Washington Laboratories, Ltd.

Addendum
FCC & Industry Canada Certification Test Report
for the
Matric Limited
CAN Bridge 500

FCC ID: K5B-CB500
IC: 3926A-CB500

October 28, 2005

Data included:

1) 6dB bandwidth plots
2) Radiated band edge data
3) Conducted emissions data (AC Mains)

1.0 Bandwidth (6dB) Data

The following plots are the 6dB bandwidth plots with the device operating at the maximum 500kb/s.

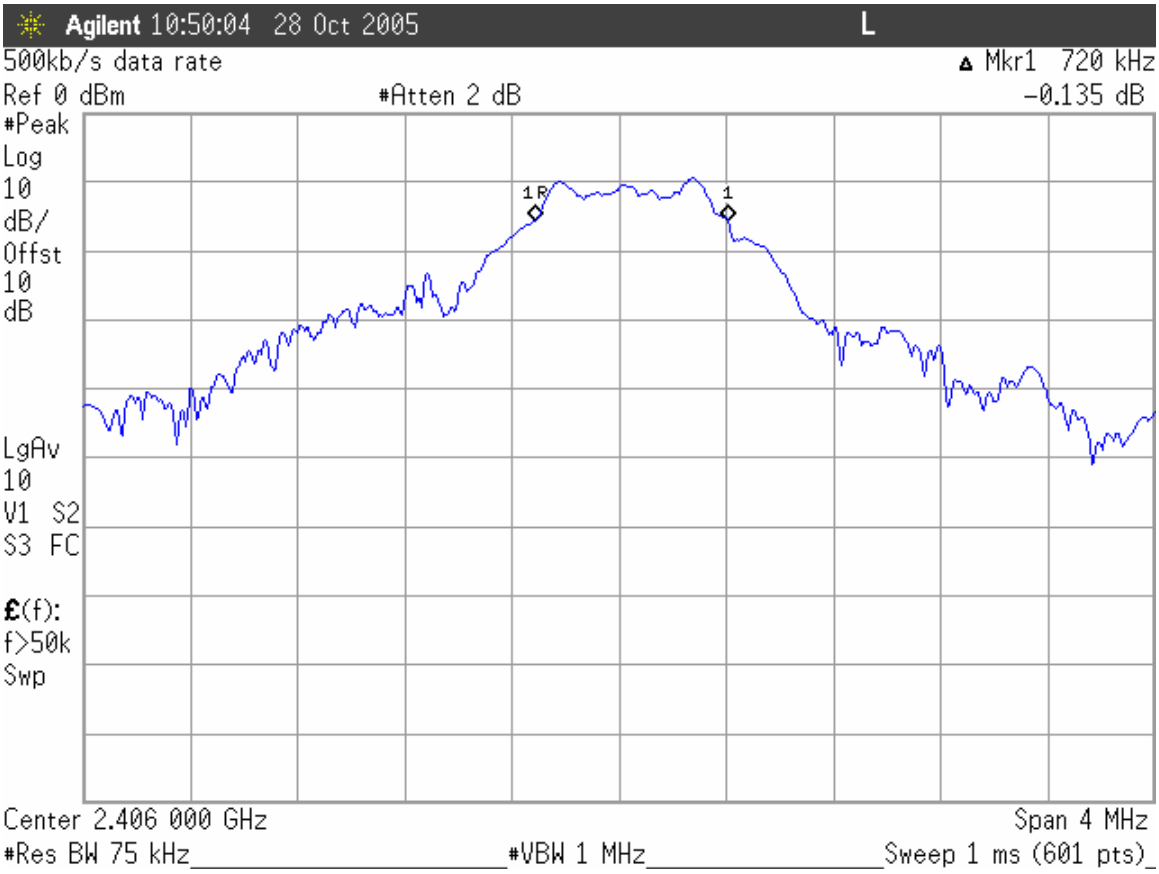

Figure 1: Low Channel 6dB Bandwidth at 500kb/s

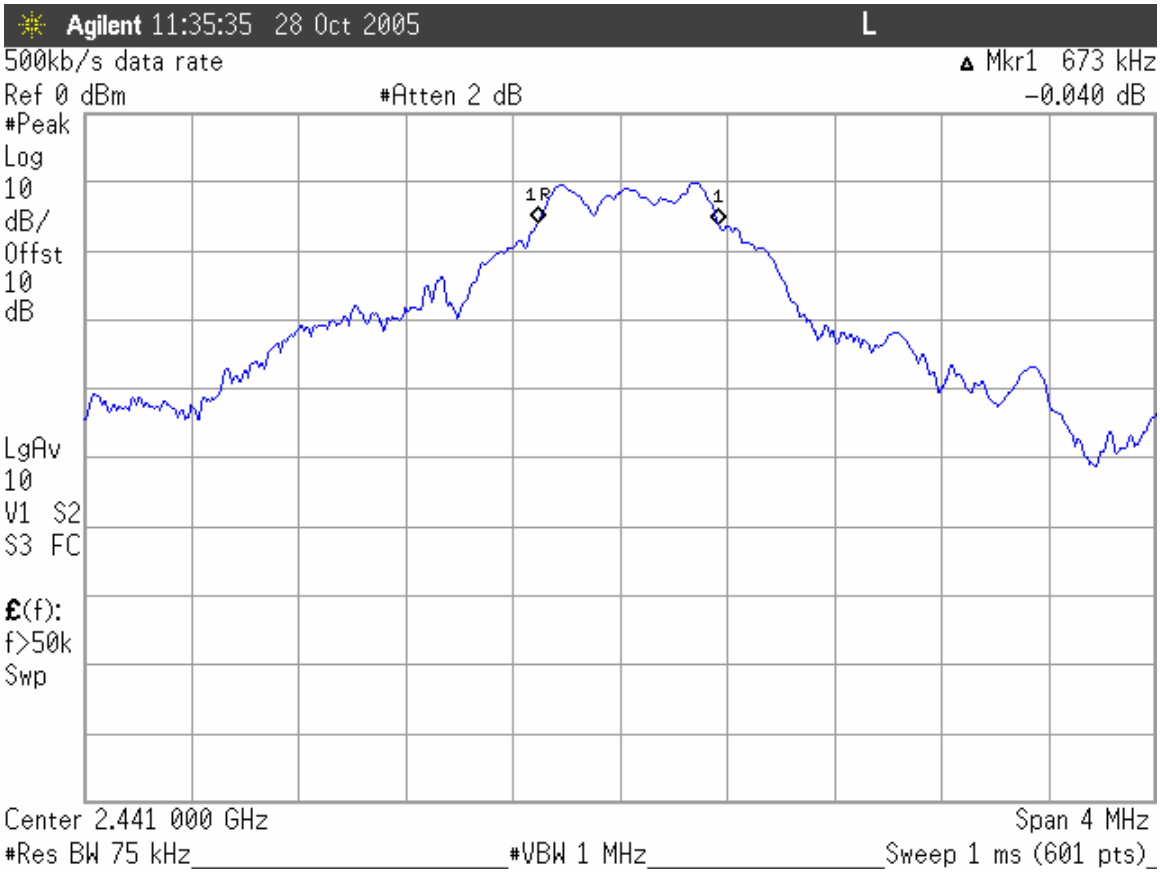

Figure 2: Mid Channel 6dB Bandwidth at 500kb/s

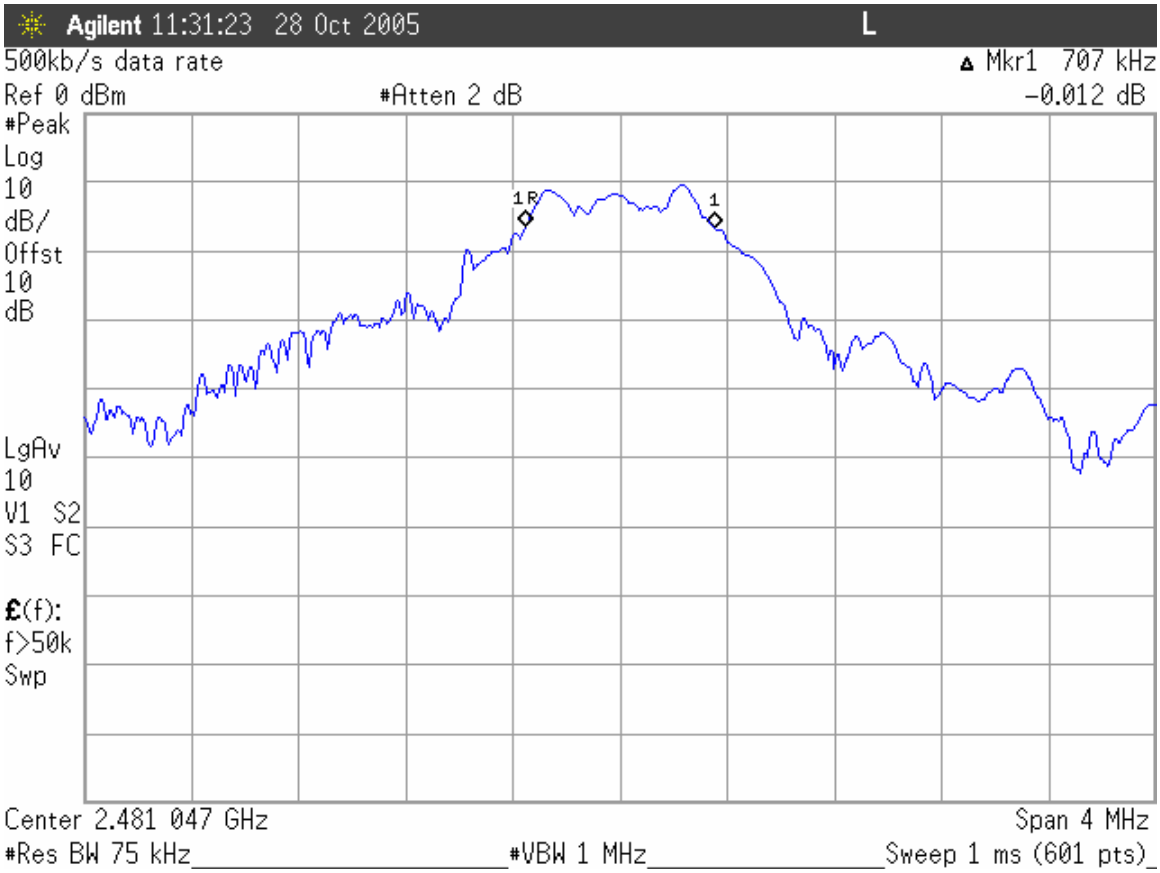

Figure 3: High Channel 6dB Bandwidth at 500kb/s

Frequency	Bandwidth	Limit (Minimum)	Pass/Fail
Low Channel 2405MHz	720kHz	500kHz	Pass
Mid Channel 2440MHz	673kHz	500kHz	Pass
High Channel 2480MHz	707kHz	500kHz	Pass

2.0 Band Edge Radiated

The following table contains the worse case (unit flat, antenna vertical) radiated band edge emissions while the device was transmitting at the high channel (2480MHz) and at the highest data rate of 500kb/s.

