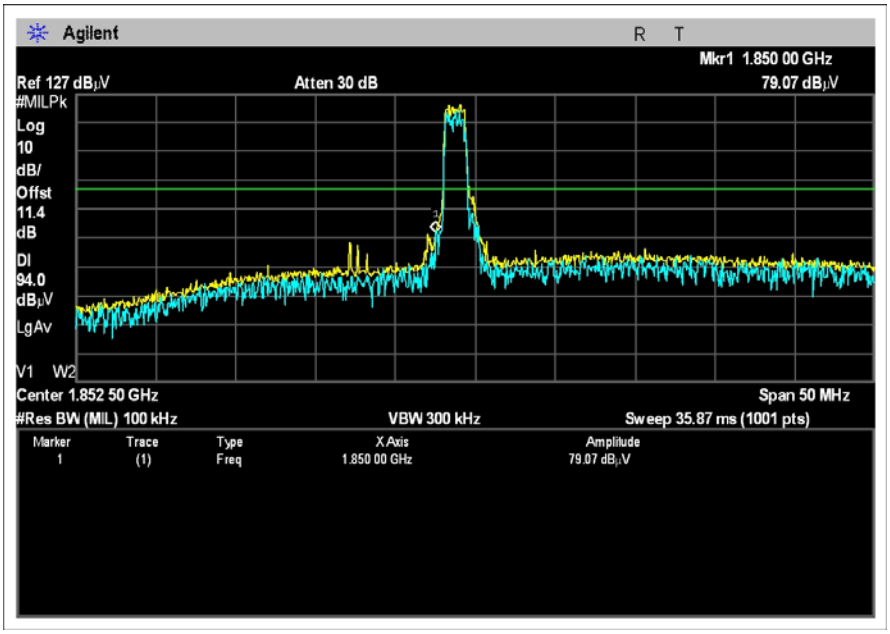
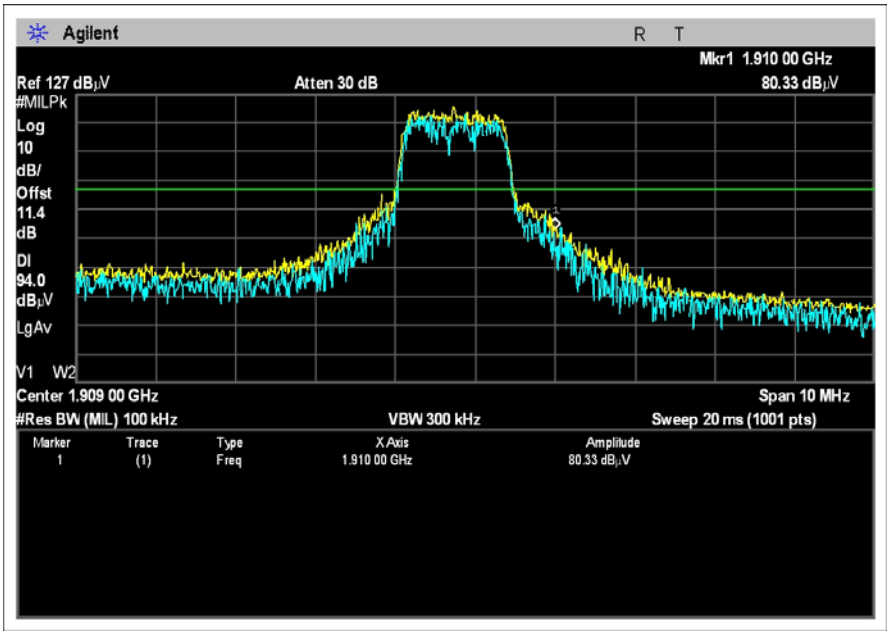
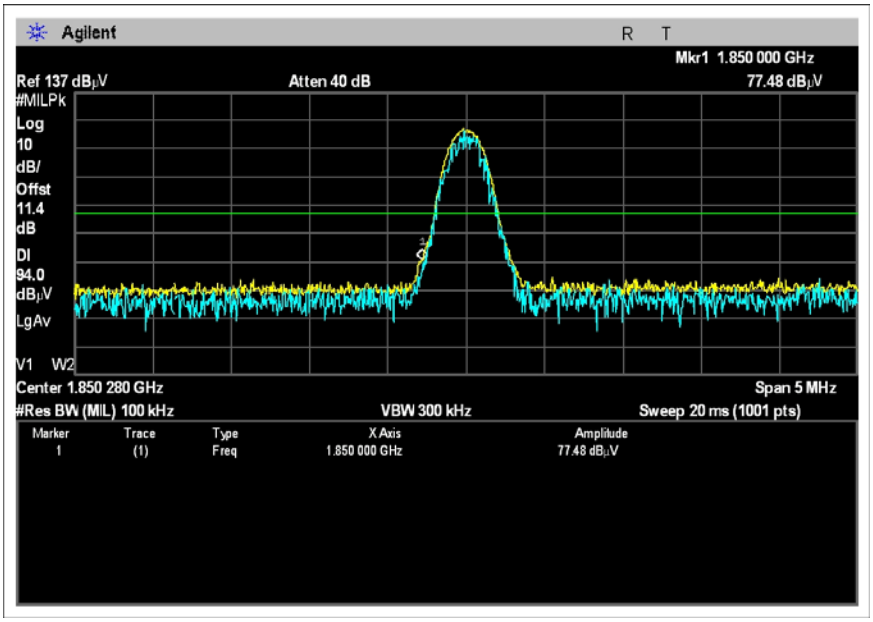
BLOCK EDGE UPLINK - CDMA LOW CHANNEL



