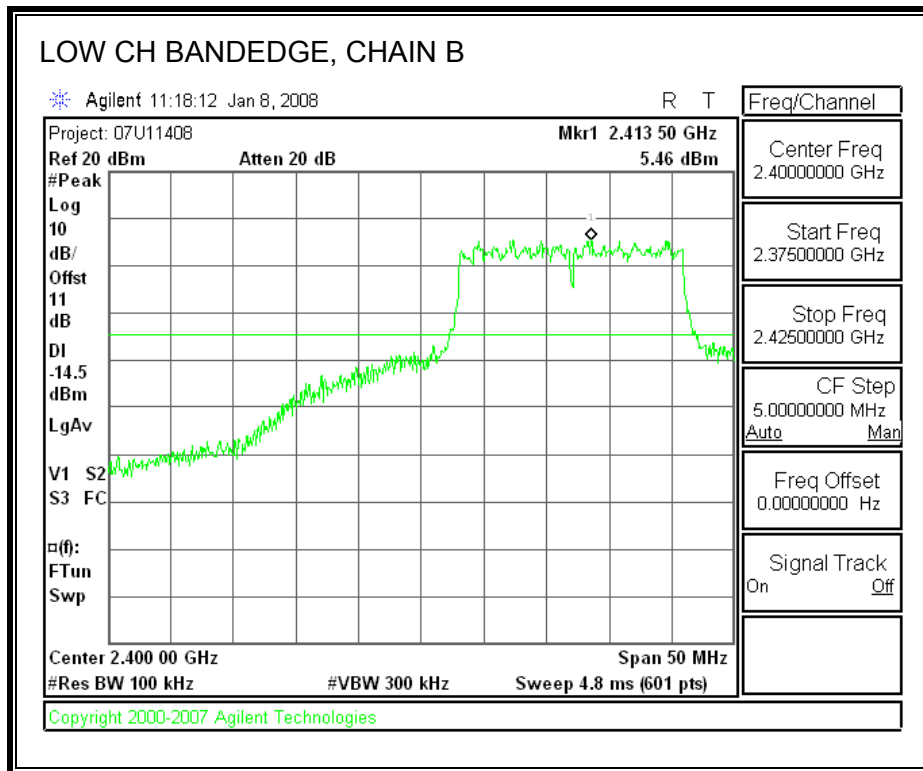
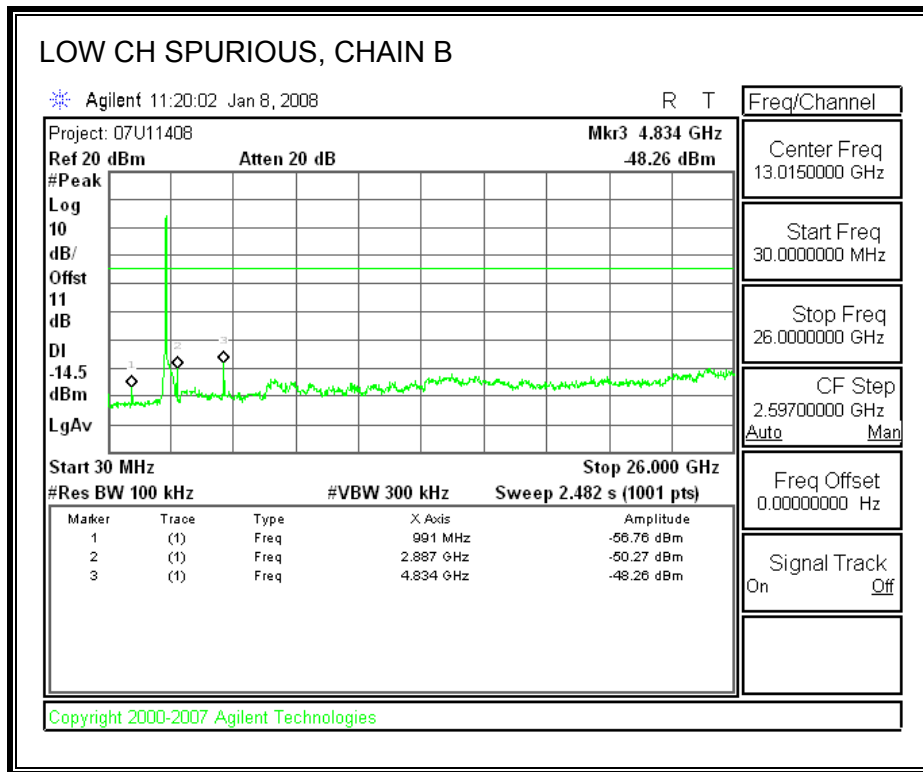
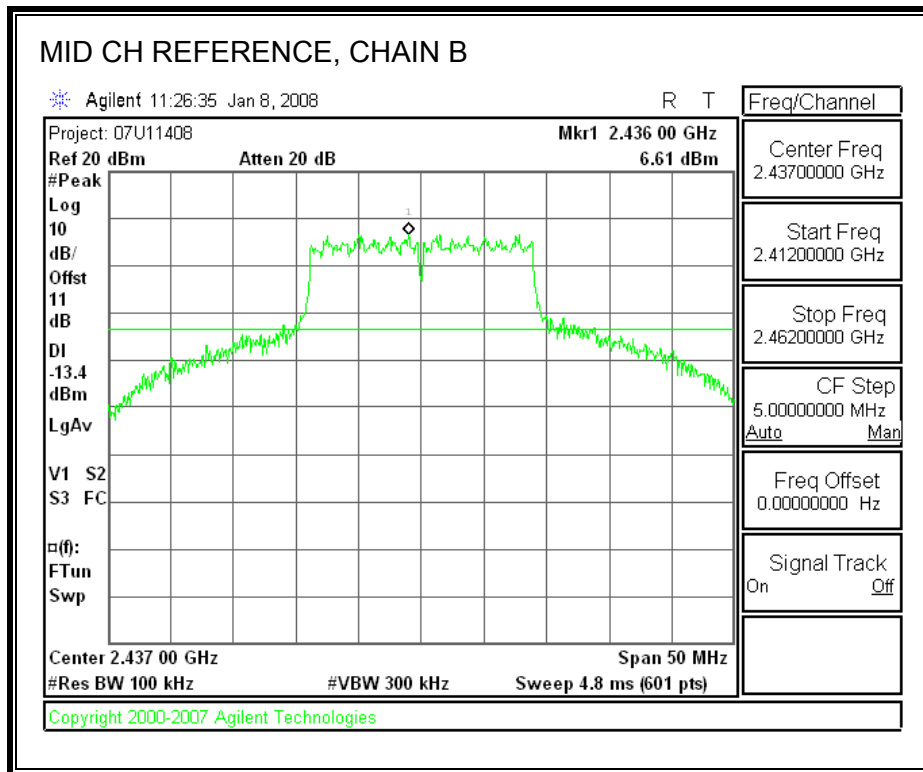
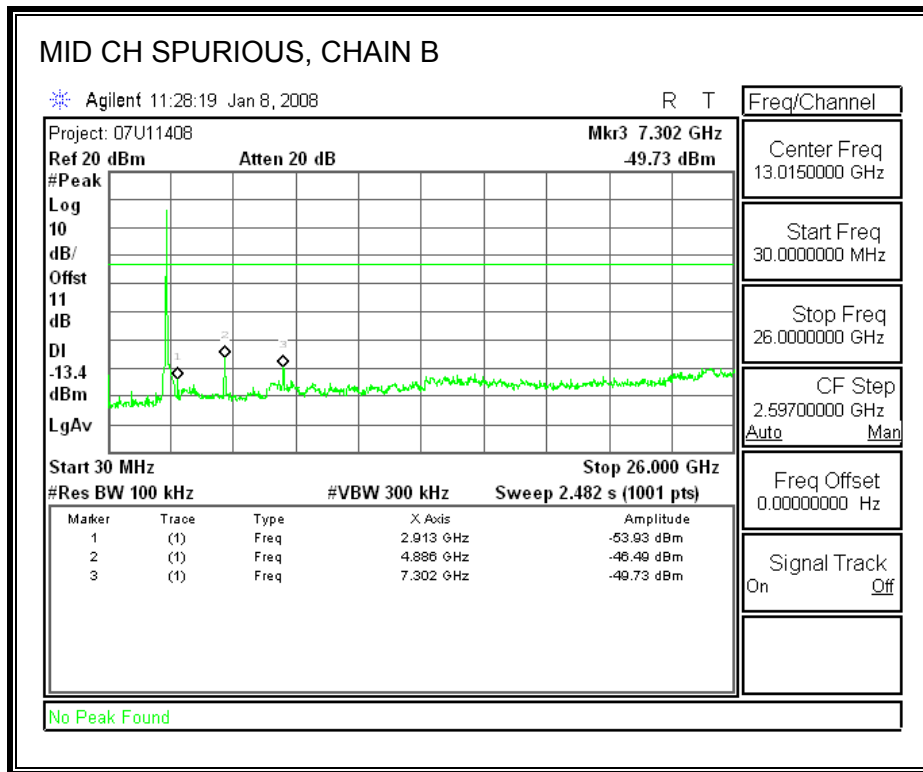


