

**Appendix O: 20 dB Bandwidth; RSS-Gen**

**11.1 20 dB Bandwidth Test Procedure – Minimum 20 db Bandwidth**

The minimum 20 dB bandwidths per RSS-Gen were measured using a 50 ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 1 MHz. The minimum 20 dB bandwidths are presented below.

**Table 11-1: 20 dB Bandwidth Test Equipment**

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
901413	Agilent	E4448A	Spectrum Analyzer	US44020346	11/2/06

**11.2 20 dB Bandwidth Test Results for 802.11b/g Card**

**Table 11-2: 20 db Bandwidth Test Data - 802.11b**

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
1	2412	17.278
6	2437	17.669
11	2462	17.657

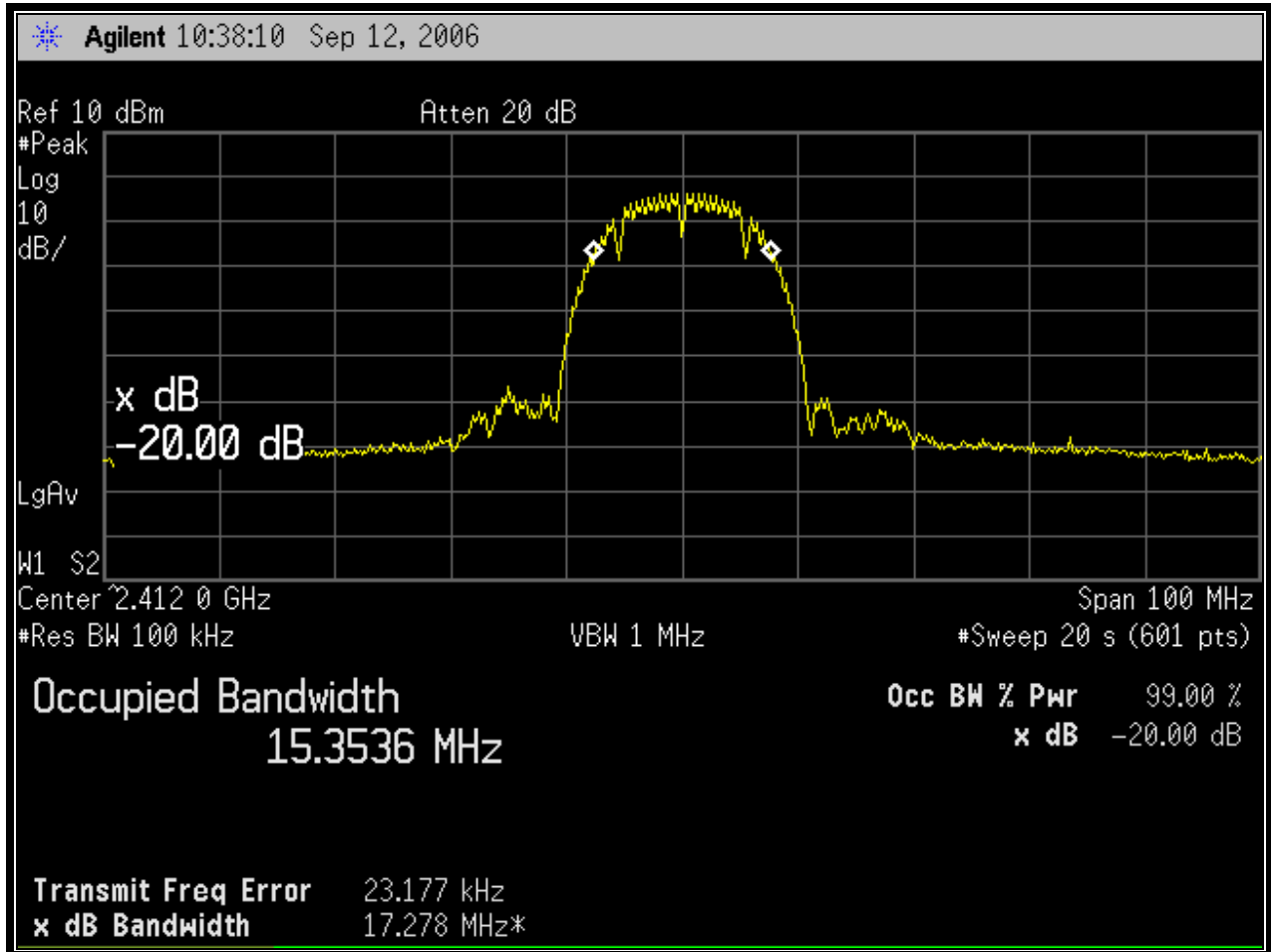
**Table 11-3: 20 db Bandwidth Test Data - 802.11g**

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
1	2412	19.518
6	2437	19.582
11	2462	19.295

