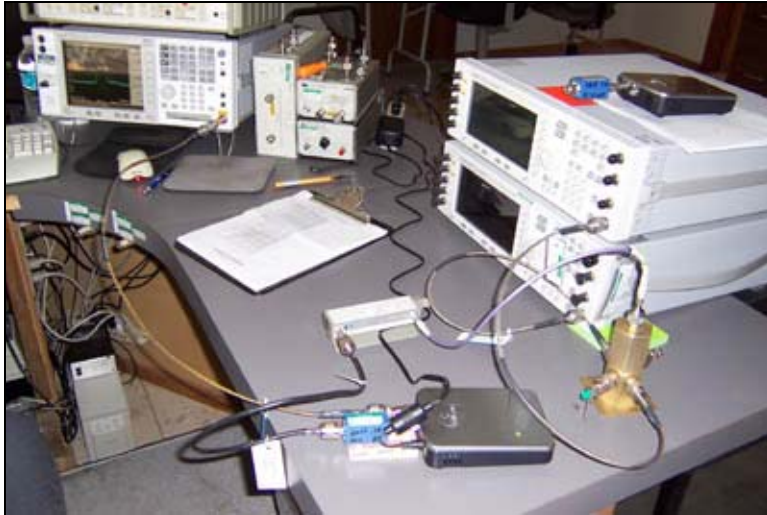
Support Devices:

Function	Manufacturer	Model #	S/N
Signal Generator	Agilent	E4437B	MY41000126
Signal Generator	Agilent	E4437B	US39260577
Power Supply	Wilson	HK-B18-A06	None
Step Attenuator	HP	8494B	AN02475
Splitter, 4-Way	Motorola	None	ANP01314

Test Conditions / Notes:

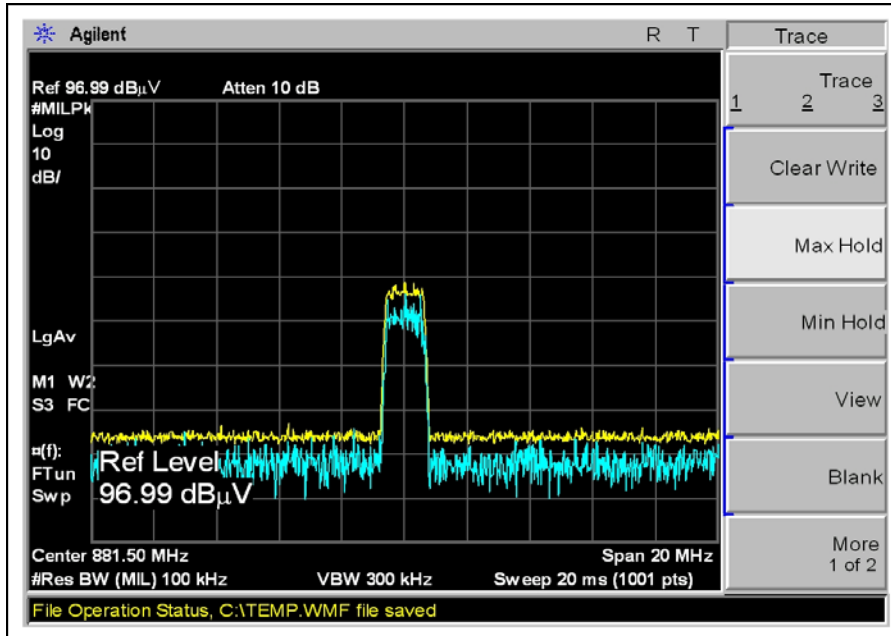
This is an in-building, dual-band bi-directional amplifier for enhancing the range of cell phones in-building environments. EUT operating frequency ranges are 824-849 MHz and 1850-1910 MHz for uplink path and 869-894 MHz and 1930-1990 MHz for downlink path. EUT is connected directly to a spectrum analyzer via suitable attenuation. Reported power levels indicate the maximum compliant power output measured at an input level just below that which will cause the EUT to fail harmonic, intermodulation or band edge limits, whichever results in the lowest power output for each modulation and channel setting. Signal generator input signal used is CW and is swept to provide amplification and bandwidth plots. For output plots, EUT is connected directly to a spectrum analyzer via suitable attenuation. For input plots, signal generator is connected directly to spectrum analyzer without external attenuation. Frequency Range Investigated: Carrier.
Temperature: 22.3°C, Relative Humidity: 35%.