Table 1: Radiated Band Edge Data

CLIENT: Matric Limited DATE: 10/28/2005
TESTER: James Ritter JOB #: 8862

EUT Information:
EUT: Can Bridge 500
CONFIGURATION: Transmitting at 2480 MHz
NOTE: unit pulsed at 500usec = averaging done at 3kHz RBW

Test Requirements:
TEST STANDARD: FCC Part 15
DISTANCE: 3m
CLASS: B

Test Equipment/Limit:
ANTENNA: A_00004
CABLE: CSITE2_HF
LIMIT: LFCC_3m_Class_B
AMPLIFIER (dB) A_00066

Frequency (MHz)	Polarity H/V	Az Deg	Ant. Hght (m)	SA Level dBµV	Ant. Corr. dB/m	Cable Corr. dB	Amp Gain dB	Corr. Level dBµV/m	Corr. Level µV/m	Limit µV/m	Margin dB
Unit Flat											
PEAK											
2483.50	H	180.0	1.0	57.2	29.1	1.5	35.6	52.3	410.9	5000.0	-21.7
2483.50	V	270.0	1.0	58.2	29.1	1.5	35.6	53.3	460.0	5000.0	-20.7
AVG											
2483.50	H	180.0	1.0	48.8	29.1	1.5	35.6	43.9	156.6	500.0	-10.1
2483.50	V	270.0	1.0	52.6	29.1	1.5	35.6	47.7	241.4	500.0	-6.3

3.0 Conducted Emissions, AC Mains

The EUT was powered via an off-the-shelf 120Vac to 12Vdc wall transformer adapter and the conducted emissions were measured in accordance with §15.207. Following is the data for the conducted emissions.