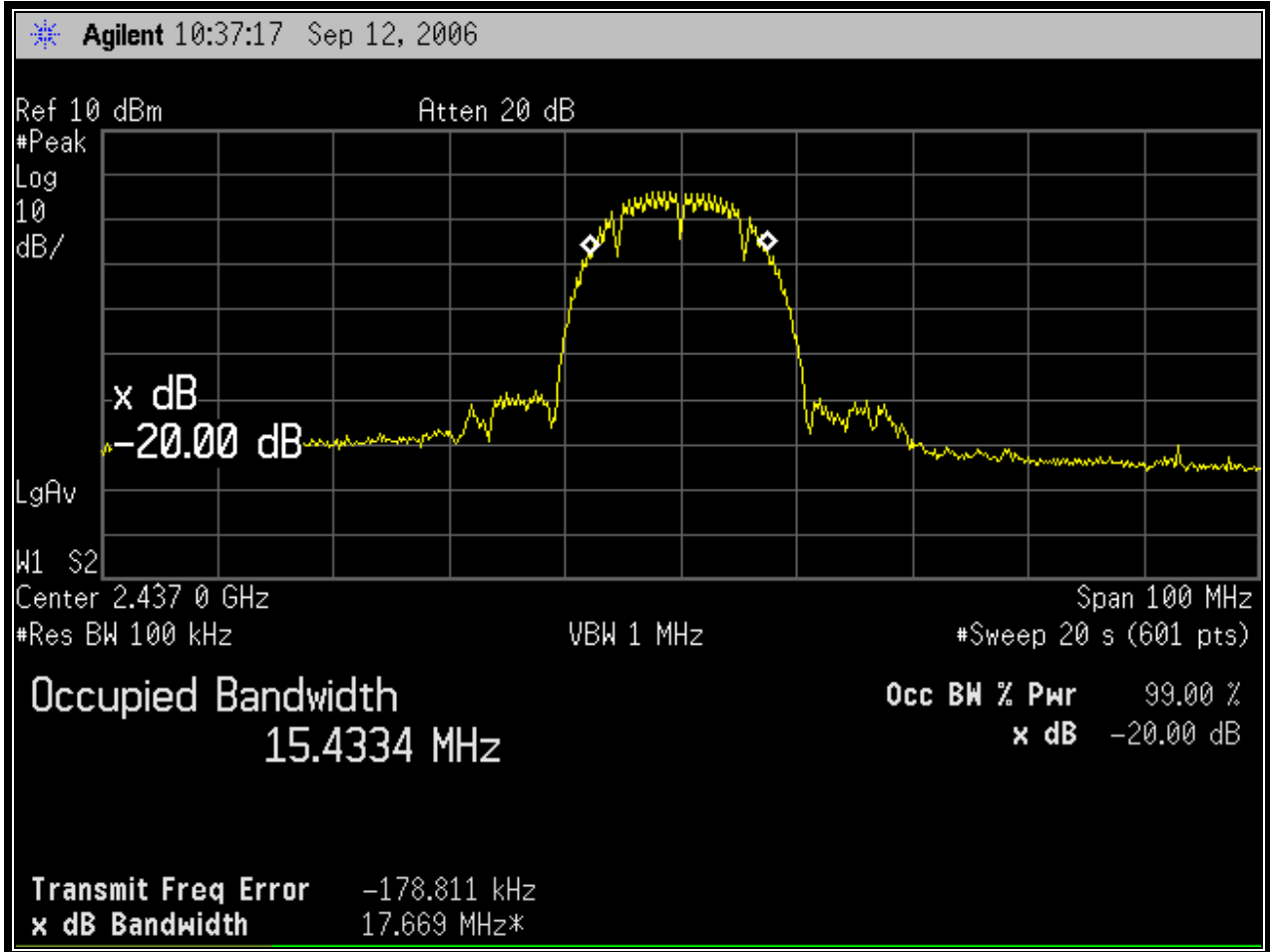
**Table 11-4: 20 db Bandwidth Test Data - 802.11a**

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
149	5745	23.816
157	5785	23.337
165	5825	22.560
152 turbo	5760	40.304
160 turbo	5800	43.328

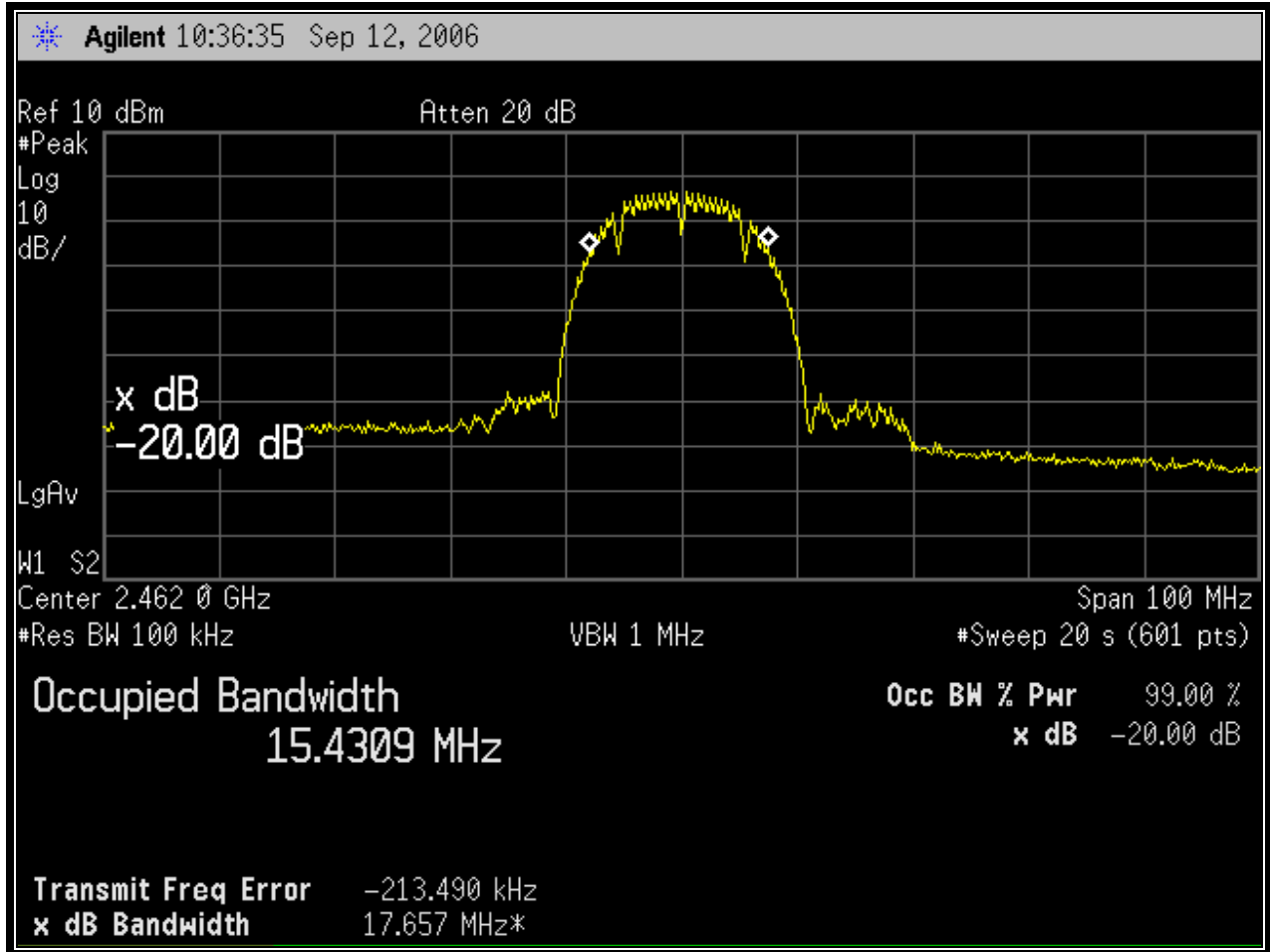
Plot 11-1: 20 dB Bandwidth Channel 1 (TX Frequency: 2412 MHz – 11 Mbps) 802.11b



