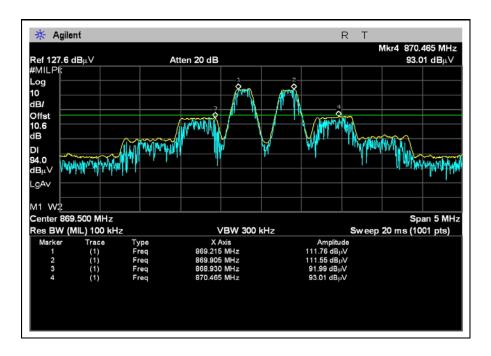
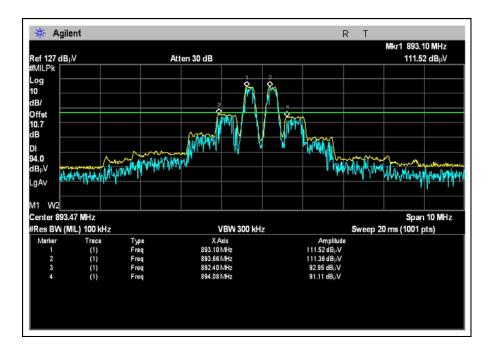


## INTERMODULATION DOWNLINK - GSM LOW CHANNEL



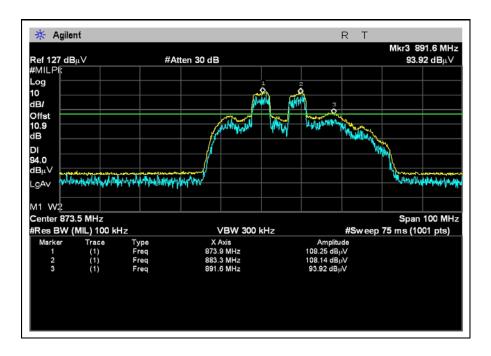
### INTERMODULATION DOWNLINK - GSM HIGH CHANNEL



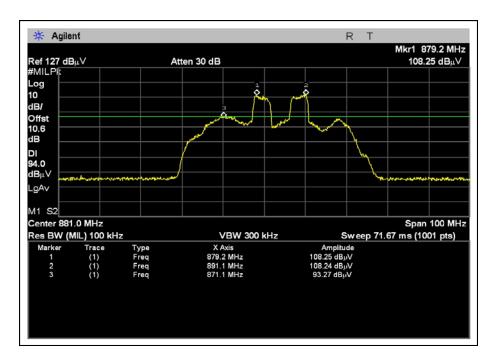
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## INTERMODULATION DOWNLINK - WCDMA LOW CHANNEL



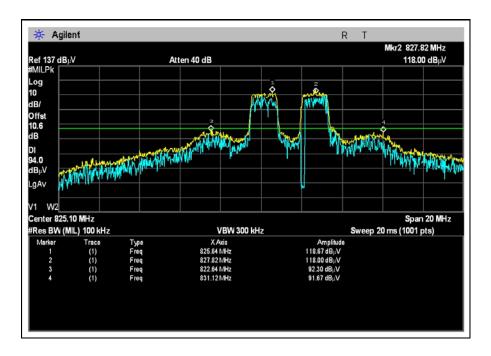
### INTERMODULATION DOWNLINK - WCDMA HIGH CHANNEL



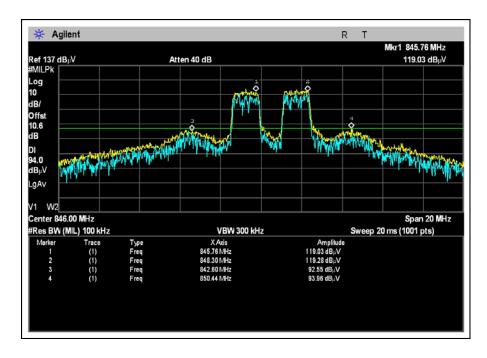
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## INTERMODULATION UPLINK - CDMA LOW CHANNEL



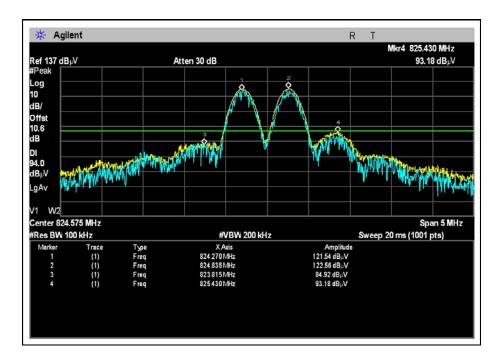
### INTERMODULATION UPLINK - CDMA HIGH CHANNEL



