

# **ADDENDUM**

to the

***Test Report No. 8612333921***

***Equipment Under Test:***

***Broadband Wireless Access  
BreezeACCESS VL 5.8 System and  
Point to Point BreezeNET B System***

## 8. Conducted emission tests:

The radio can operate in three signal bandwidths: 10MHz, 20MHz, and 40MHz.

### 8.1. Minimum bandwidth

#### Requirements:

The minimum 6dB bandwidth shall be at least 500KHz, as required in section 15.247 (b) (2) subpart C.

#### Test procedure:

The units were tested at three channel central frequencies:

- 10MHz BW - low channel 5730MHz, middle channel 5785MHz, and high channel 5835MHz;
- 20MHz BW - low channel 5735MHz, middle channel 5785MHz, and high channel 5835MHz;
- 40MHz BW - low channel 5745MHz, middle channel 5785MHz, and high channel 5830MHz;

The units were set to deliver maximum output power = 21dBm.

Tests were performed at the room temperature  $T = 25^{\circ}\text{C}$ .

#### Test results:

**The measured minimum 6dB emission bandwidth values are shown in plots 1 to 9.**

**The measured minimum 99% occupied bandwidth values are shown in plots 10 to 18.**

The measurement results are summarized in Table 1 and Table 2. The minimum measured bandwidth for all configurations is 8.33MHz that is within at least 500KHz required bandwidth.

### 8.2. Maximum peak output power

#### Requirements:

The maximum peak transmit power shall not exceed 30dBm for all channel bandwidths, as required in section 15.247 (b) (1).

#### Test procedure:

The units were tested at three channel central frequencies:

- 10MHz BW - low channel 5730MHz, middle channel 5785MHz, and high channel 5835MHz;
- 20MHz BW - low channel 5735MHz, middle channel 5785MHz, and high channel 5835MHz;
- 40MHz BW - low channel 5745MHz, middle channel 5785MHz, and high channel 5830MHz;

The units were set to deliver maximum output power = 21dBm.

Tests were performed at the room temperature  $T = 25^{\circ}\text{C}$ .

**The measured peak power values are shown in plots 19 to 27.**

#### Calculations:

1. Measure the 6dB emission bandwidth at  $\text{RBW} = \text{VBW} = 1\text{MHz}$ .
2. Measure peak power using max hold function.
3. Calculate total peak power as  $\text{peak\_power}(2) + 10\log[\text{BW}(1)]$

#### Test results:

The measurement results and computed values are summarized in Table 1. The maximum peak transmit power values do not exceed 30dBm for all channel bandwidths.

Table 1

| Bandwidth | Measured results<br>low channel |                        | Total<br>peak<br>power<br>[dBm] | Measured results<br>middle channel |                        | Total<br>peak<br>power<br>[dBm] | Measured results<br>high channel |                        | Total<br>peak<br>power<br>[dBm] |
|-----------|---------------------------------|------------------------|---------------------------------|------------------------------------|------------------------|---------------------------------|----------------------------------|------------------------|---------------------------------|
|           | 6dB<br>points<br>[MHz]          | Peak<br>power<br>[dBm] |                                 | 6dB<br>points<br>[MHz]             | Peak<br>power<br>[dBm] |                                 | 6dB<br>points<br>[MHz]           | Peak<br>power<br>[dBm] |                                 |
| 10 MHz    | 8.80                            | 19.39                  | 28.83                           | 8.77                               | 18.10                  | 27.53                           | 8.76                             | 18.15                  | 27.58                           |
| 20 MHz    | 16.88                           | 16.58                  | 28.85                           | 16.99                              | 16.28                  | 28.58                           | 16.82                            | 14.51                  | 26.77                           |
| 40 MHz    | 33.42                           | 13.61                  | 28.85                           | 33.66                              | 13.38                  | 28.65                           | 33.60                            | 13.52                  | 28.78                           |

Calculations:

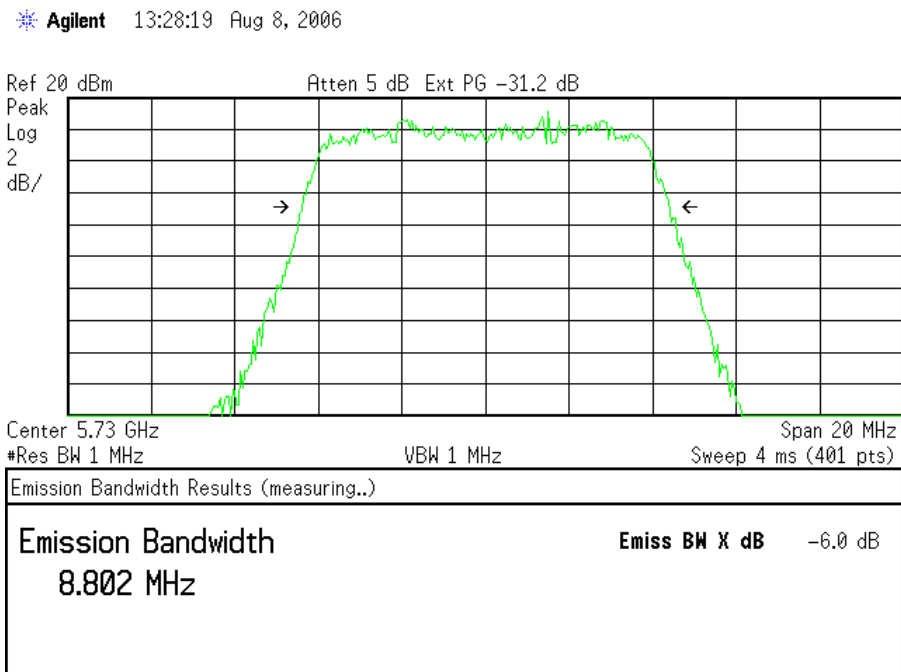
1. Measure the 99% occupied bandwidth at RBW = 100KHz/300KHz and VBW = 1MHz/3MHz.
2. Measure peak power using max hold function.
3. Calculate total peak power as  $\text{peak\_power}(2) + 10\log[\text{BW}(1)]$

Test results:

The measurement results and computed values are summarized in Table 2. The maximum peak transmit power values do not exceed 30dBm for all channel bandwidths.