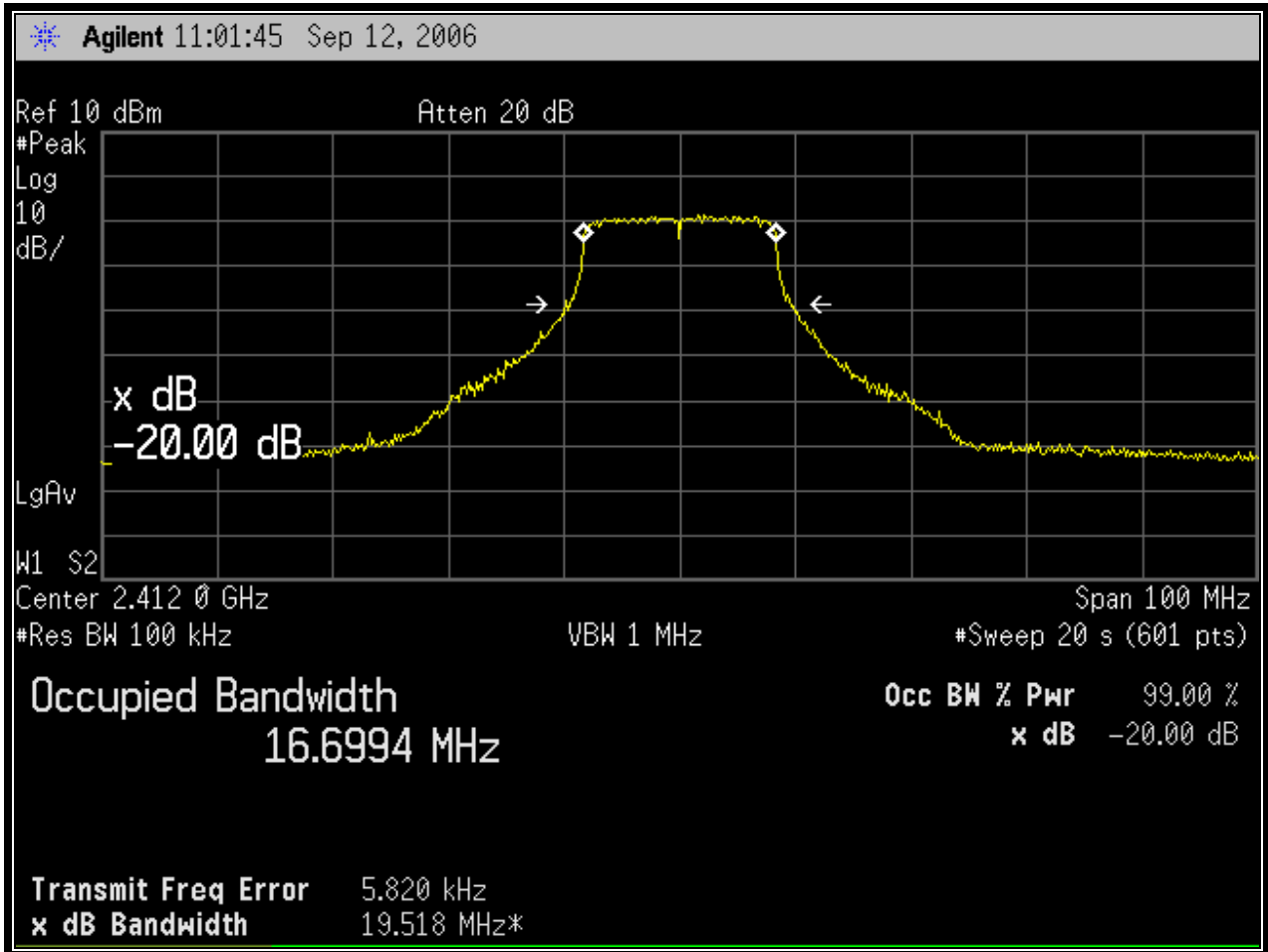
Plot 11-2: 20 dB Bandwidth Channel 6 (TX Frequency: 2437 MHz – 11 Mbps) 802.11b