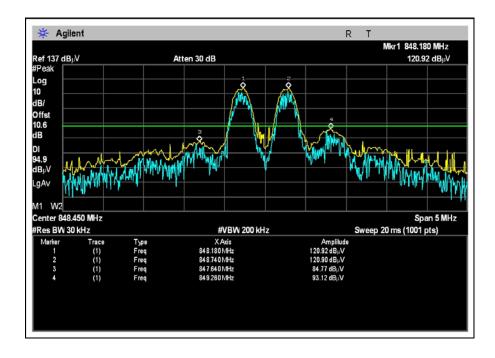
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## INTERMODULATION UPLINK - EDGE LOW CHANNEL



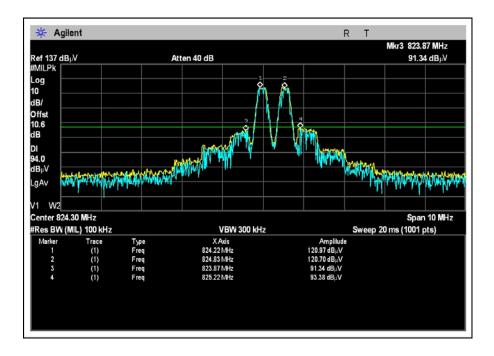
## INTERMODULATION UPLINK - EDGE HIGH CHANNEL



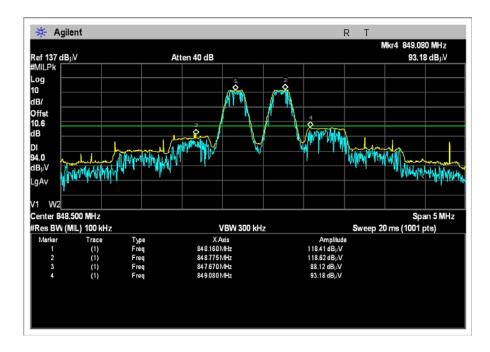
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## INTERMODULATION UPLINK - GSM LOW CHANNEL



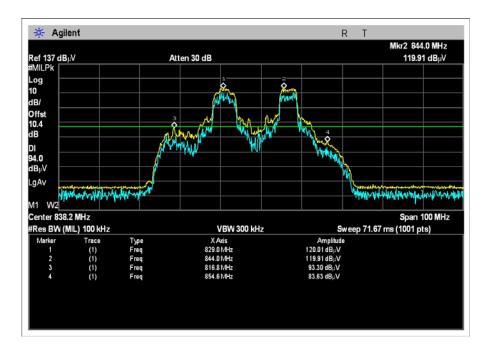
# INTERMODULATION UPLINK - GSM HIGH CHANNEL



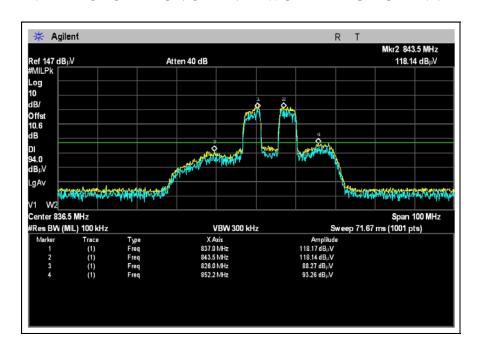
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## INTERMODULATION UPLINK - WCDMA LOW CHANNEL



## INTERMODULATION UPLINK - WCDMA HIGH CHANNEL



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## FCC 2.1051 – OUT OF BAND REJECTION

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	Wilson Electronics	271247-50	80124799021181716
Wireless Cellular/PCS			
Amplifier*			

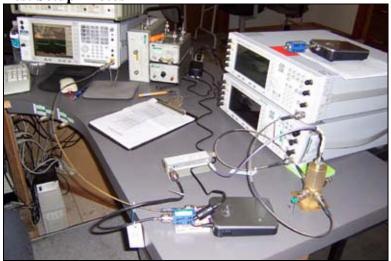
Support Devices:

Support 2 criters.			
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 out of band and passband spectrum characteristics. Frequency Range Investigated: See provided plots (frequency spectrum investigated up to three times the indicated span). Frequency Range Investigated: Carrier. Temperature: 22.3°C, Relative Humidity: 35%.