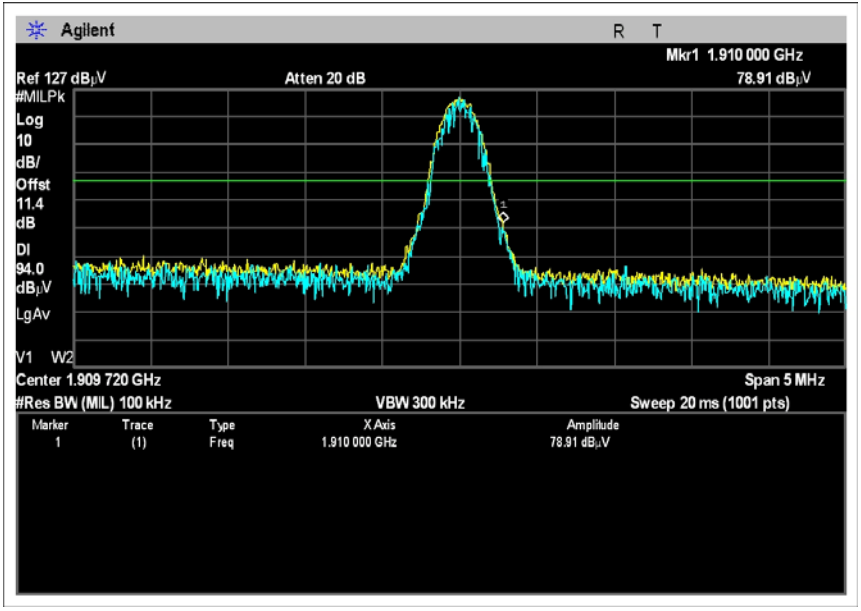
BLOCK EDGE UPLINK - CDMA HIGH CHANNEL



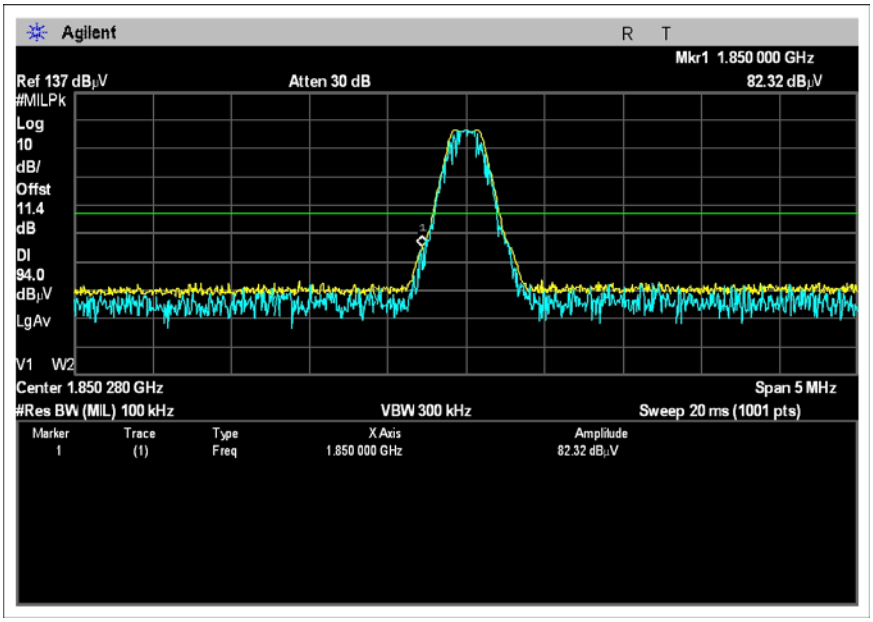
BLOCK EDGE UPLINK - EDGE LOW CHANNEL



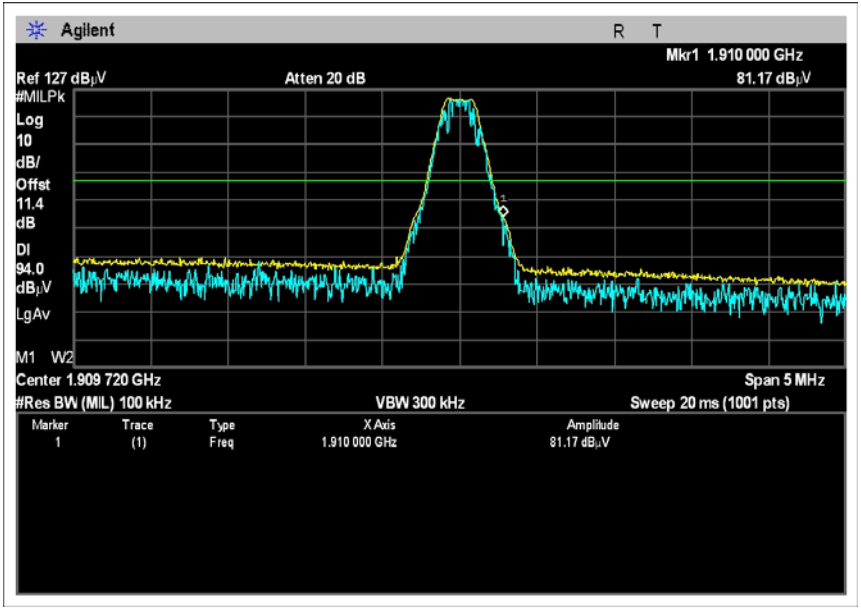
BLOCK EDGE UPLINK - EDGE HIGH CHANNEL



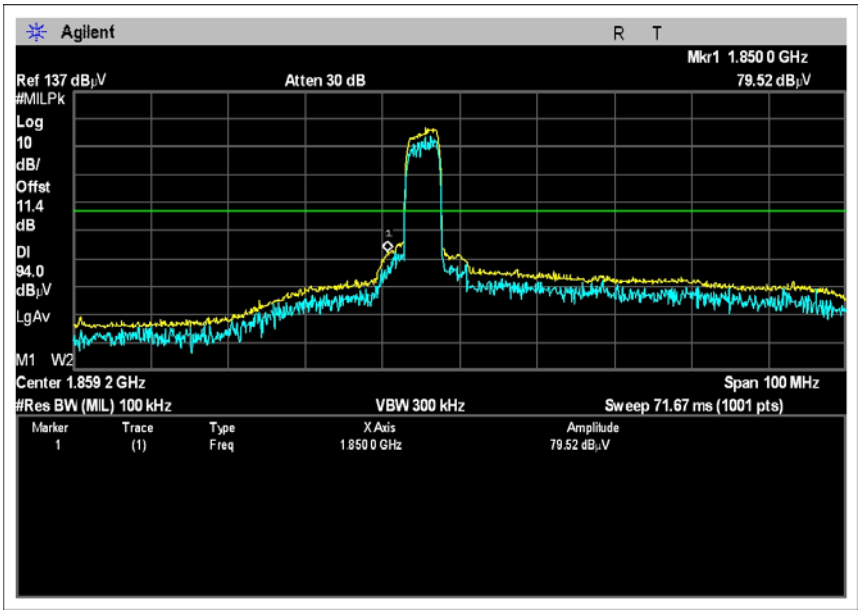
BLOCK EDGE UPLINK - GSM LOW CHANNEL



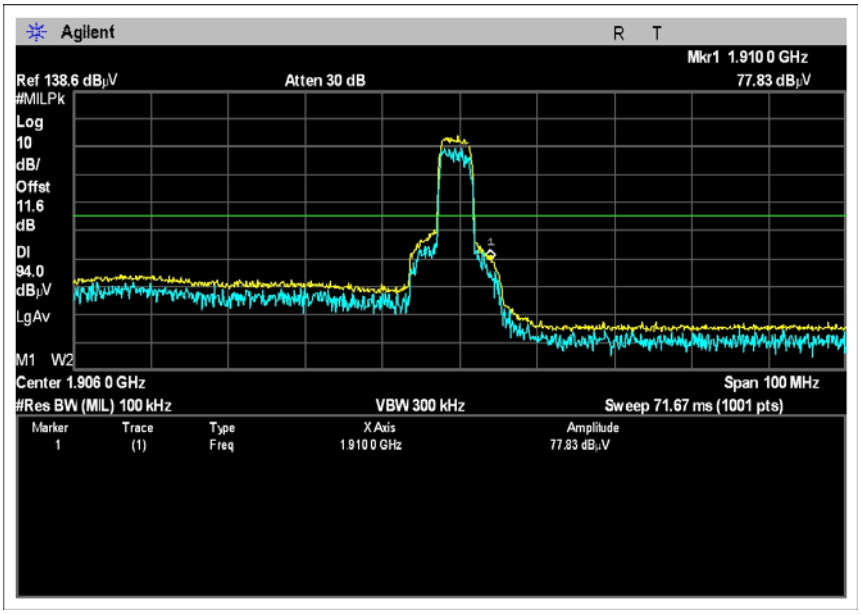
BLOCK EDGE UPLINK - GSM HIGH CHANNEL



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

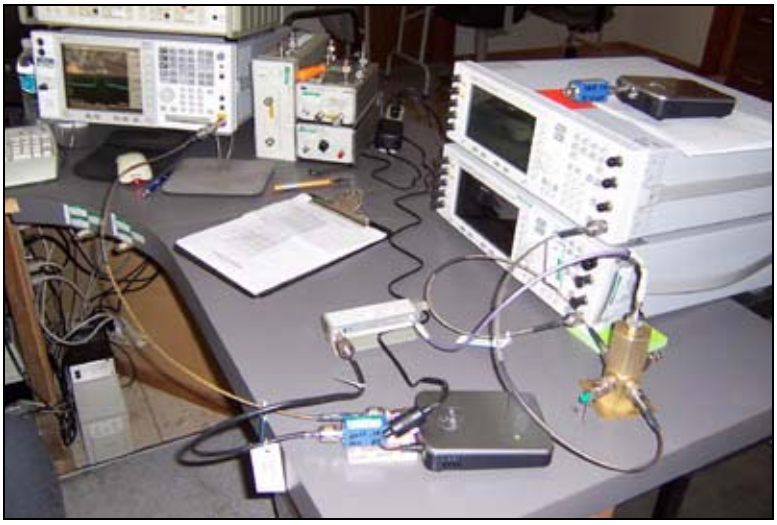
Support Devices:

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:

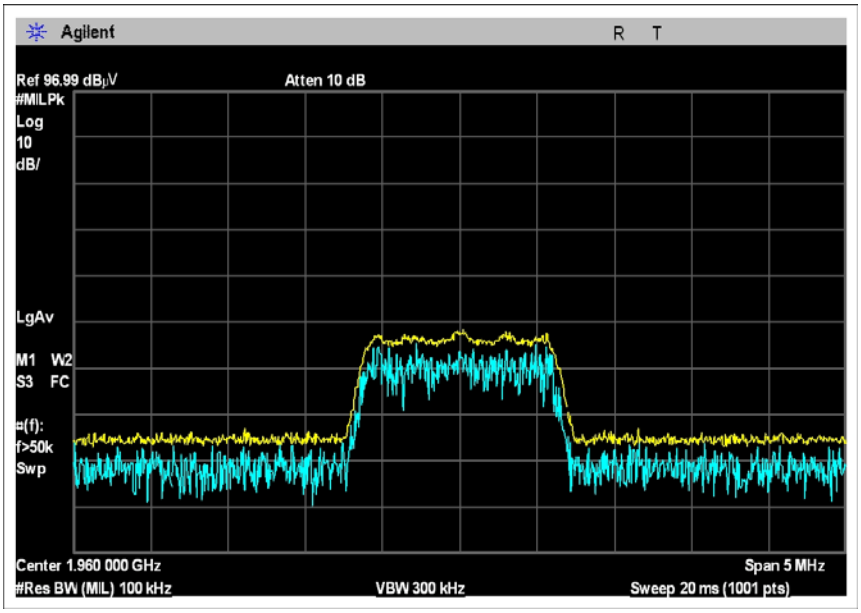
This is an in-building, dual-band bi-directional amplifier for enhancing the range of cell phones in-building environments. EUT operating frequency ranges are 824-849 MHz and 1850-1910 MHz for uplink path and 869-894 MHz and 1930-1990 MHz for downlink path. EUT is connected directly to a spectrum analyzer 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: 22.3ºC, Relative Humidity: 35%.