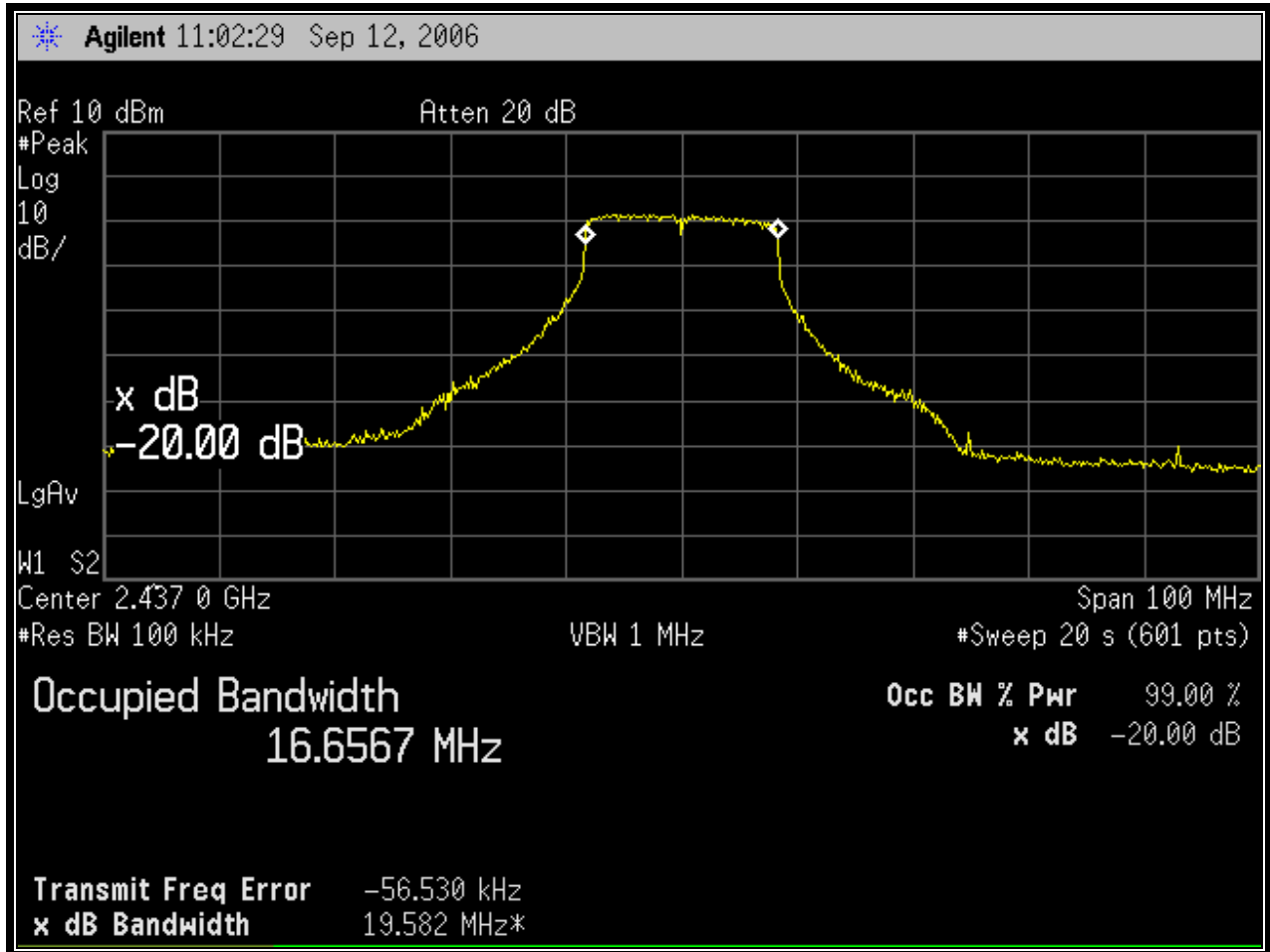
**Plot 11-3: 20 dB Bandwidth Channel 11 (TX Frequency: 2462 MHz – 11 Mbps) 802.11b**