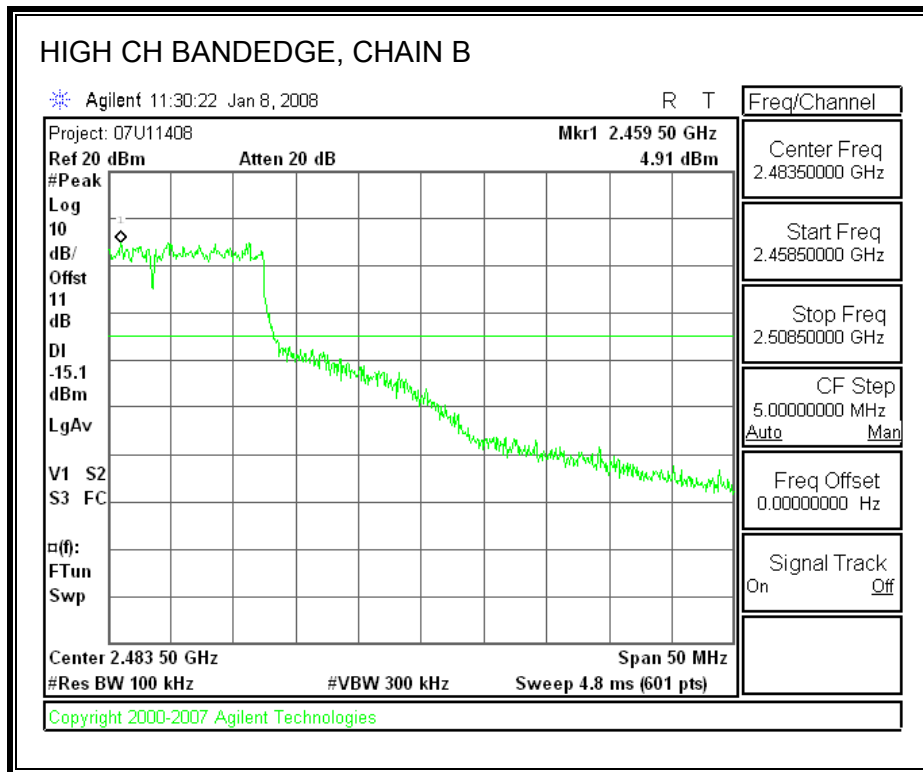
**CHAIN B SPURIOUS EMISSIONS**

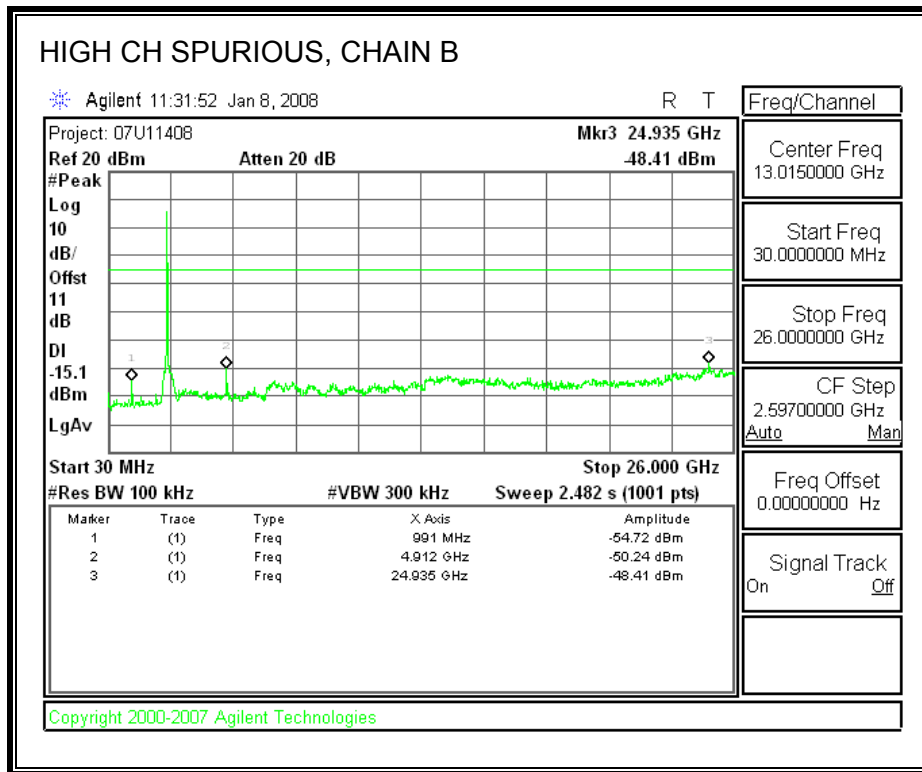






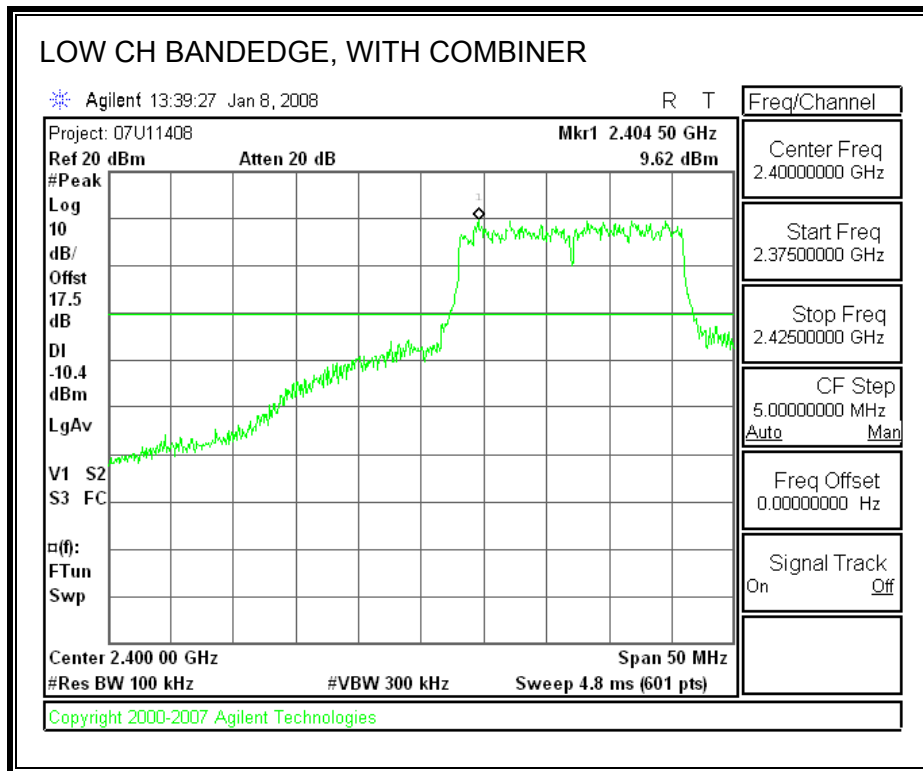


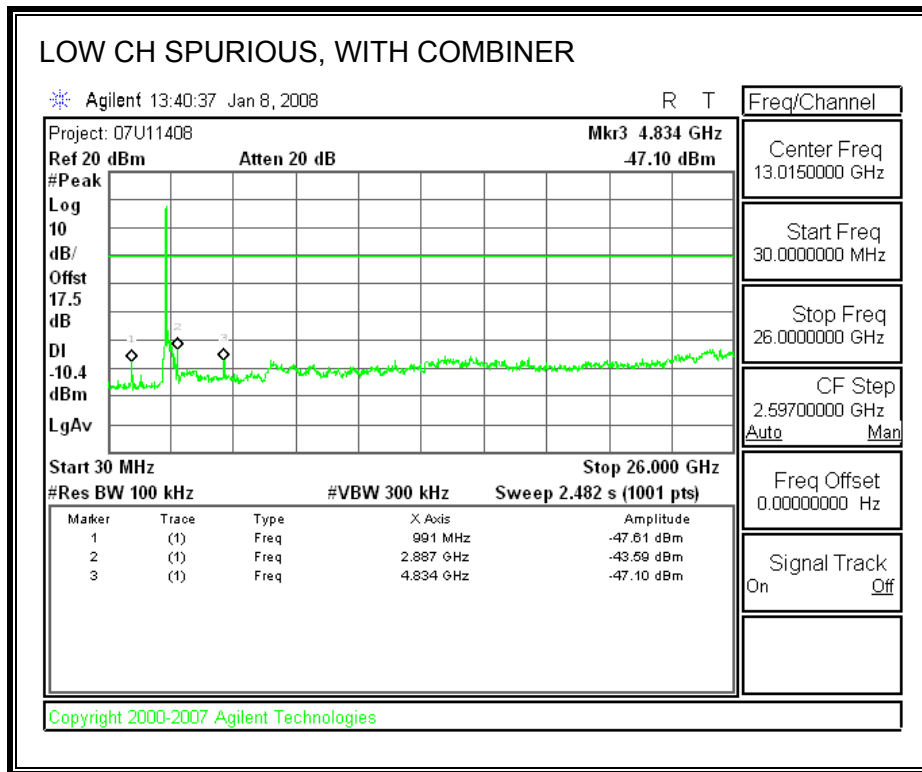


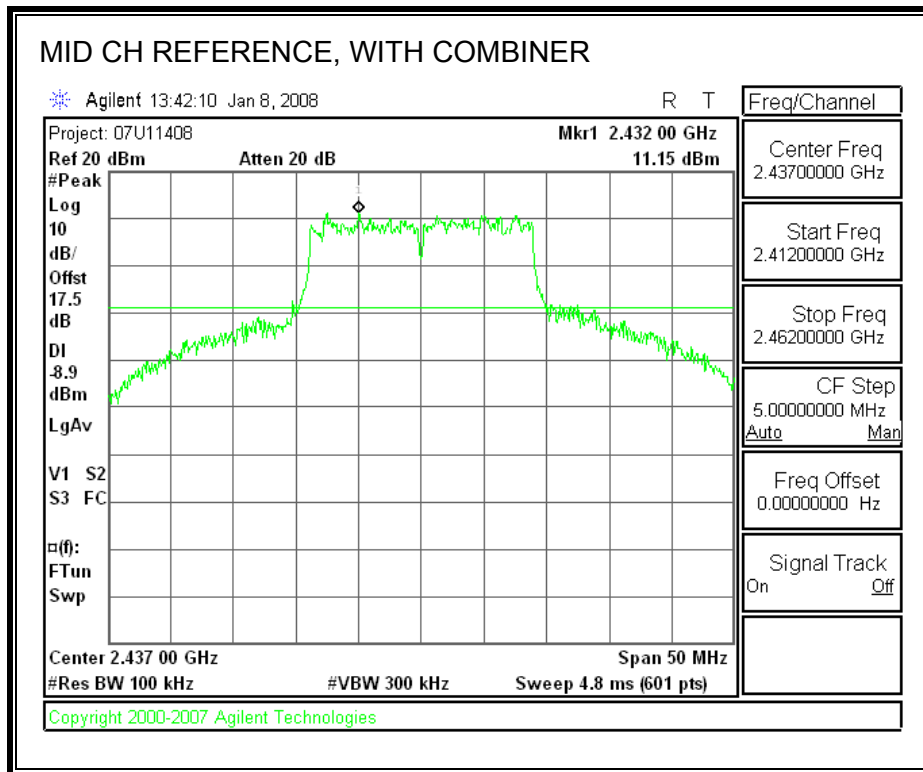


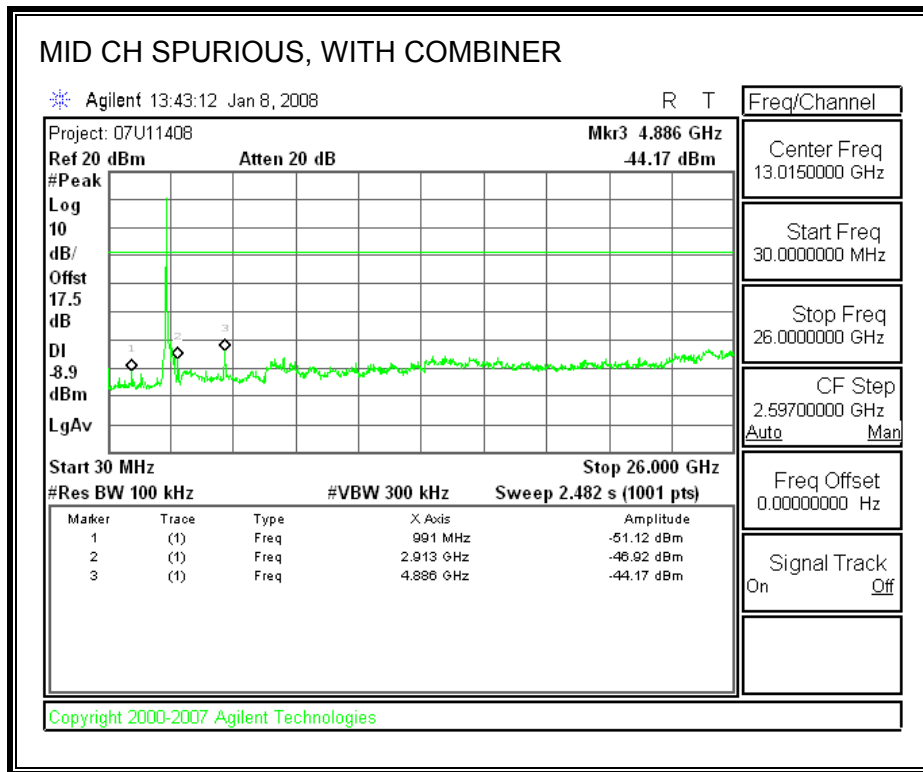


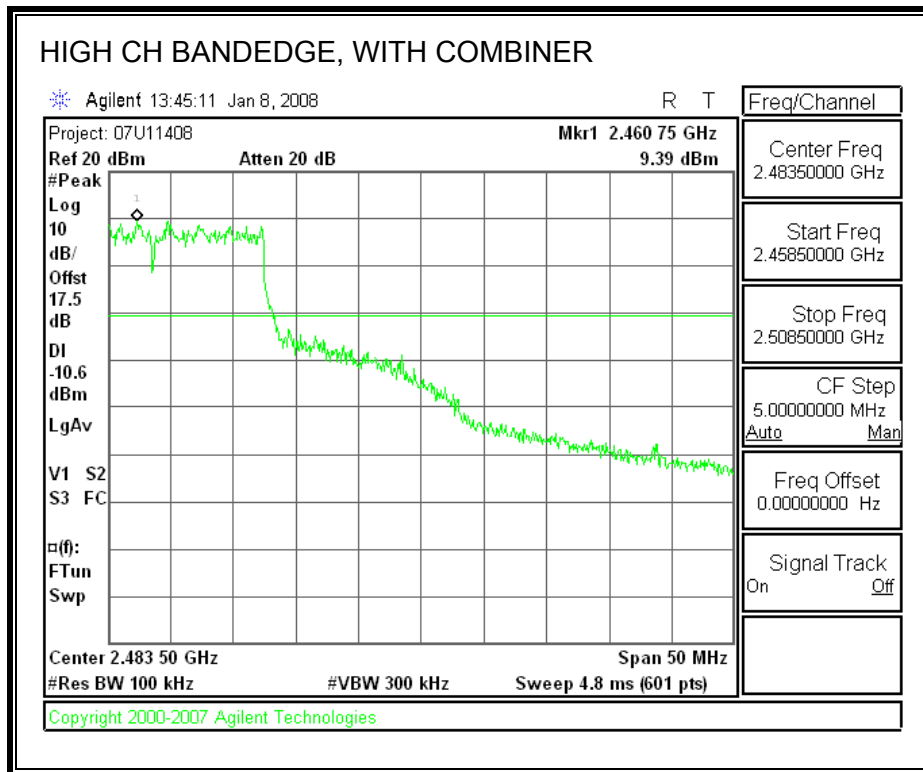
**SPURIOUS EMISSIONS WITH COMBINER**

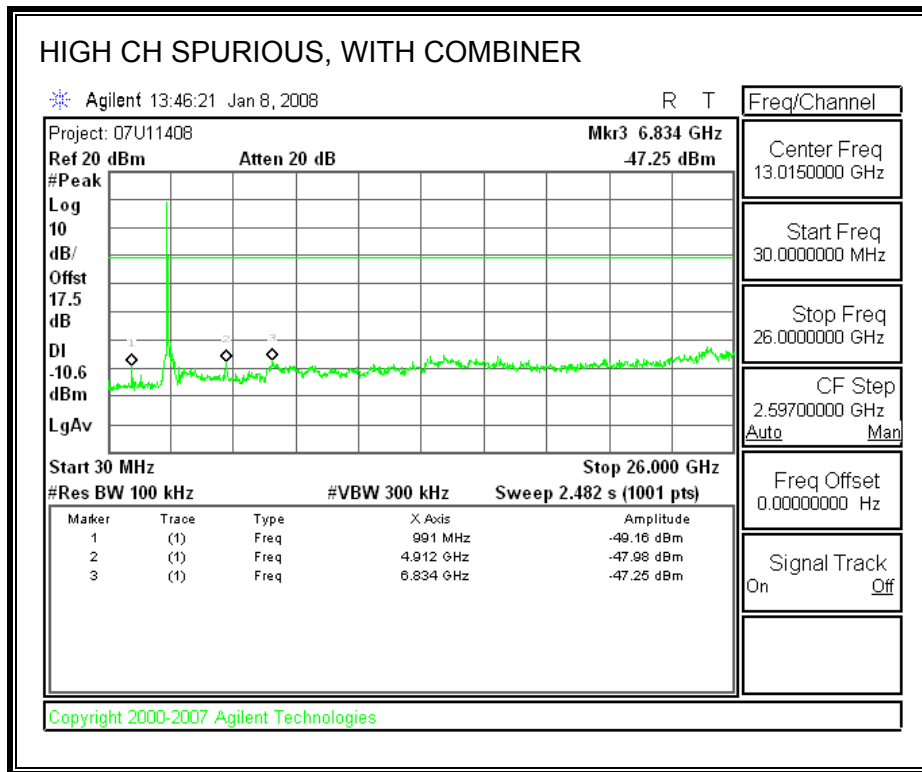












## 7.4. 802.11n HT40 MODE IN THE 2.4 GHz BAND

### 7.4.1. 6 dB BANDWIDTH

#### LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

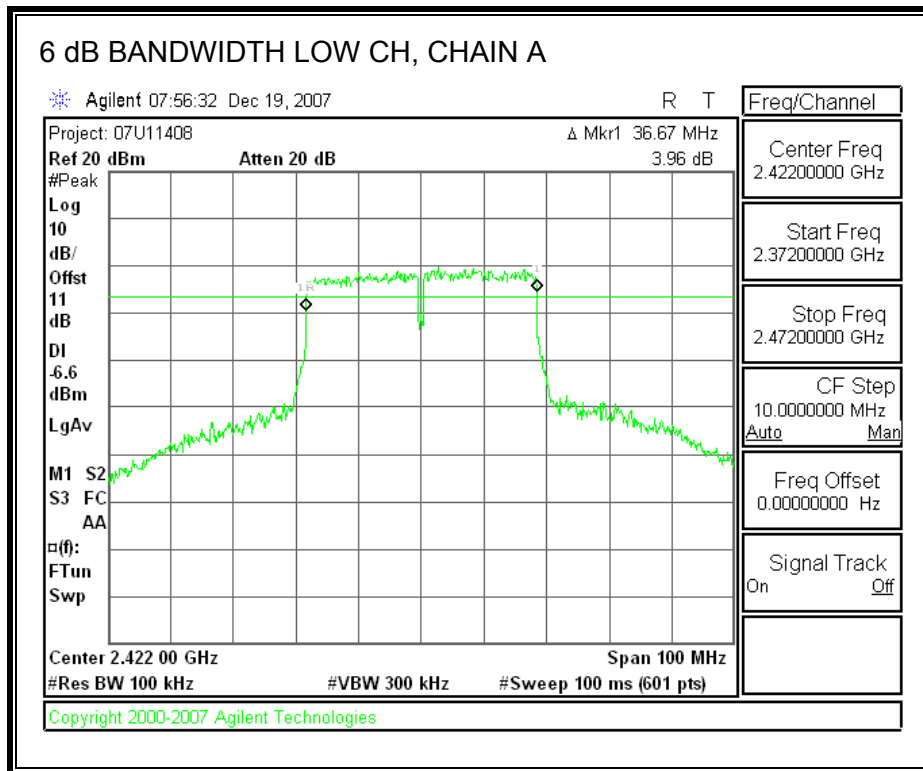
#### TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

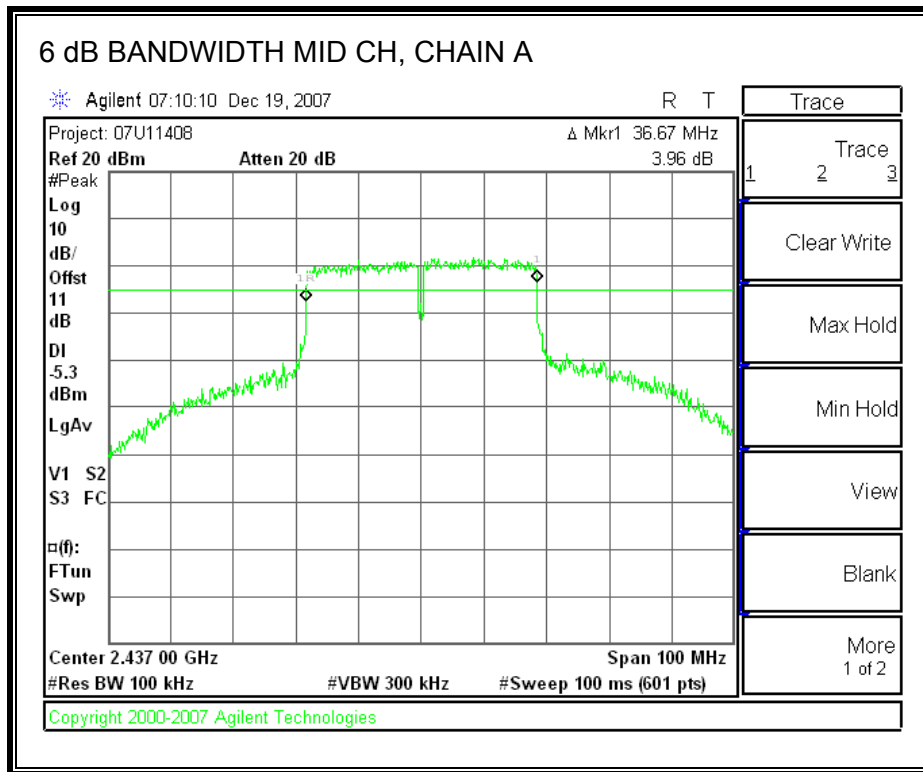
#### RESULTS

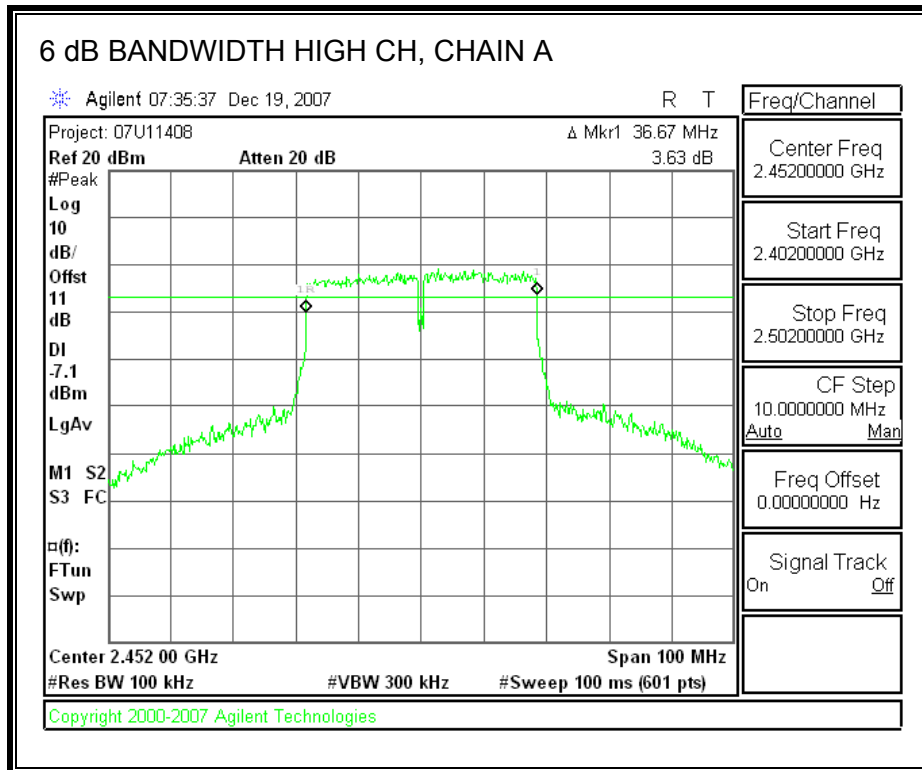
Channel	Frequency (MHz)	Chain A 6 dB BW (MHz)	Chain B 6 dB BW (MHz)	Minimum Limit (MHz)
Low	2422	36.67	36.50	0.5
Middle	2437	36.67	36.50	0.5
High	2452	36.67	36.67	0.5

**6 dB BANDWIDTH, CHAIN A**

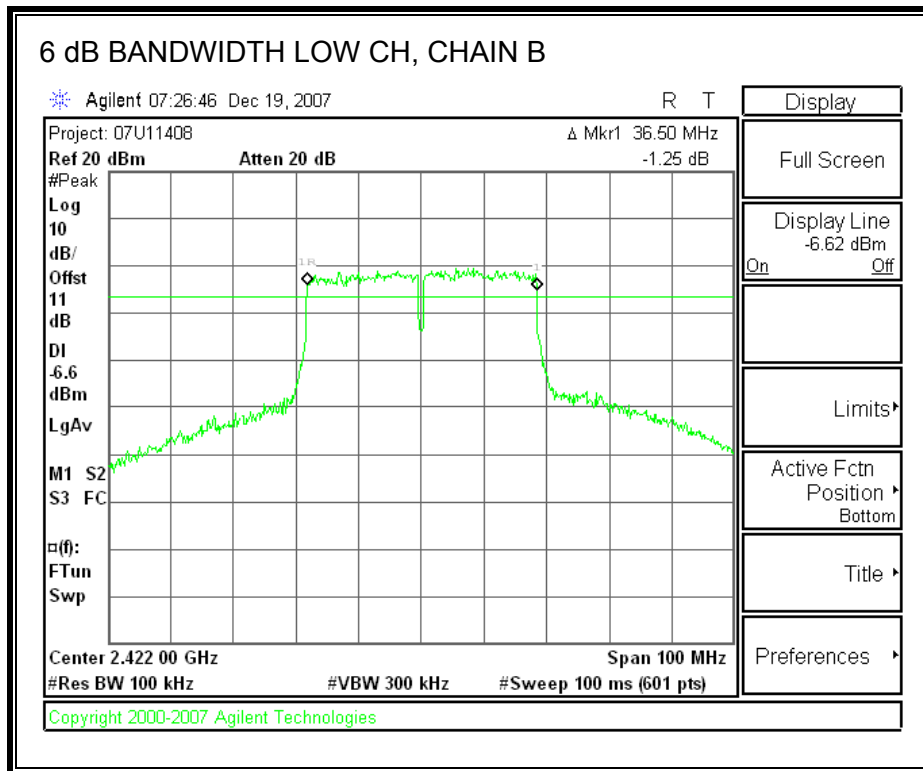


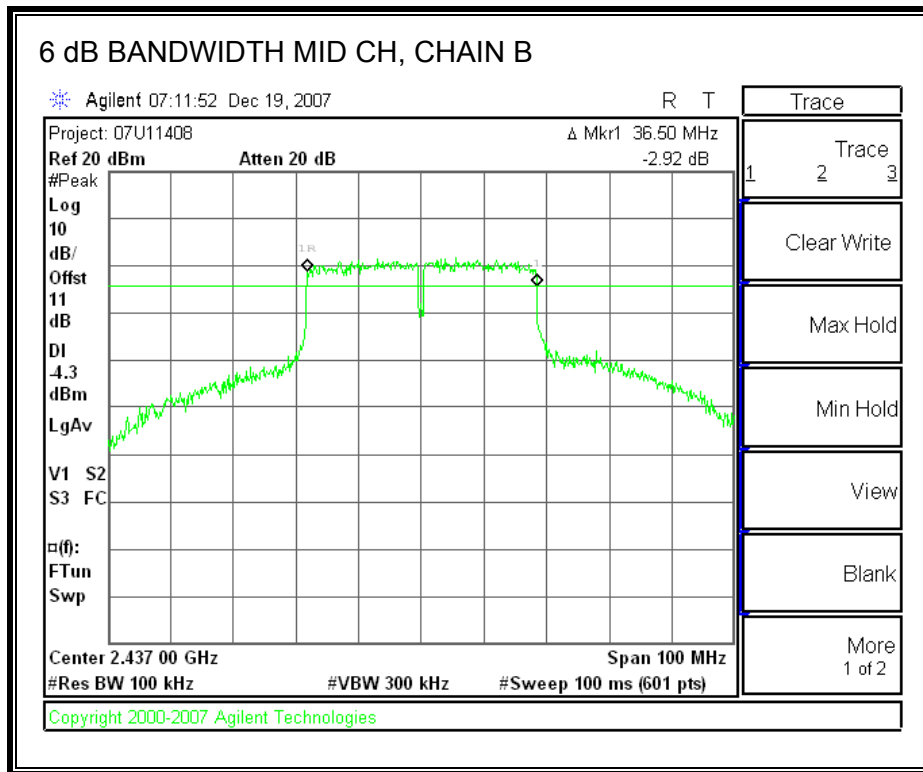


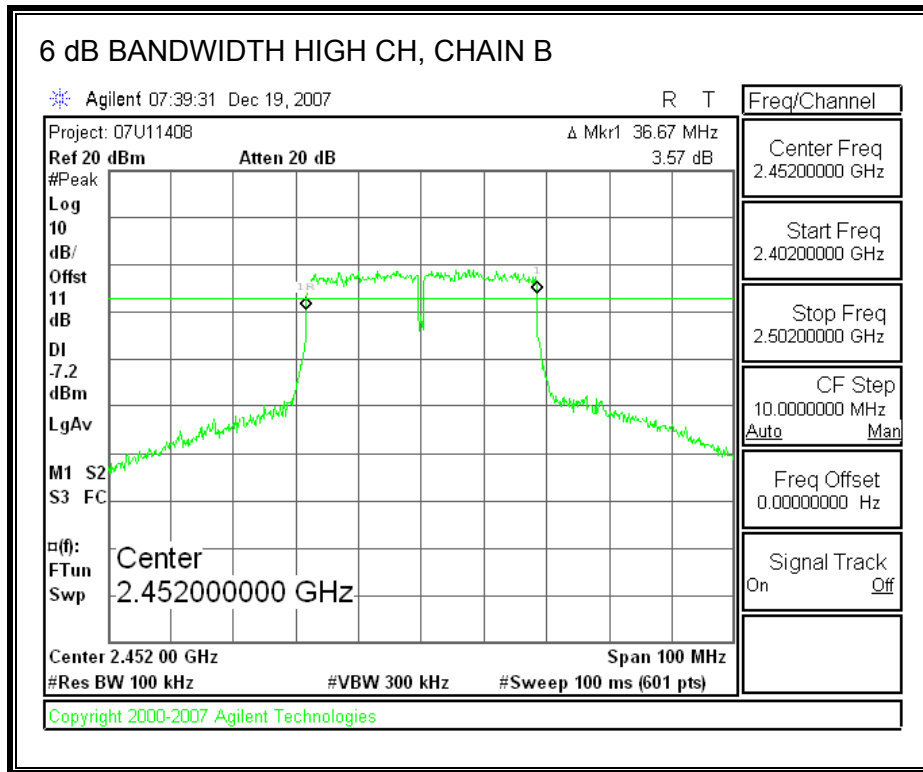




**6 dB BANDWIDTH, CHAIN B**







**7.4.2. 99% BANDWIDTH****LIMITS**

None; for reporting purposes only.

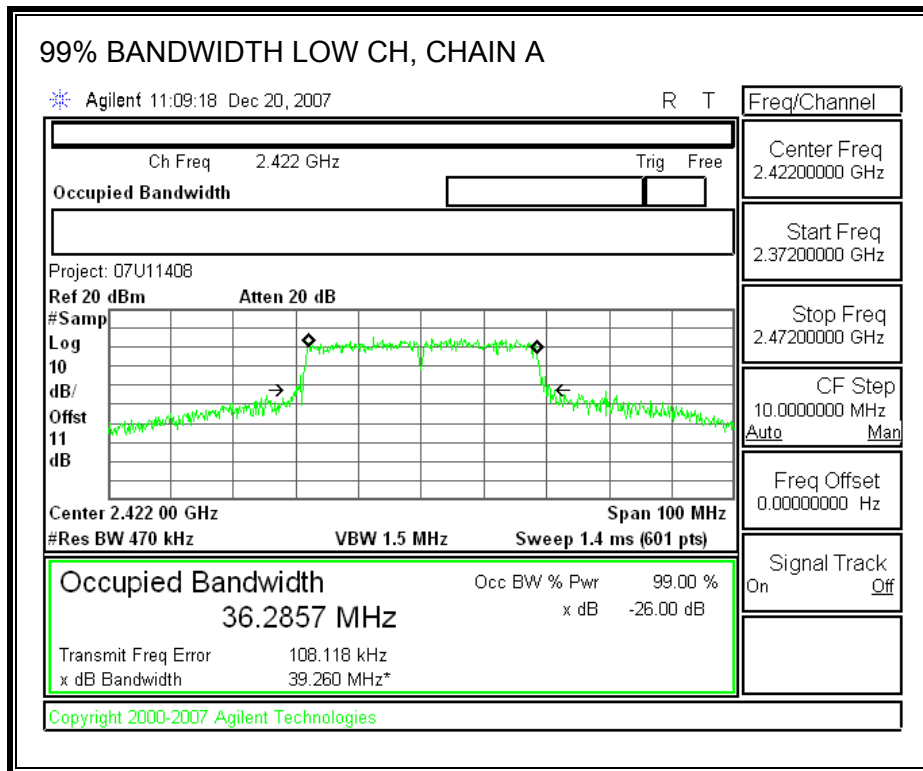
**TEST PROCEDURE**

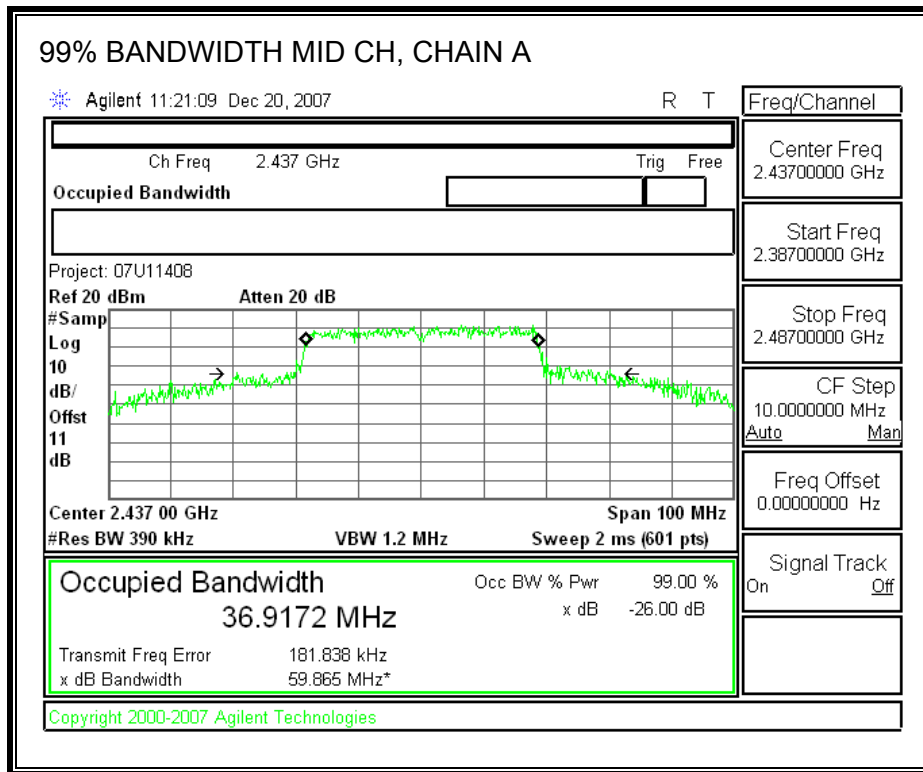
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

**RESULTS**

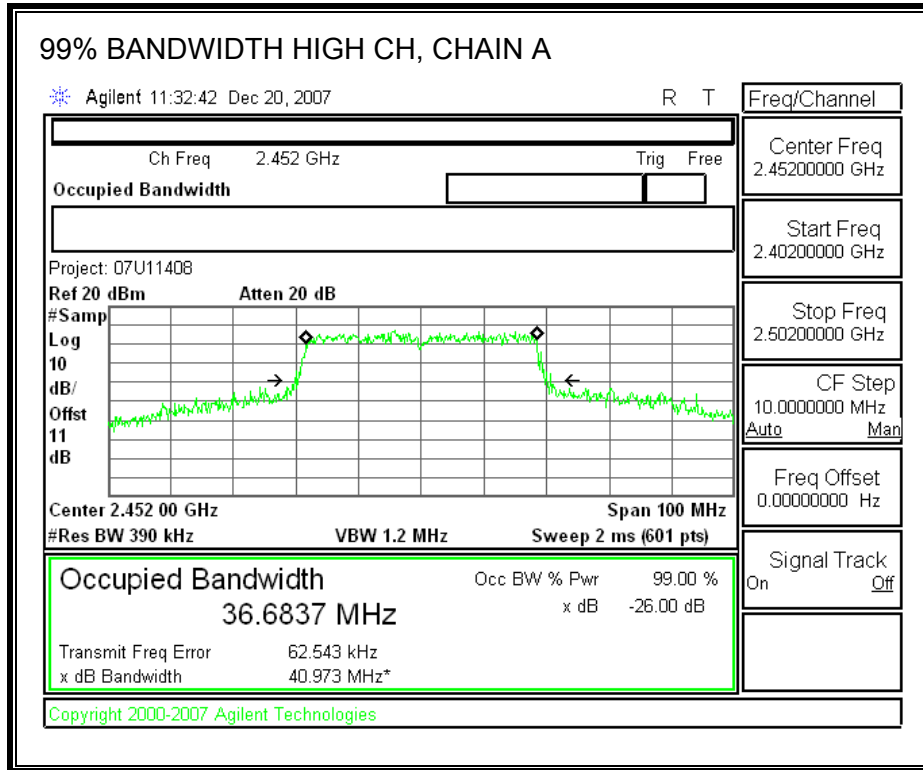
Channel	Frequency (MHz)	Chain A 99% Bandwidth (MHz)	Chain B 99% Bandwidth (MHz)
Low	2422	36.2857	36.3594
Middle	2437	36.9172	36.9248
High	2452	36.6837	36.6837