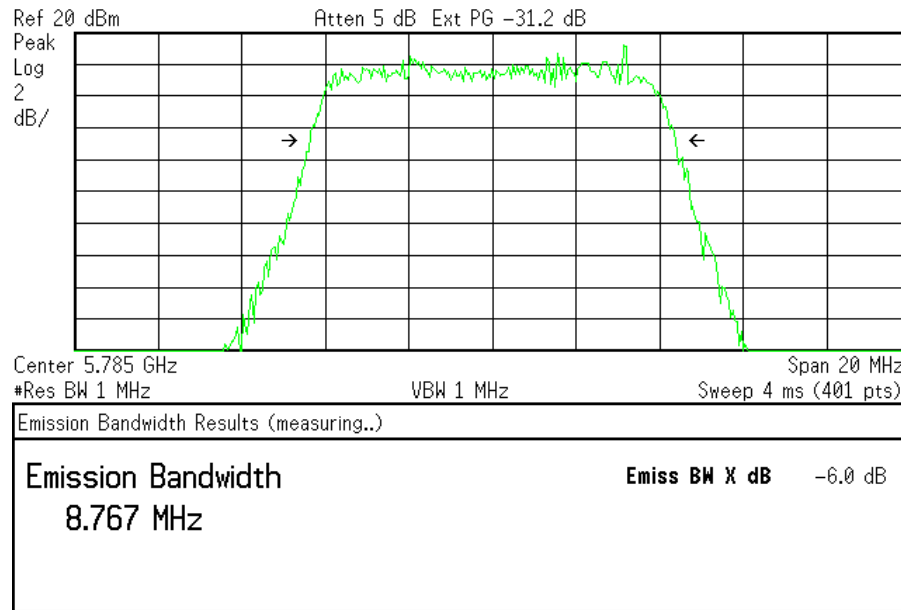
Table 2

| Bandwidth | Measured results low channel |                  | Total peak power [dBm] | Measured results middle channel |                  | Total peak power [dBm] | Measured results high channel |                  | Total peak power [dBm] |
|-----------|------------------------------|------------------|------------------------|---------------------------------|------------------|------------------------|-------------------------------|------------------|------------------------|
|           | 99% points [MHz]             | Peak power [dBm] |                        | 99% points [MHz]                | Peak power [dBm] |                        | 99% points [MHz]              | Peak power [dBm] |                        |
| 10 MHz    | 8.34                         | 19.39            | 28.60                  | 8.34                            | 18.10            | 27.31                  | 8.33                          | 18.15            | 27.36                  |
| 20 MHz    | 16.73                        | 16.58            | 28.81                  | 16.76                           | 16.28            | 28.52                  | 16.76                         | 14.51            | 26.75                  |
| 40 MHz    | 33.06                        | 13.61            | 28.80                  | 33.04                           | 13.38            | 28.57                  | 33.02                         | 13.52            | 28.71                  |



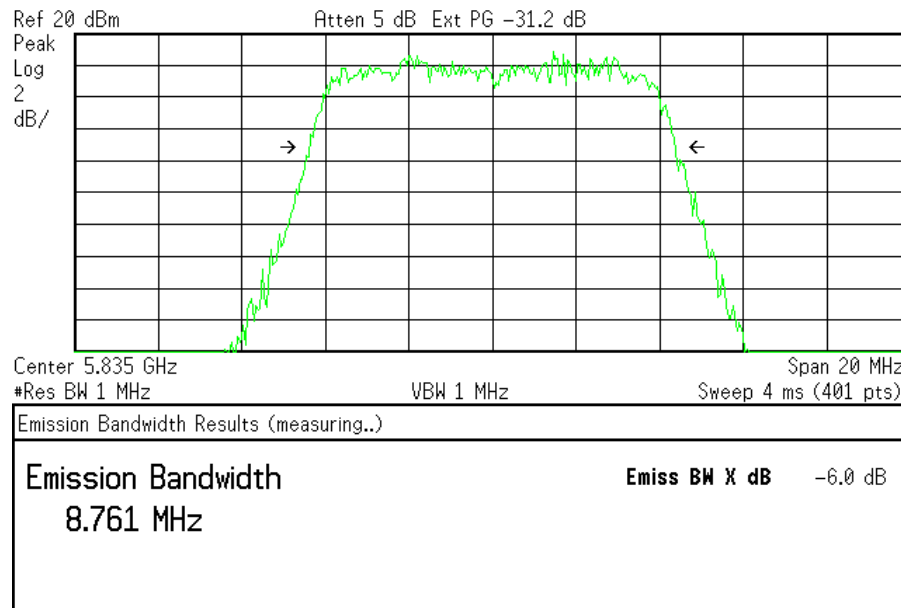
Plot 1: Minimum 6dB bandwidth – 10MHz low channel

Agilent 13:31:57 Aug 8, 2006



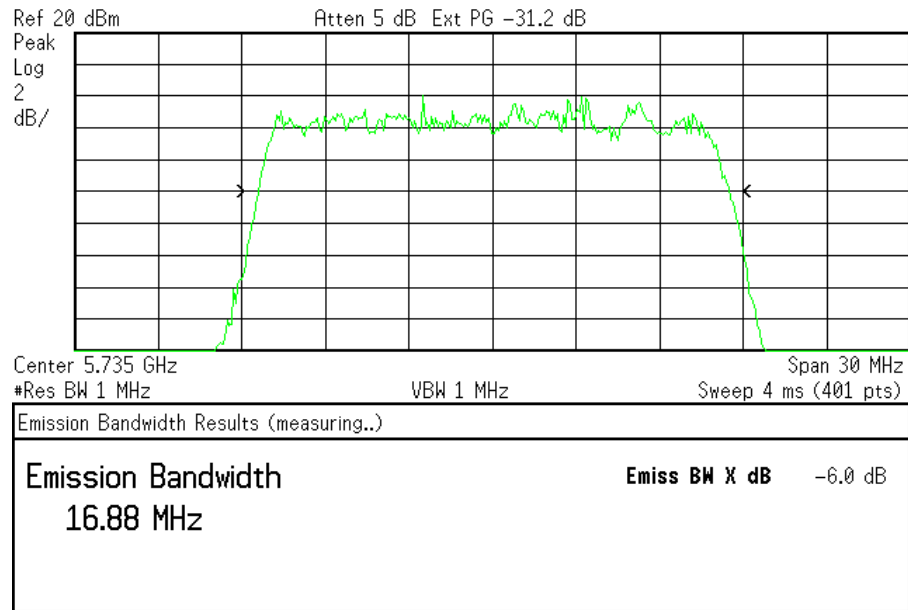
Plot 2: Minimum 6dB bandwidth – 10MHz middle channel

Agilent 13:33:30 Aug 8, 2006



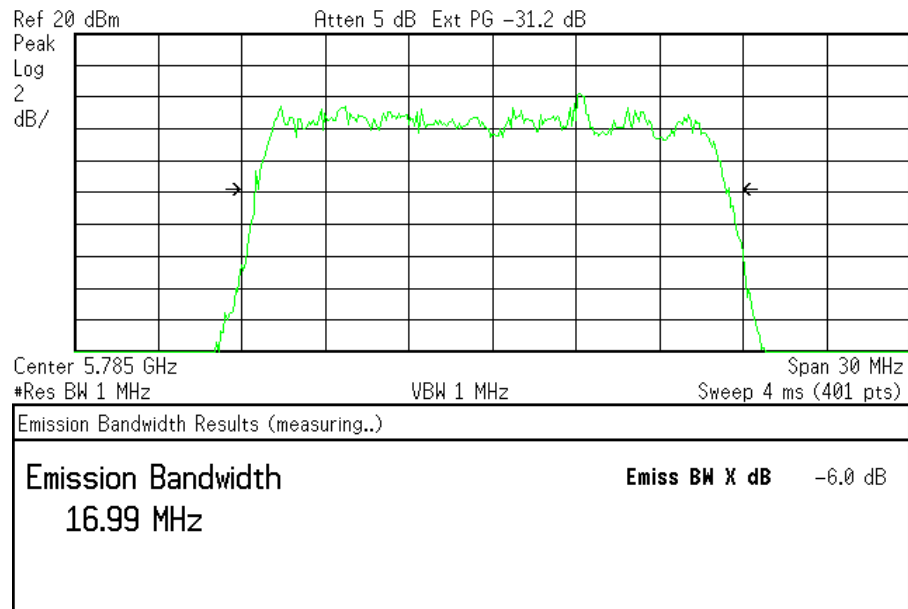
Plot 3: Minimum 6dB bandwidth – 10MHz high channel