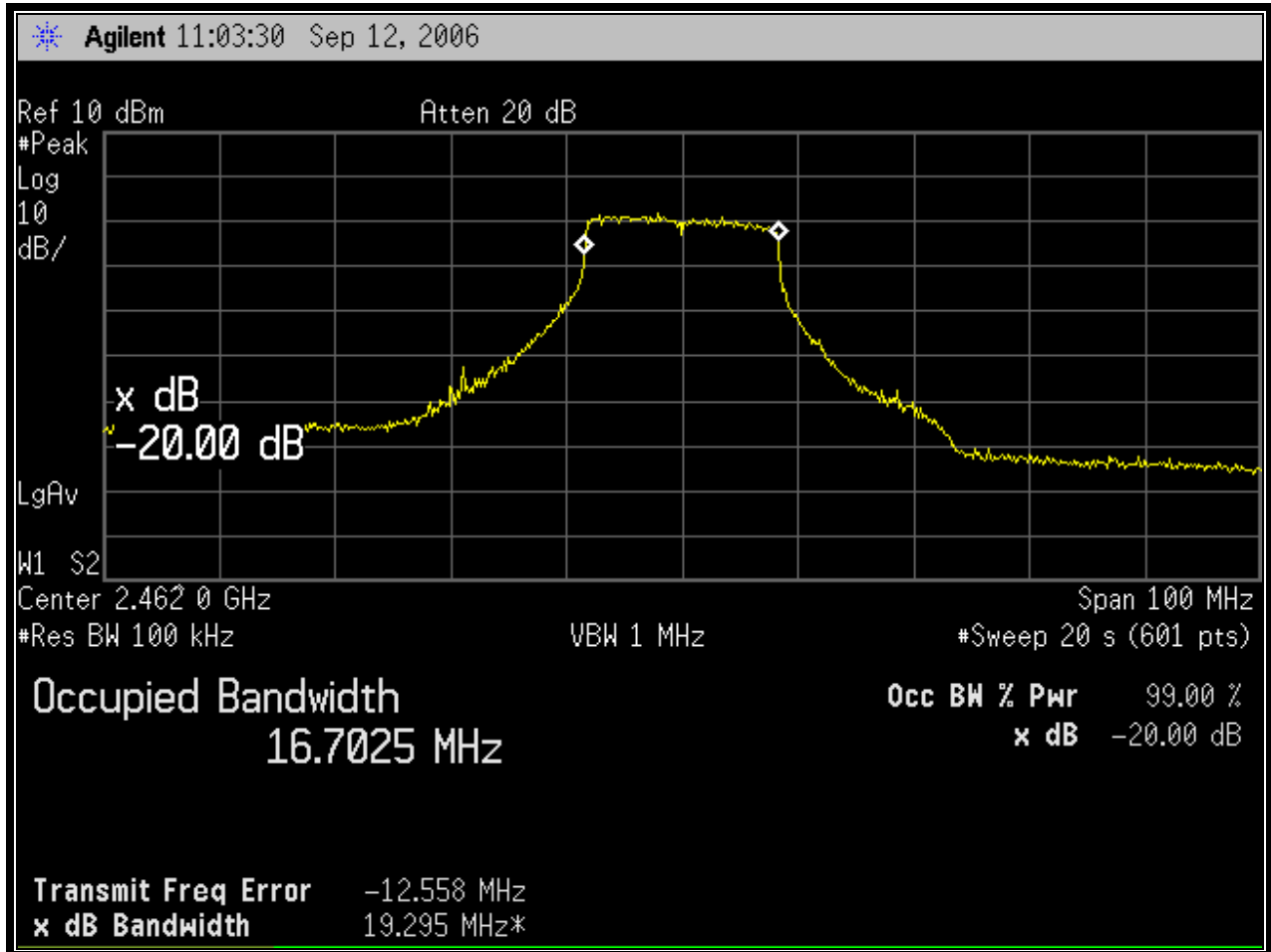
Plot 11-4: 20 dB Bandwidth Channel 1 (TX Frequency: 2412 MHz – 54 Mbps) 802.11g



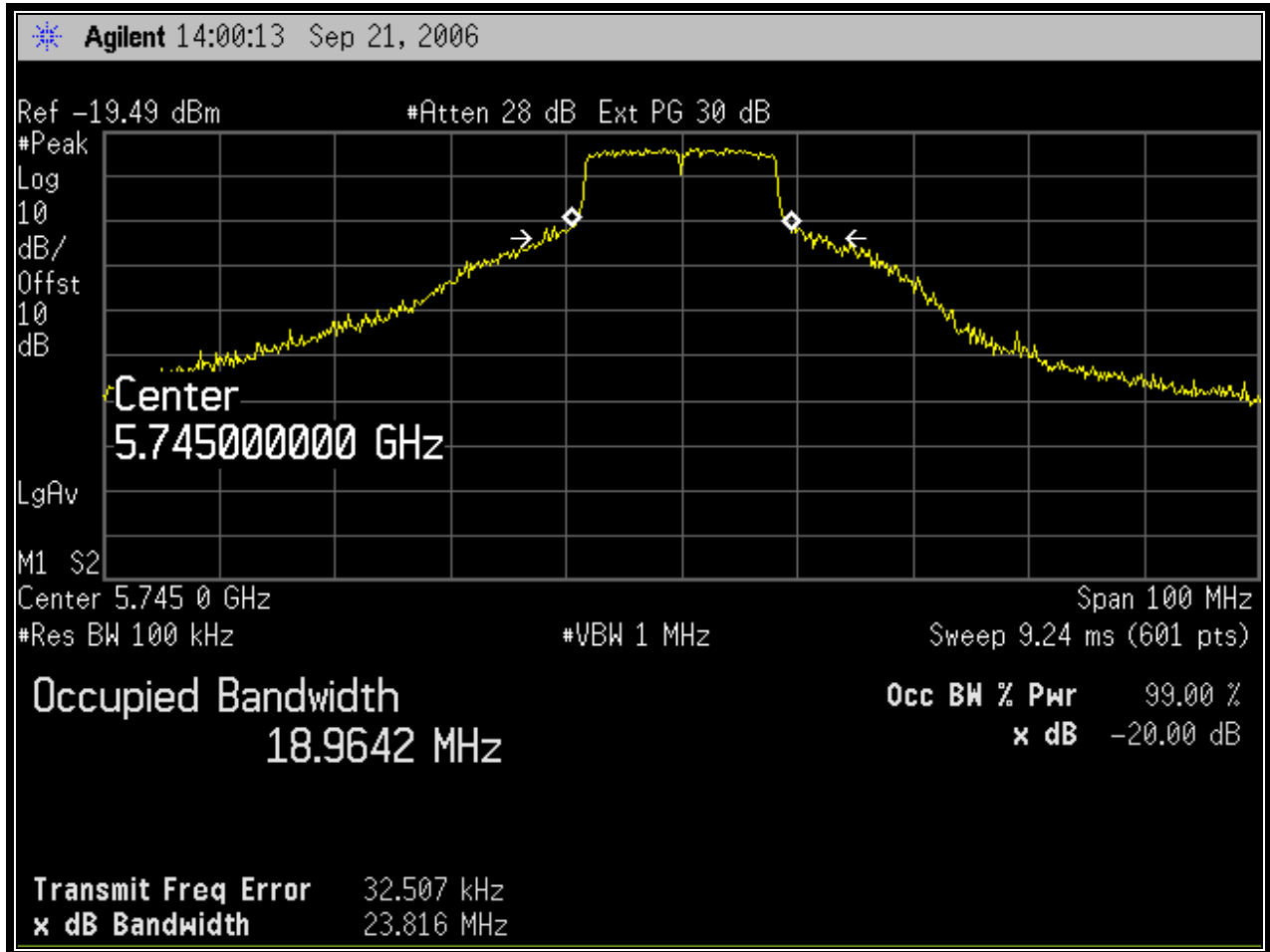
**Plot 11-5: 20 dB Bandwidth Channel 6 (TX Frequency: 2437 MHz – 6 Mbps) 802.11g**