Test Setup Photos

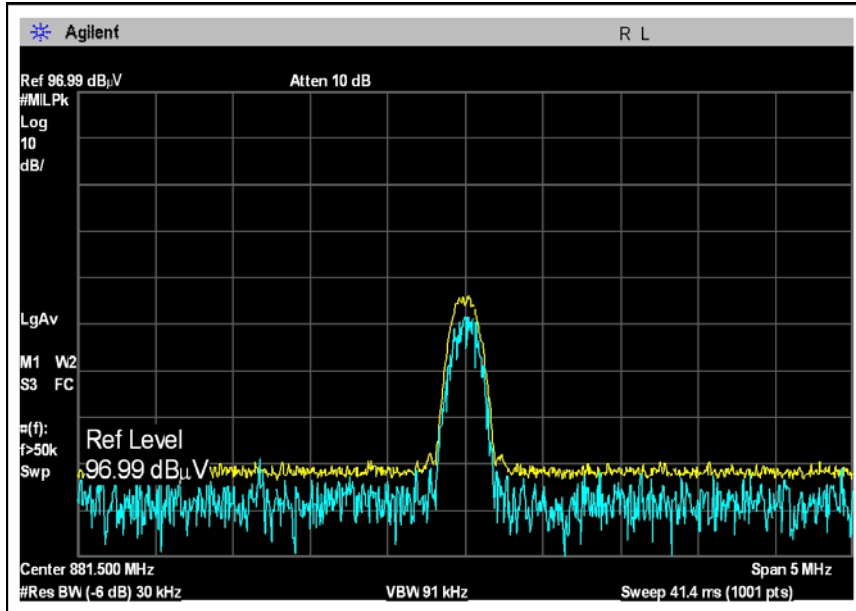


Test Plots

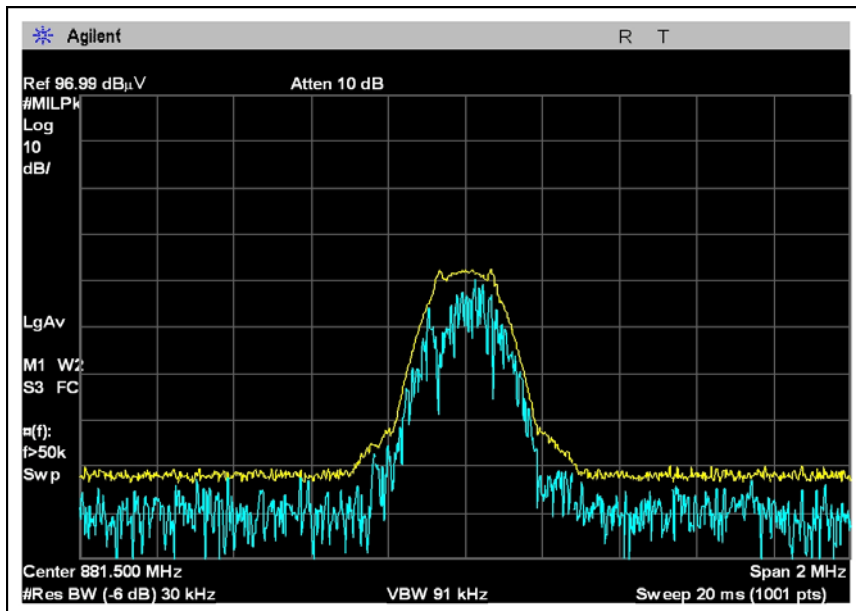
INPUT PLOT DOWNLINK - CDMA MID CHANNEL



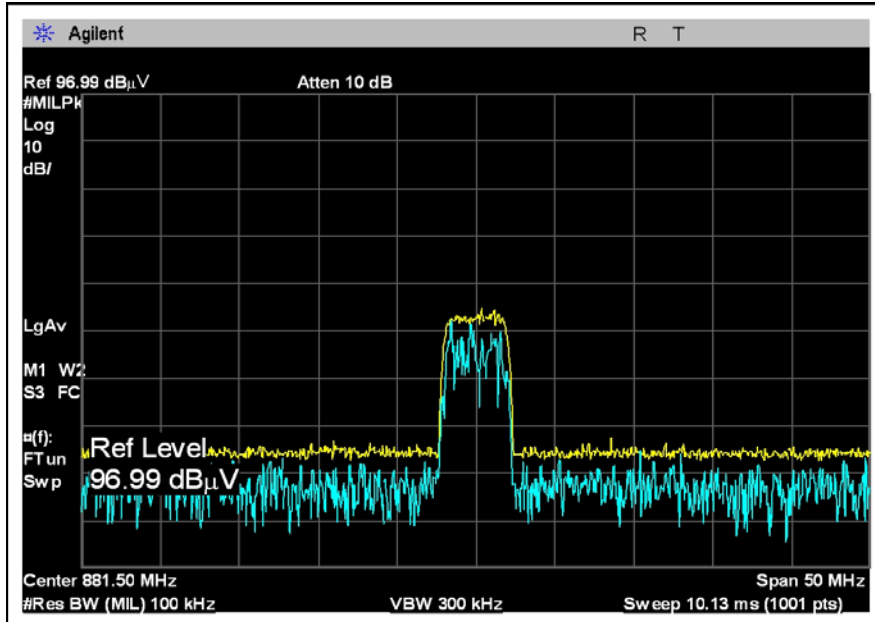
INPUT PLOT DOWNLINK - EDGE MID CHANNEL