**99% BANDWIDTH, CHAIN A**

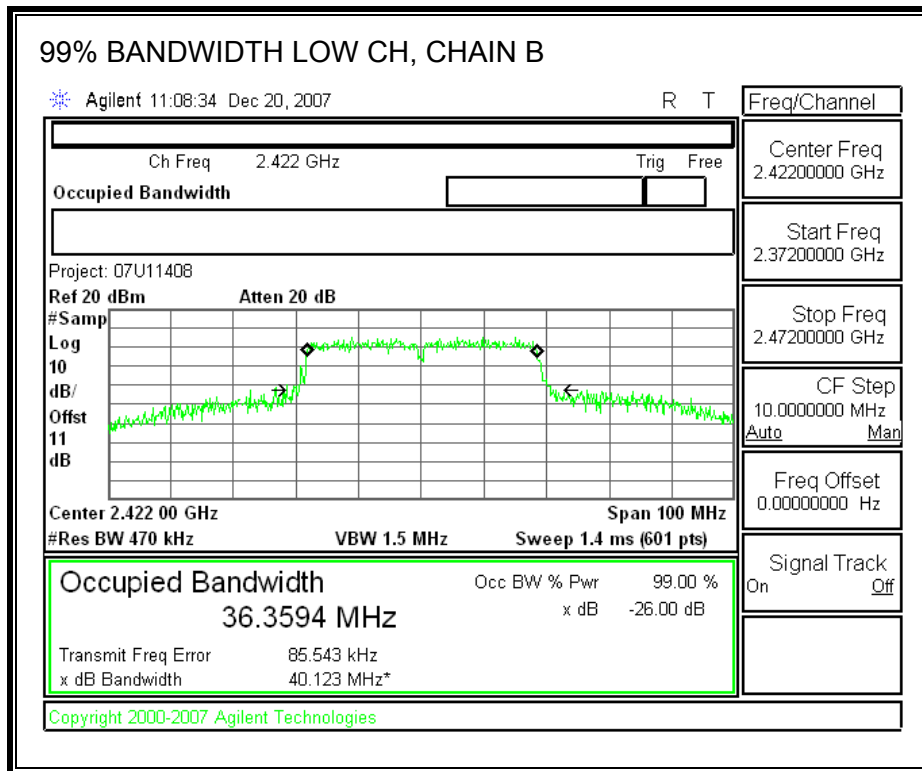


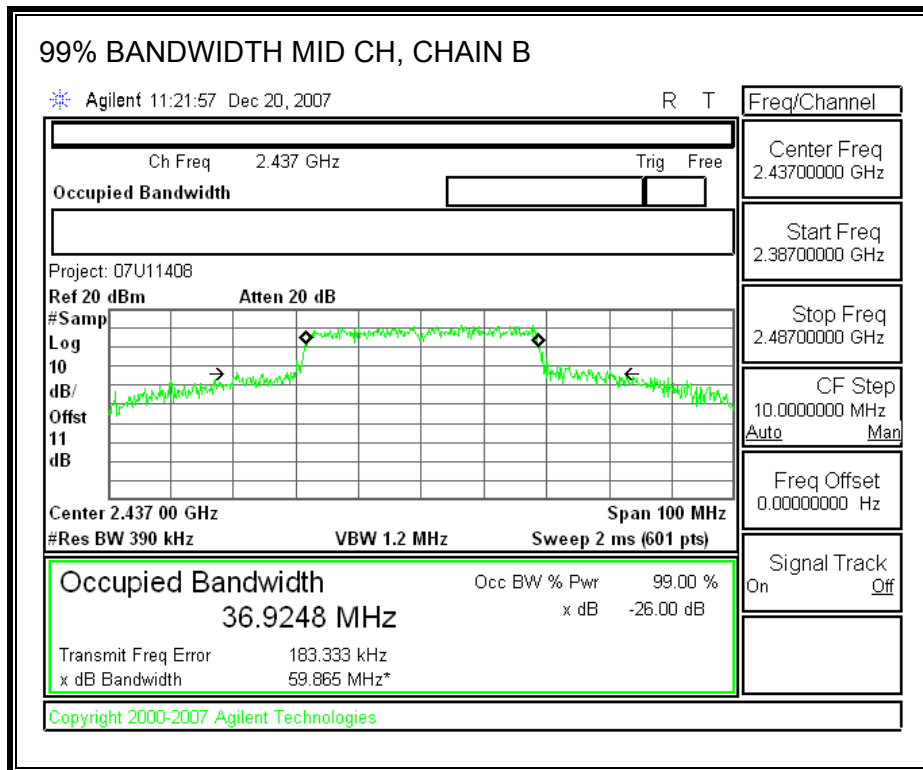


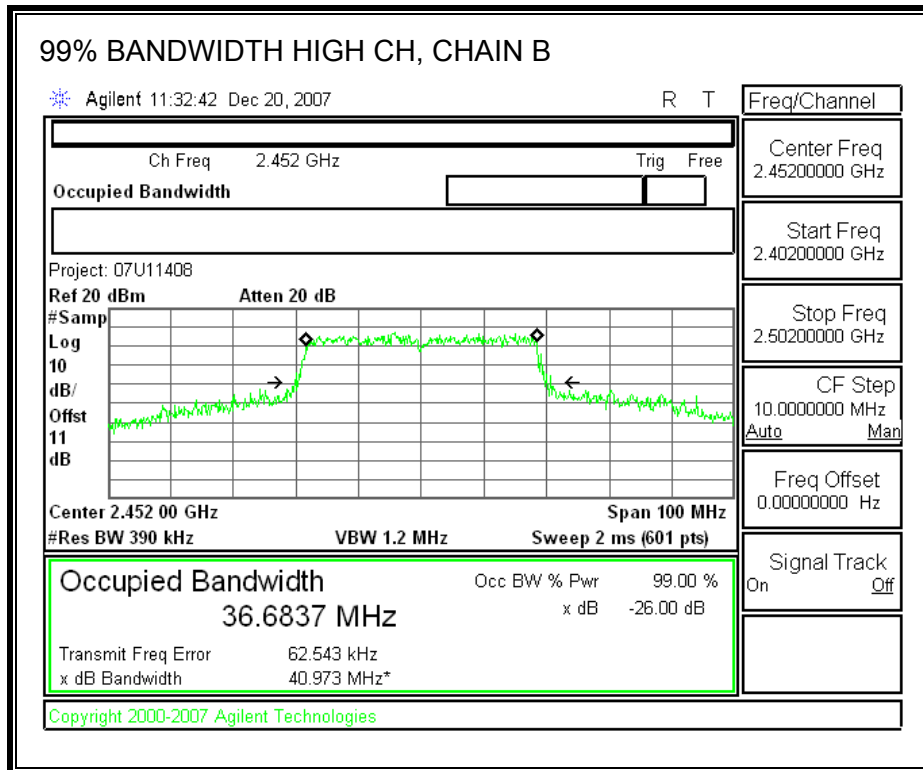




**99% BANDWIDTH, CHAIN B**







### 7.4.3. OUTPUT POWER

#### LIMITS

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

The maximum antenna gain is -0.73 dBi for other than fixed, point-to-point operations, therefore the limit is 30 dBm.

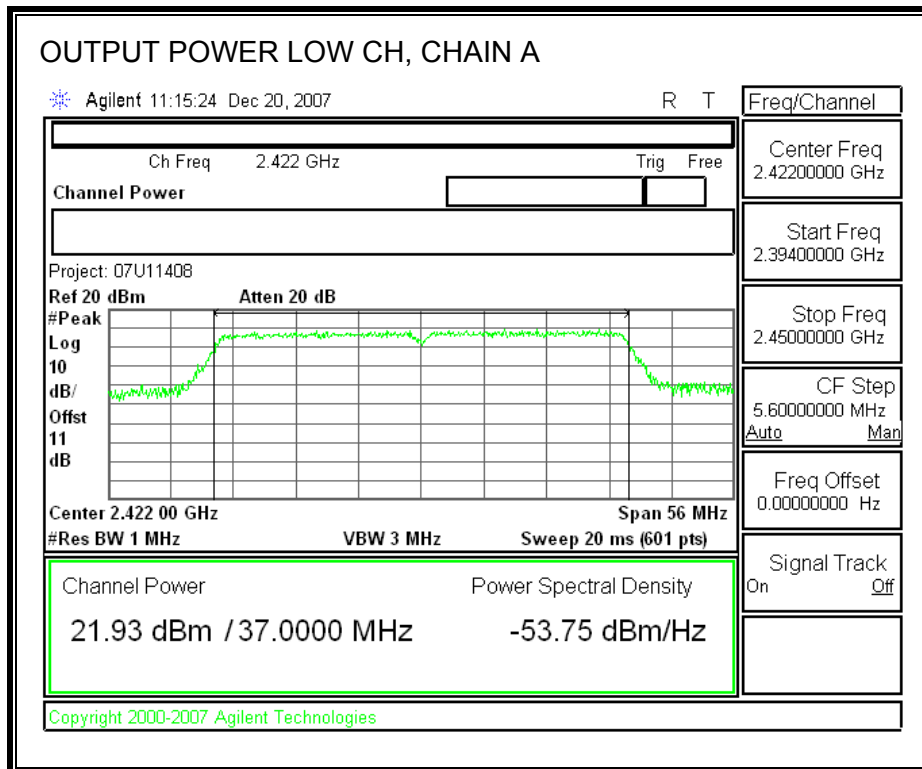
#### TEST PROCEDURE

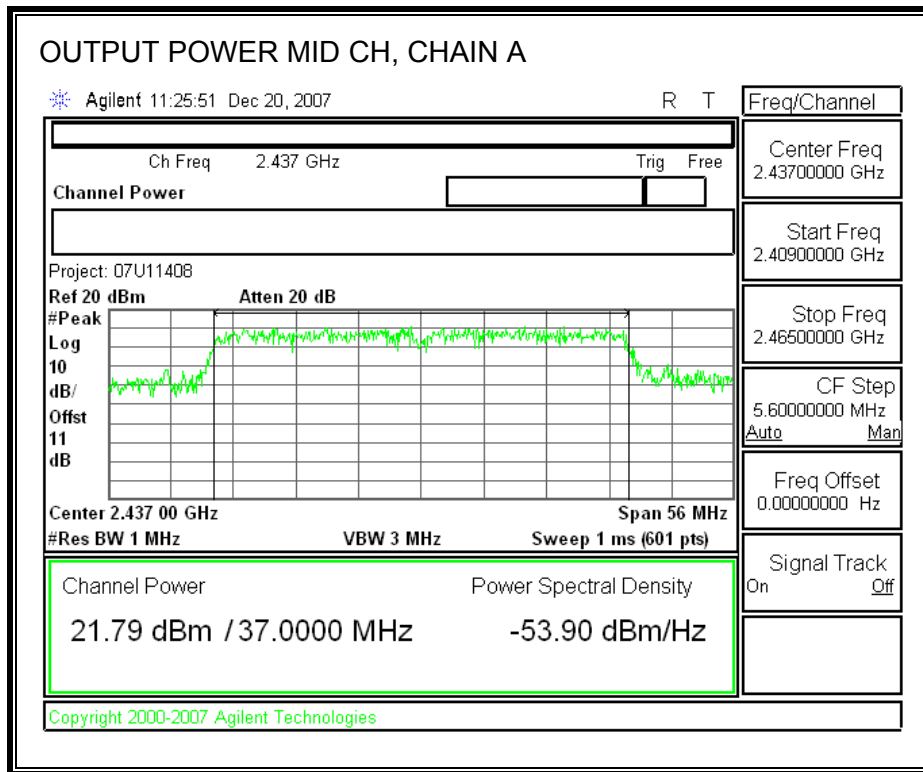
Peak power is measured using the spectrum analyzer's internal channel power integration function. Power is integrated over a bandwidth greater than or equal to the 99% bandwidth.

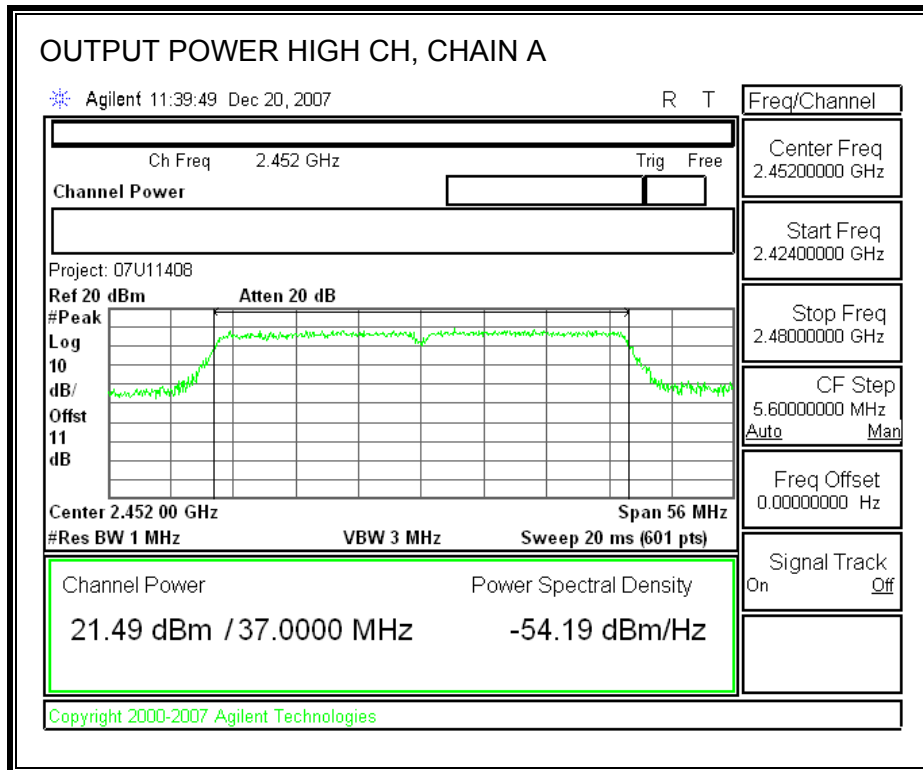
#### RESULTS

Channel	Frequency (MHz)	Limit (dBm)	Chain A Power (dBm)	Chain B Power (dBm)	Total Power (dBm)	Margin (dB)
Low	2422	30.00	21.93	22.31	25.13	-4.87
Mid	2437	30.00	21.79	21.63	24.72	-5.28
High	2452	30.00	21.49	21.88	24.70	-5.30

**CHAIN A OUTPUT POWER**

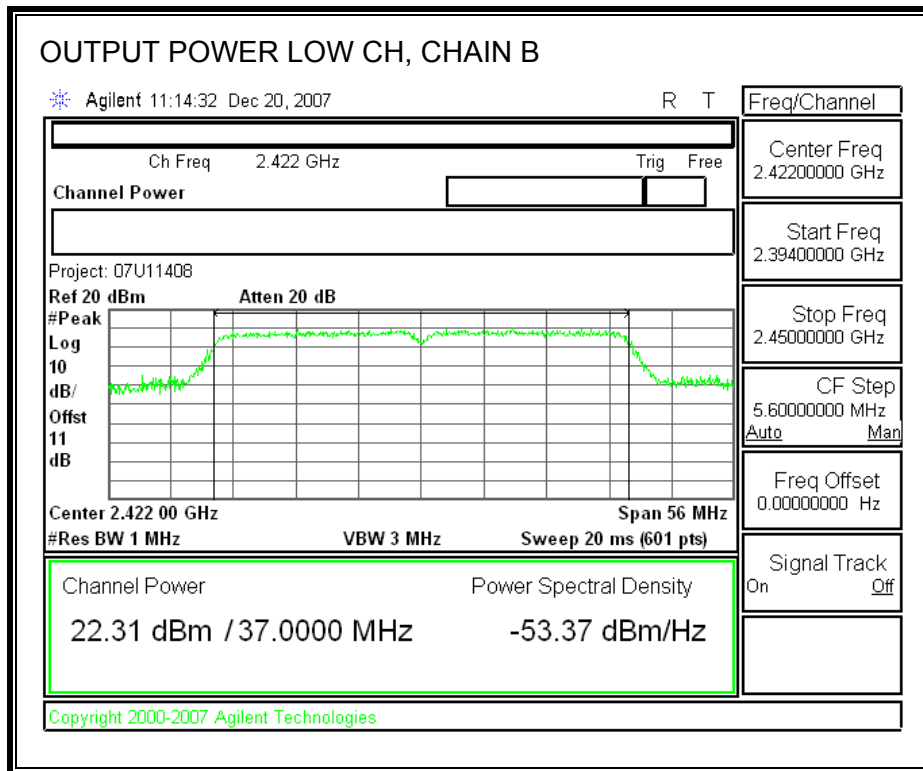


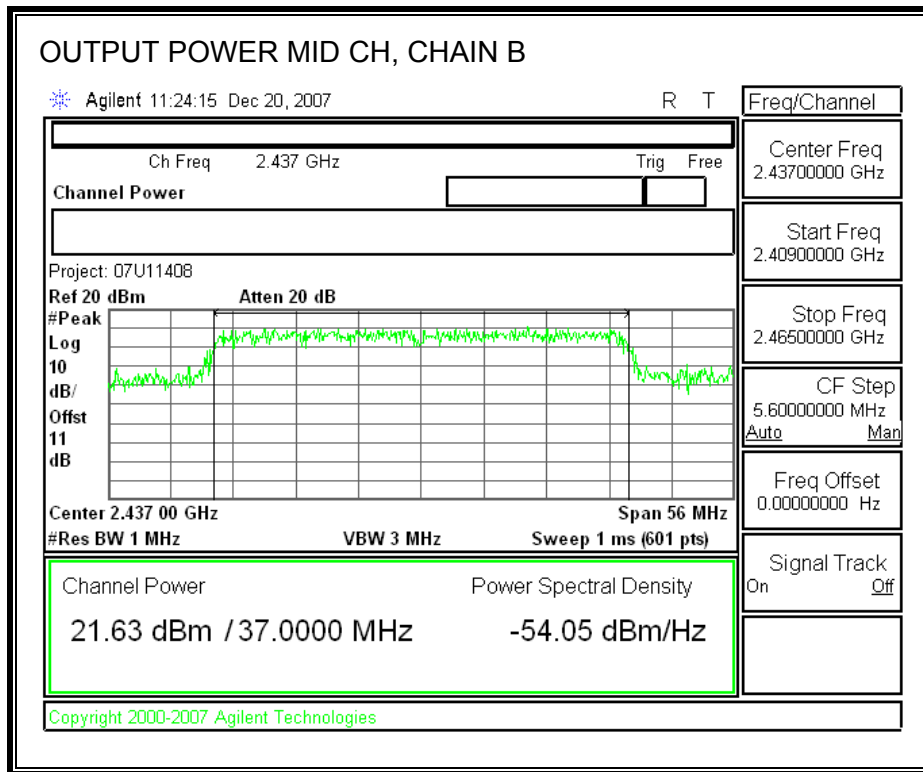


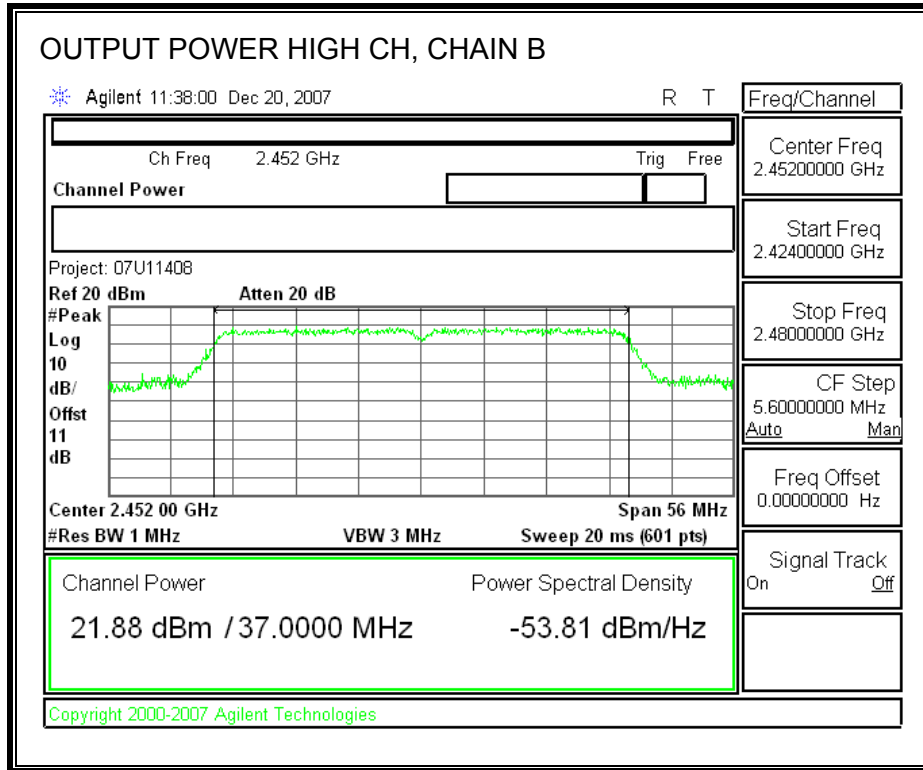




**CHAIN B OUTPUT POWER**







#### 7.4.4. POWER SPECTRAL DENSITY

##### LIMITS

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

##### TEST PROCEDURE

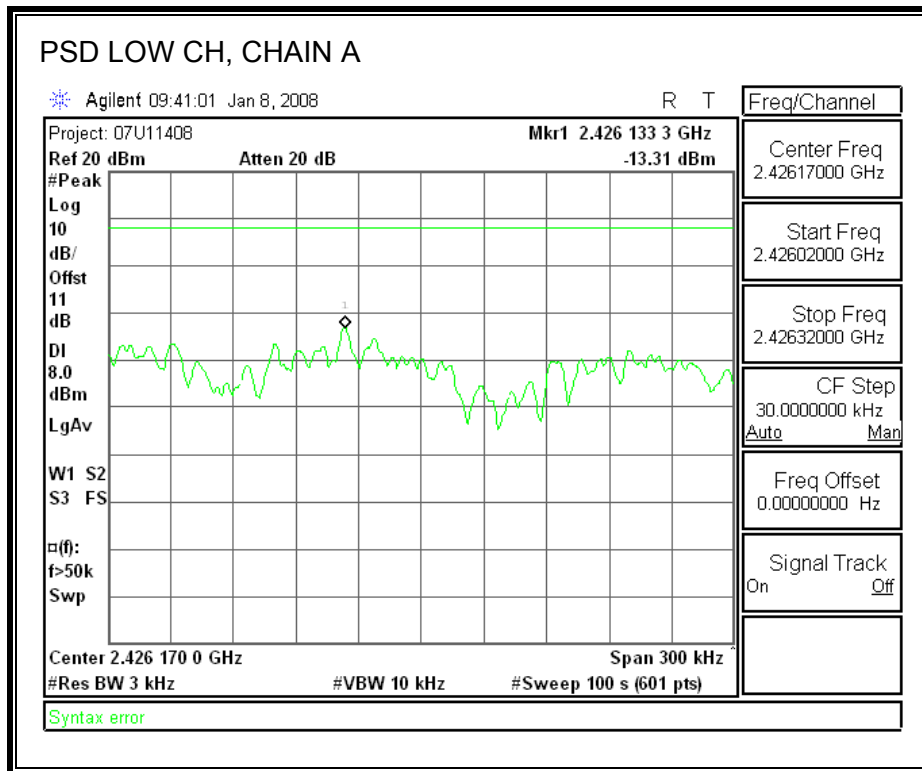
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