**Plot 11-6: 20 dB Bandwidth Channel 11 (TX Frequency: 2462 MHz - 54 Mbps) 802.11g**

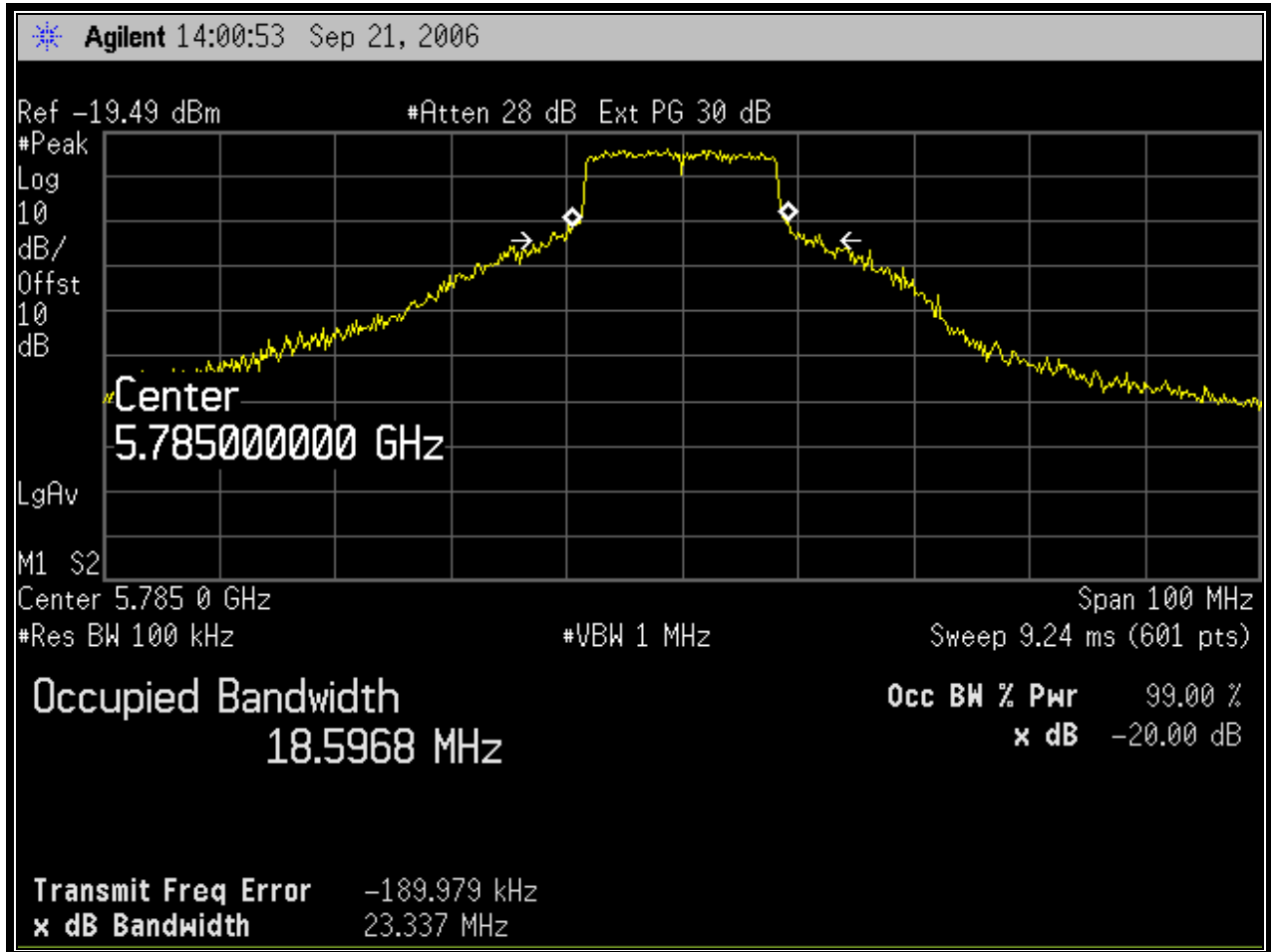


Plot 11-7: 20 dB Bandwidth Channel 149 (TX Frequency: 5745 MHz – 54 Mbps) 802.11a