Agilent 13:35:05 Aug 8, 2006



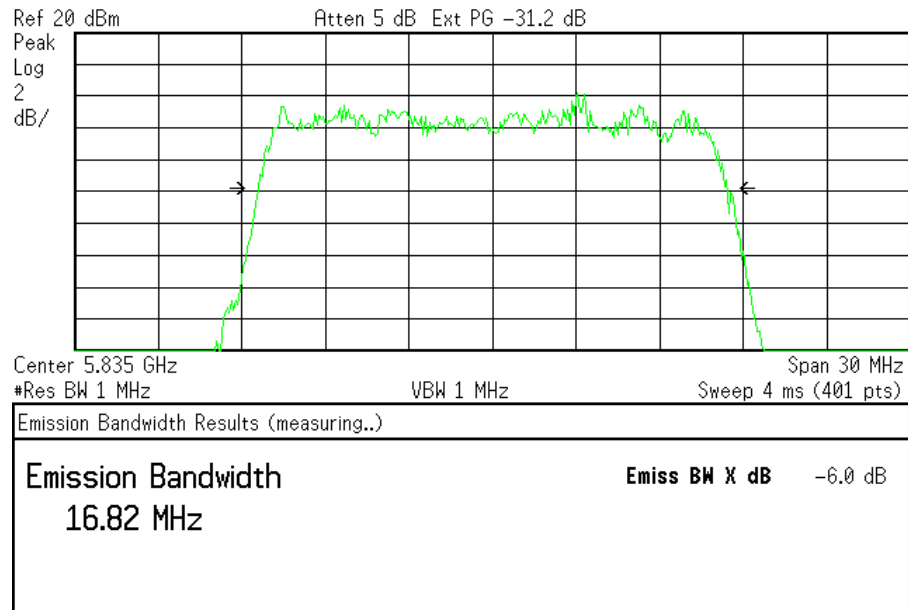
Plot 4: Minimum 6dB bandwidth – 20MHz low channel

Agilent 13:36:31 Aug 8, 2006



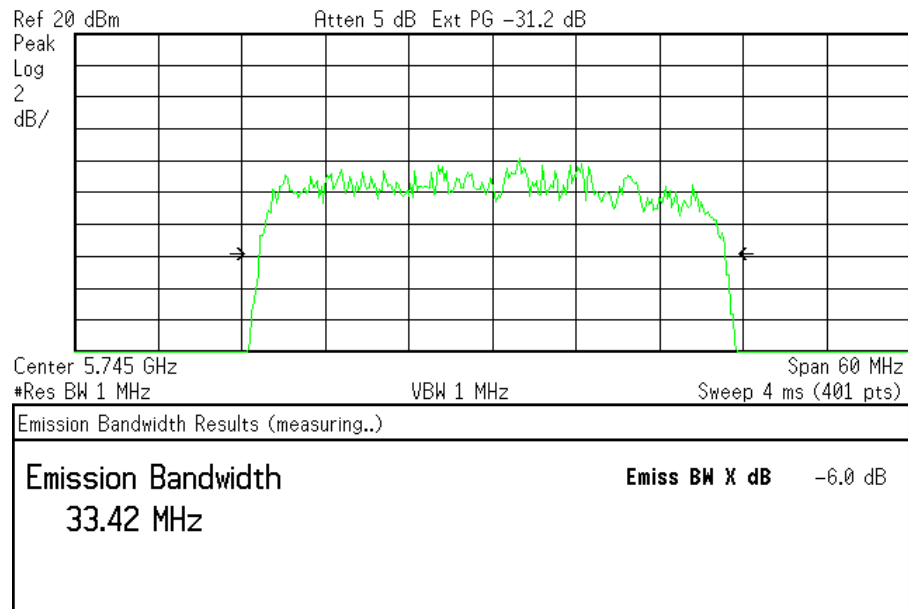
Plot 5: Minimum 6dB bandwidth – 20MHz middle channel

Agilent 13:37:46 Aug 8, 2006



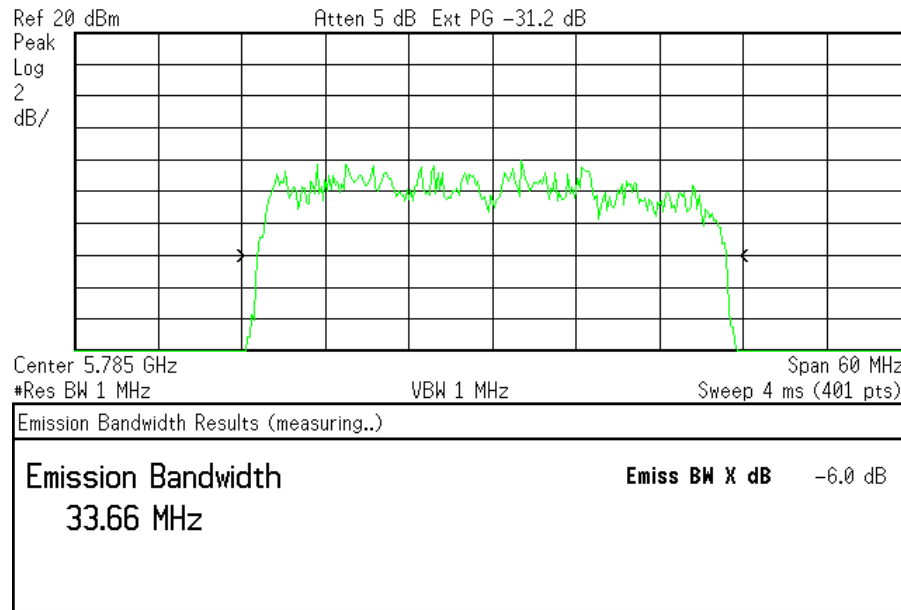
Plot 6: Minimum 6dB bandwidth – 20MHz high channel

Agilent 13:40:00 Aug 8, 2006



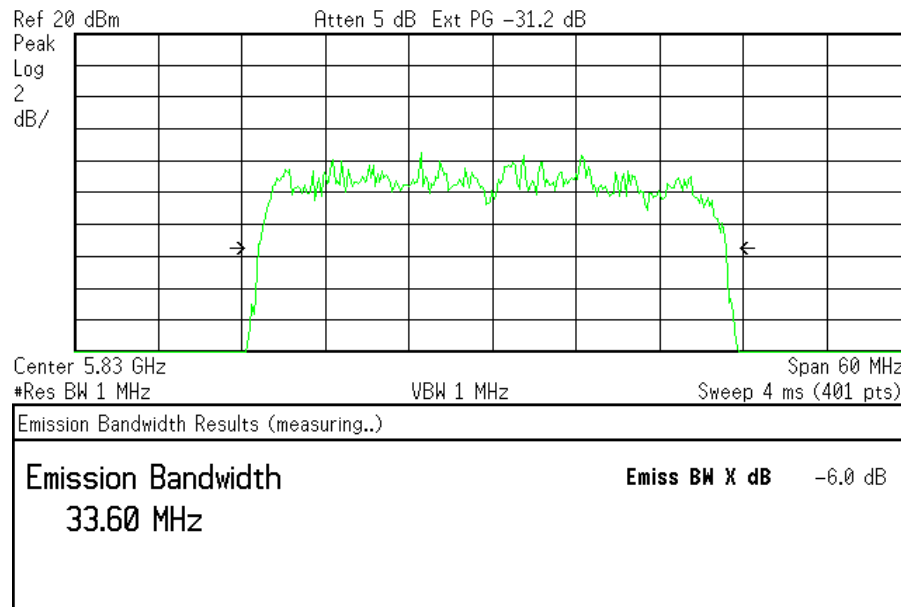
Plot 7: Minimum 6dB bandwidth – 40MHz low channel