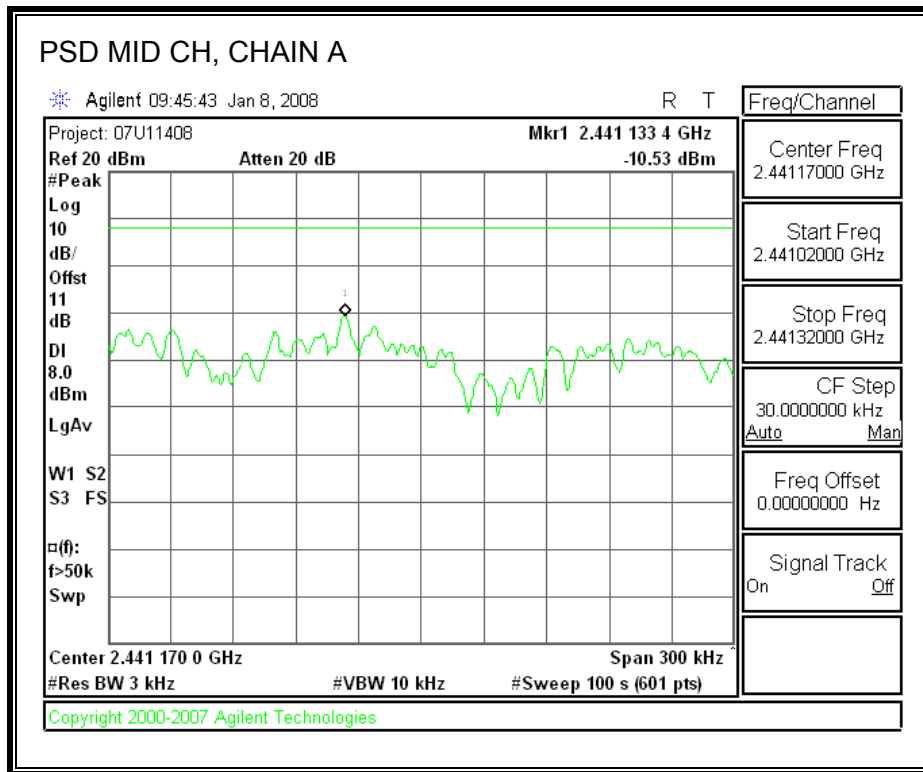
##### RESULTS

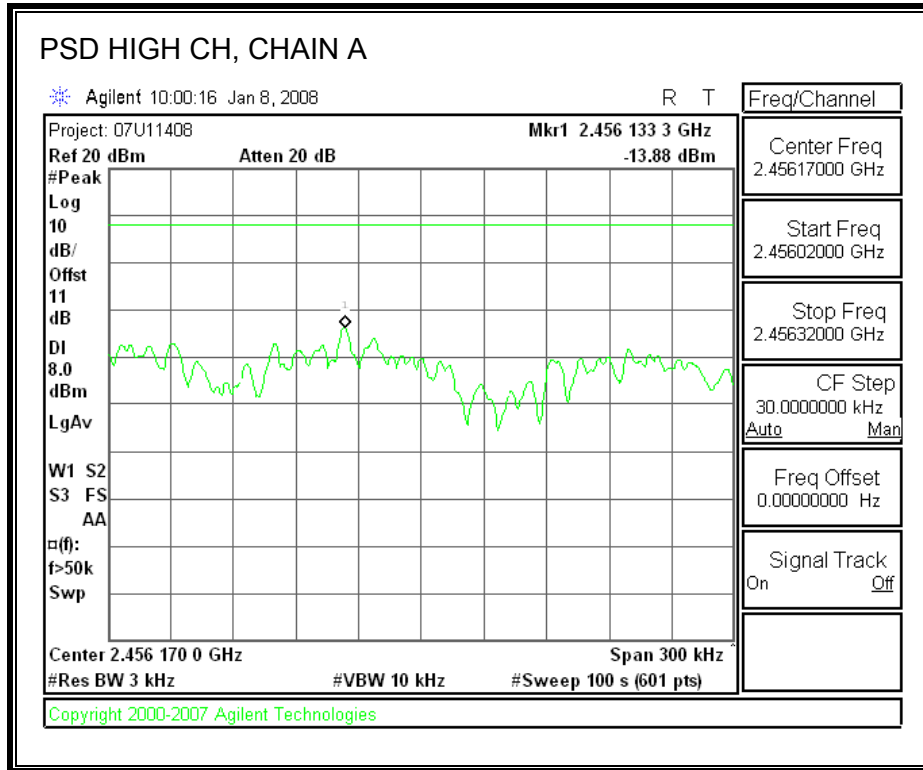
Channel	Frequency (MHz)	Chain A PSD (dBm)	Chain B PSD (dBm)	Limit (dBm)
Low	2422	-13.31	-13.04	8
Middle	2437	-10.53	-10.51	8
High	2452	-13.88	-13.32	8

Channel	Frequency (MHz)	PSD with Combiner (dBm)	Limit (dBm)	Margin (dB)
Low	2422	-8.40	8	-16.40
Middle	2437	-5.71	8	-13.71
High	2452	-8.73	8	-16.73

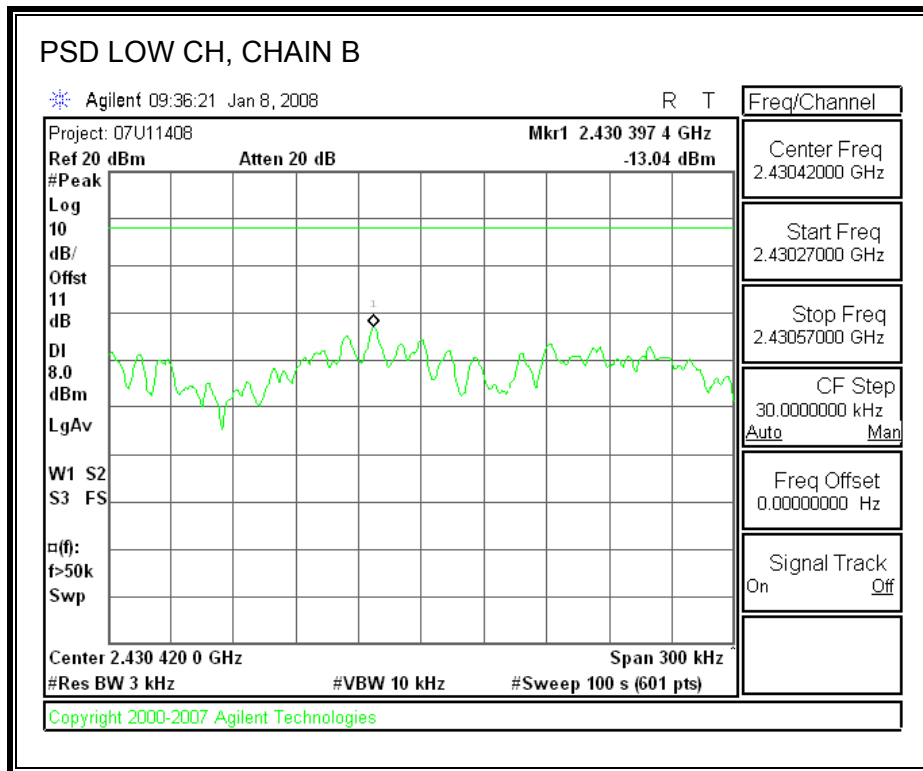
**POWER SPECTRAL DENSITY, CHAIN A**



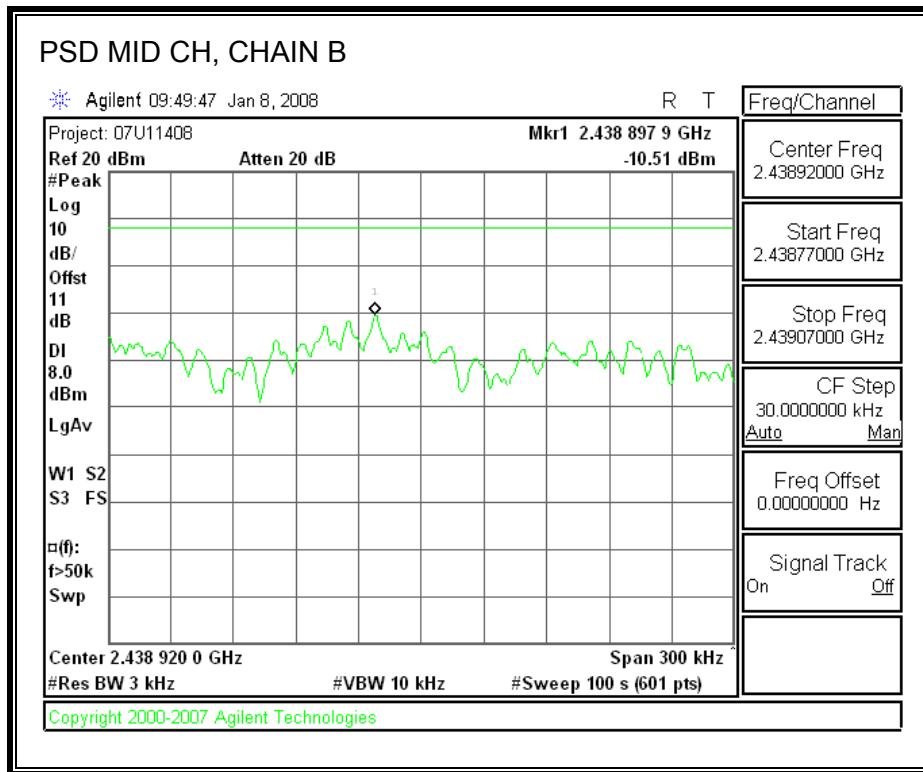


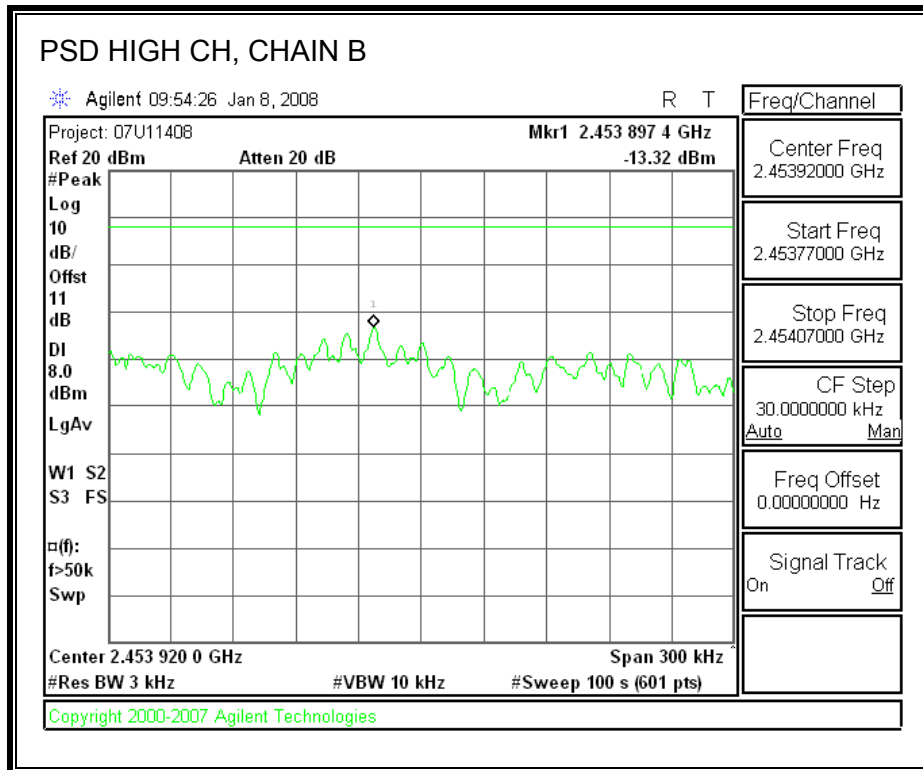


**POWER SPECTRAL DENSITY, CHAIN B**

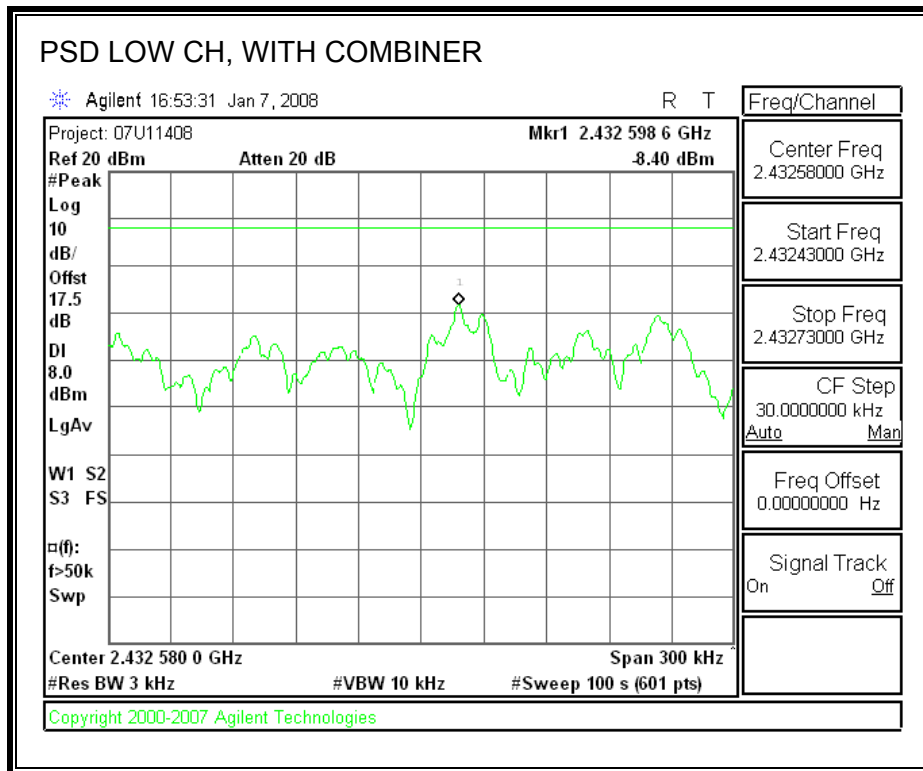


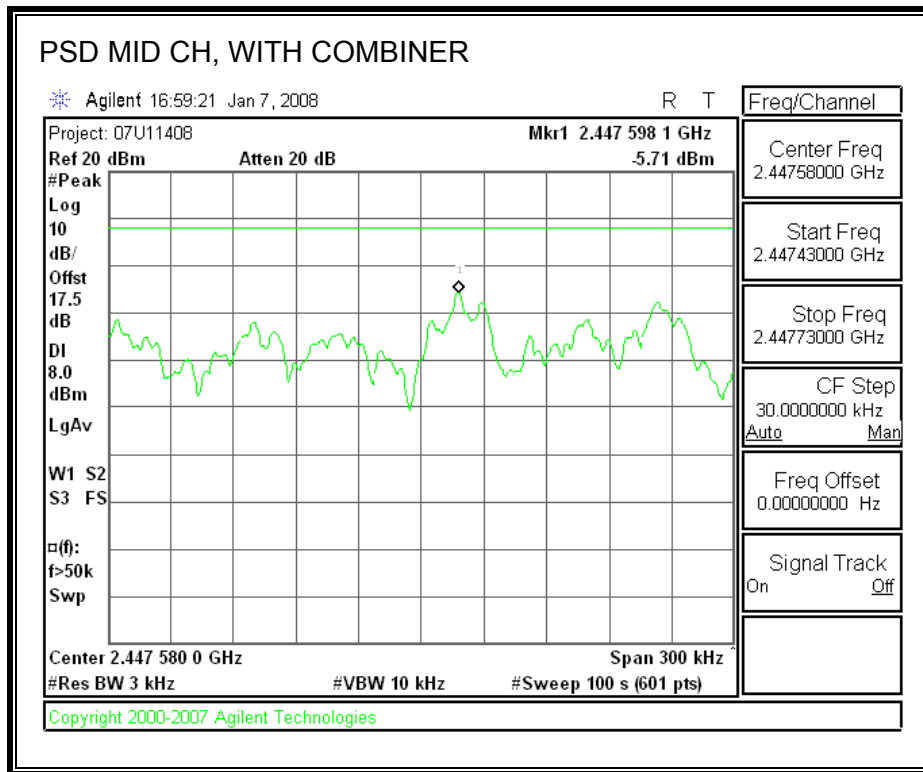


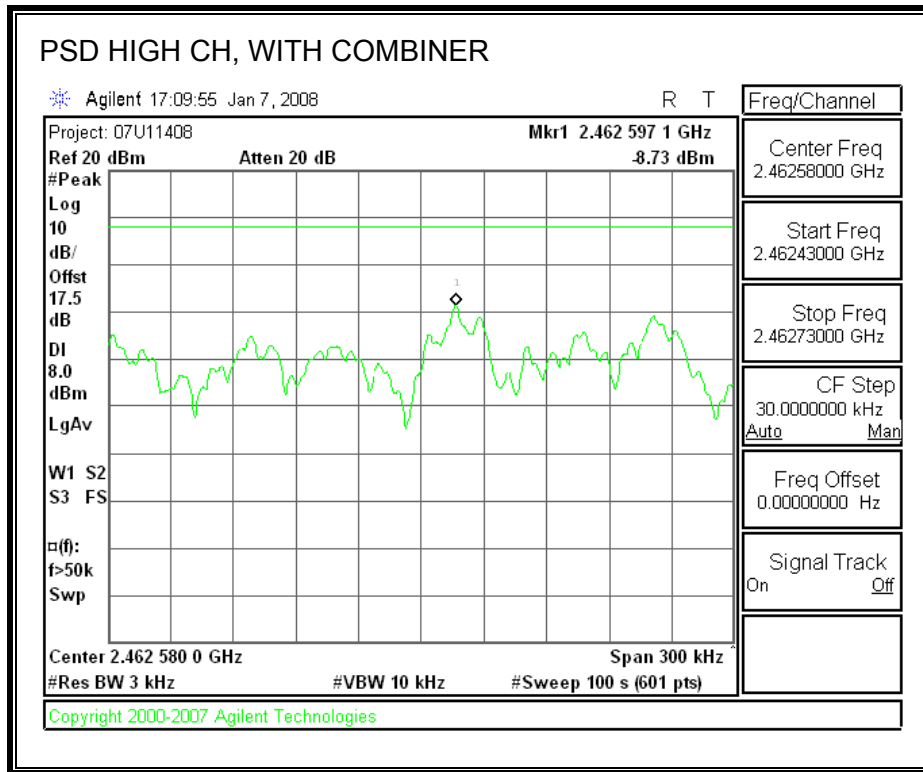




**POWER SPECTRAL DENSITY, WITH COMBINER**







## 7.4.5. CONDUCTED SPURIOUS EMISSIONS

### LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

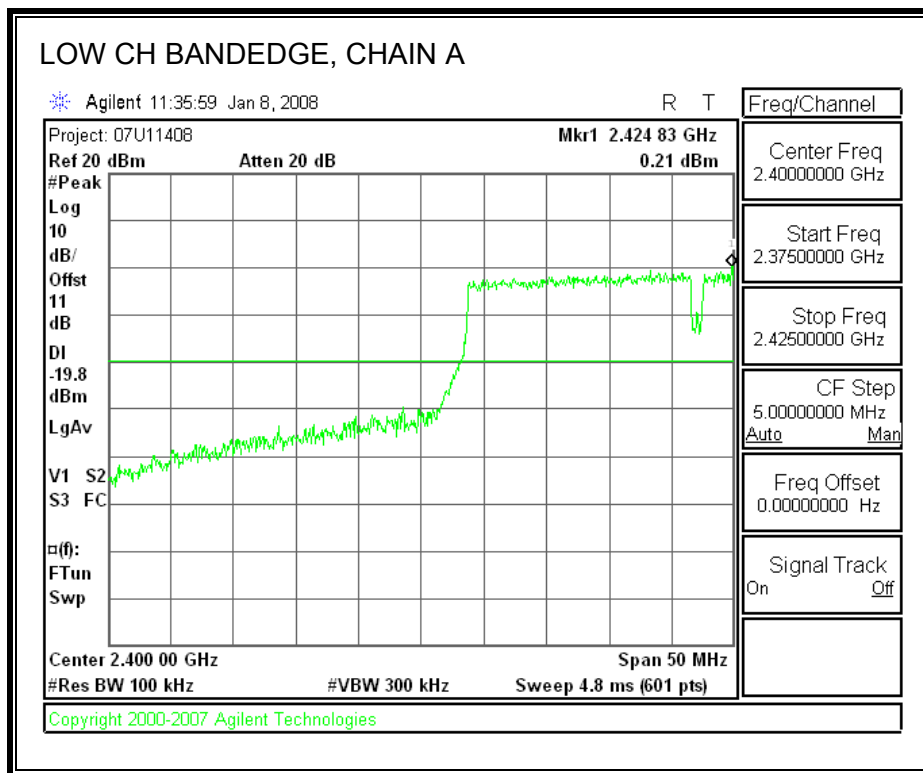
### TEST PROCEDURE

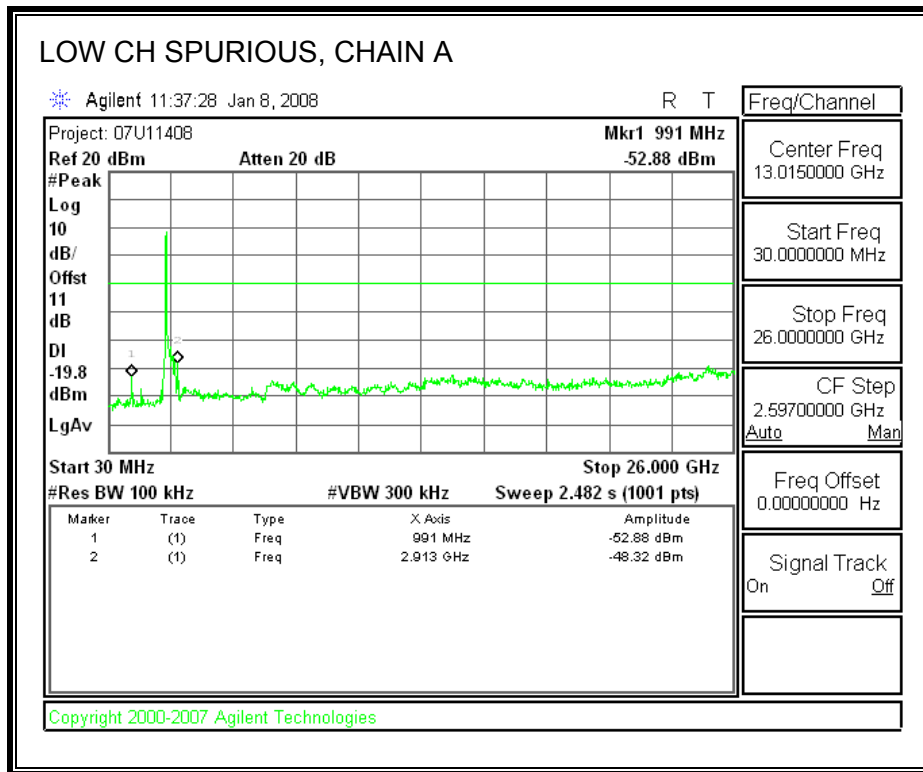
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