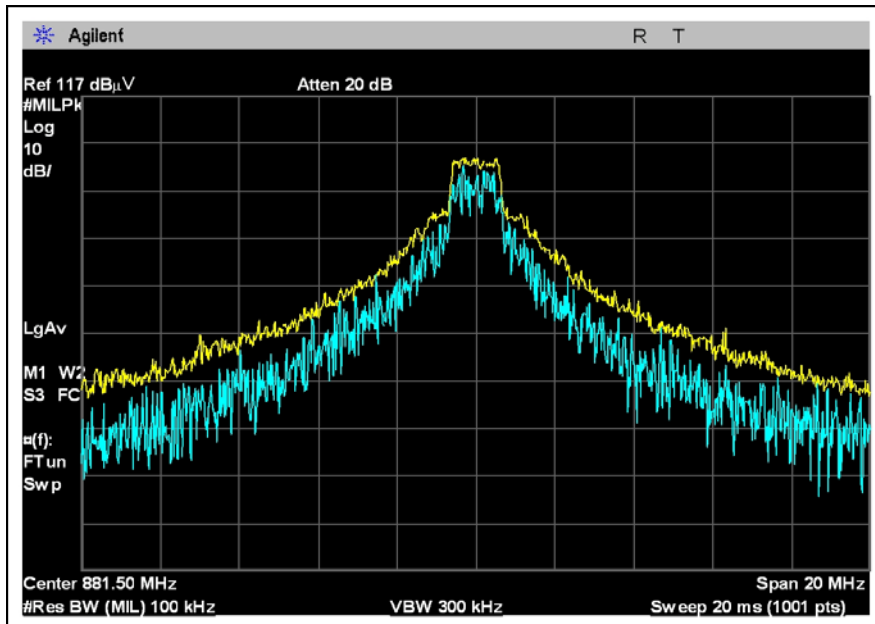
INPUT PLOT DOWNLINK - GSM MID CHANNEL



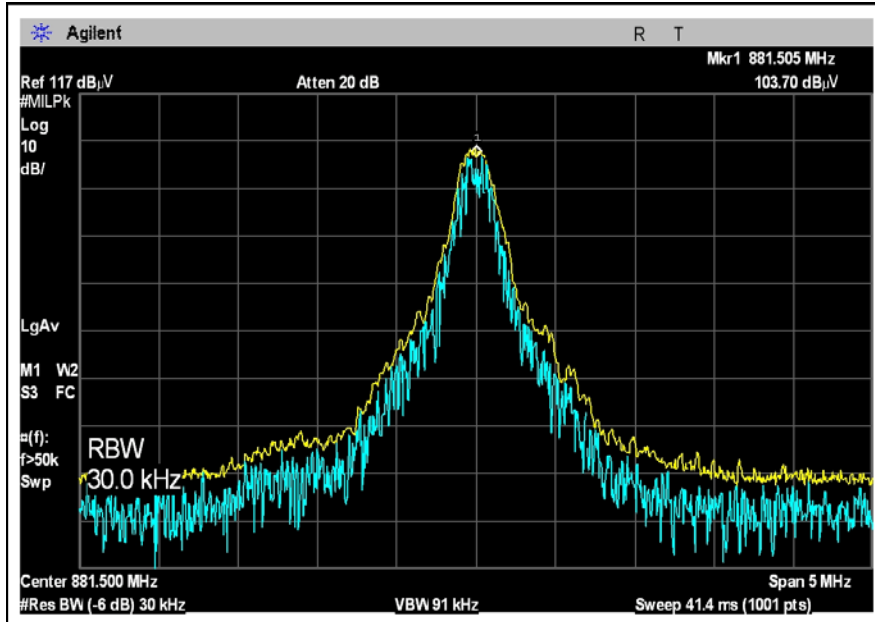
INPUT PLOT DOWNLINK - WCDMA MID CHANNEL



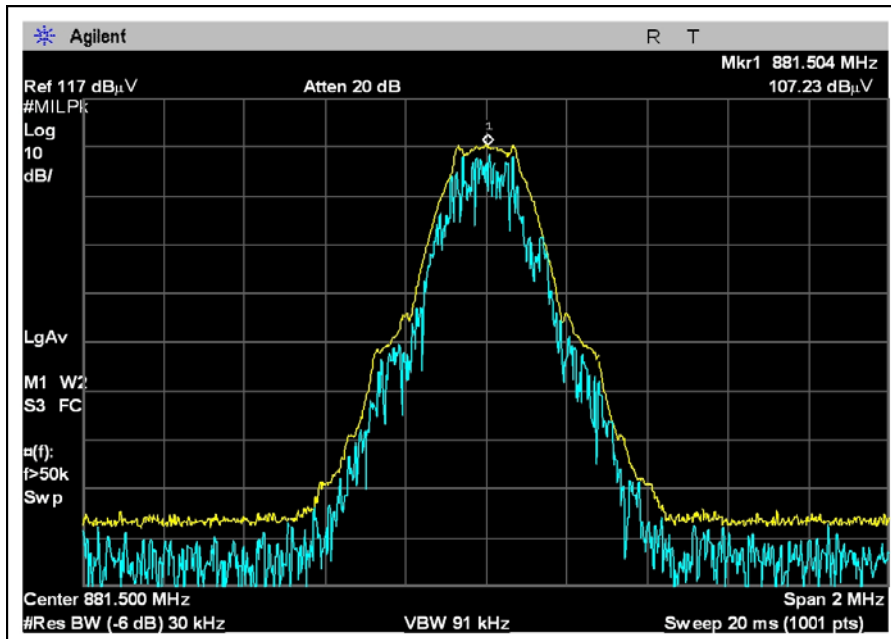
OUTPUT PLOT DOWNLINK - CDMA MID CHANNEL