Agilent 13:40:51 Aug 8, 2006



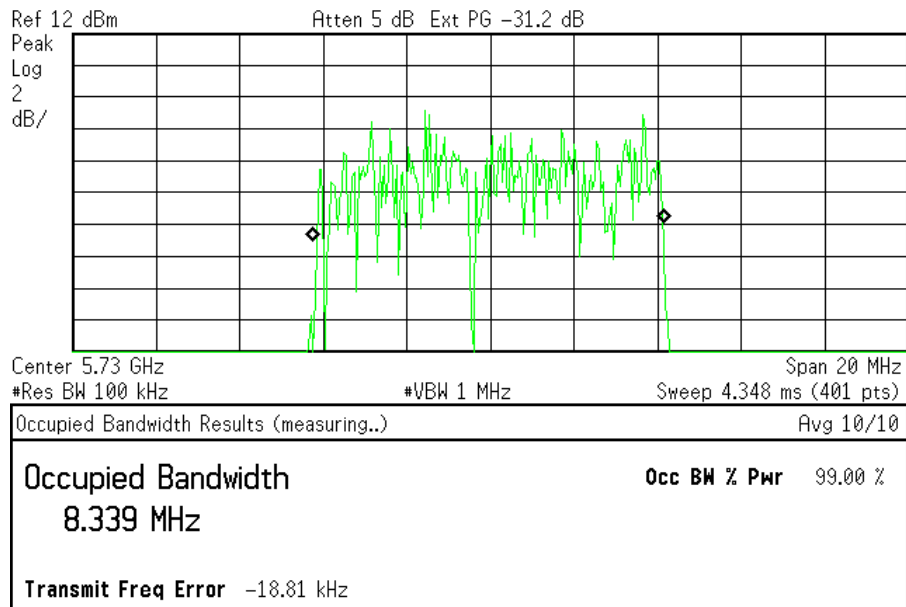
Plot 8: Minimum 6dB bandwidth – 40MHz middle channel

Agilent 13:42:29 Aug 8, 2006



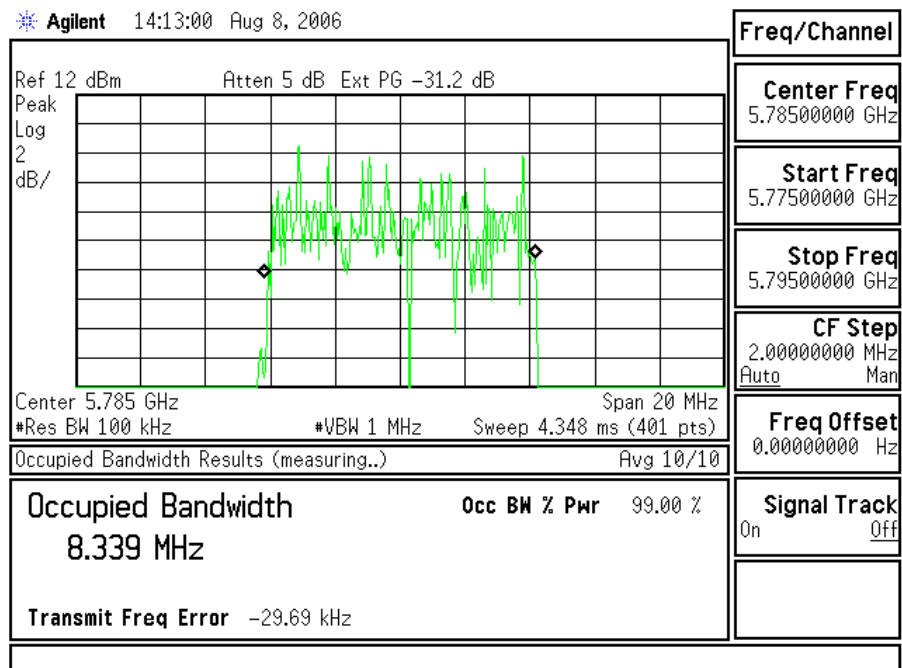
Plot 9: Minimum 6dB bandwidth – 40MHz high channel