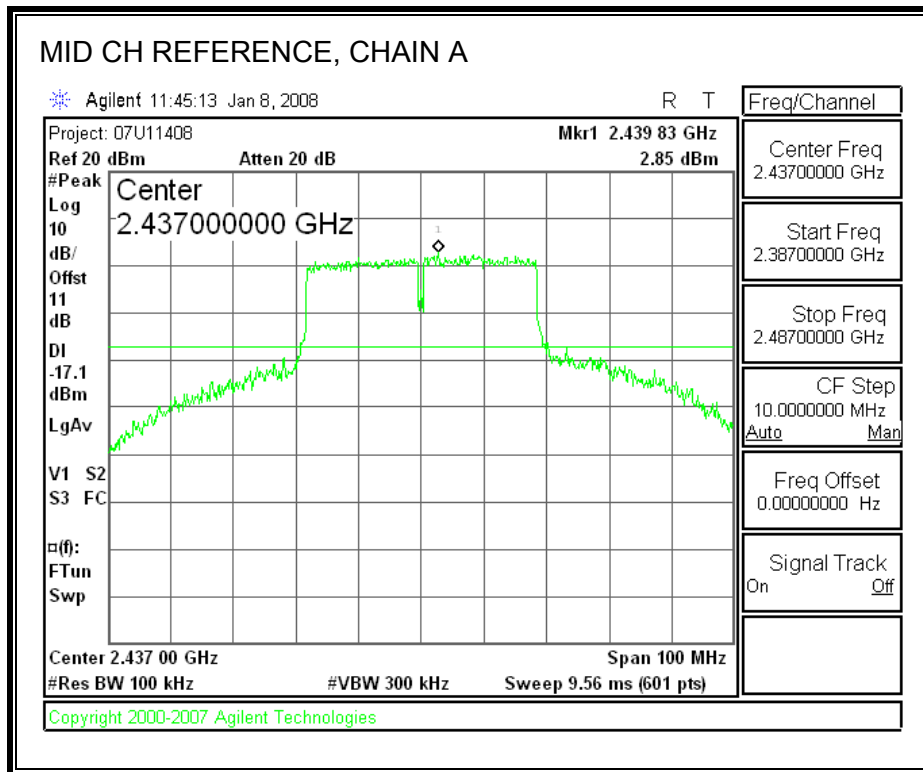
### RESULTS

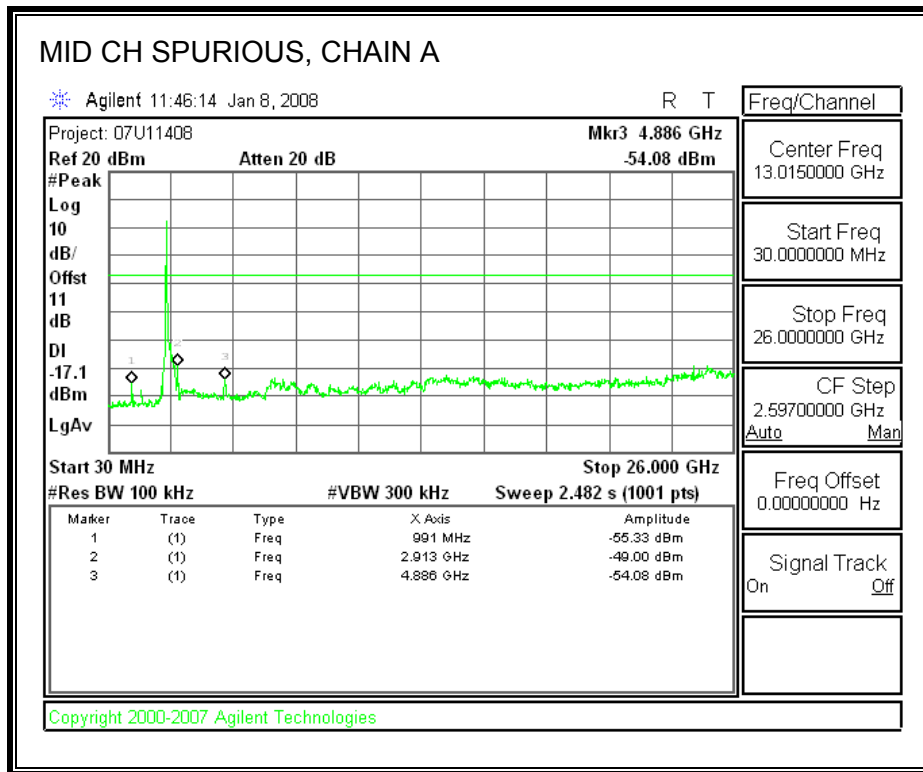
**CHAIN A SPURIOUS EMISSIONS**

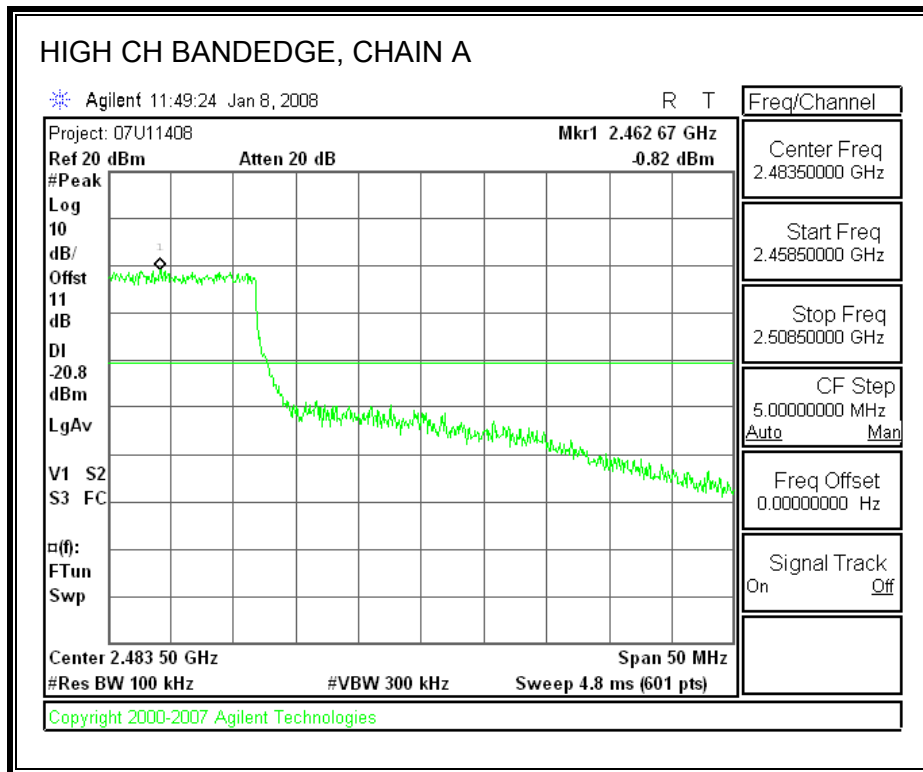


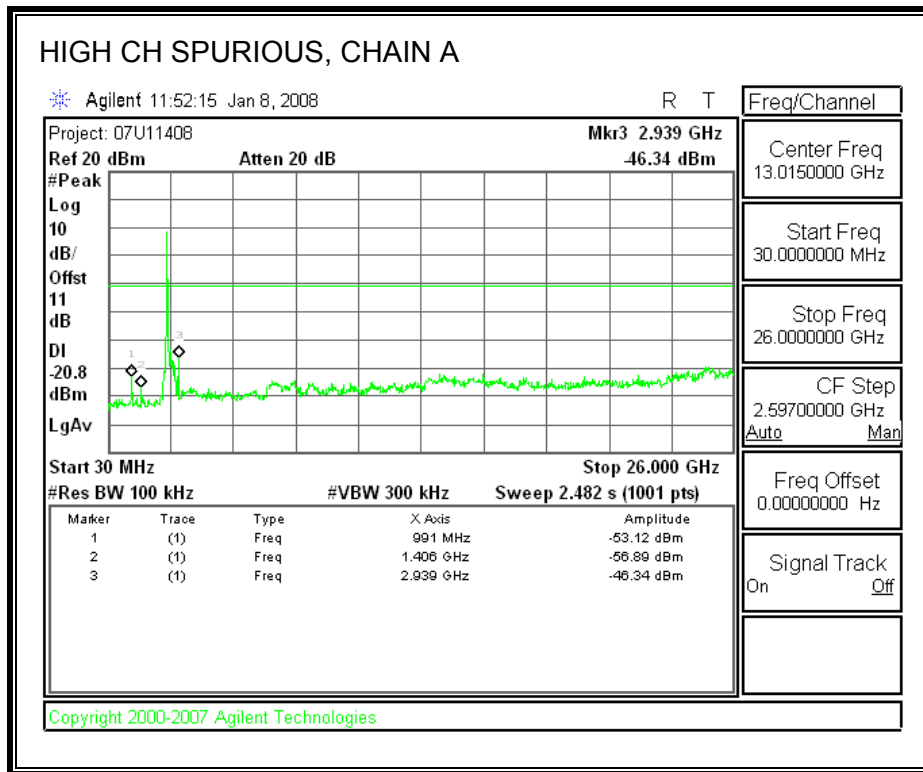




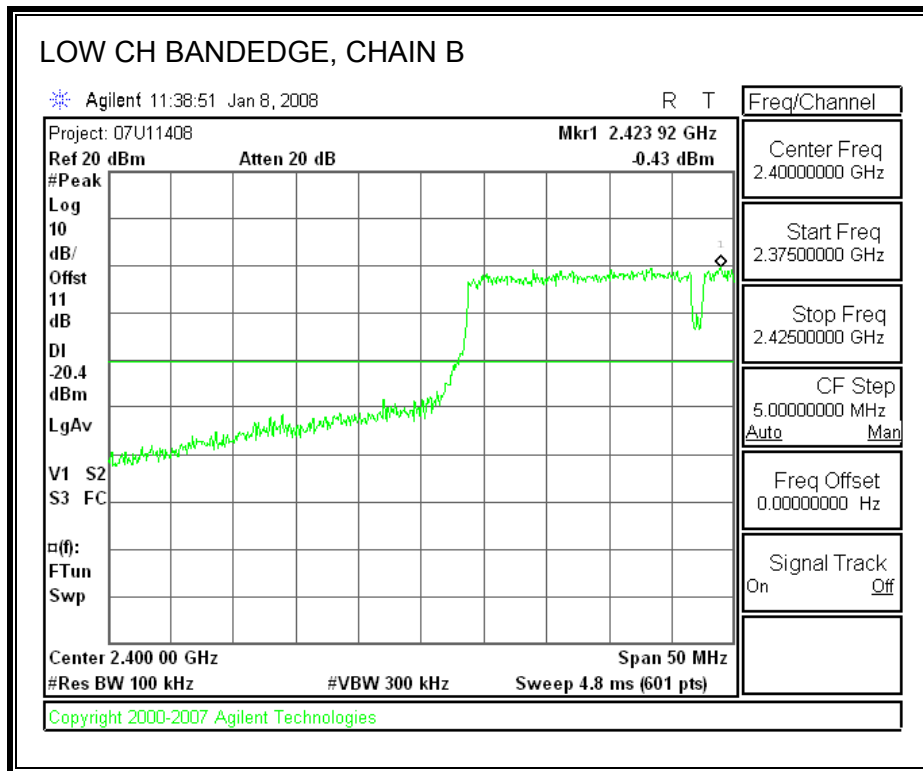


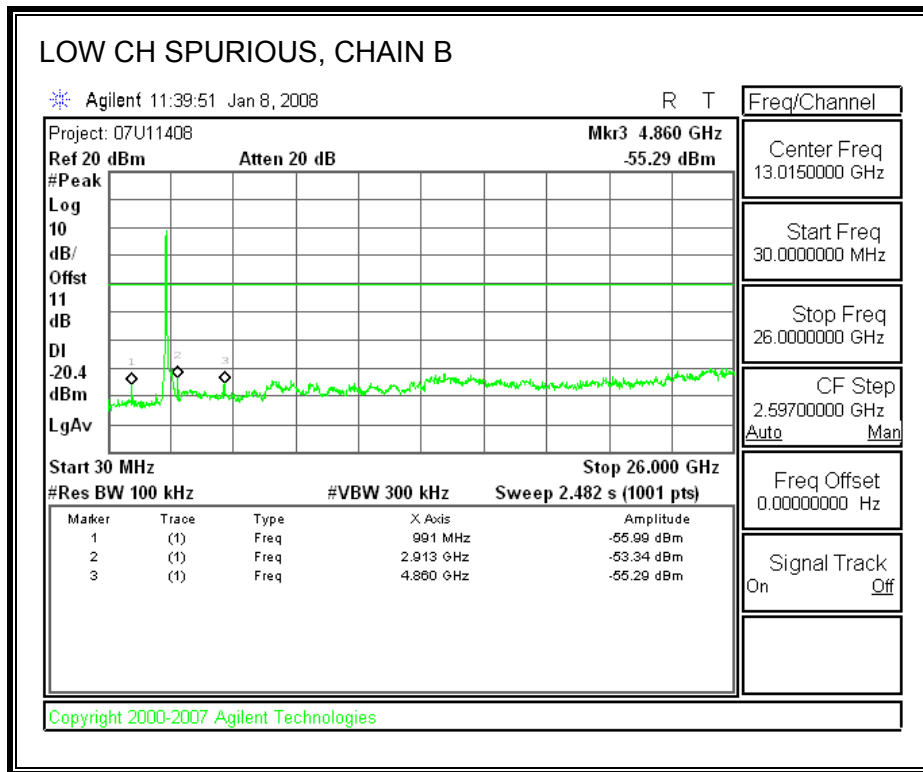


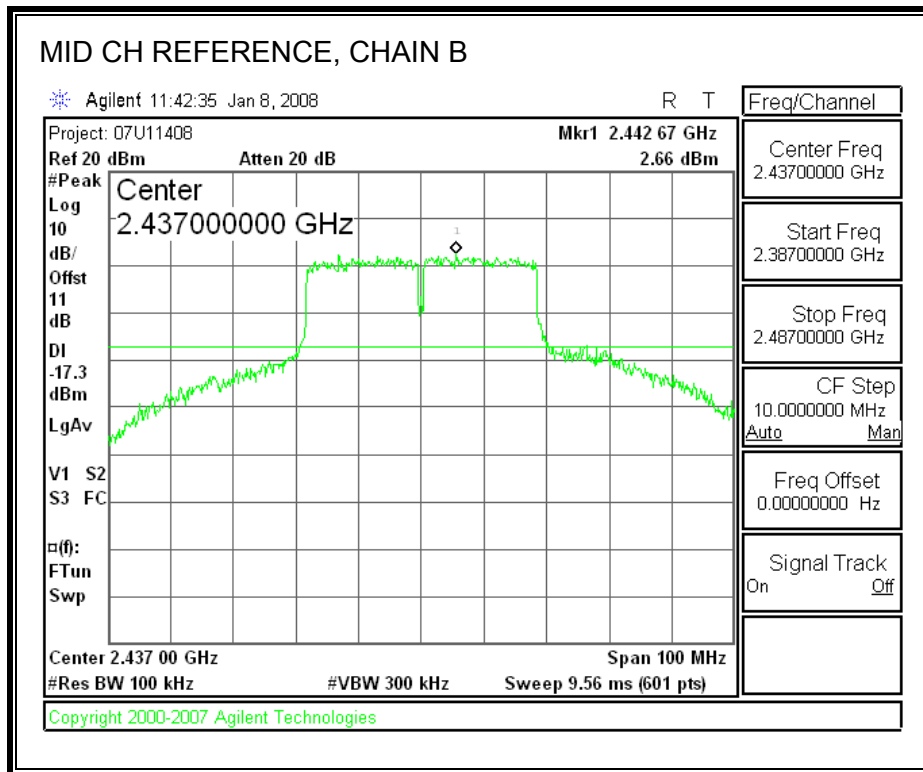


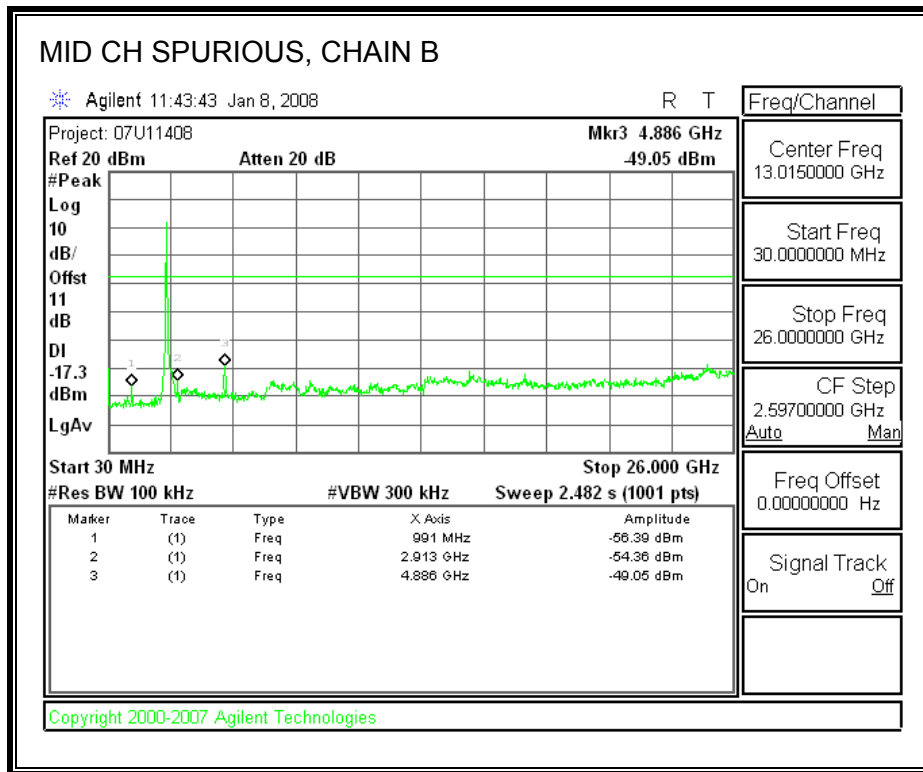


**CHAIN B SPURIOUS EMISSIONS**

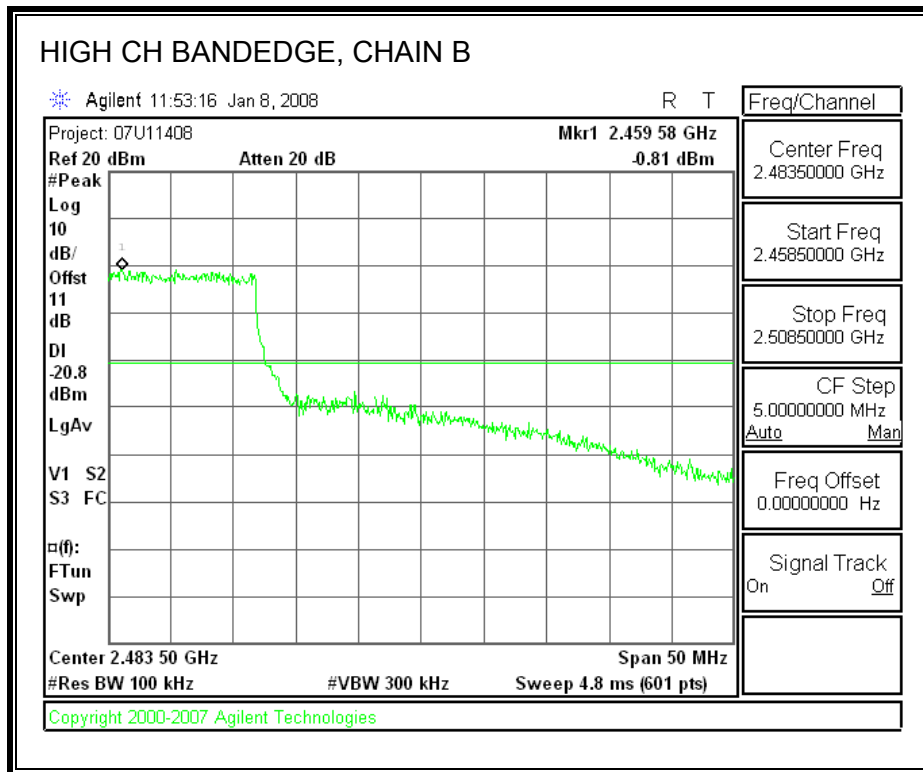


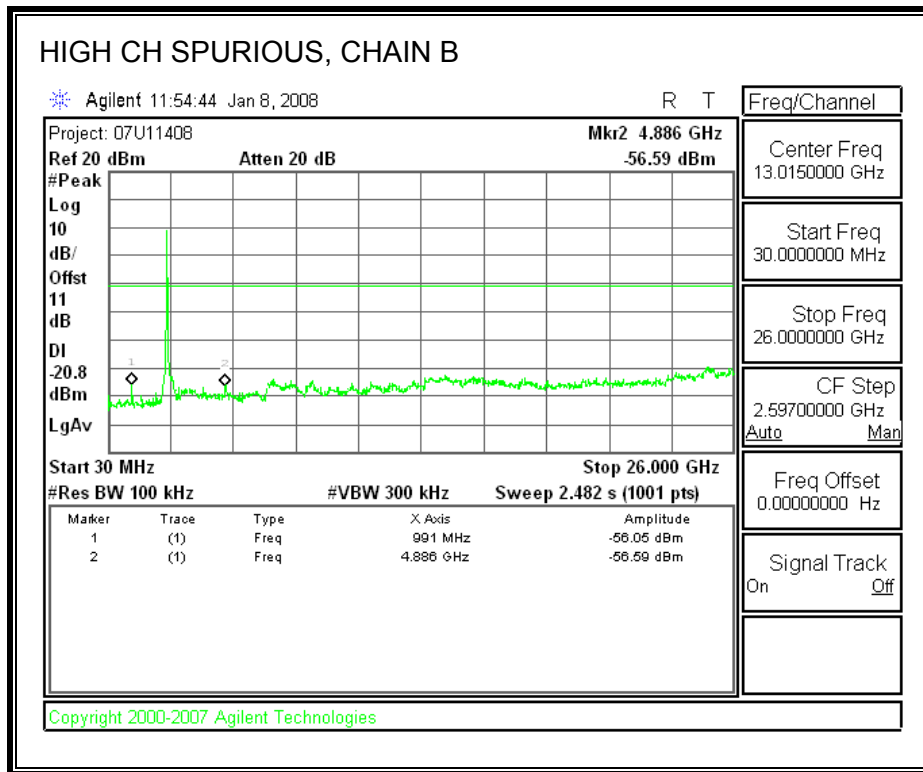




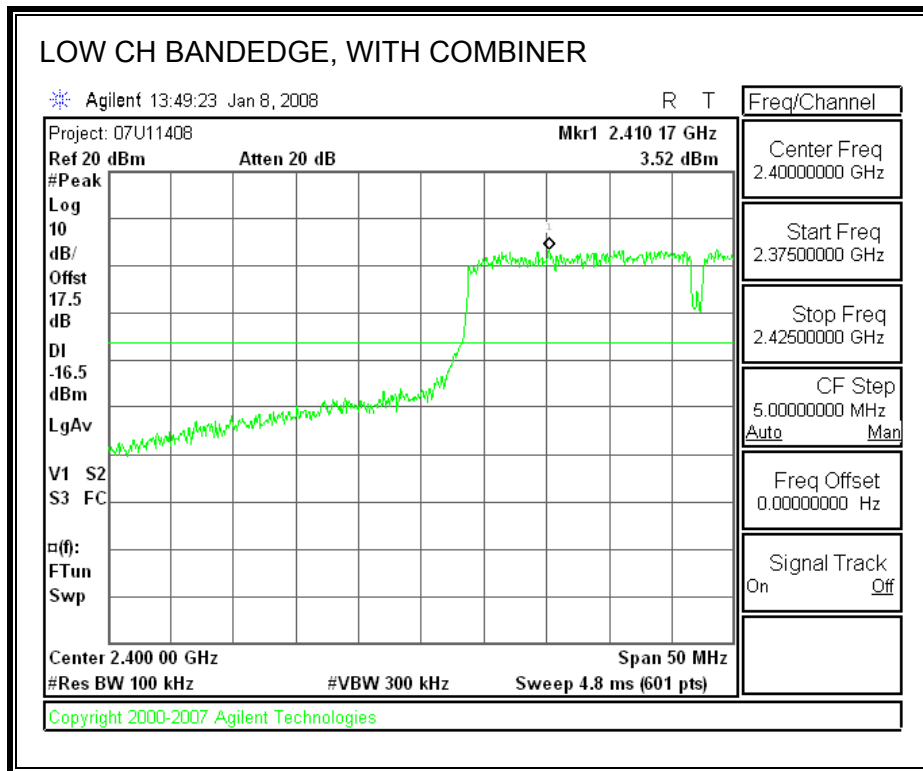


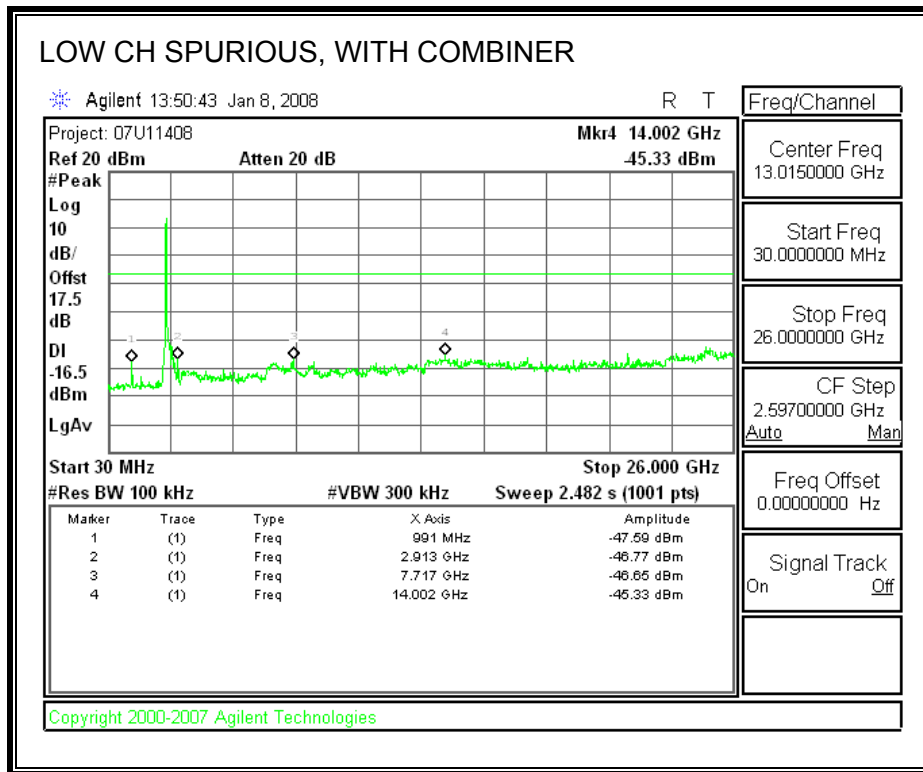


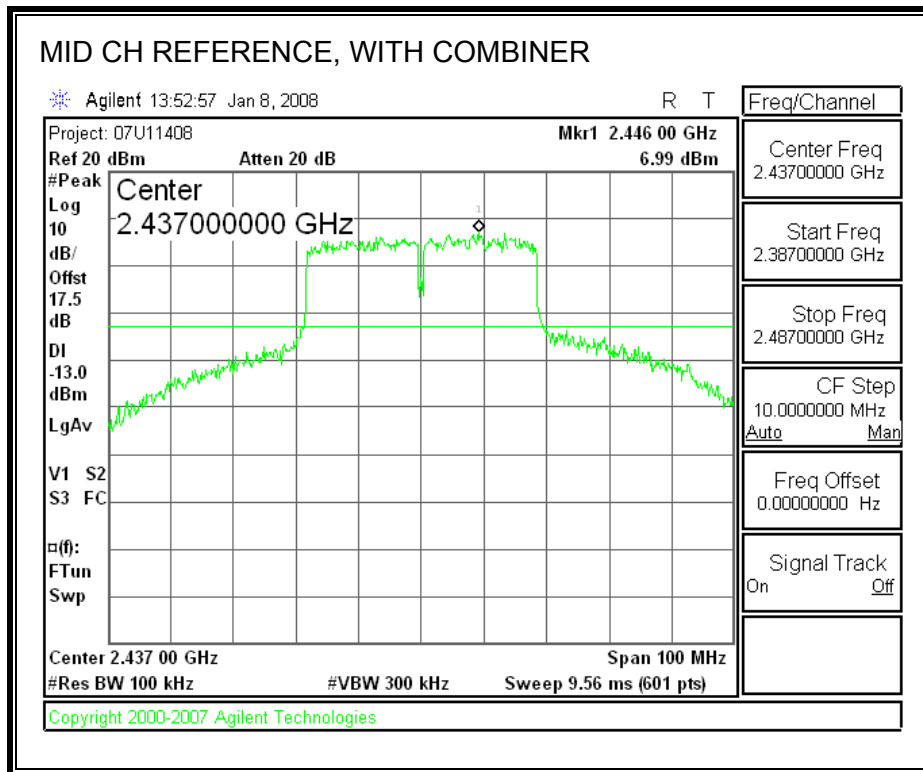


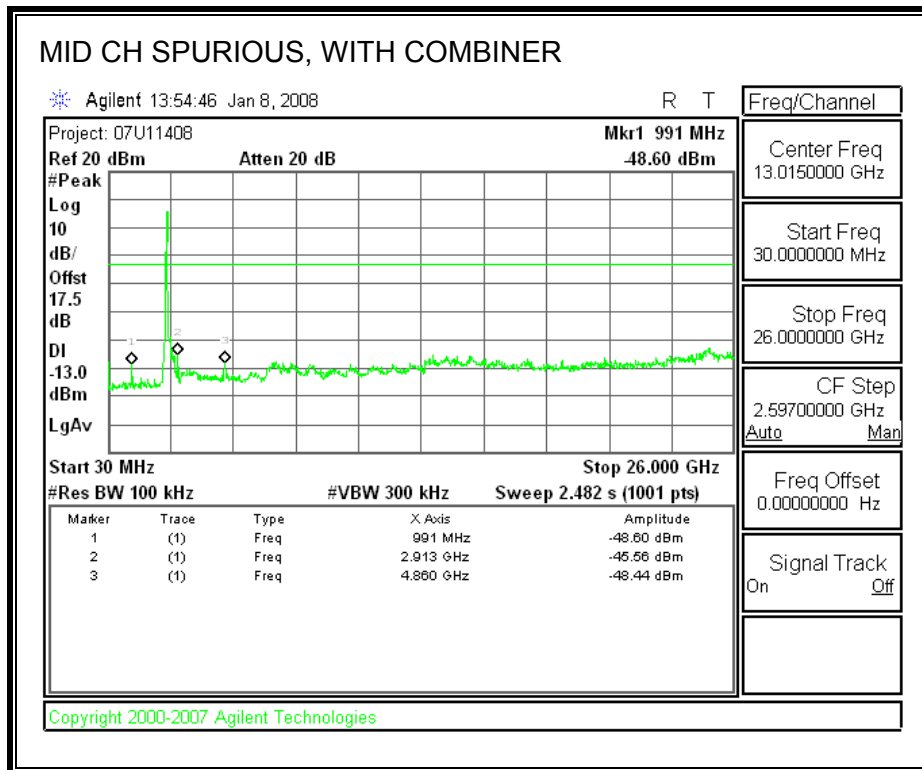


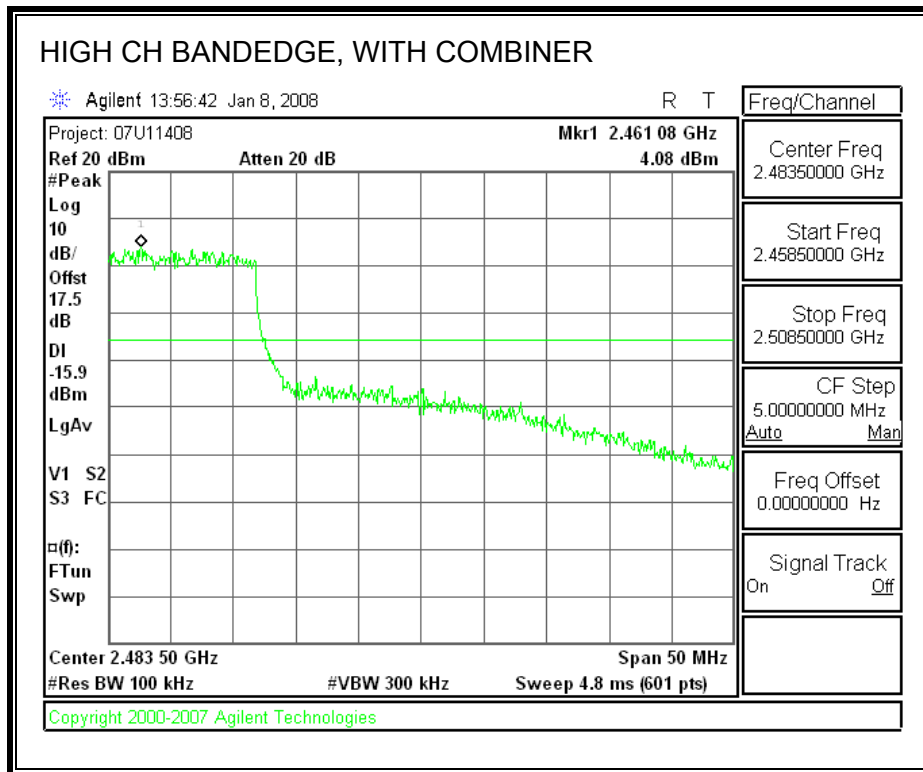
**SPURIOUS EMISSIONS WITH COMBINER**

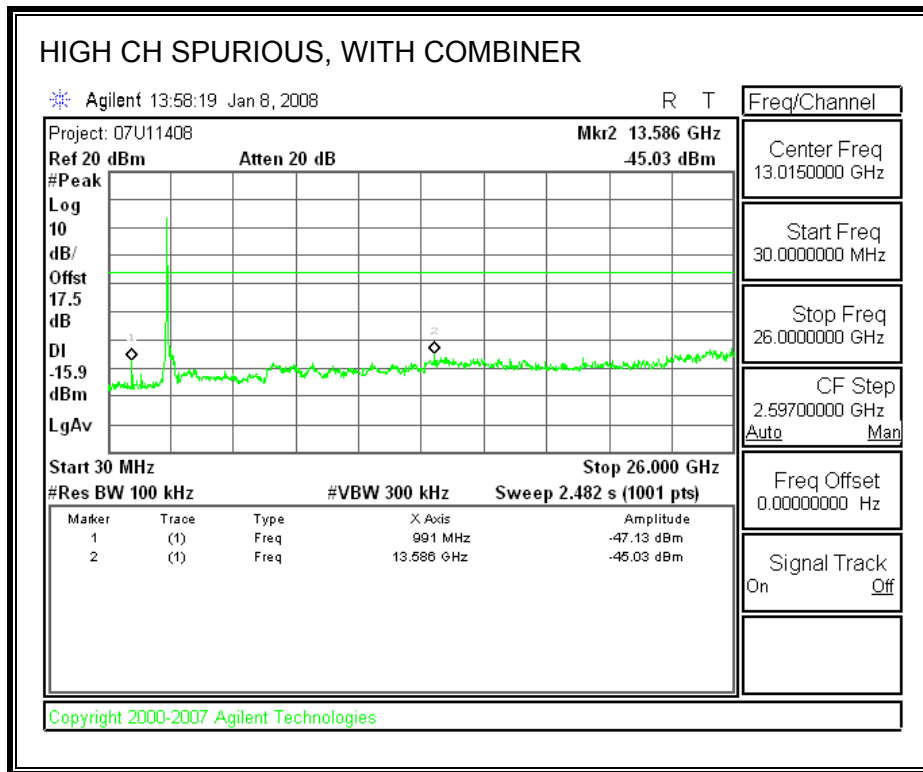