Test Setup Photos

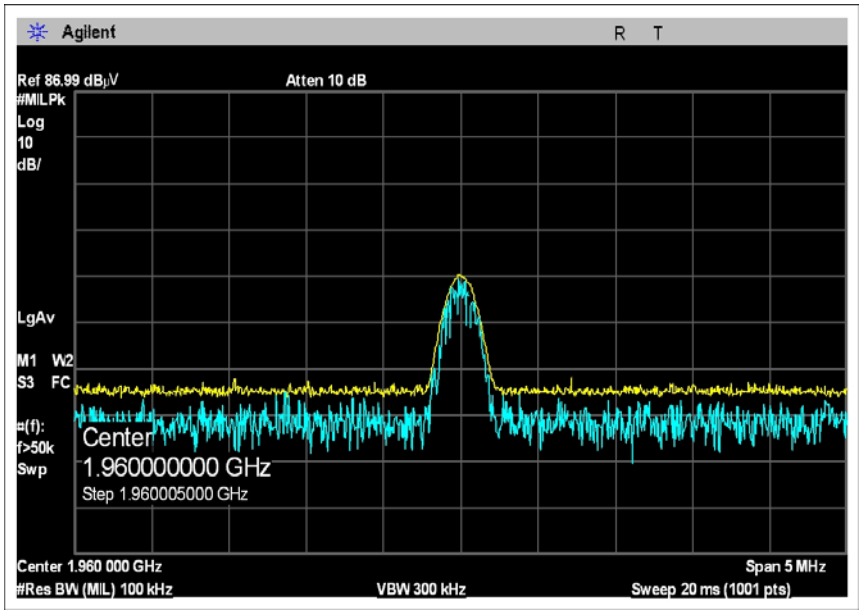


Test Plots

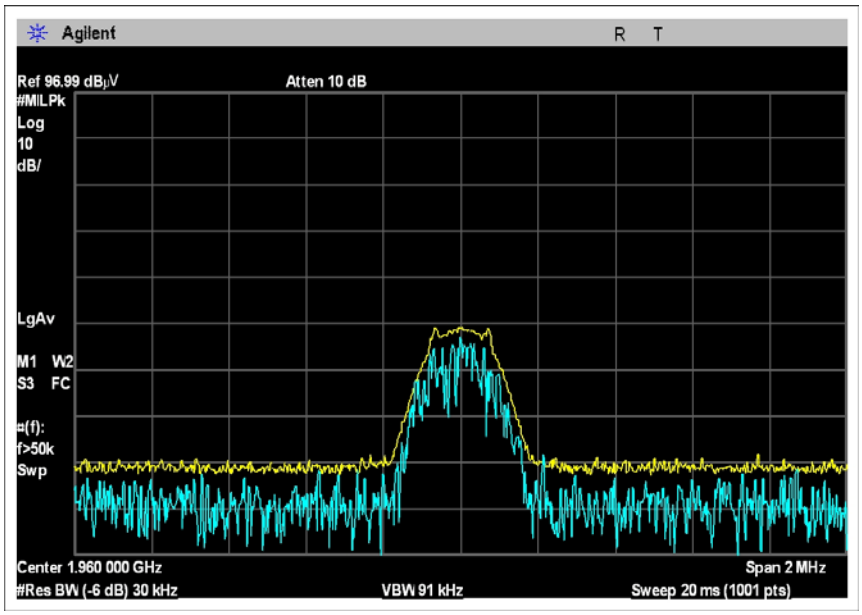
INPUT PLOT DOWNLINK - CDMA MID CHANNEL



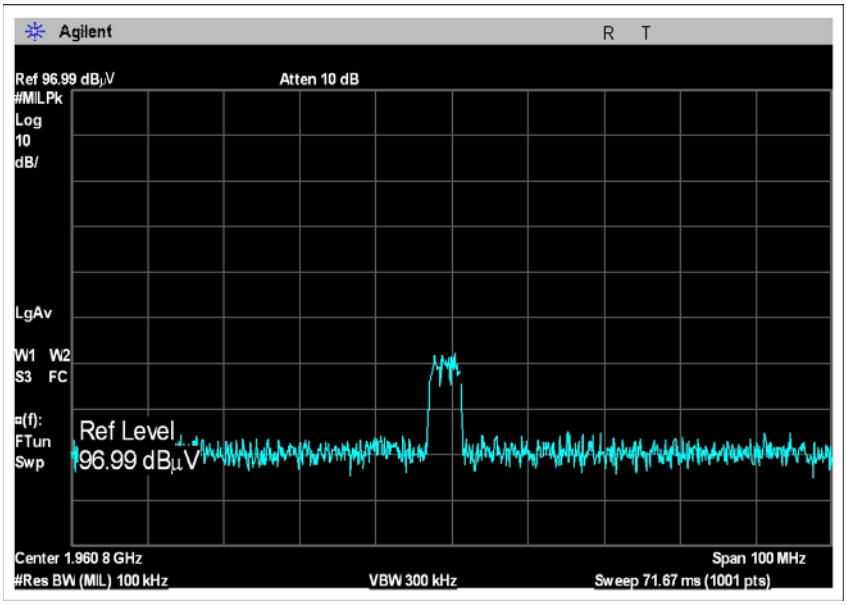
INPUT PLOT DOWNLINK - EDGE MID CHANNEL



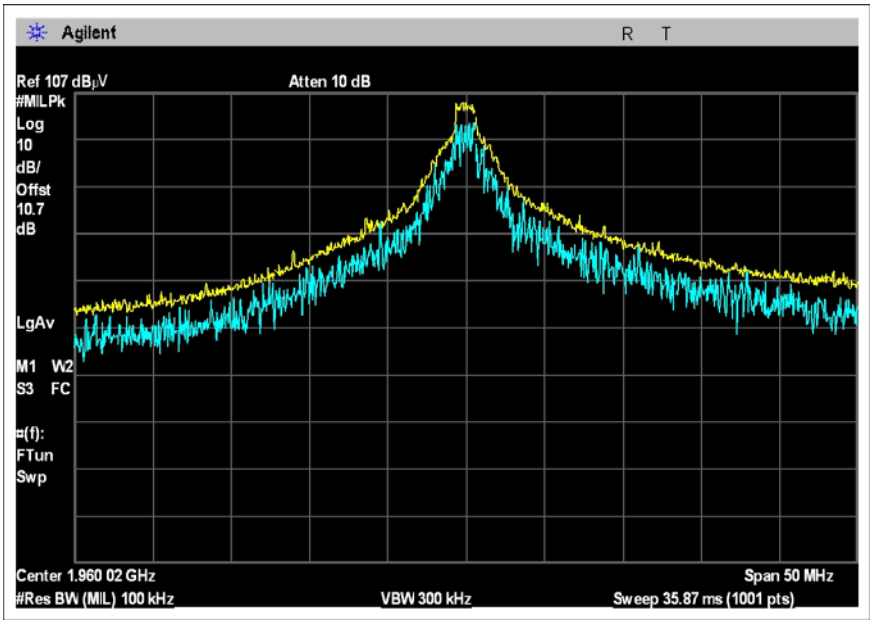
INPUT PLOT DOWNLINK - GSM MID CHANNEL



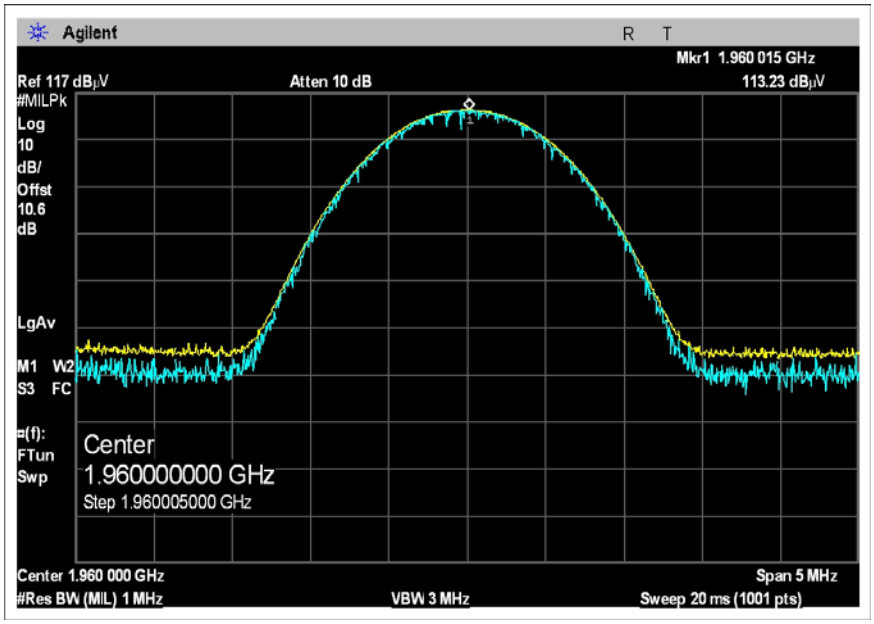