Agilent 14:11:59 Aug 8, 2006



Plot 10: Minimum 99% bandwidth – 10MHz low channel

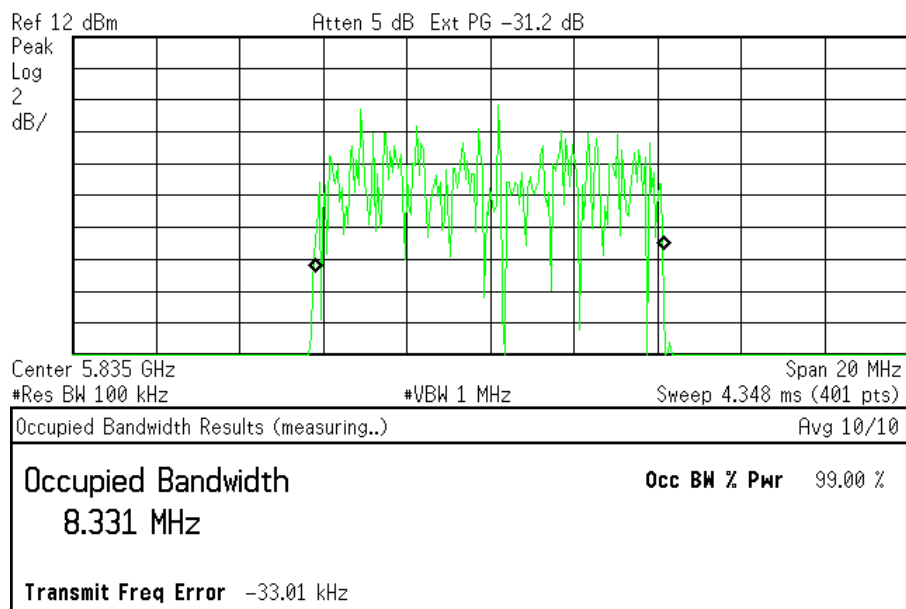
Agilent 14:13:00 Aug 8, 2006



Plot 11: Minimum 99% bandwidth – 10MHz middle channel

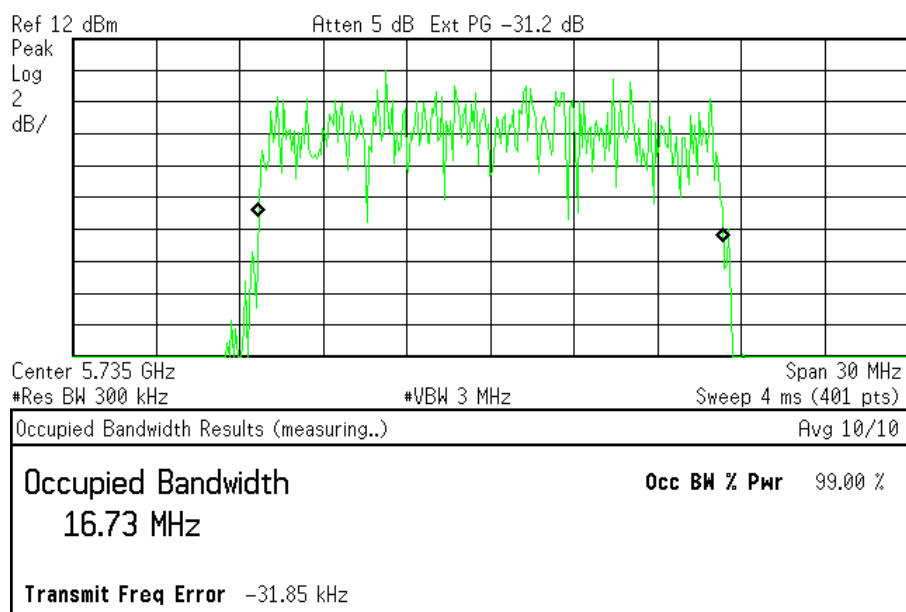


Agilent 14:14:00 Aug 8, 2006



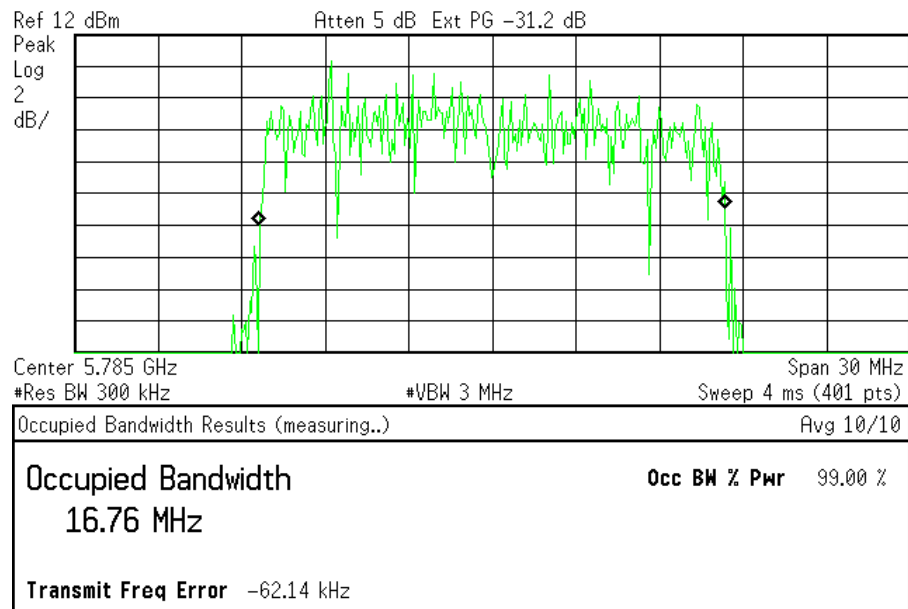
Plot 12: Minimum 99% bandwidth – 10MHz high channel

Agilent 14:15:01 Aug 8, 2006



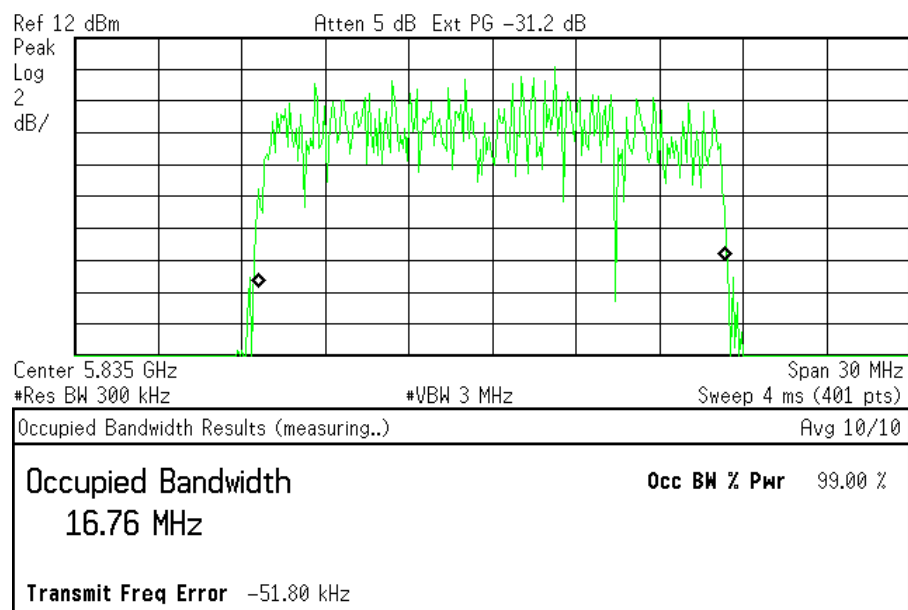
Plot 13: Minimum 99% bandwidth – 20MHz low channel

\* Agilent 14:15:50 Aug 8, 2006



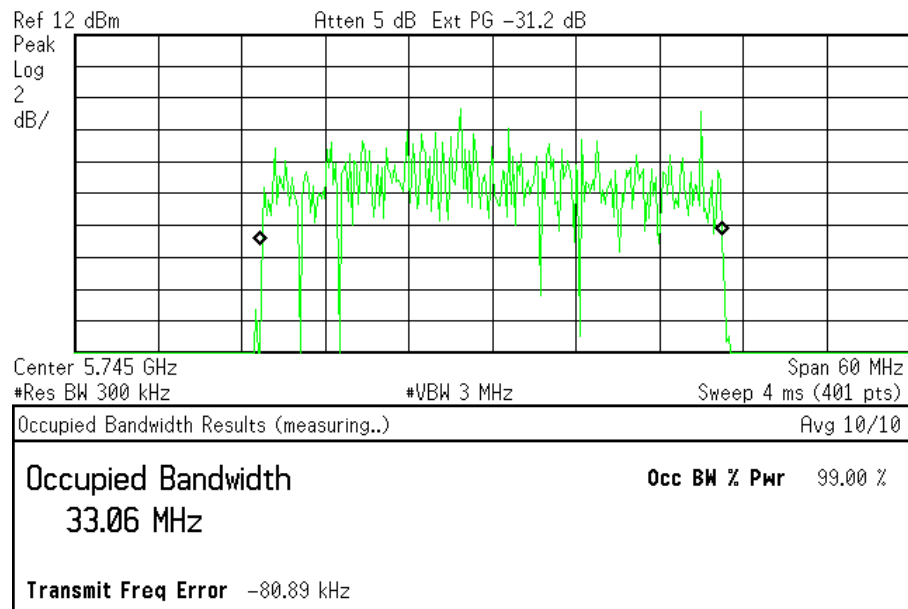
Plot 14: Minimum 99% bandwidth – 20MHz middle channel