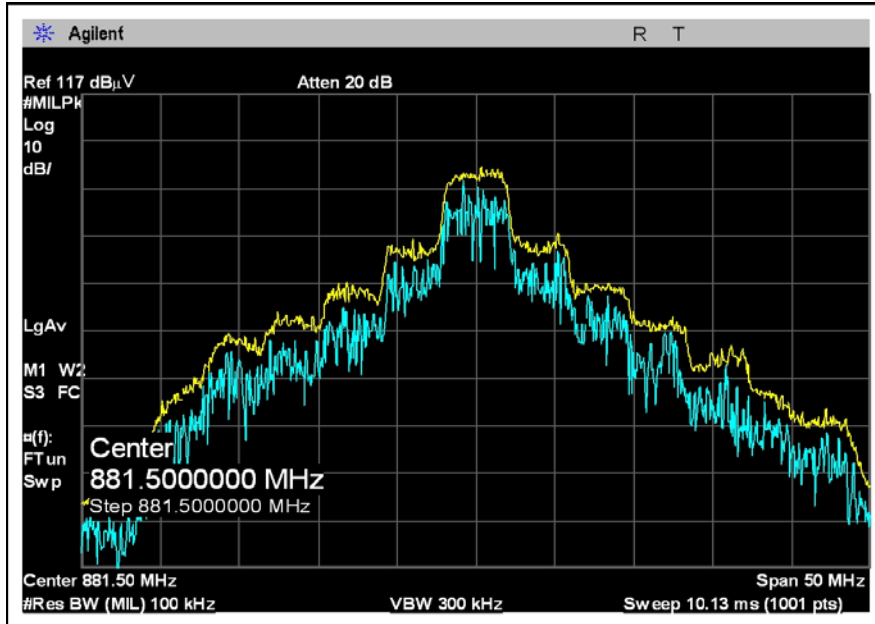
OUTPUT PLOT DOWNLINK - EDGE MID CHANNEL



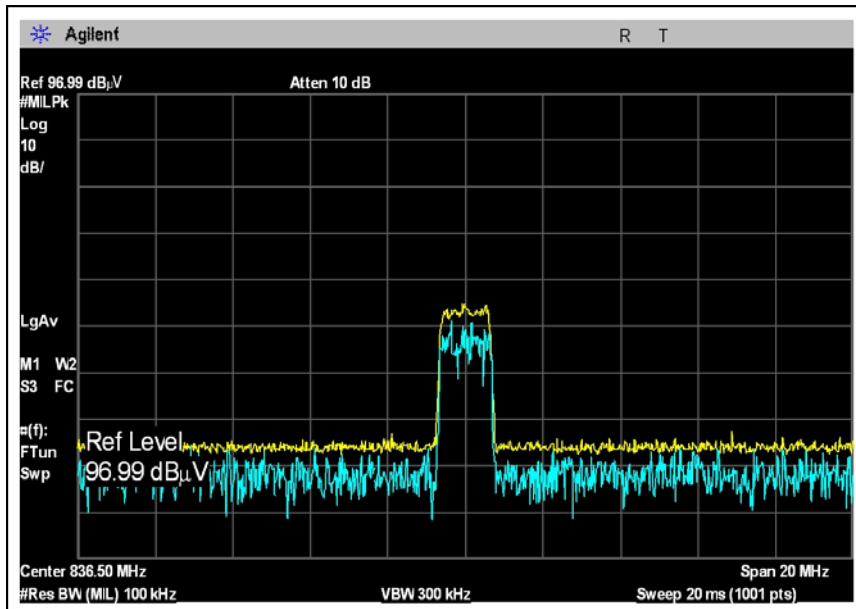
OUTPUT PLOT DOWNLINK - GSM MID CHANNEL



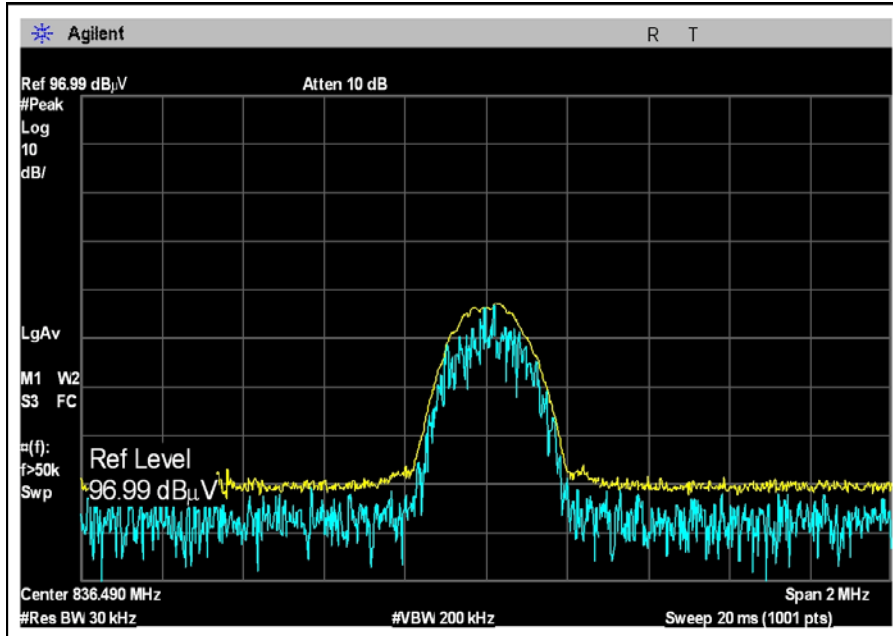
OUTPUT PLOT DOWNLINK - WCDMA MID CHANNEL