INPUT PLOT DOWNLINK - WCDMA MID CHANNEL



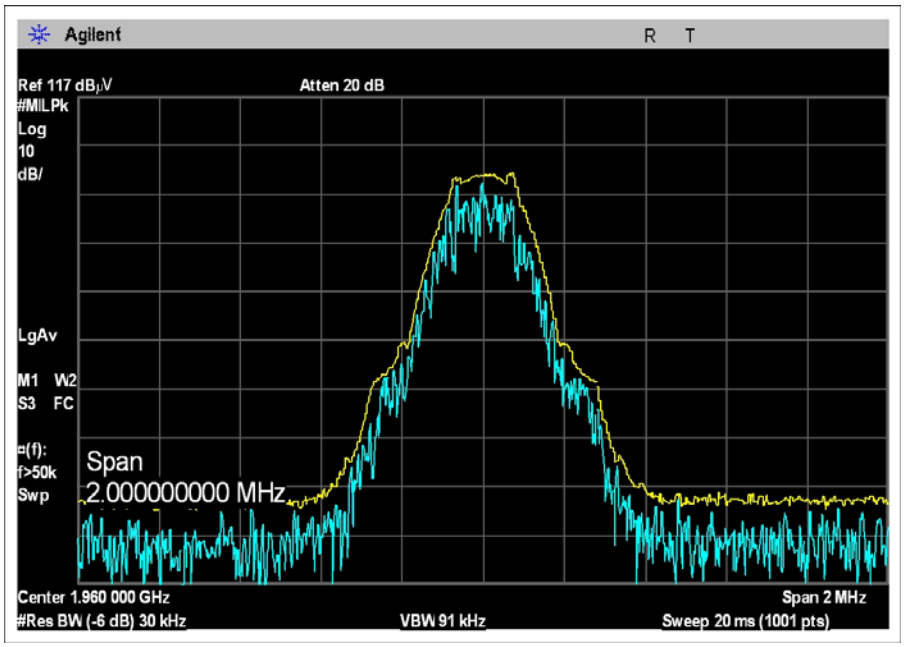
OUTPUT PLOT DOWNLINK - CDMA MID CHANNEL



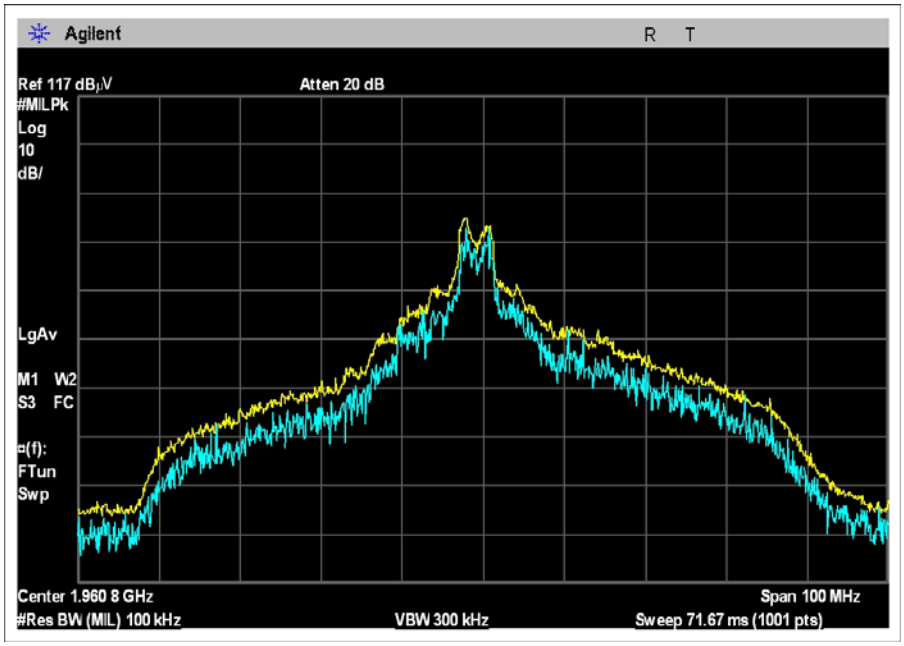
OUTPUT PLOT DOWNLINK - EDGE MID CHANNEL



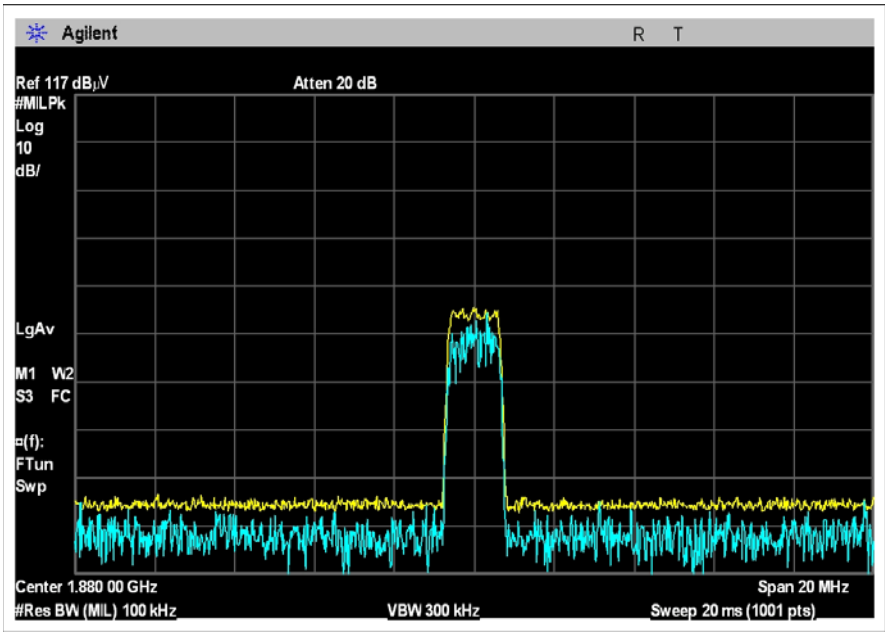
OUTPUT PLOT DOWNLINK - GSM MID CHANNEL



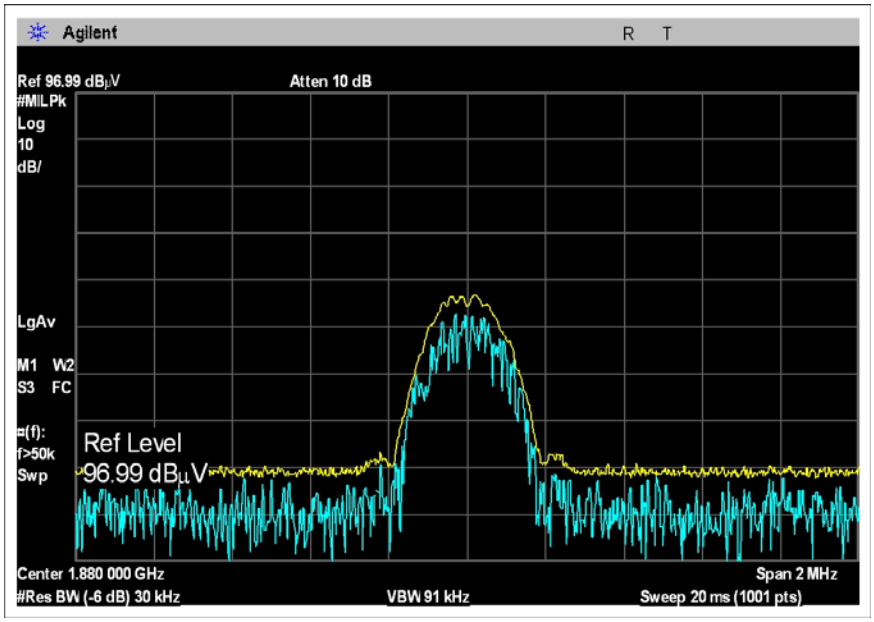
OUTPUT PLOT DOWNLINK - WCDMA MID CHANNEL