\* Agilent 14:16:37 Aug 8, 2006



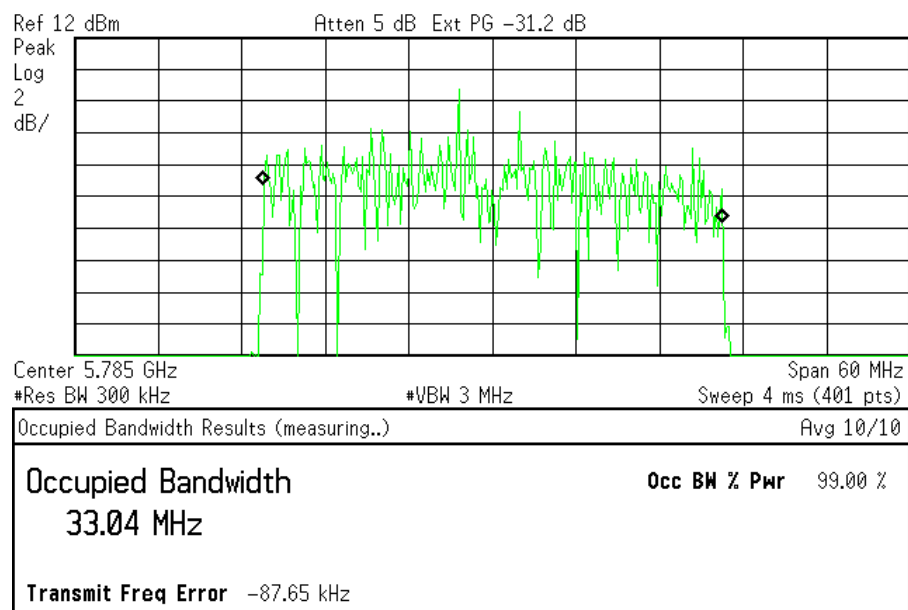
Plot 15: Minimum 99% bandwidth – 20MHz high channel

\* Agilent 14:17:41 Aug 8, 2006



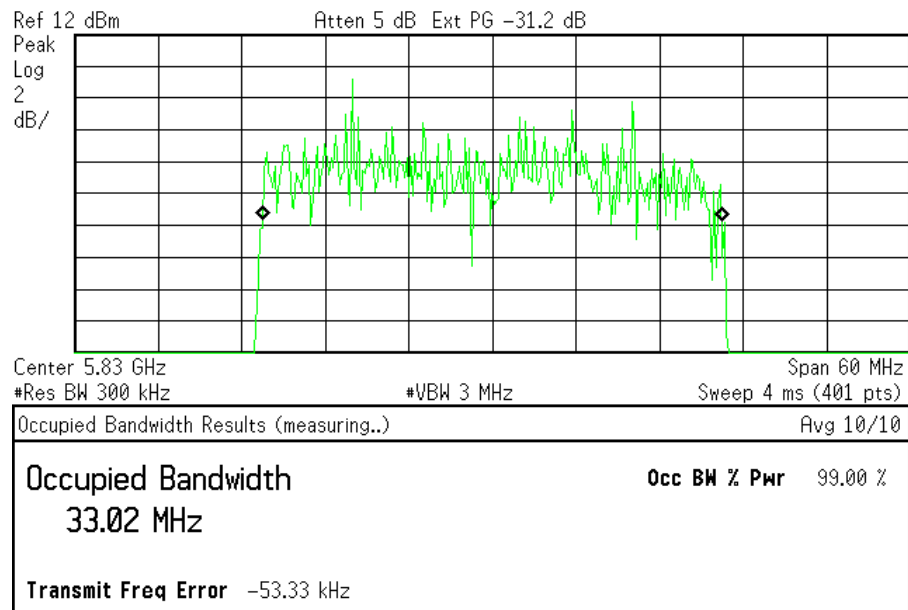
Plot 16: Minimum 99% bandwidth – 40MHz low channel

\* Agilent 14:18:26 Aug 8, 2006



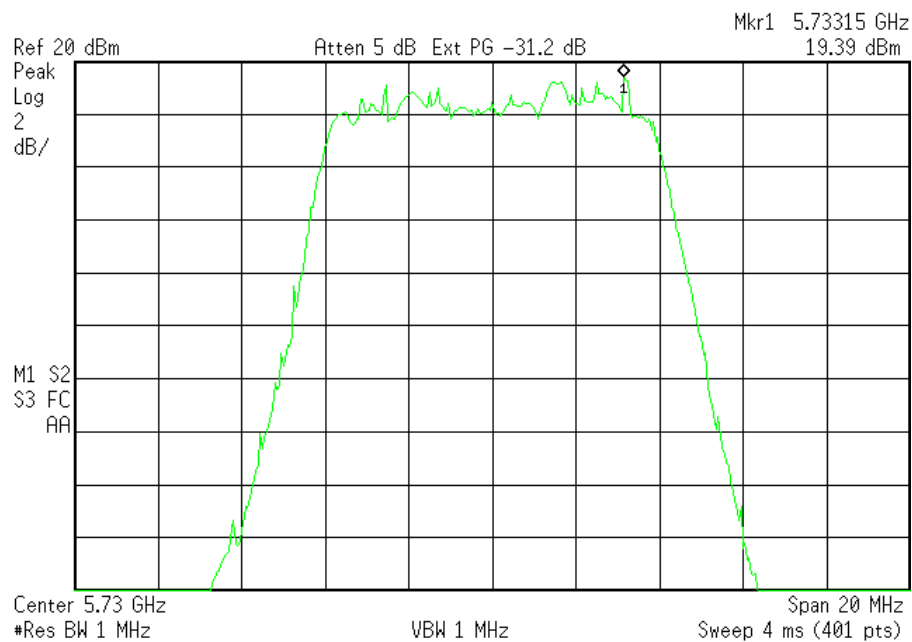
Plot 17: Minimum 99% bandwidth – 40MHz middle channel

Agilent 14:19:11 Aug 8, 2006



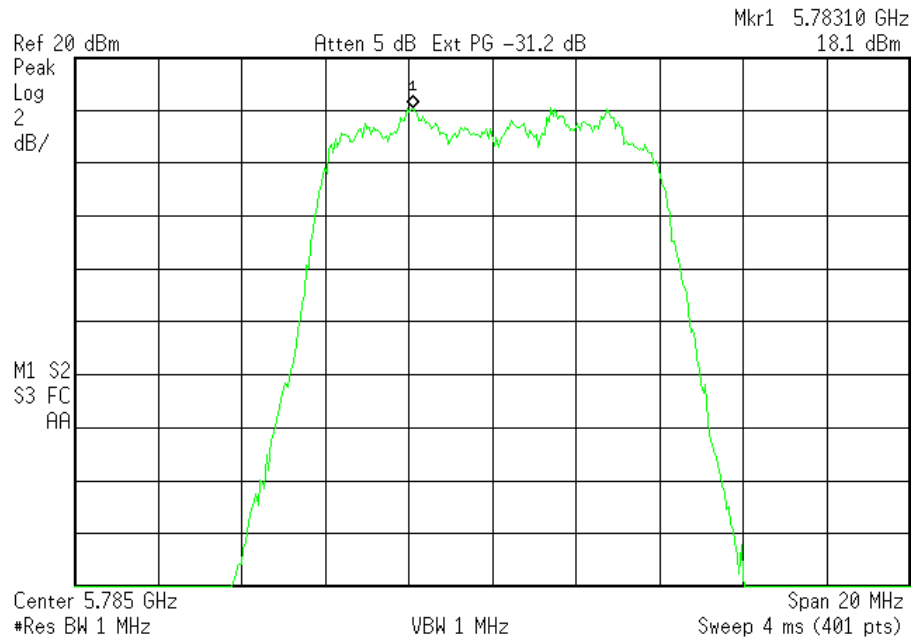
Plot 18: Minimum 99% bandwidth – 40MHz high channel