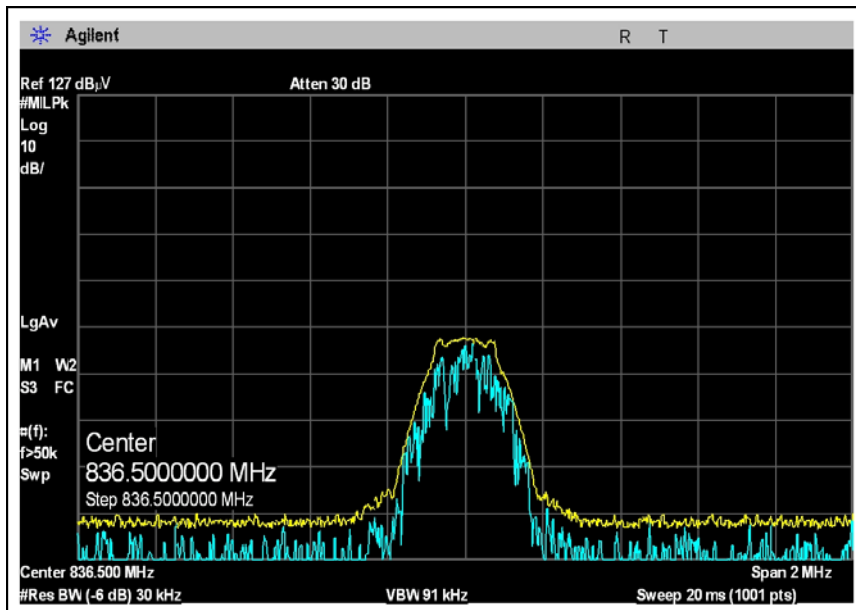
INPUT PLOT UPLINK - CDMA MID CHANNEL



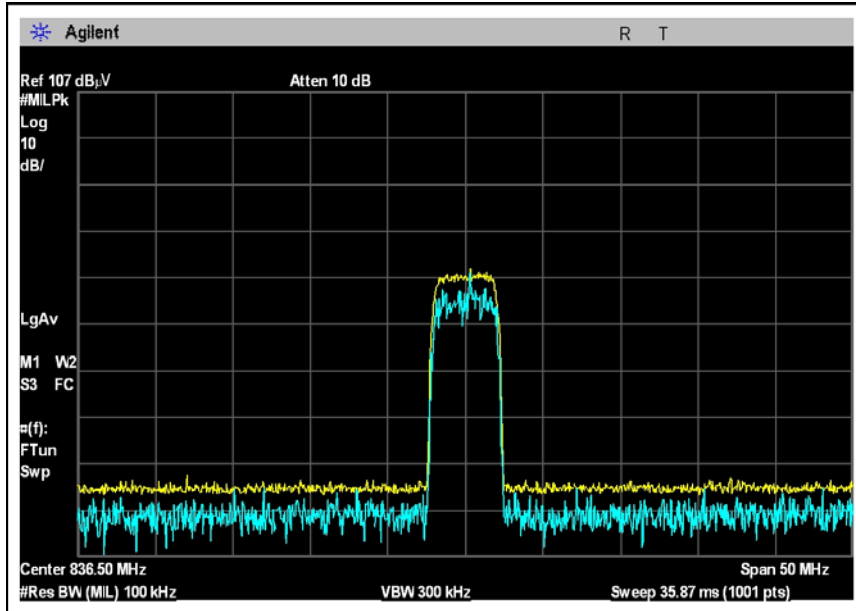
INPUT PLOT UPLINK - EDGE MID CHANNEL



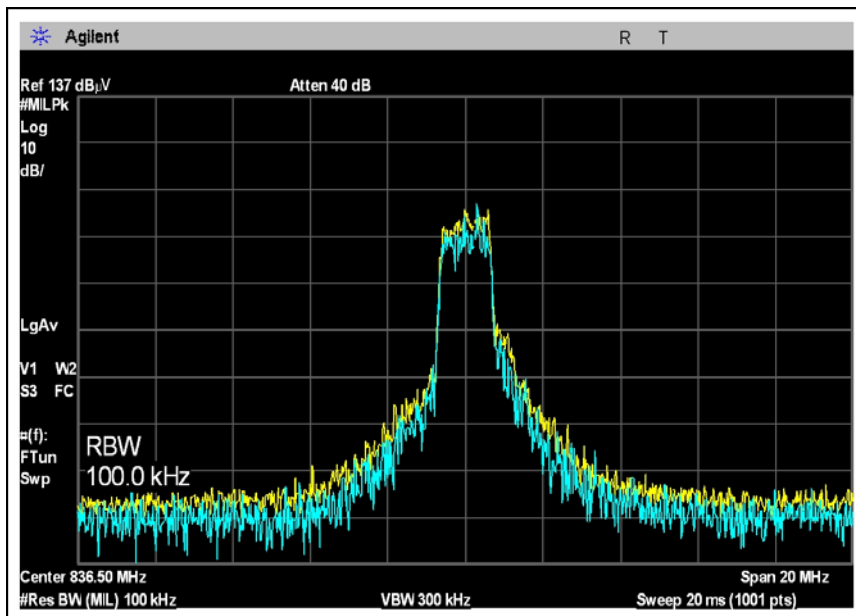
INPUT PLOT UPLINK - GSM MID CHANNEL



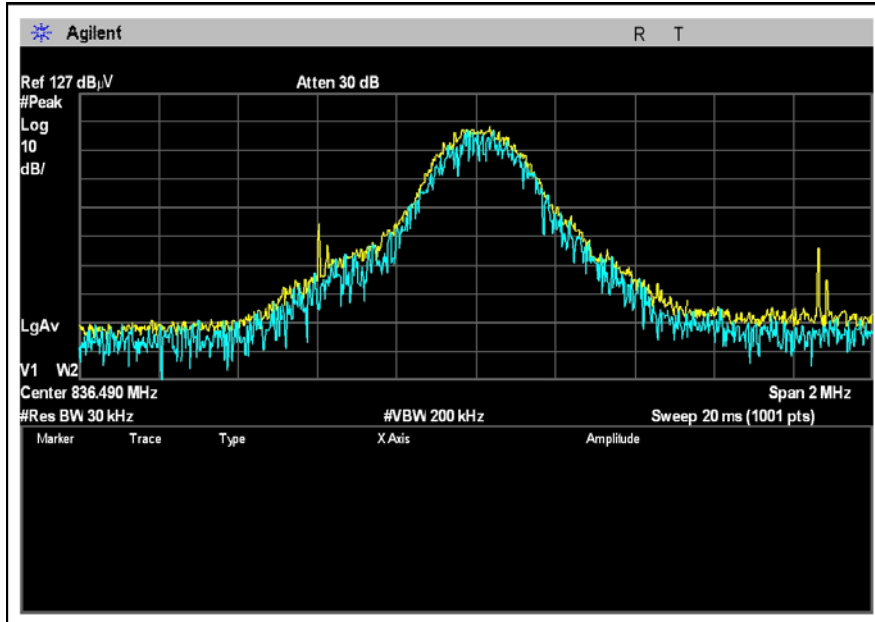
INPUT PLOT UPLINK - WCDMA MID CHANNEL



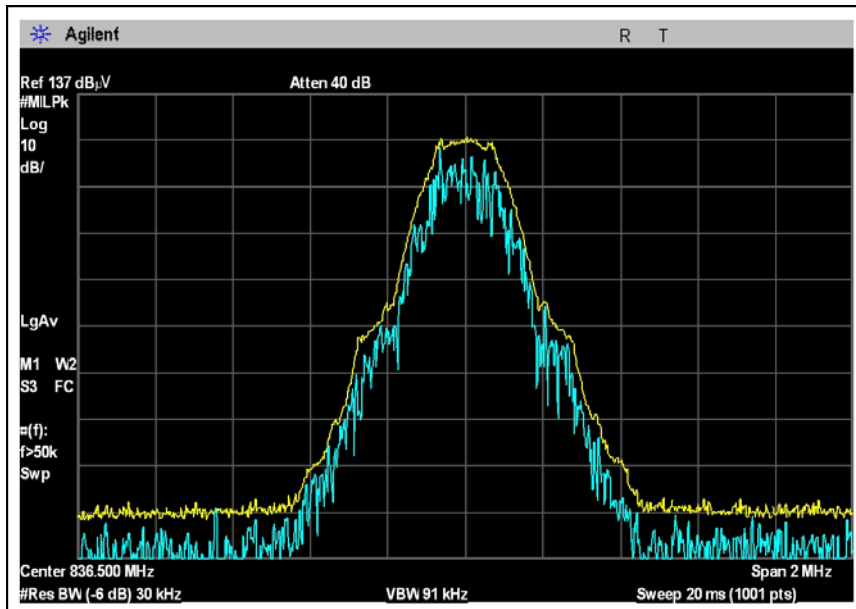
OUTPUT PLOT UPLINK - CDMA MID CHANNEL



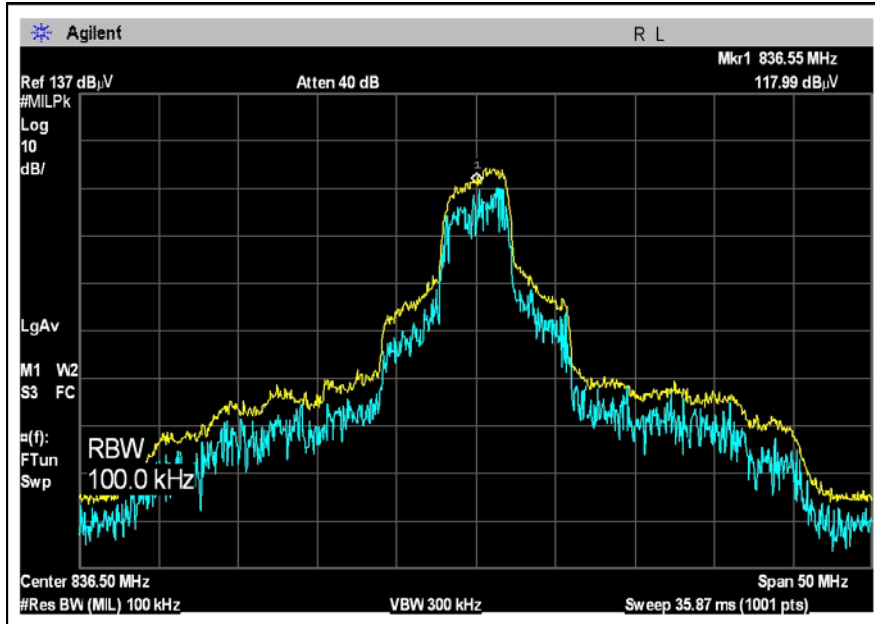
OUTPUT PLOT UPLINK - EDGE MID CHANNEL



OUTPUT PLOT UPLINK - GSM MID CHANNEL

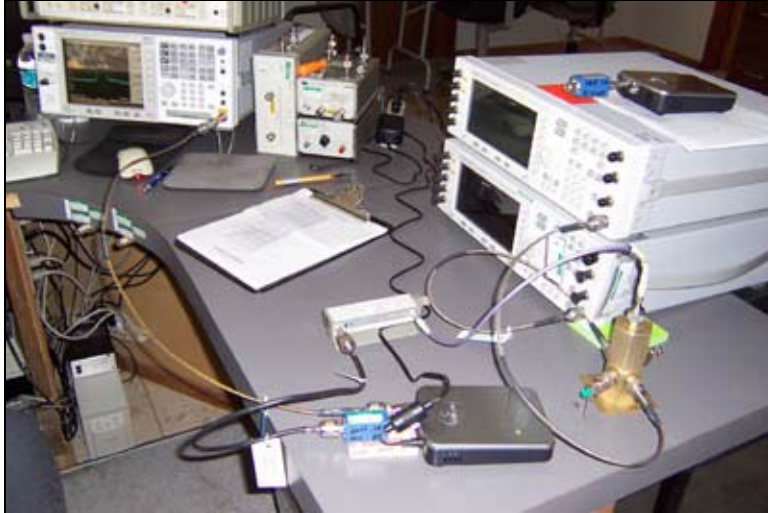


OUTPUT PLOT UPLINK - WCDMA MID CHANNEL



FCC 2.1051- INTERMODULATION ATTENUATION

Test Setup Photos



Test Data

Test Location: CKC Laboratories, Inc. • 5046 Sierra Pines Dr. • Mariposa, CA 95338 • 209 966-5240

Customer: **Wilson Electronics**
 Specification: **FCC 22.917**
 Work Order #: **88636** Date: 11/3/2008
