# 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  $T = 25^{\circ}C$ .

## 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  $T = 25^{\circ}C$ .

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

## Calculations:

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

## <u>Test results:</u>

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.

Та	b	le	1
		· •	

Bandwidth	Measured results low channel		Total	Measured results middle channel		Total	Measured results high channel		Total
	6dB points [MHz]	Peak power [dBm]	реак power [dBm]	6dB points [MHz]	Peak power [dBm]	реак power [dBm]	6dB points [MHz]	Peak power [dBm]	реак power [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 peak\_power(2)+10log[BW(1)]

## <u>Test results:</u>

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	Measured results middle channel		Total	Measured results high channel		Total
	99% points [MHz]	Peak power [dBm]	реак power [dBm]	99% points [MHz]	Peak power [dBm]	реак power [dBm]	99% points [MHz]	Peak power [dBm]	реак 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

#### ₩ Agilent 13:28:19 Aug 8, 2006



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







#### 🔆 Agilent 13:36:31 Aug 8, 2006

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

🔆 Agilent 13:37:46 Aug 8, 2006







**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





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



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



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



🔆 Agilent 14:15:01 Aug 8, 2006

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



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



🔆 Agilent 14:16:37 Aug 8, 2006

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



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





Plot 20: Peak power – 10MHz middle channel



₩ Agilent 14:54:40 Aug 8, 2006

Plot 21: Peak power – 10MHz high channel

.....



Plot 22: Peak power – 20MHz low channel



₩ Agilent 14:58:44 Aug 8, 2006

Plot 23: Peak power – 20MHz middle channel



Plot 24: Peak power – 20MHz high channel



₩ Agilent 15:15:42 Aug 8, 2006

Plot 25: Peak power – 40MHz low channel





Plot 26: Peak power – 40MHz middle channel



🔆 Agilent 15:20:46 Aug 8, 2006

Plot 27: Peak power – 40MHz high channel