## 7.5. 802.11a MODE IN THE 5.8 GHz BAND

### 7.5.1. 6 dB BANDWIDTH

#### LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

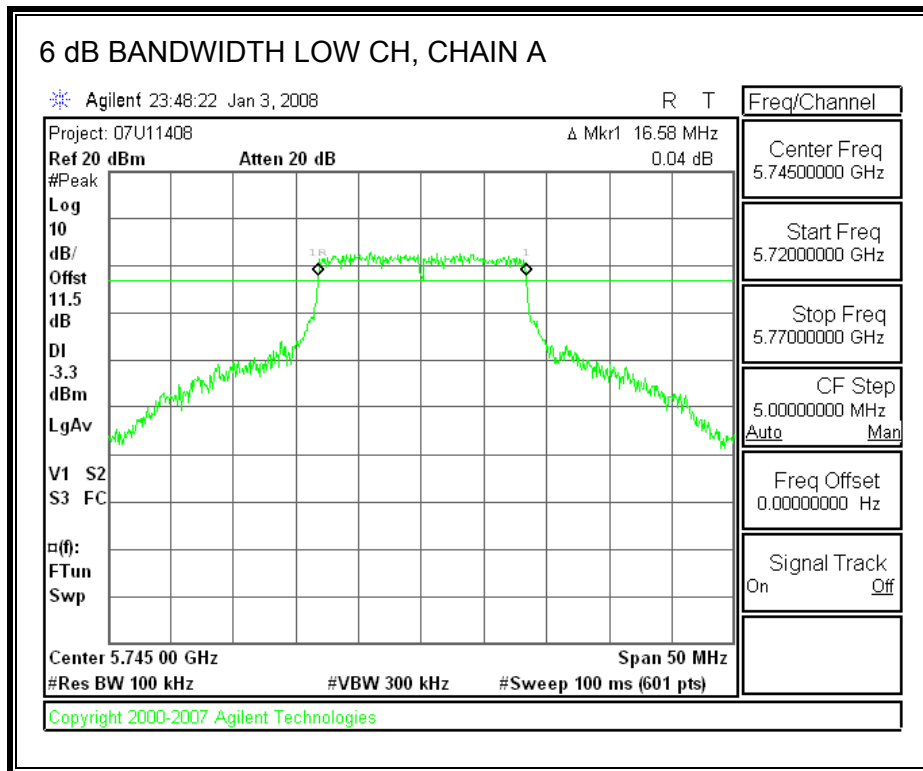
#### TEST PROCEDURE

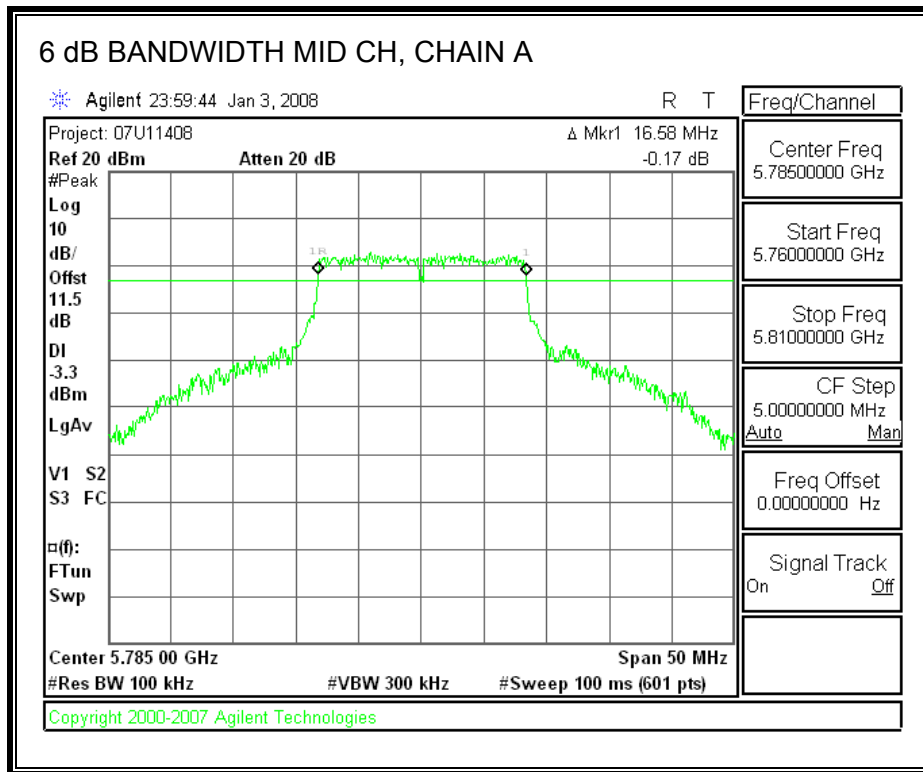
The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 300 kHz. The sweep time is coupled.

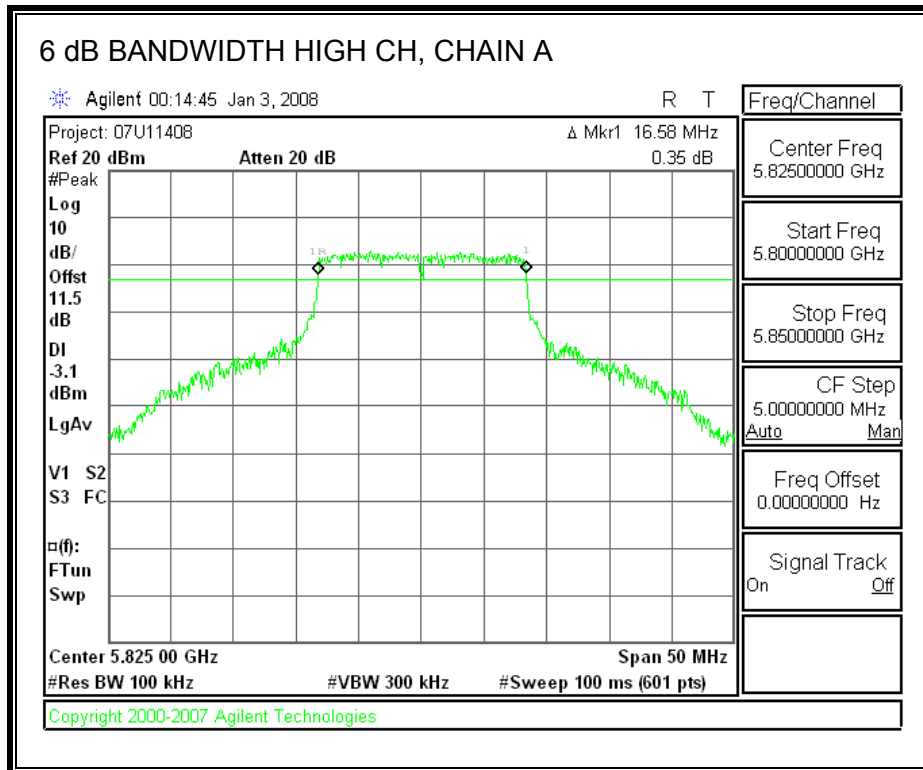
#### RESULTS

Channel	Frequency (MHz)	Chain A 6 dB BW (MHz)	Chain B 6 dB BW (MHz)	Minimum Limit (MHz)
Low	5745	16.58	16.58	0.5
Middle	5785	16.58	16.58	0.5
High	5825	16.58	16.58	0.5

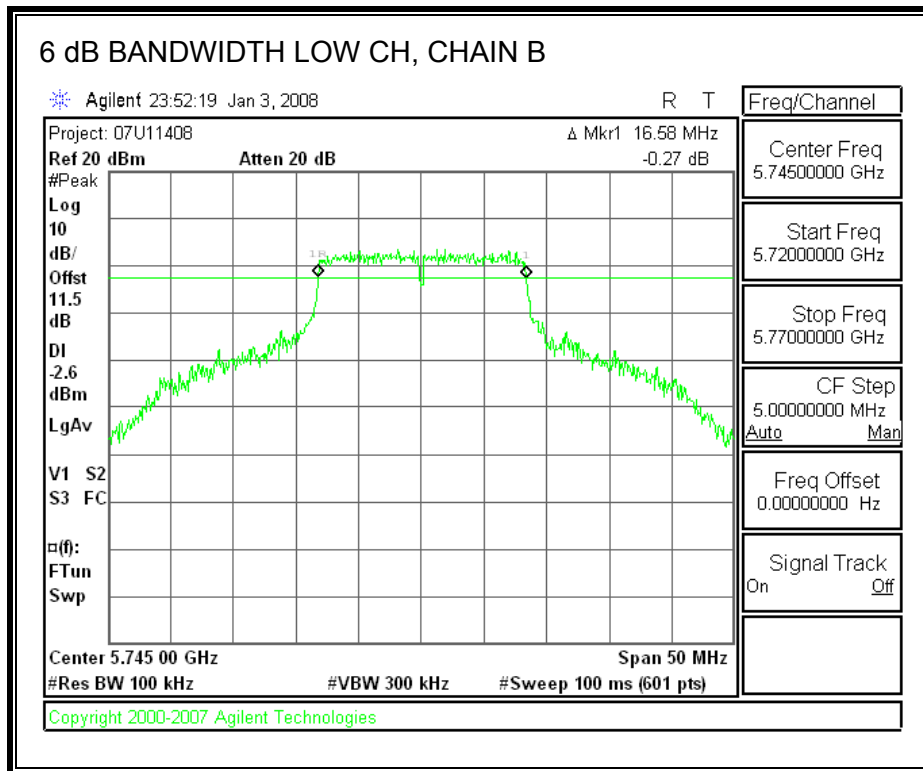
**6 dB BANDWIDTH, CHAIN A**

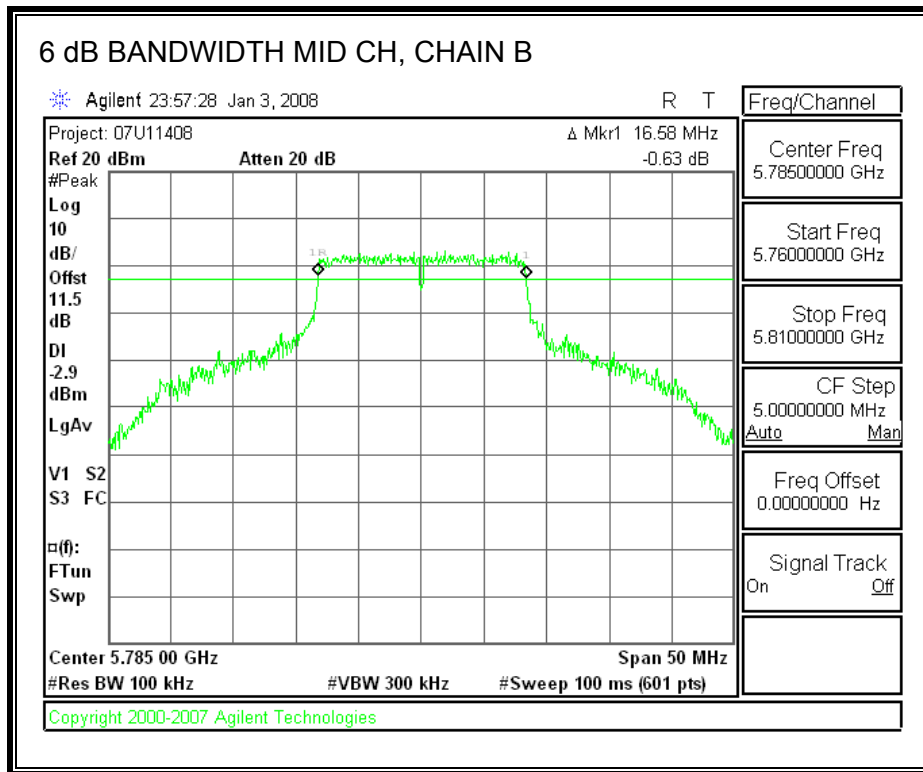


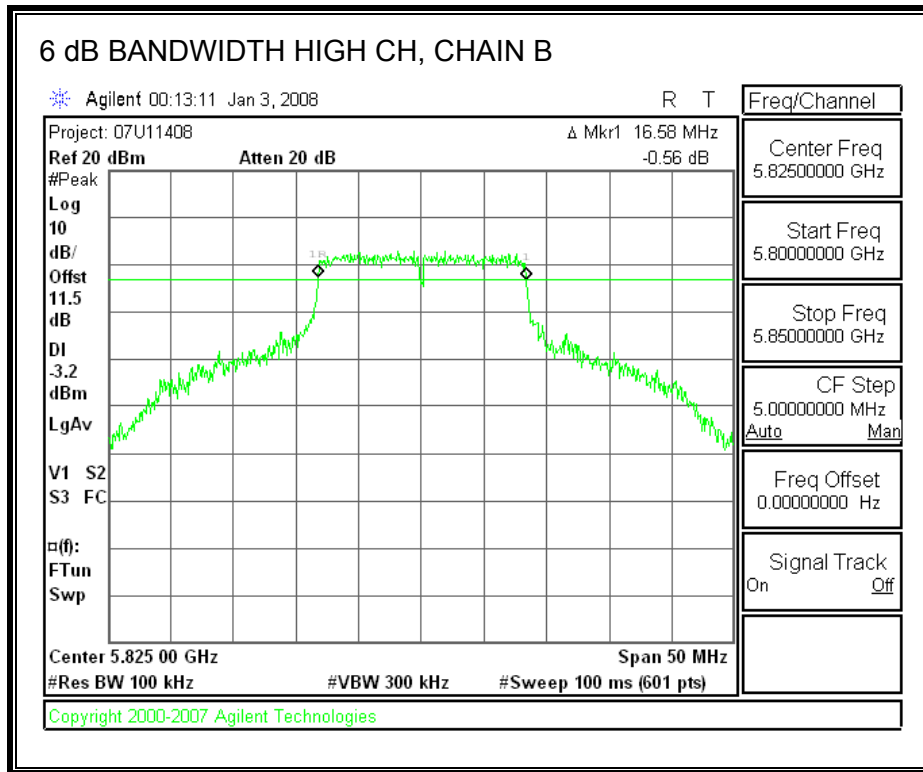




**6 dB BANDWIDTH, CHAIN B**







**7.5.2. 99% BANDWIDTH****LIMITS**

None; for reporting purposes only.