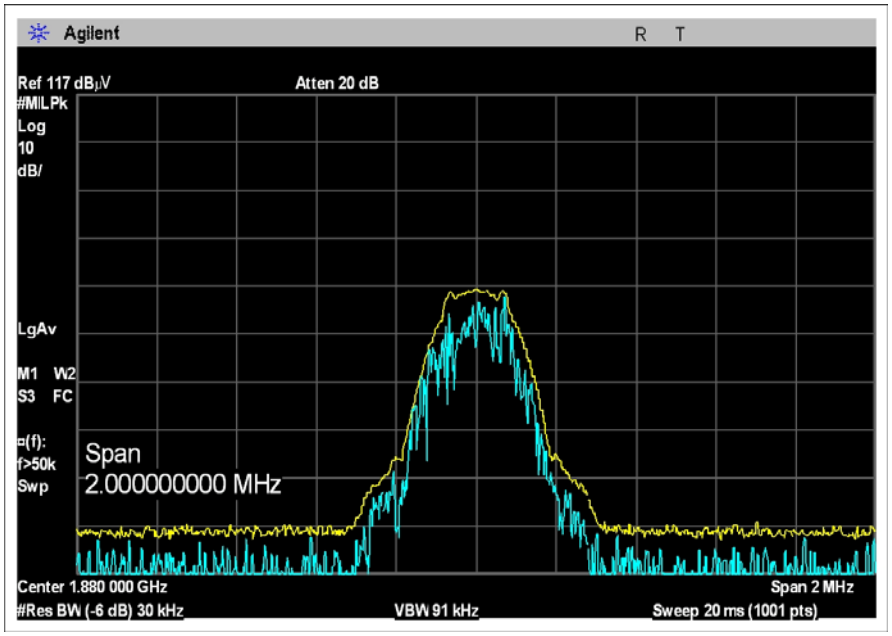
INPUT PLOT UPLINK - CDMA MID CHANNEL



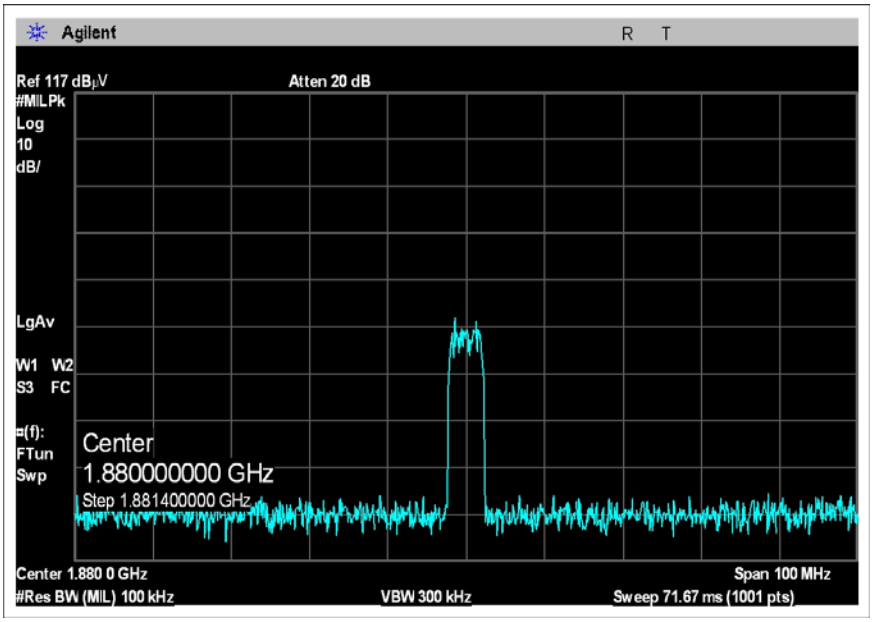
INPUT PLOT UPLINK - EDGE MID CHANNEL



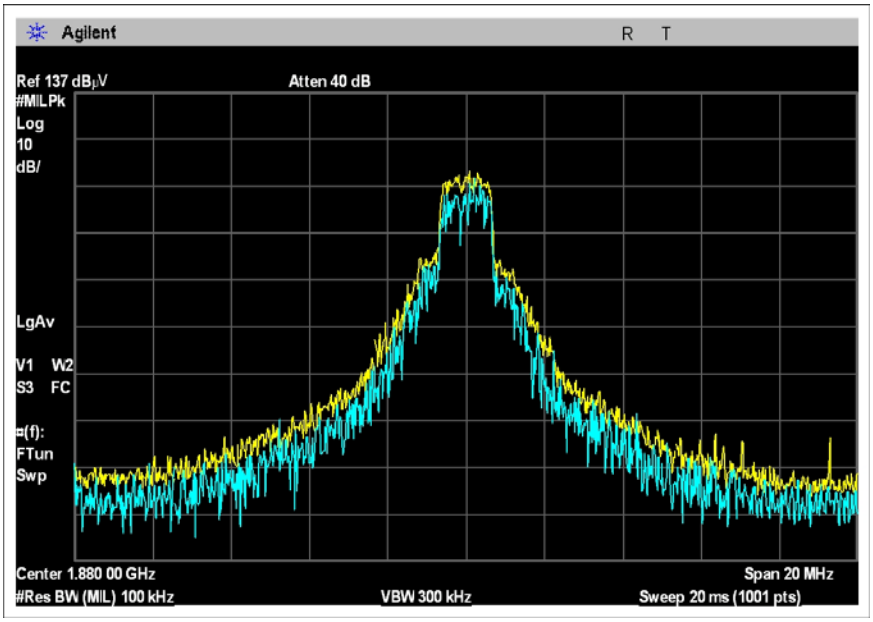
INPUT PLOT UPLINK - GSM MID CHANNEL



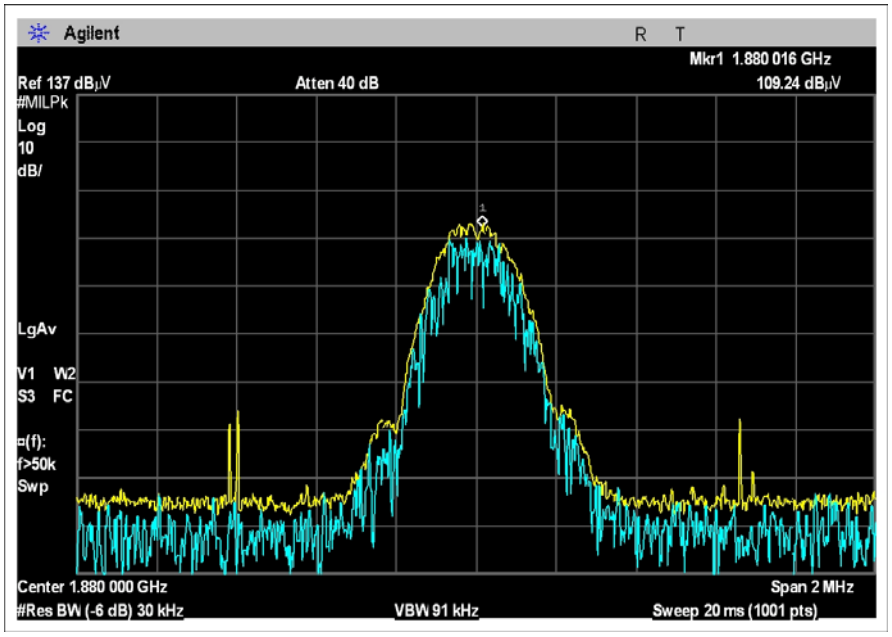
INPUT PLOT UPLINK - WCDMA MID CHANNEL



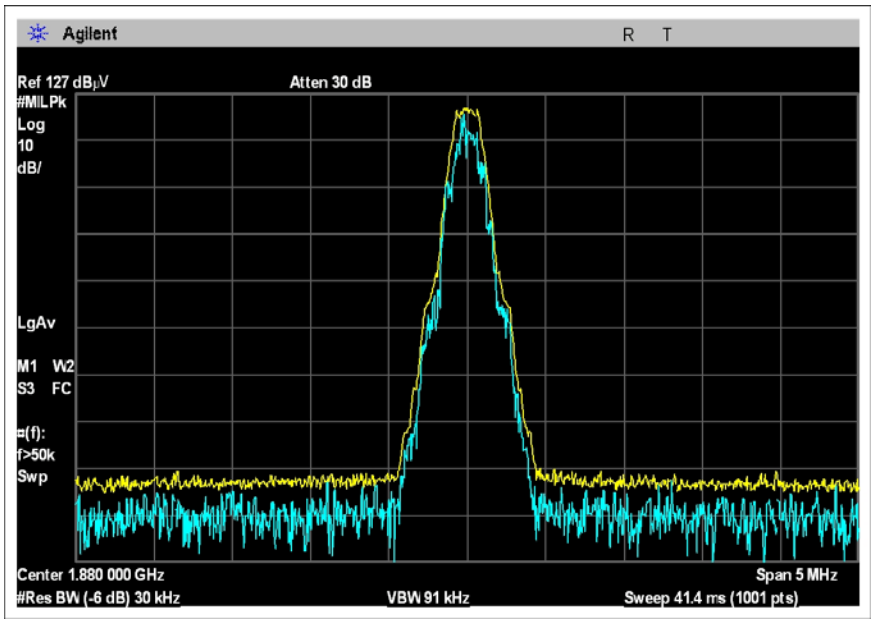
OUTPUT PLOT UPLINK - CDMA MID CHANNEL



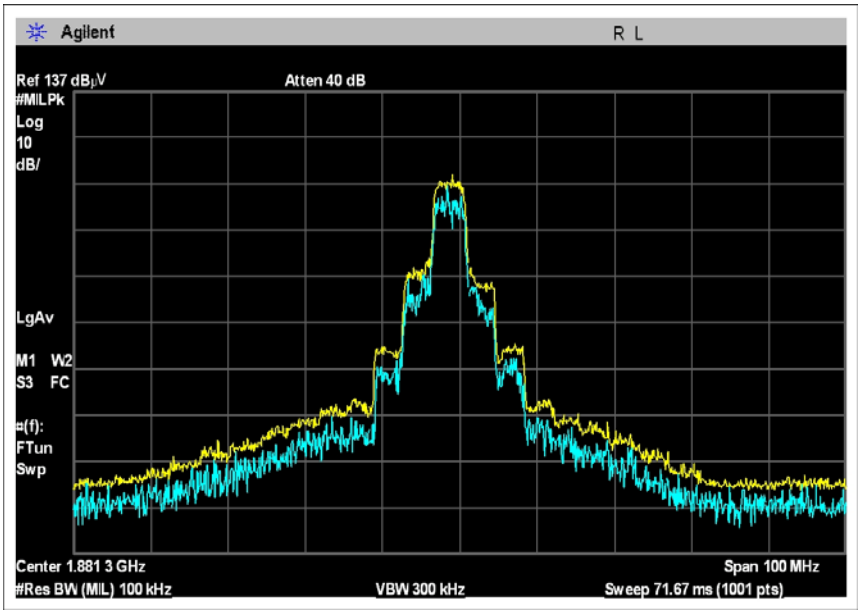
OUTPUT PLOT UPLINK - EDGE MID CHANNEL



OUTPUT PLOT UPLINK - GSM MID CHANNEL

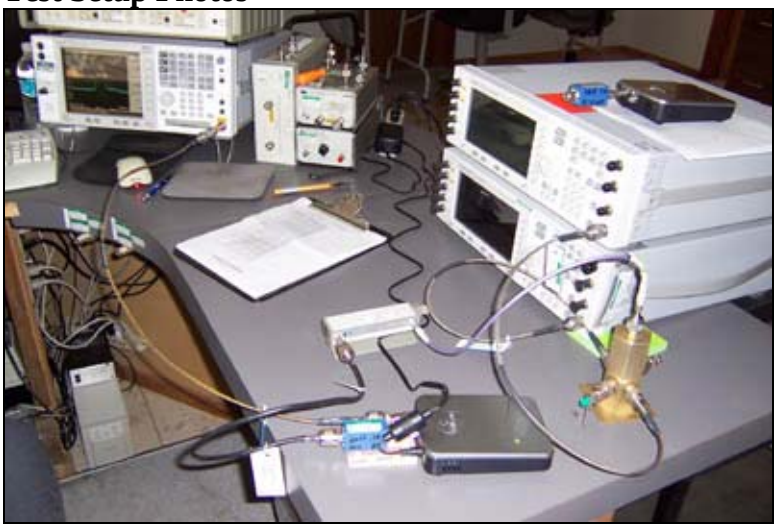


OUTPUT PLOT UPLINK - WCDMA MID CHANNEL



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 24.238**
Work Order #: **88636** Date: 10/31/2008
Test Type: **Maximized Emissions** Time: 08:58:45
Equipment: **Signal Boost In-Building Wireless Cellular/PCS Amplifier** Sequence#: 6
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
Wilson 50-75 Ohm Adapter	None	10/14/2008	10/14/2010	C00013

***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, 75 Ohm adapter and attenuator insertion loss accounted for in the measurements were: 10.6 dB for the frequency range of 869 to 894 MHz & 1930 to 1990 MHz. 11.4 dB for the frequency range of 842 to 849 MHz & 1850 to 1910 MHz. Freqency Range Investigated: 9kHz - 20 GHz. Temperature: 22.3ºC, Relative Humidity: 35%. RBW=100kHz.

Transducer Legend:

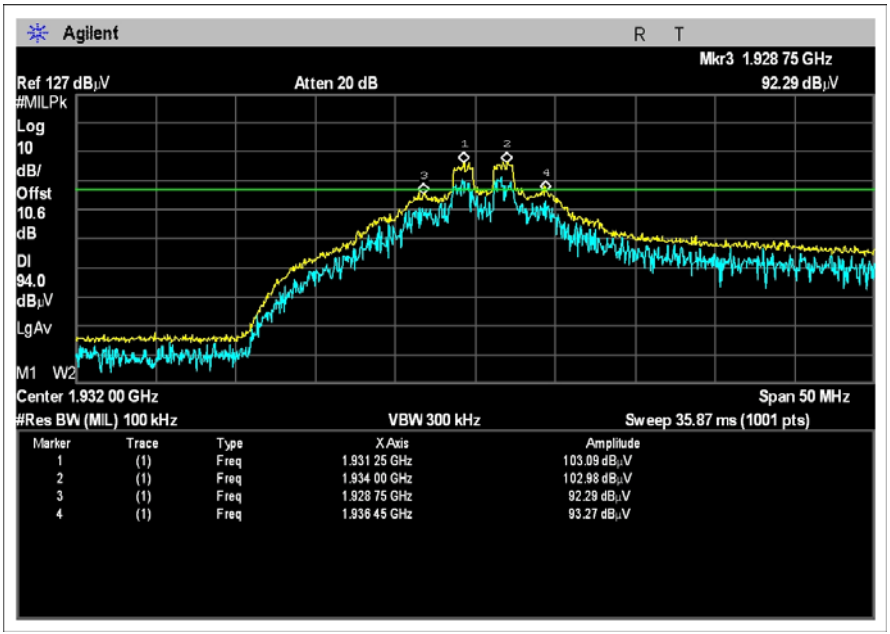
Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dBµV	dB	dB	dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	1981.100M	93.8					+0.0	93.8	94.0 DL-HIGH-CDMA	-0.2	None
2	1910.240M	93.6					+0.0	93.6	94.0 UL-HIGH-EDGE	-0.4	None

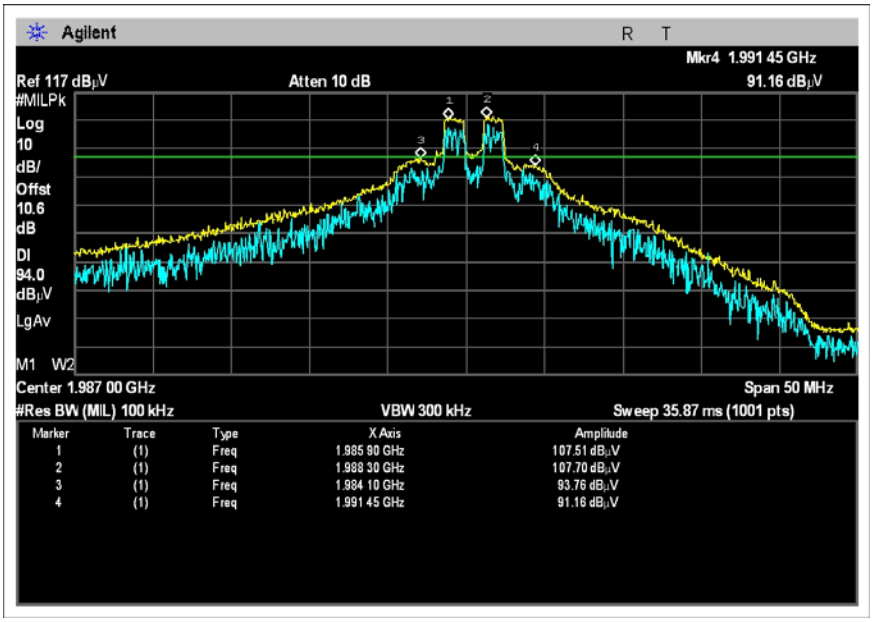
3	1883.300M	93.5	+0.0	93.5	94.0 UL-HIGH-WCDMA	-0.5	None
4	1971.800M	93.5	+0.0	93.5	94.0 UL-LOW-WCDMA	-0.5	None
5	1929.920M	93.4	+0.0	93.4	94.0 DL-LOW-GSM	-0.6	None
6	1851.420M	93.3	+0.0	93.3	94.0 UL-LOW-EDGE	-0.7	None
7	1903.700M	93.3	+0.0	93.3	94.0 UL-HIGH-CDMA	-0.7	None
8	1936.450M	93.3	+0.0	93.3	94.0 DL-LOW-CDMA	-0.7	None
9	1851.210M	93.1	+0.0	93.1	94.0 UL-LOW-GSM	-0.9	None
10	1953.200M	93.0	+0.0	93.0	94.0 DL-LOW-WCDMA	-1.0	None
11	1929.740M	92.9	+0.0	92.9	94.0 DL-LOW-EDGE	-1.1	None
12	1910.090M	92.6	+0.0	92.6	94.0 UL-HIGH-GSM	-1.4	None
13	1848.550M	92.1	+0.0	92.1	94.0 UL-LOW-CDMA	-1.9	None
14	1988.670M	91.9	+0.0	91.9	94.0 DL-HIGH-GSM	-2.1	None
15	1969.200M	89.2	+0.0	89.2	94.0 DL-HIGH-WCDMA	-4.8	None