**Test Setup Photos** 

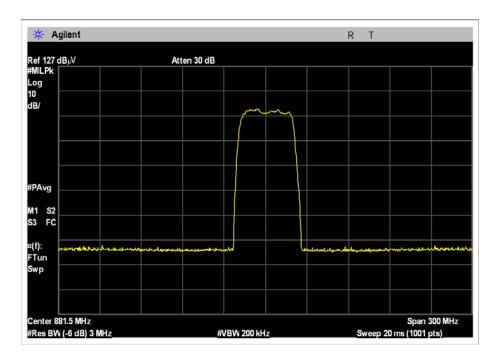


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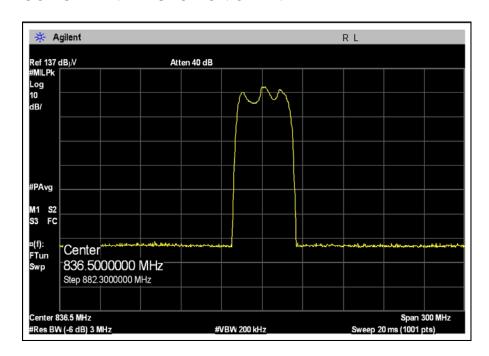


# **Test Plots**

## **OUT OF BAND REJECTION DOWNLINK**



# **OUT OF BAND REJECTION UPLINK**



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## RSS-131 - PASSBAND GAIN AND BANDWIDTH

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
Direct Connection	Wilson Electronics	2B1401	811401A1011128467
Cellular/PCS Amplifier w/			
GPS Bypass*			

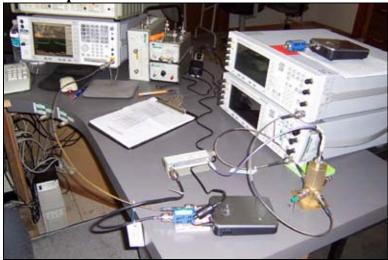
Support Devices:

Function	Manufacturer	Model #	S/N
DC Power Supply	Topward Electric	TPS-2000	920027
	Instruments Co., Ltd		
Signal Generator	Agilent	E4437B	MY41000126
Signal Generator	Gigatronics	1026	281701

#### 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. Temperature: 22.3°C, Relative Humidity: 35%. RBW=100kHz. Signal generator input signal used is CW and is swept to provide amplification and bandwidth plots. Amplifier Gain is measured from the maximum output level to the input signal level. The input signal level is adjusted 3dB below the point at which the amplifier attenuates an input signal in the midband of the amplifier path. Passbandwidth is measured 20dBc from the maximum output level using the same settings as listed above. Frequency Range Investigated: See provided plots (frequency spectrum investigated up to three times the indicated span).

**Test Setup Photos** 

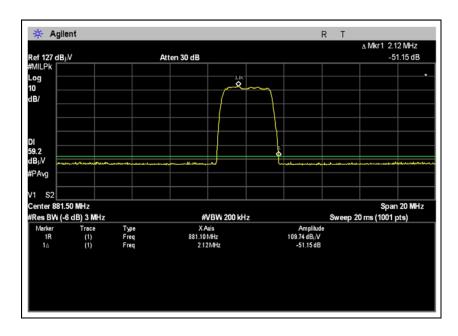


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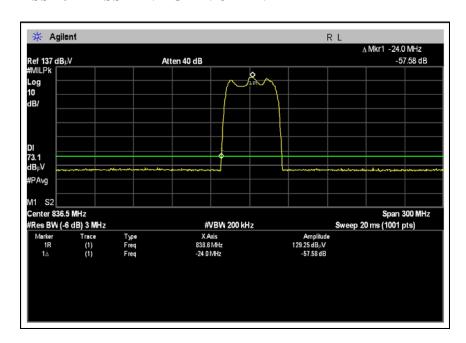


# **Test Plots**

## **RSS-131 PASSBAND GAIN DOWNLINK**



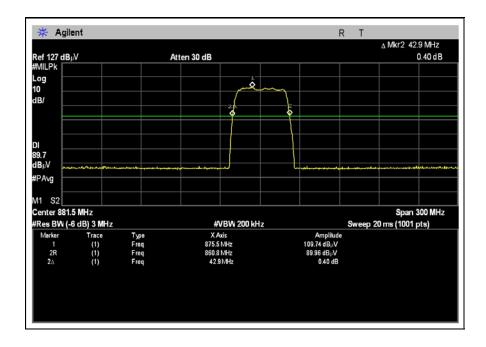
## **RSS-131 PASSBAND GAIN UPLINK**



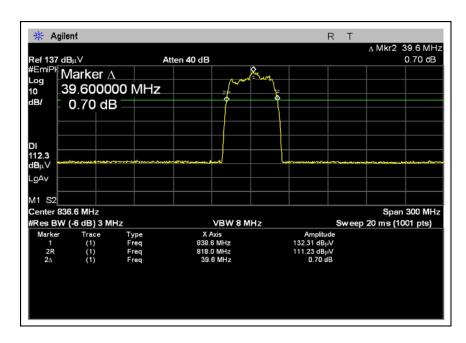
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## RSS-131 PASSBAND BANDWIDTH DOWNLINK



## RSS-131 PASSBAND BANDWIDTH UPLINK



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