 Test Type: **Maximized Emissions** Time: 15:26:16
 Equipment: **Signal Boost In-Building Wireless Cellular/PCS Amplifier** Sequence#: 2
 Manufacturer: Wilson Electronics Tested By: Mike Wilkinson
 Model: 271247-50
 S/N: 80124799021181716

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/03/2007	01/03/2009	02660
Cable 2' 40 GHz Astrolab	NA	01/15/2008	01/15/2010	AN03008
Weinchel 10dB attenuator	C8597	11/30/2006	11/30/2008	P02139

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Signal Boost In-Building Wireless Cellular/PCS Amplifier*	Wilson Electronics	271247-50	80124799021181716

Support Devices:

Function	Manufacturer	Model #	S/N
Signal Generator	Agilent	E4437B	MY41000126
Signal Generator	Agilent	E4437B	US39260577
Power Supply	Wilson	HK-B18-A06	None
Splitter, 4-Way	Motorola	None	ANP01314
Step Attenuator	HP	8494B	AN02475

Test Conditions / Notes:

This is an in-building, dual-band bi-directional amplifier for enhancing the range of cell phones in-building environments. EUT operating frequency ranges are 824-849 MHz and 1850-1910 MHz for uplink path and 869-894 MHz and 1930-1990 MHz for downlink path. EUT is connected directly to a spectrum analyzer via suitable attenuation. Combined cable and attenuator insertion loss accounted for in the measurements were: 10.6 dB for the frequency range of 869 to 894 MHz. 10.6 dB for the frequency range of 824 to 849 MHz. Frequency Range Investigated: 9kHz - 20 GHz. Temperature: 22.3°C, Relative Humidity: 35%. RBW=100kHz.

Transducer Legend:

--

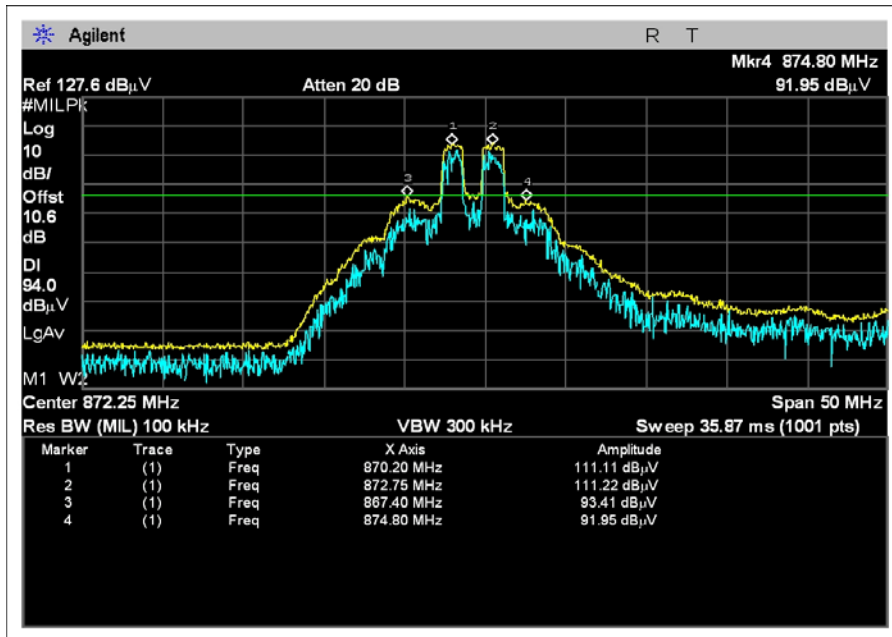
Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	dB	dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	850.440M	93.9					+0.0	93.9	94.0	-0.1	None
									UL-HIGH END-CDMA		
2	891.600M	93.9					+0.0	93.9	94.0	-0.1	None
									DL-LOW END - WCDMA		