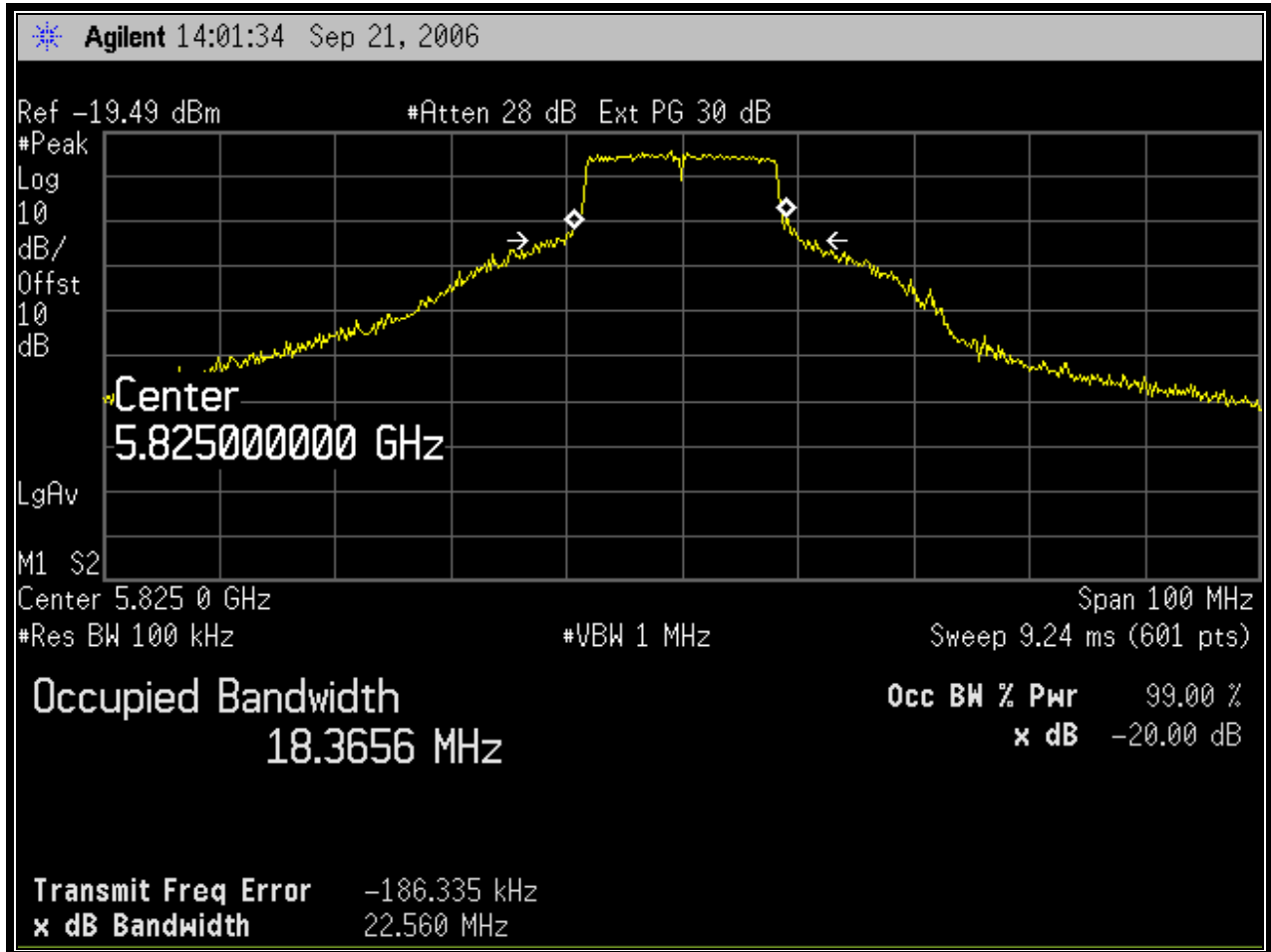




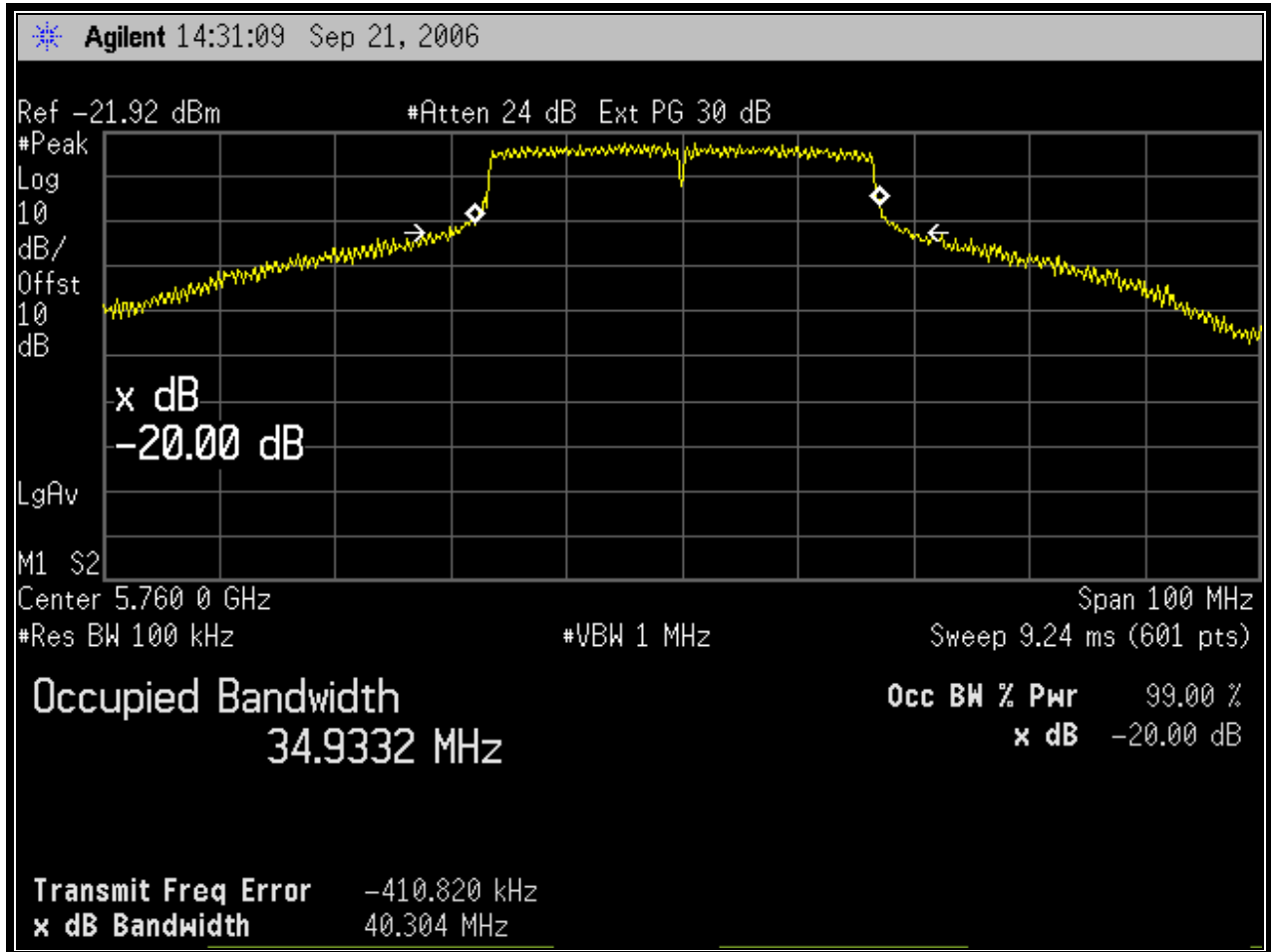
**Plot 11-8: 20 dB Bandwidth Channel 157 (TX Frequency: 5785 MHz – 54 Mbps) 802.11a**