Test Plots

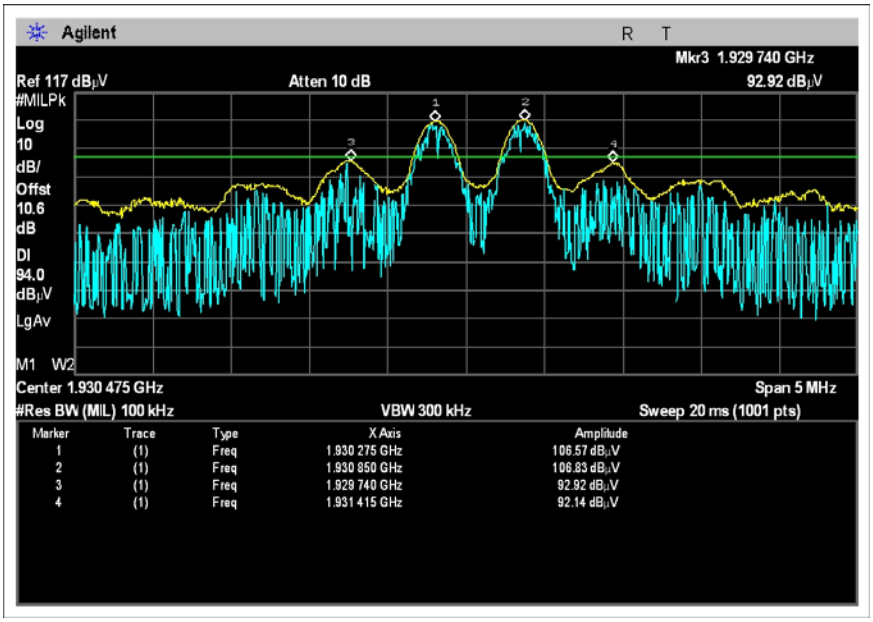
INTERMODULATION ATTENUATION DOWNLINK – CDMA LOW CHANNEL



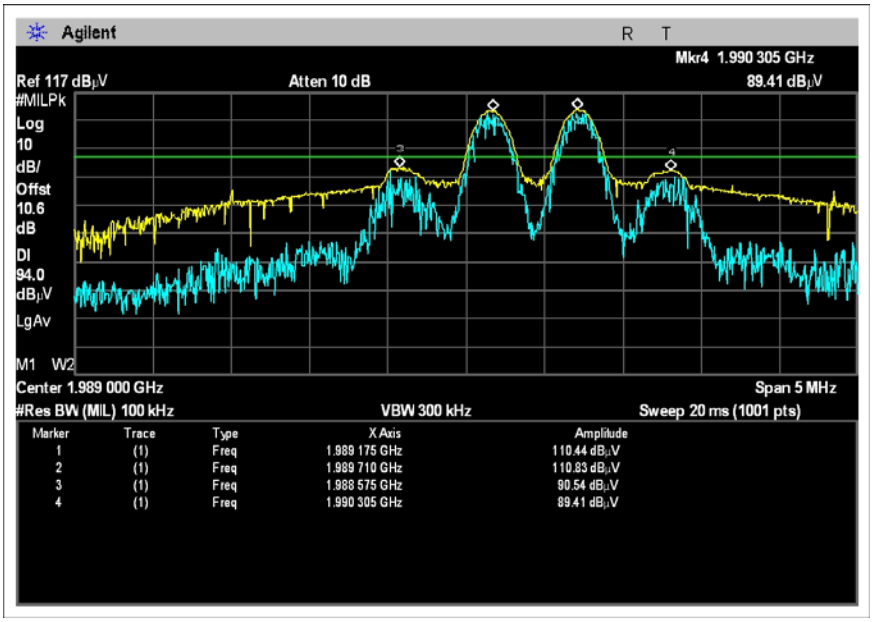
INTERMODULATION ATTENUATION DOWNLINK – CDMA HIGH CHANNEL



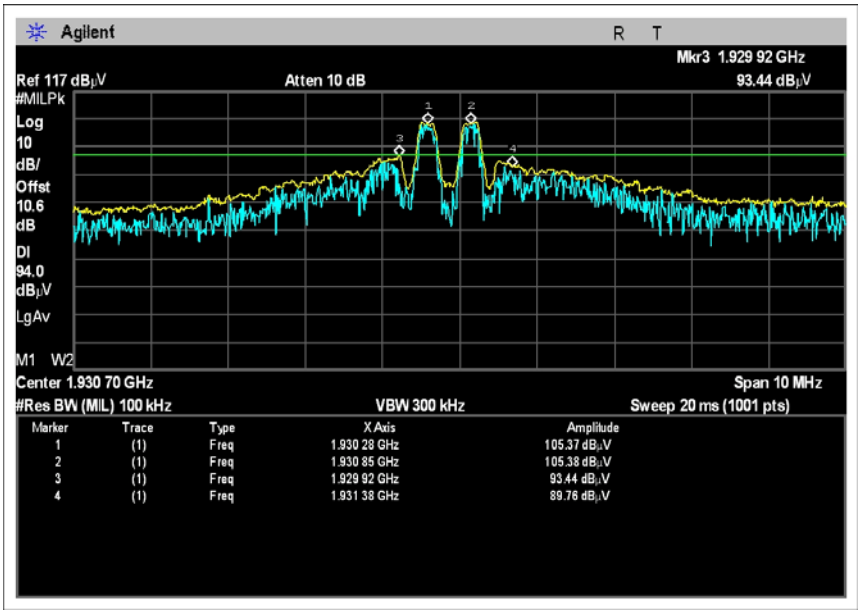
INTERMODULATION ATTENUATION DOWNLINK – EDGE LOW CHANNEL



INTERMODULATION ATTENUATION DOWNLINK – EDGE HIGH CHANNEL



INTERMODULATION ATTENUATION DOWNLINK – GSM LOW CHANNEL



INTERMODULATION ATTENUATION DOWNLINK – GSM HIGH CHANNEL