Agilent 14:48:30 Aug 8, 2006



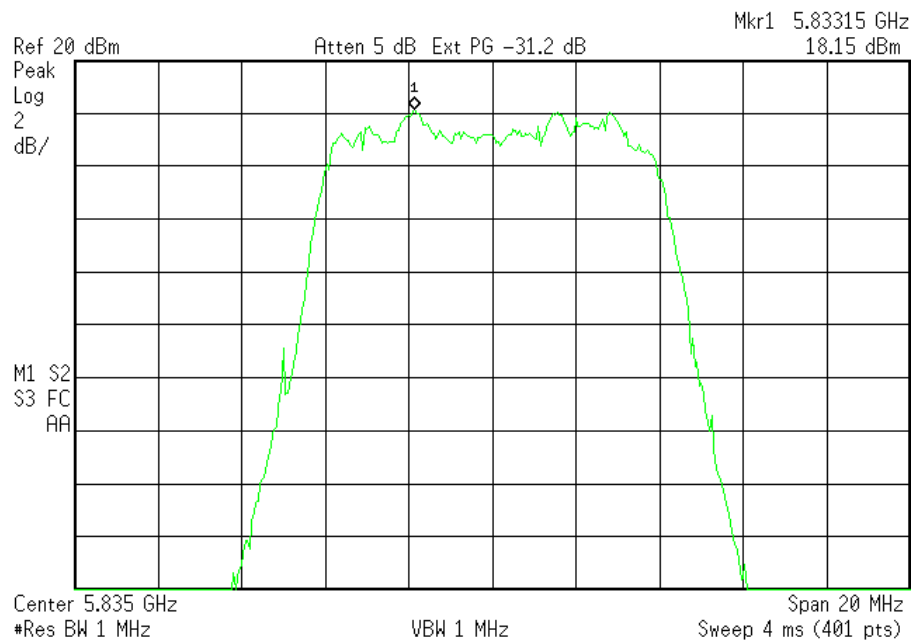
Plot 19: Peak power – 10MHz low channel

Agilent 14:52:31 Aug 8, 2006



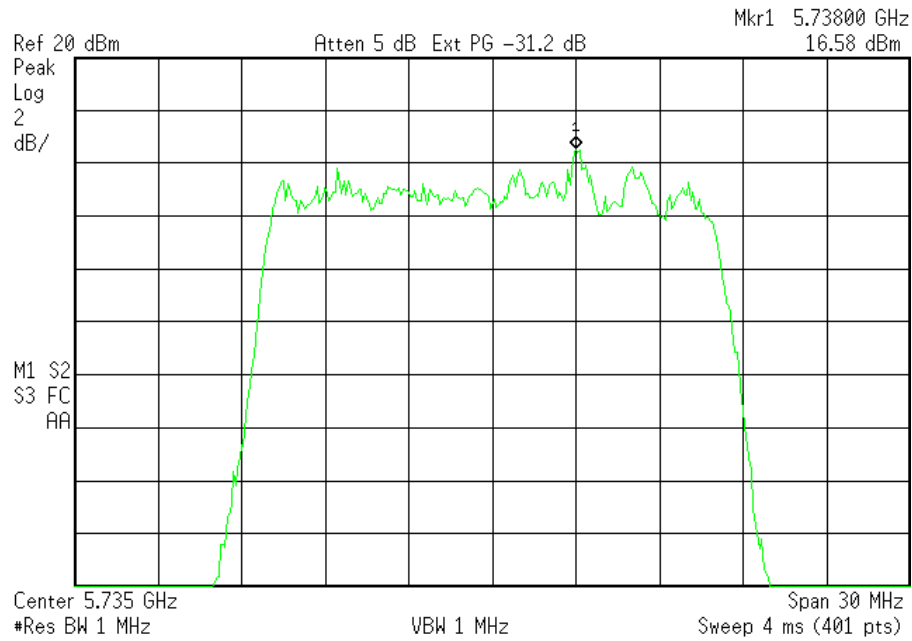
Plot 20: Peak power – 10MHz middle channel

Agilent 14:54:40 Aug 8, 2006



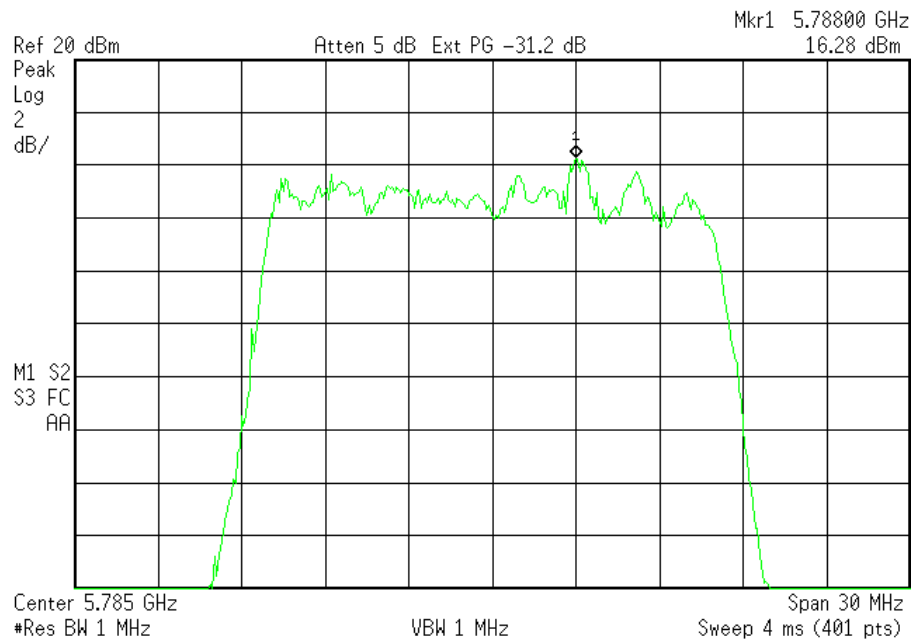
Plot 21: Peak power – 10MHz high channel