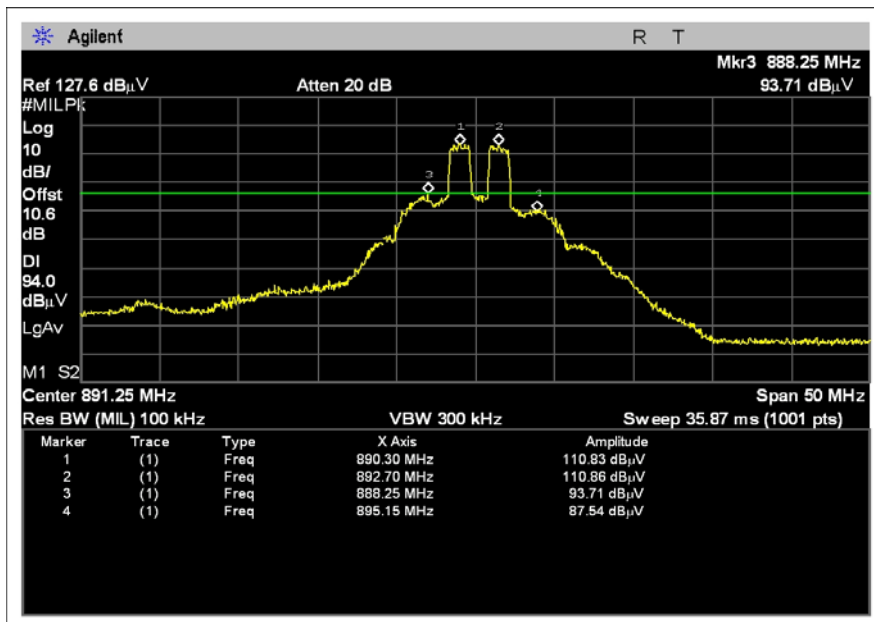
3	888.250M	93.7	+0.0	93.7	94.0	-0.3	None
					DL-HIGH END- CDMA		
4	871.600M	93.7	+0.0	93.7	94.0	-0.3	None
					DL-HIGH END- WCDMA		
5	870.000M	93.6	+0.0	93.6	94.0	-0.4	None
					DL-LOW END- EDGE		
6	825.220M	93.4	+0.0	93.4	94.0	-0.6	None
					UL-LOW END- GSM		
7	867.400M	93.4	+0.0	93.4	94.0	-0.6	None
					DL-LOW END- CDMA		
8	852.500M	93.3	+0.0	93.3	94.0	-0.7	None
					UL-HIGH END- WCDMA		
9	816.800M	93.3	+0.0	93.3	94.0	-0.7	None
					UL-LOW END- WCDMA		
10	892.965M	93.4	+0.0	93.4	94.0	-0.7	None
					DL-HIGH END- EDGE		
11	824.430M	93.2	+0.0	93.2	94.0	-0.8	None
					UL-LOW END- EDGE		
12	849.000M	93.2	+0.0	93.2	94.0	-0.8	None
					UL-HIGH END- GSM		
13	870.465M	93.0	+0.0	93.0	94.0	-1.0	None
					DL-LOW END- GSM		
14	894.080M	93.0	+0.0	93.0	94.0	-1.1	None
					DL-HIGH END- GSM		
15	822.640M	92.3	+0.0	92.3	94.0	-1.7	None
					UL-LOW END- CDMA		

Test Plots

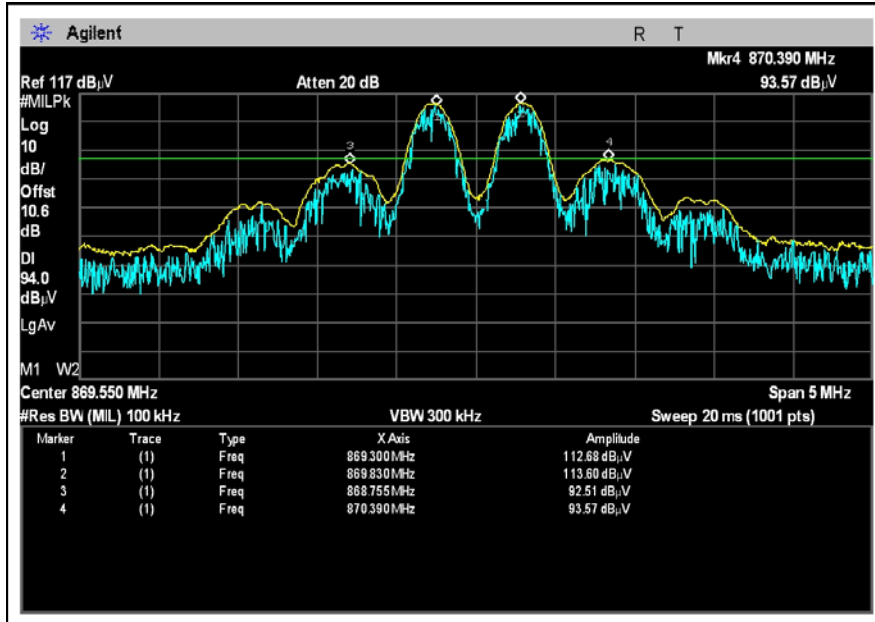
INTERMODULATION DOWNLINK - CDMA LOW CHANNEL



INTERMODULATION DOWNLINK - CDMA HIGH CHANNEL



INTERMODULATION DOWNLINK - EDGE LOW CHANNEL



INTERMODULATION DOWNLINK - EDGE HIGH CHANNEL