**TEST PROCEDURE**

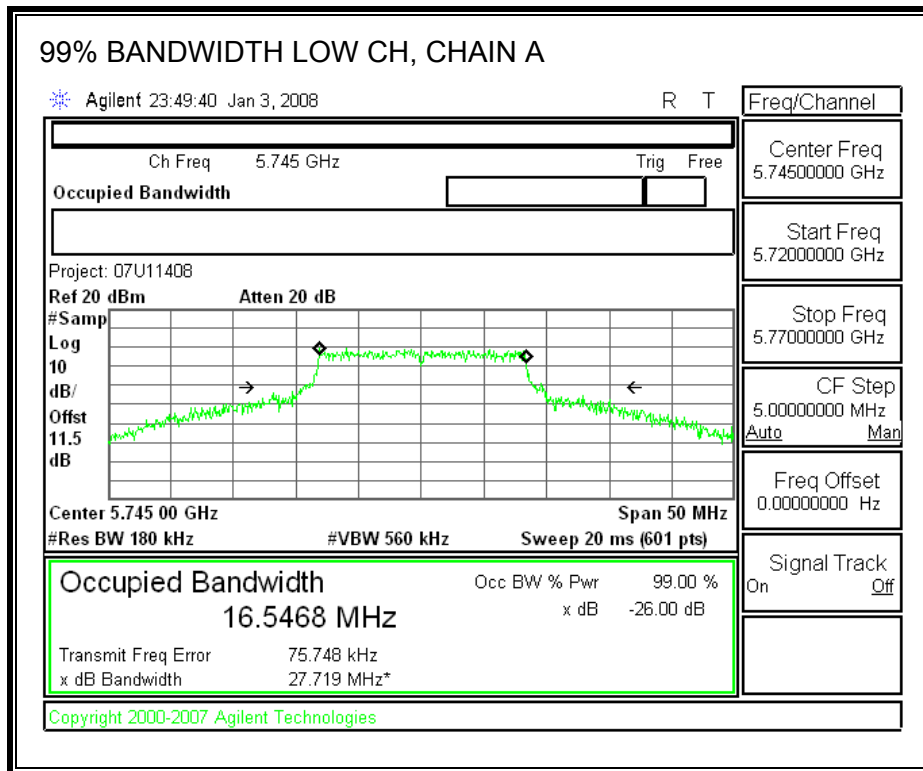
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

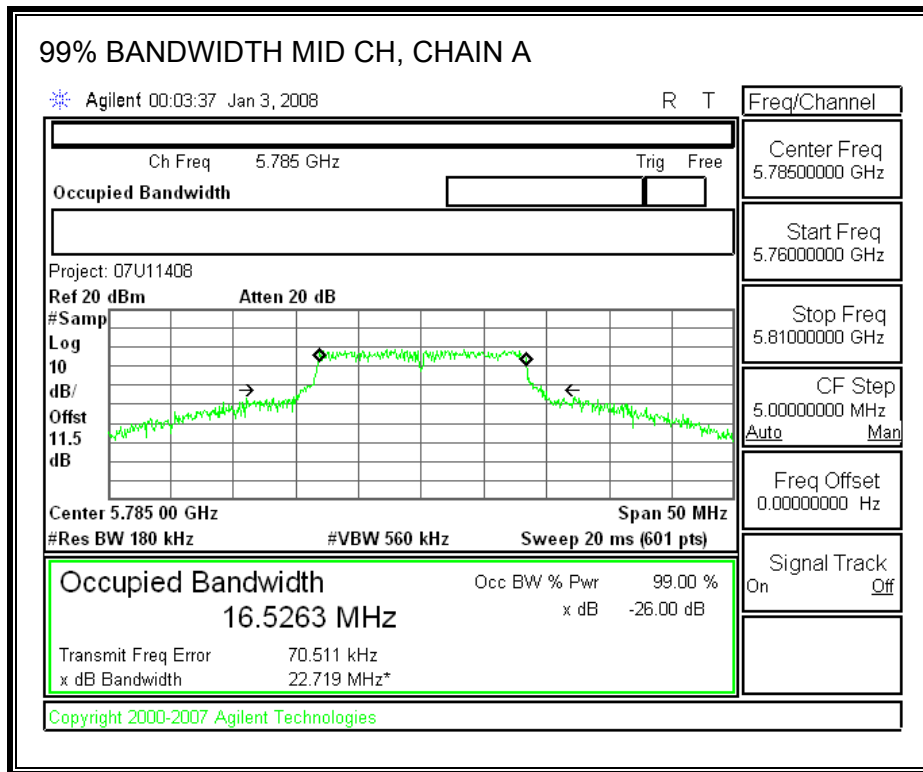
**RESULTS**

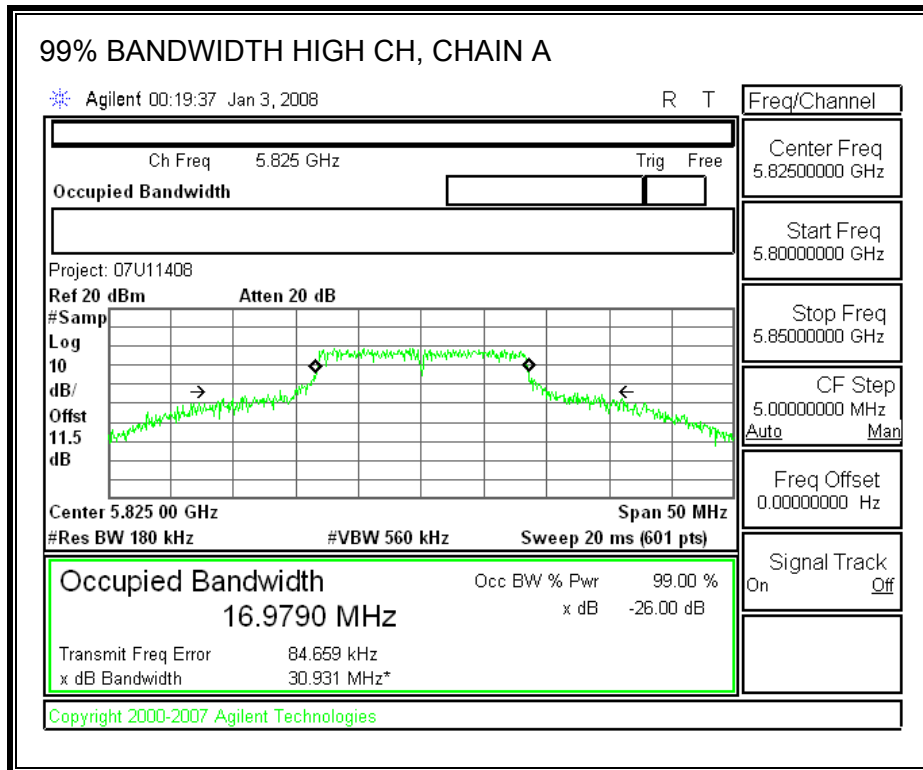
Channel	Frequency (MHz)	Chain A 99% Bandwidth (MHz)	Chain B 99% Bandwidth (MHz)
Low	5745	16.5468	16.7752
Middle	5785	16.5263	16.7527
High	5825	16.9790	16.9790



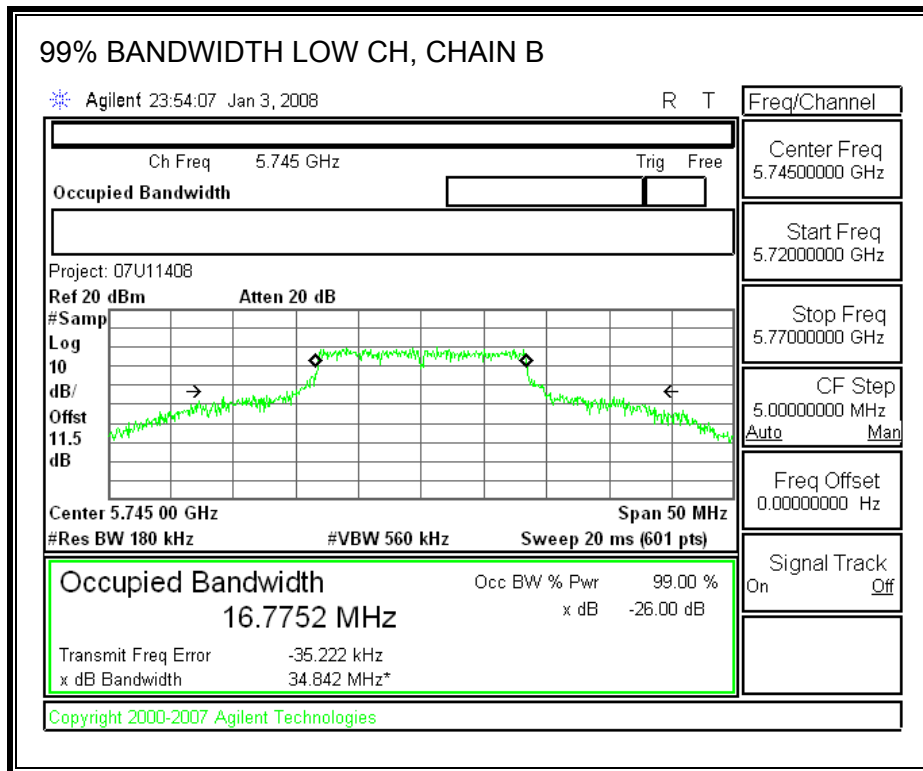
**99% BANDWIDTH, CHAIN A**

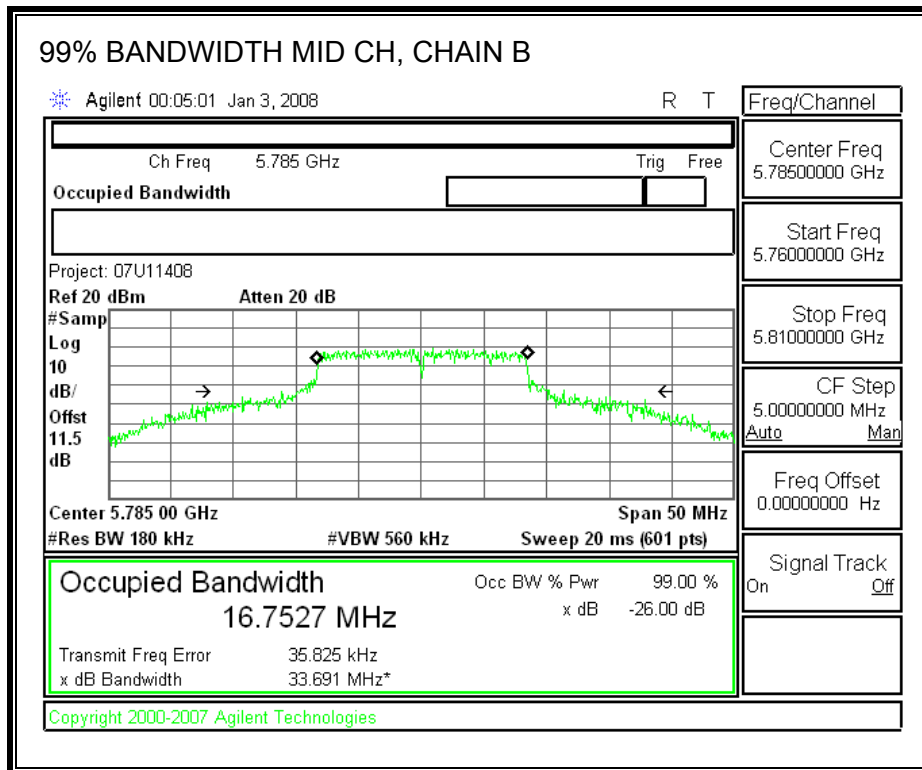


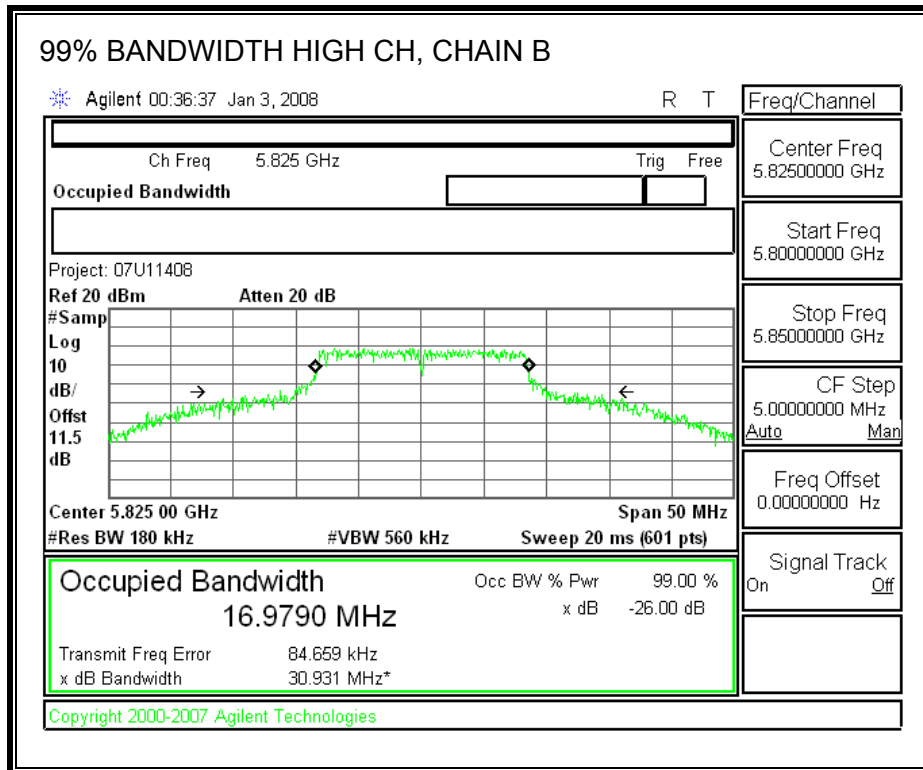




**99% BANDWIDTH, CHAIN B**







### 7.5.3. OUTPUT POWER

#### LIMITS

FCC §15.247 (b)

IC RSS-210 A8.4

Antenna Gain (dBi)	10 Log (# Tx Chains) (dB)	Effective Legacy Gain (dBi)
3.42	3.01	6.43

The maximum effective antenna gain is 6.43 dBi, which is greater than 6 dBi by 0.43 dB, therefore the limit is 29.57 dBm.

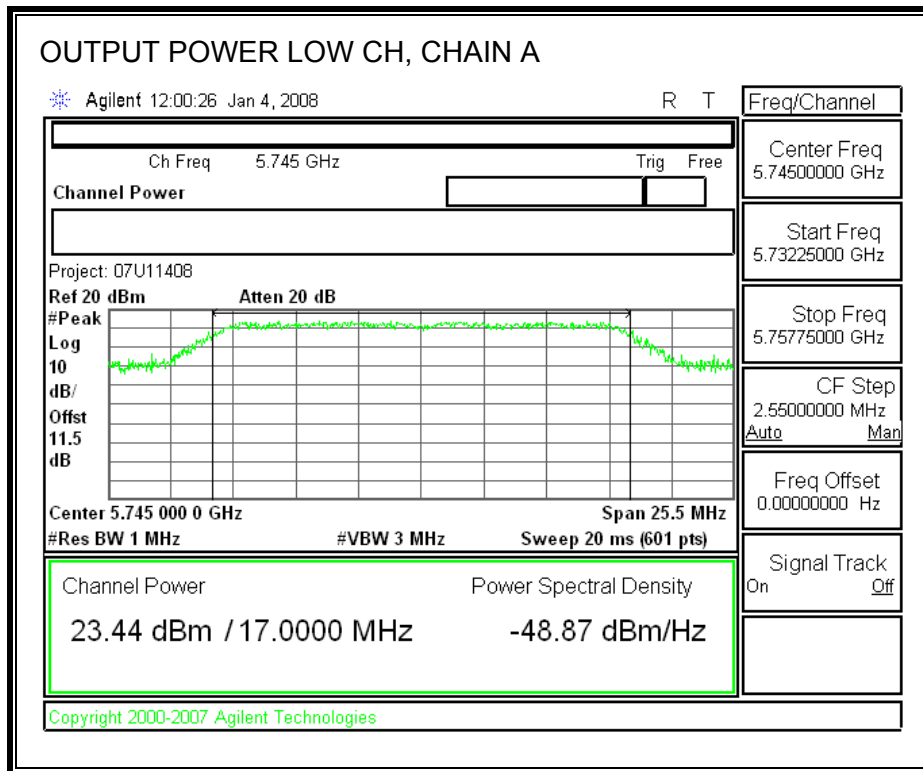
#### TEST PROCEDURE

Peak power is measured using the spectrum analyzer's internal channel power integration function. Power is integrated over a bandwidth greater than or equal to the 99% bandwidth.

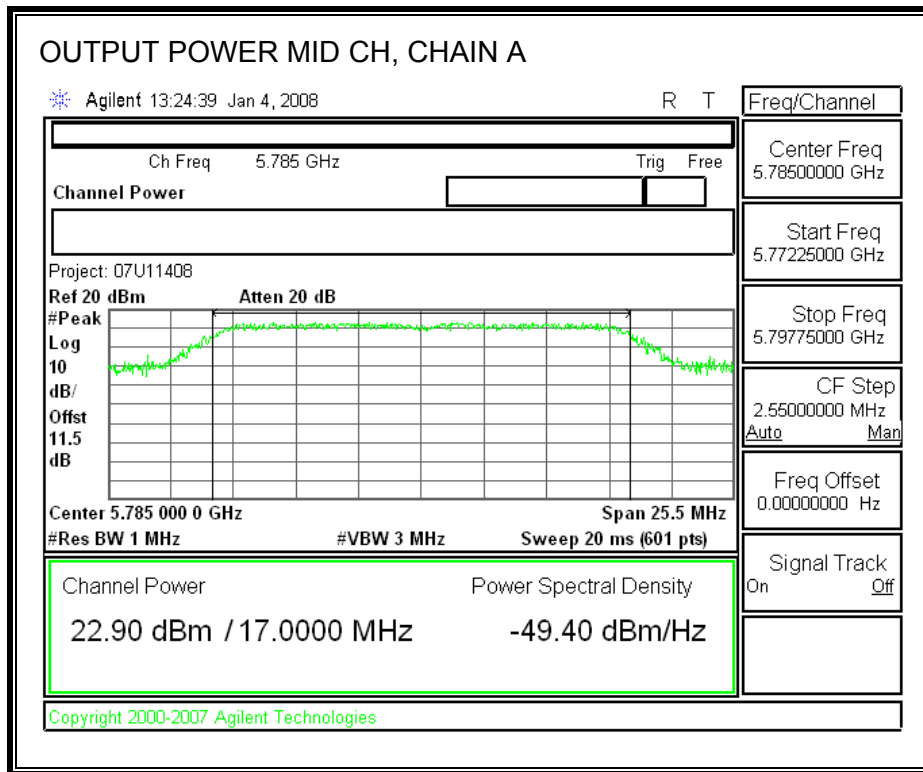
#### RESULTS

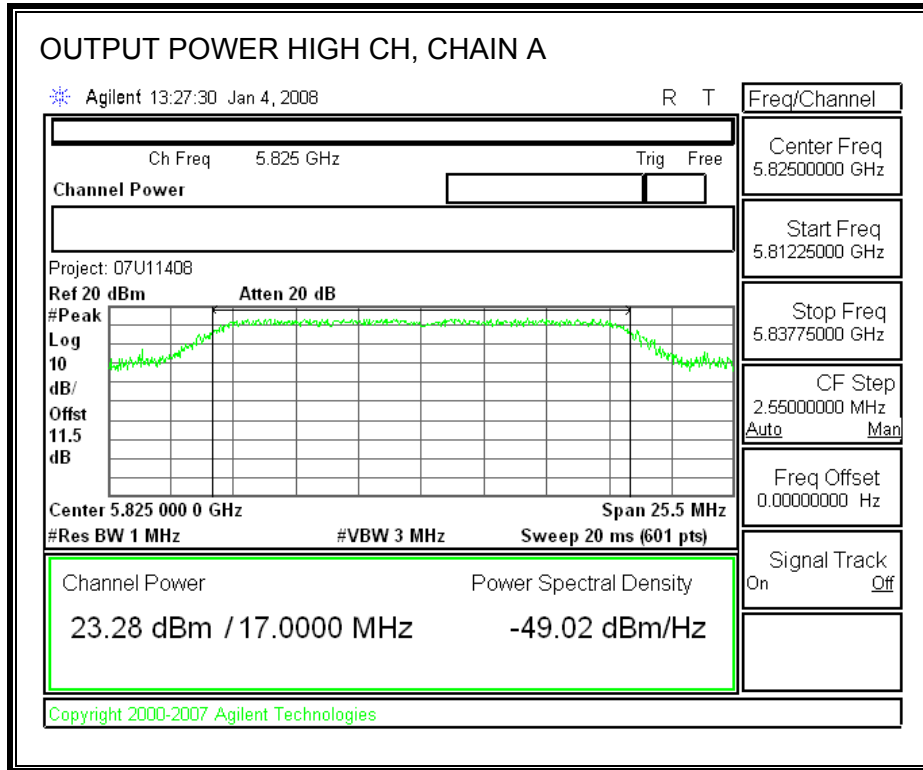
Channel	Frequency (MHz)	Limit (dBm)	Chain A Power (dBm)	Chain B Power (dBm)	Total Power (dBm)	Margin (dB)
Low	5745	29.57	23.44	23.46	26.46	-3.11
Mid	5785	29.57	22.90	23.03	25.98	-3.59
High	5825	29.57	23.28	23.03	26.17	-3.40