Agilent 14:57:09 Aug 8, 2006



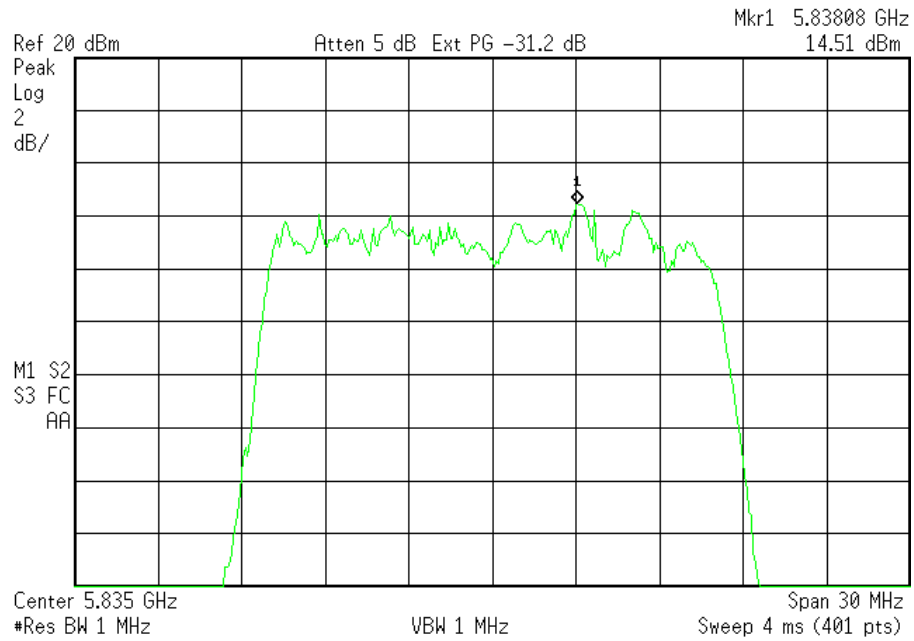
Plot 22: Peak power – 20MHz low channel

Agilent 14:58:44 Aug 8, 2006



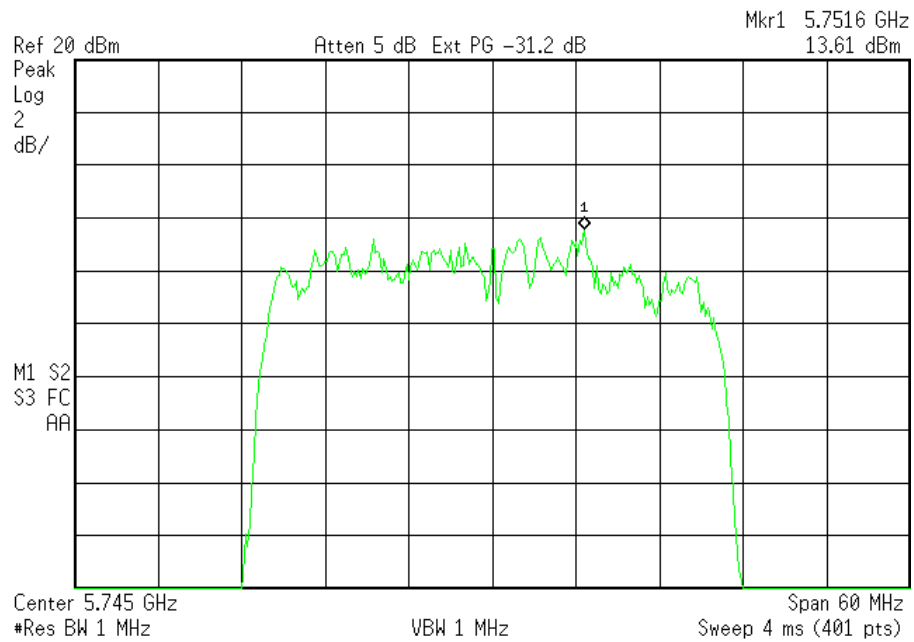
Plot 23: Peak power – 20MHz middle channel

Agilent 15:02:09 Aug 8, 2006



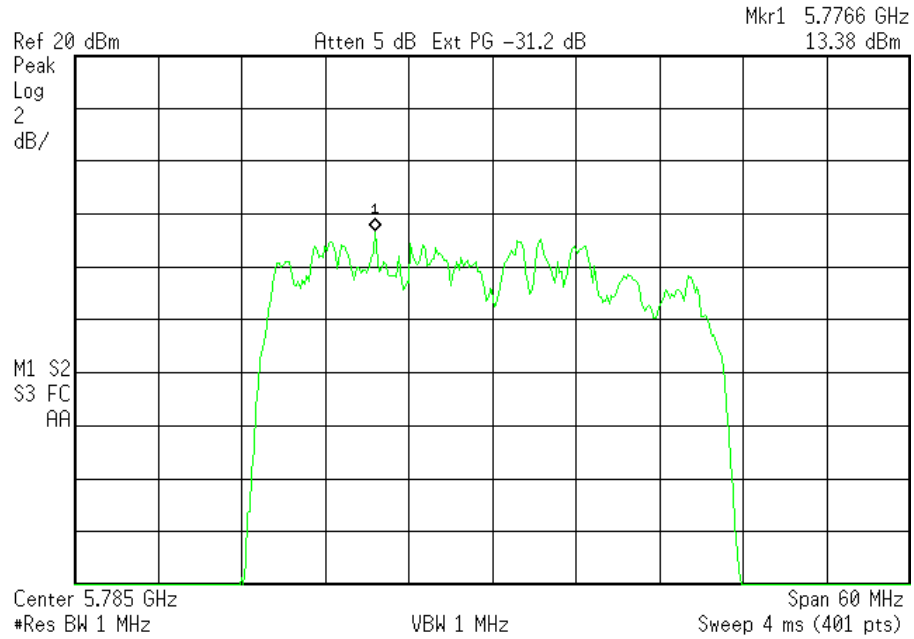
Plot 24: Peak power – 20MHz high channel

Agilent 15:15:42 Aug 8, 2006



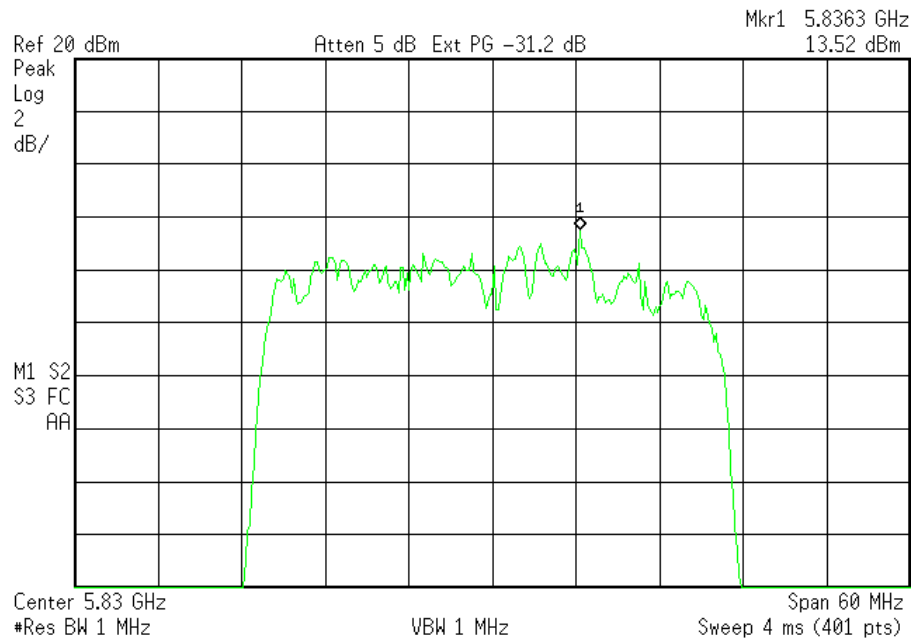
Plot 25: Peak power – 40MHz low channel

Agilent 15:18:14 Aug 8, 2006



Plot 26: Peak power – 40MHz middle channel

Agilent 15:20:46 Aug 8, 2006



Plot 27: Peak power – 40MHz high channel