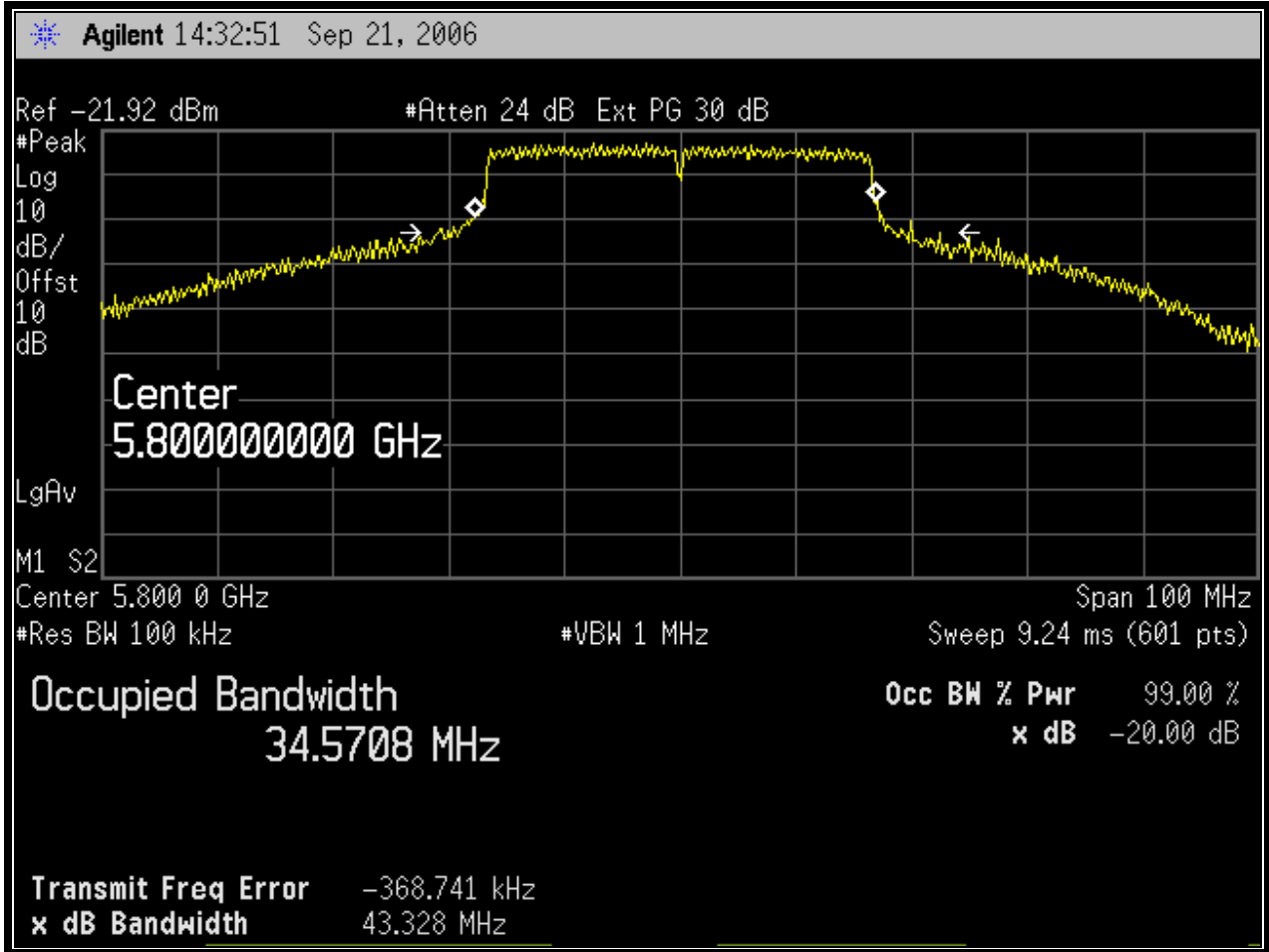
Plot 11-9: 20 dB Bandwidth Channel 165 (TX Frequency: 5825 MHz -54 Mbps) 802.11a



Plot 11-10: 20 dB Bandwidth Channel 152 (TX Frequency: 5760 MHz – Turbo 54 Mbps) 802.11a



**Plot 11-11: 20 dB Bandwidth Channel 160 (TX Frequency: 5800 MHz – Turbo 54 Mbps) 802.11a**



**Test Personnel:**

Daniel W. Baltzell  
 Test Engineer

Signature

September 12 & 21, 2006  
 Dates Of Tests