**CHAIN A OUTPUT POWER**

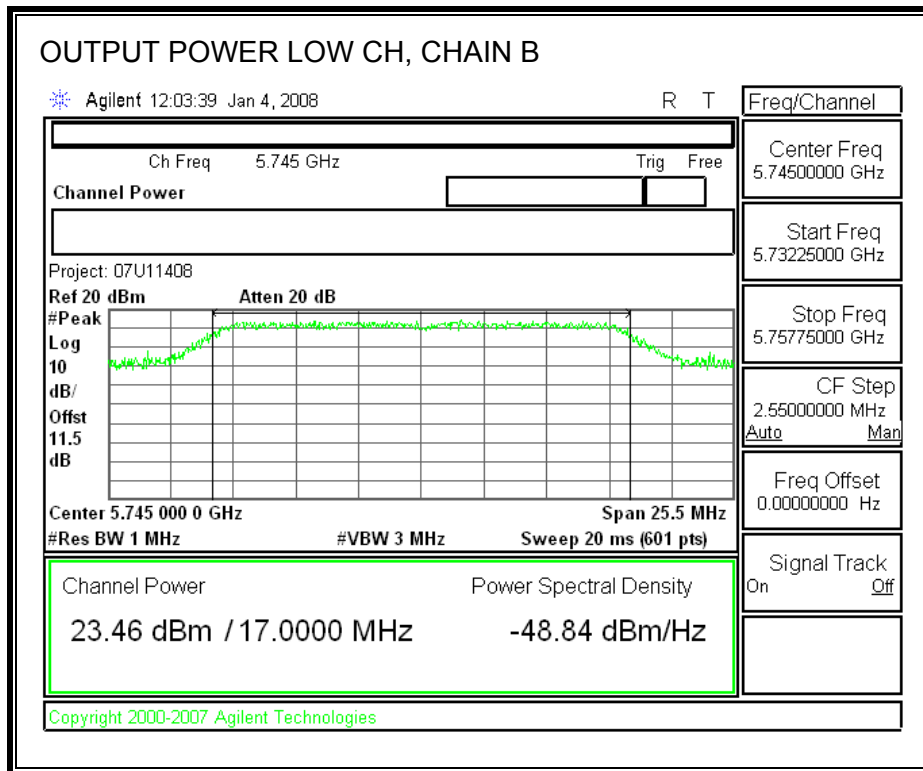


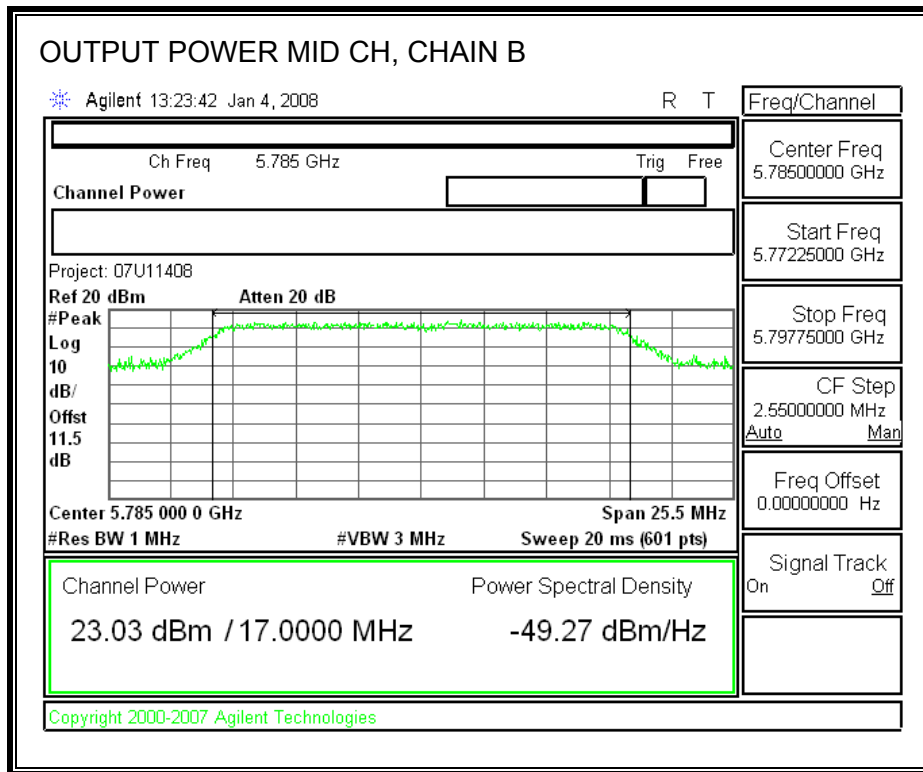


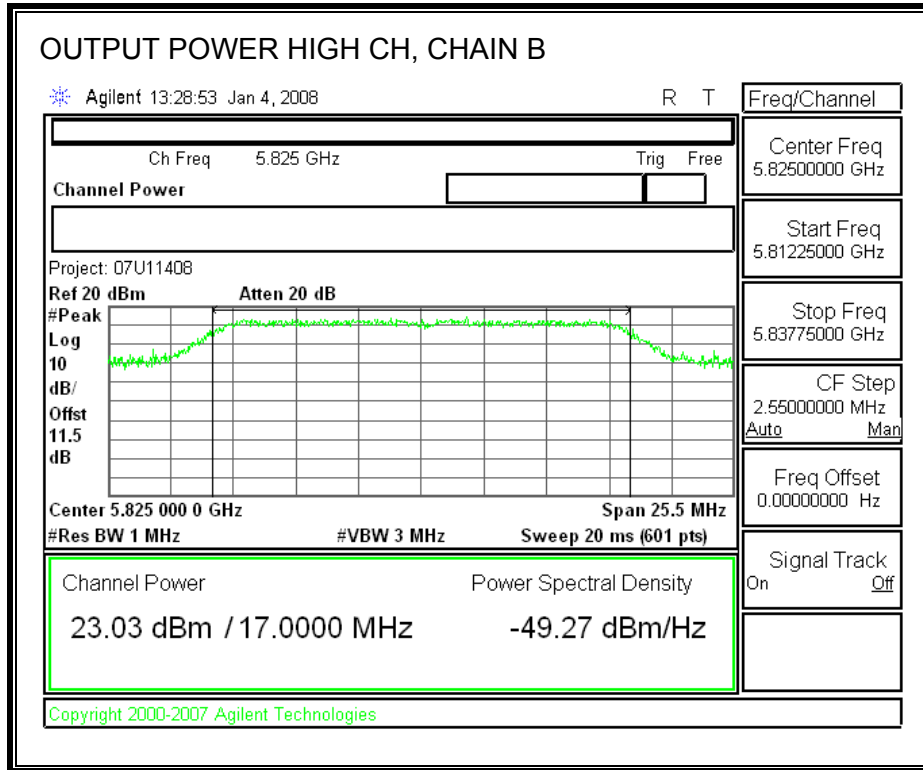




**CHAIN B OUTPUT POWER**







## 7.5.4. POWER SPECTRAL DENSITY

### LIMITS

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### TEST PROCEDURE

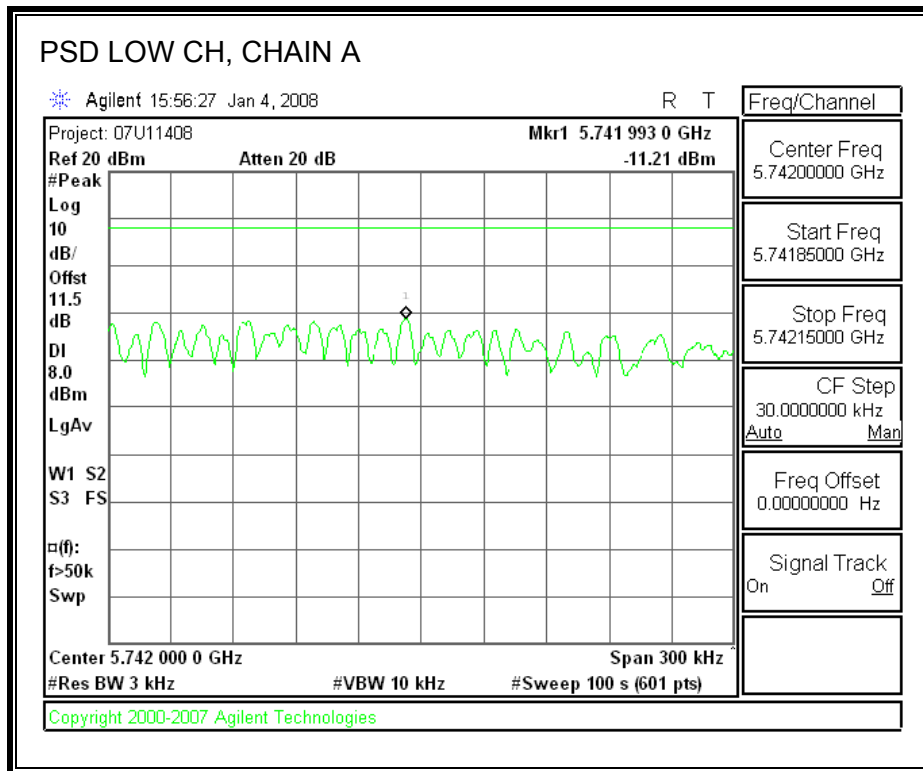
Output power was measured based on the use of a peak measurement, therefore the power spectral density was measured using PSD Option 1 in accordance with FCC document "Measurement of Digital Transmission Systems Operating under Section 15.247", March 23, 2005.

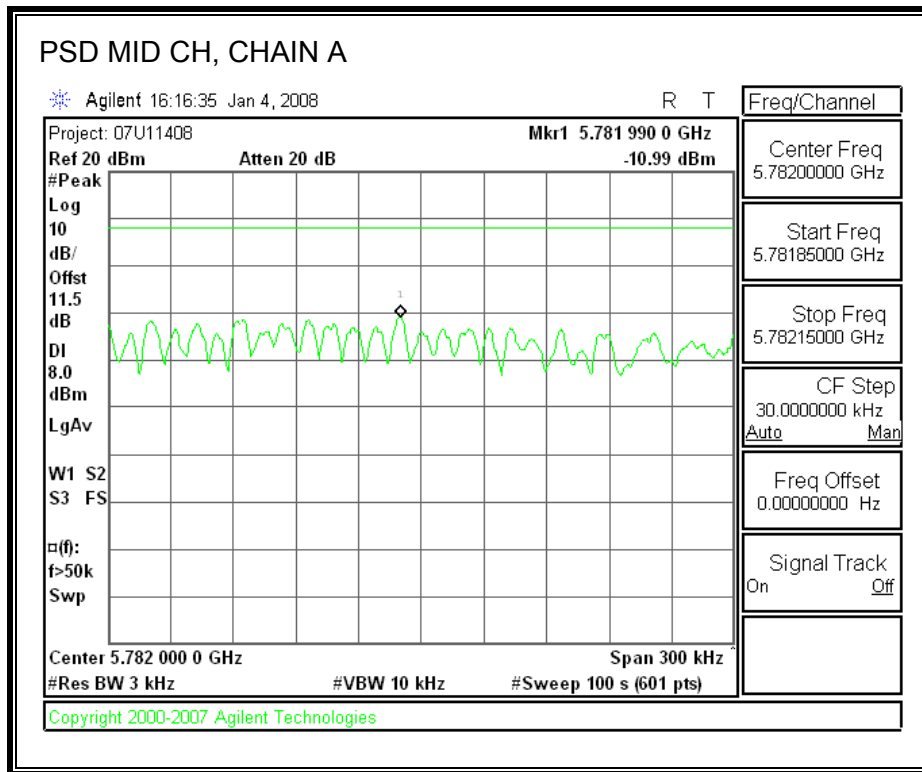
### RESULTS:

Channel	Frequency (MHz)	Chain A PSD (dBm)	Chain B PSD (dBm)	Limit (dBm)
Low	5745	-11.21	-11.09	8
Middle	5785	-10.99	-11.37	8
High	5825	-10.59	-11.82	8

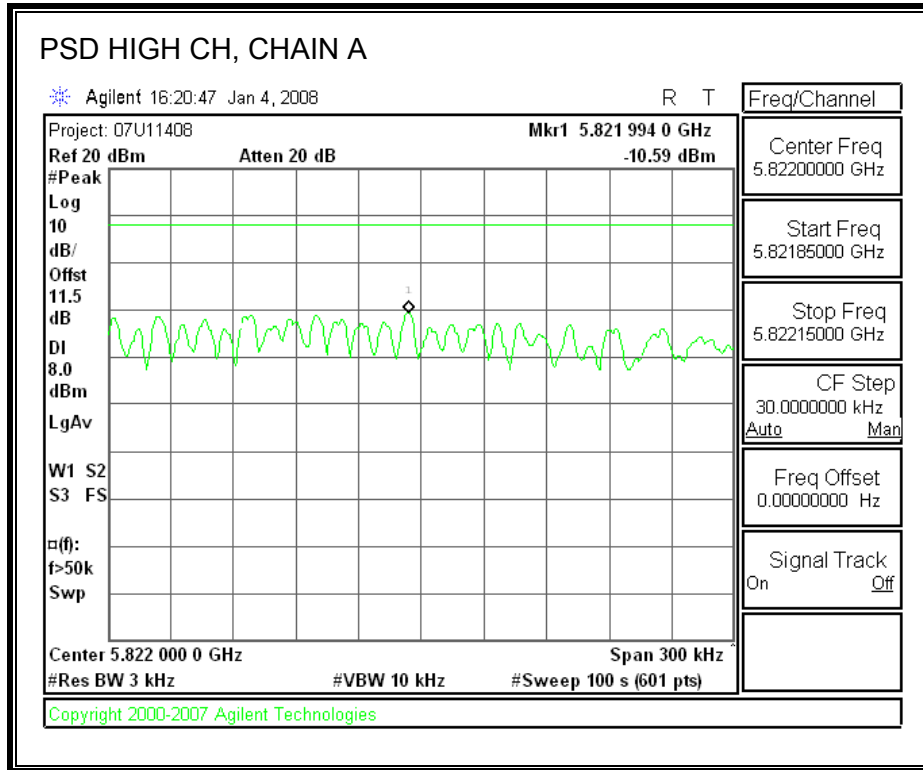
Channel	Frequency (MHz)	PSD with Combiner (dBm)	Limit (dBm)	Margin (dB)
Low	5745	-5.66	8	-13.66
Middle	5785	-5.82	8	-13.82
High	5825	-6.03	8	-14.03

**POWER SPECTRAL DENSITY, CHAIN A**

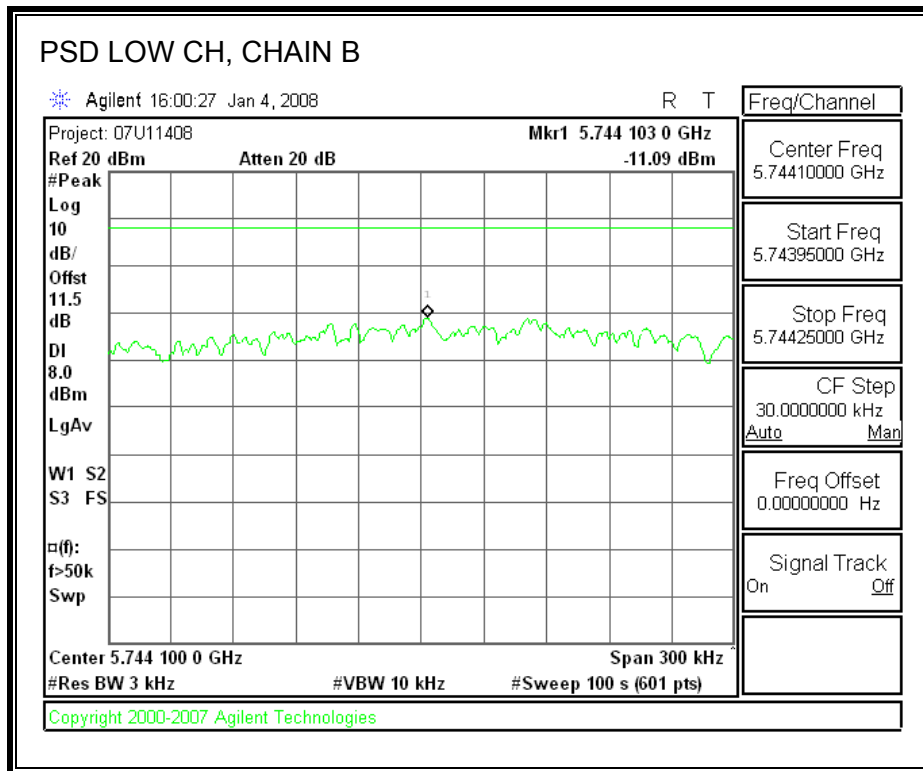


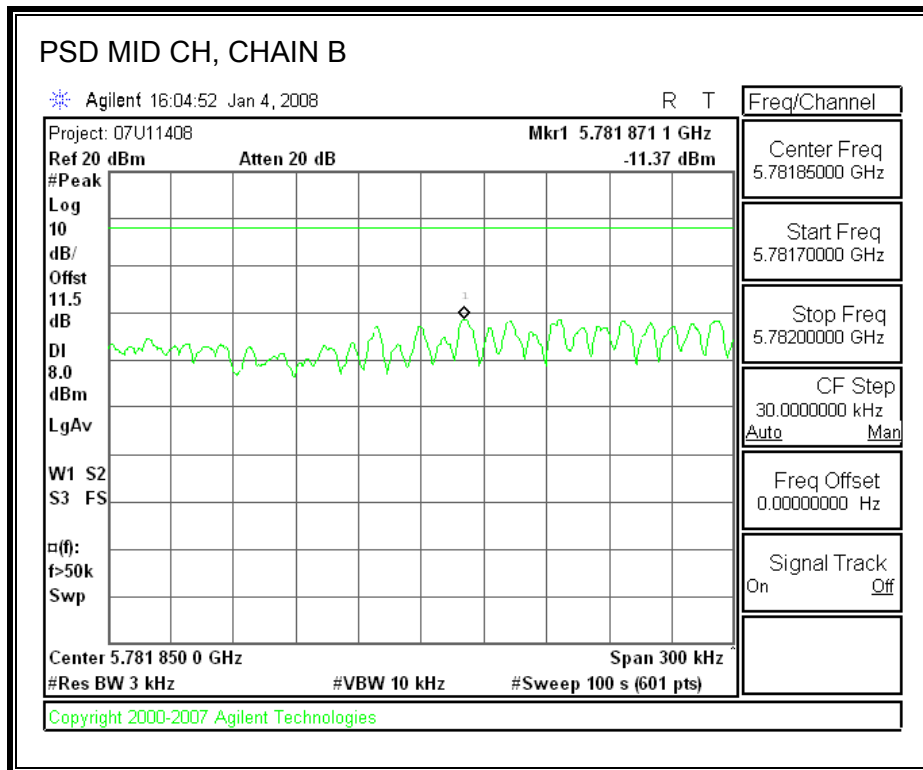


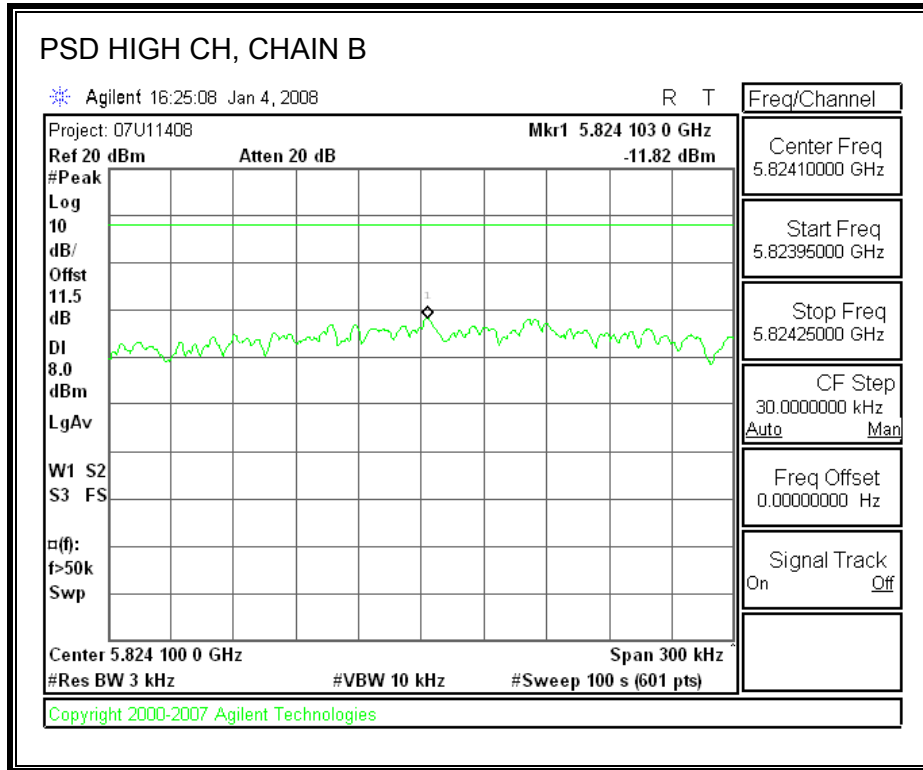




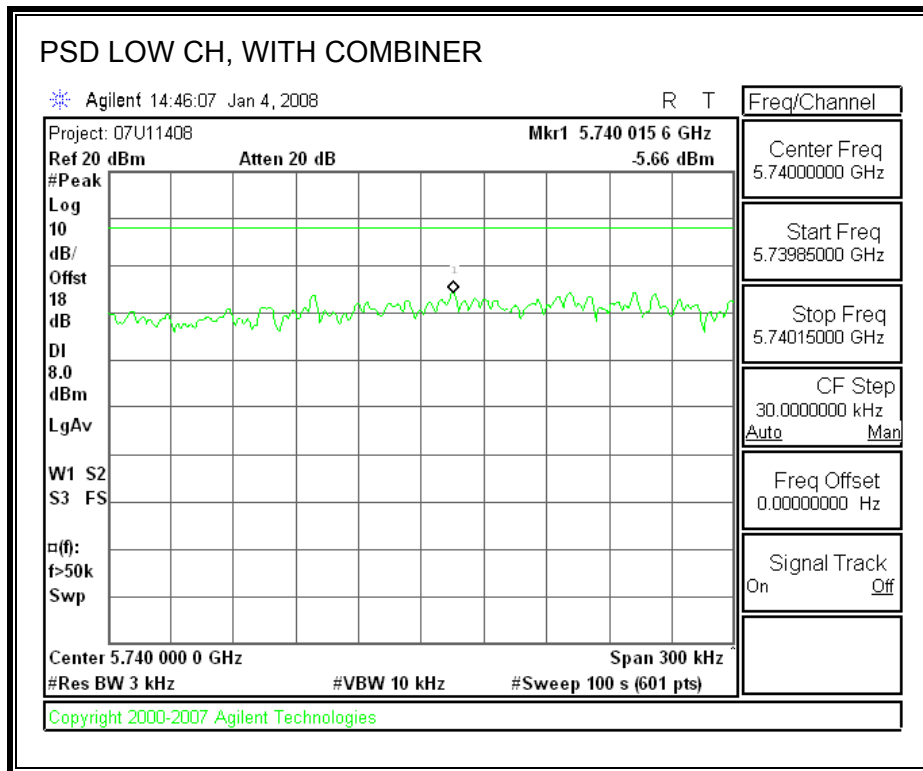
**POWER SPECTRAL DENSITY, CHAIN B**

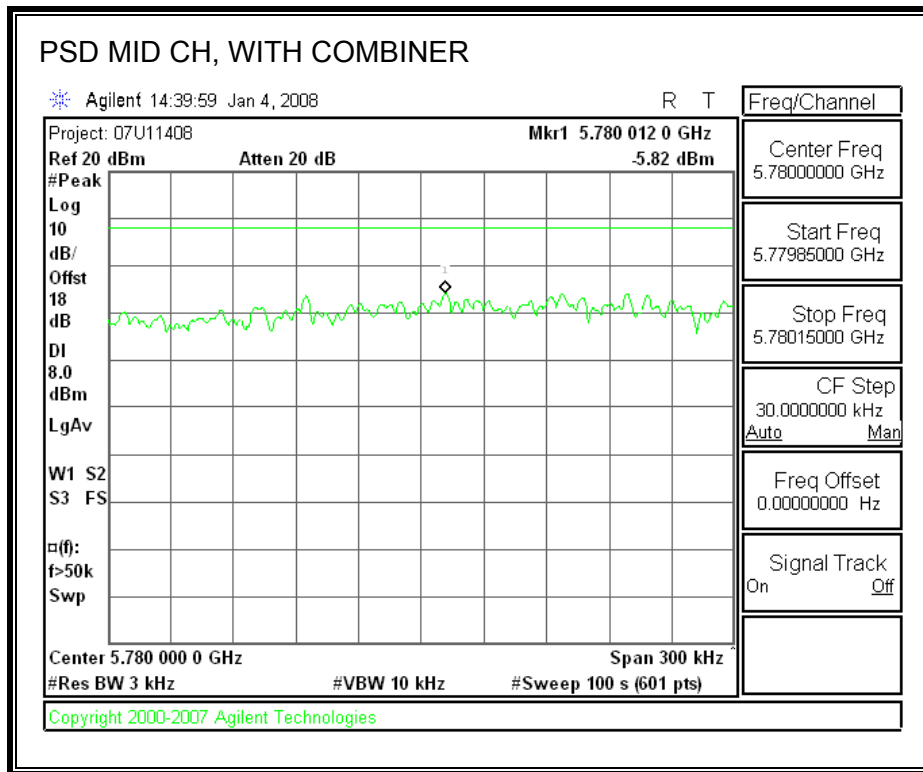


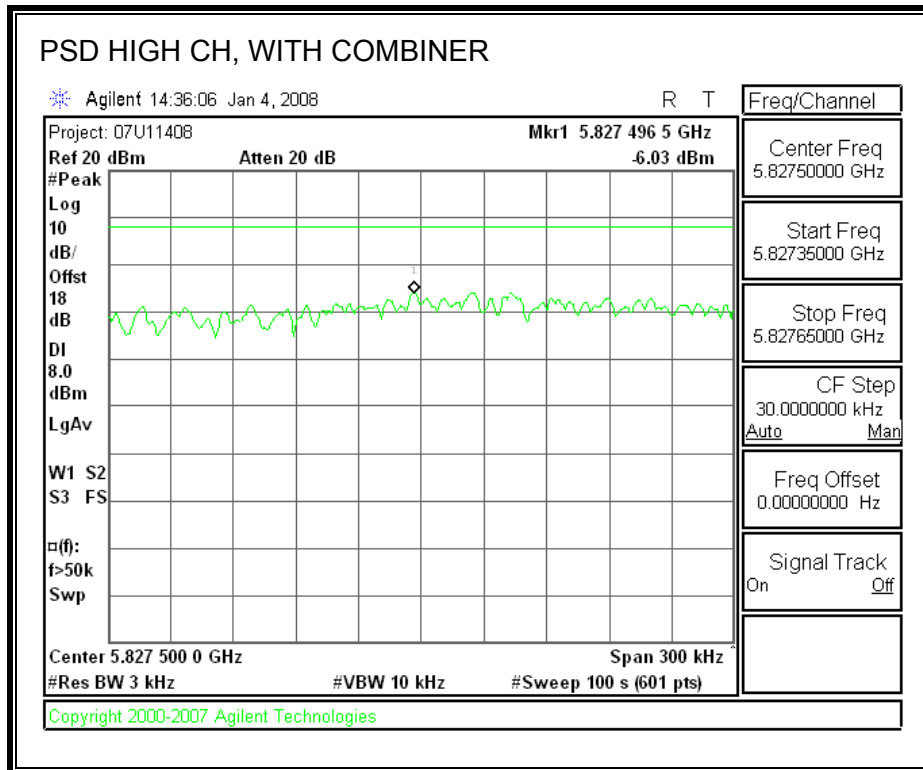




**POWER SPECTRAL DENSITY, WITH COMBINER**







## 7.5.5. CONDUCTED SPURIOUS EMISSIONS

### LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

### TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

### RESULTS



**CHAIN A SPURIOUS EMISSIONS**