Table 2: AC Mains Conducted Emissions Data

CLIENT: Matric Limited DATE: 10/28/2005
TESTER: James Ritter JOB #: 8862
EUT: Can Bridge 500
Power Supply: Ascend Model WP572012 DG

TEST STANDARD: FCC_B LISN 1: A_00126
TEST SITE: CSITE2_CE
VOLTAGE: 120VAC LISN 2: A_00125

LINE 1 - NEUTRAL (LISN 1)

Frequency MHz	Level QP dBuV	Cable Loss dB	LISN Corr dB	Corr Level dBuV	Limit QP dBuV	Margin QP dB	Level AVG dBuV	Corr Level dBuV	Limit AVG dBuV	Margin AVG dB
0.157	50.1	10.1	1.4	61.6	65.6	-4.1	14.2	25.7	55.6	-29.9
0.173	49.3	10.1	1.2	60.6	64.8	-4.2	11.7	23.0	54.8	-31.8
0.224	46.6	10.2	0.8	57.6	62.7	-5.1	5.9	16.9	52.7	-35.8
0.774	23.3	10.4	0.5	34.2	56.0	-21.8	7.8	18.7	46.0	-27.3
1.824	25.7	10.5	0.3	36.5	56.0	-19.5	2.3	13.1	46.0	-32.9
3.335	14.1	10.5	0.4	25.0	56.0	-31.0	14.1	25.0	46.0	-21.0
3.871	10.8	10.5	0.4	21.7	56.0	-34.3	10.8	21.7	46.0	-24.3
7.169	11.9	11.2	0.4	23.5	60.0	-36.5	11.9	23.5	50.0	-26.5

LINE 2 - PHASE (LISN 2)

Frequency MHz	Level QP dBuV	Cable Loss dB	LISN Corr dB	Corr Level dBuV	Limit QP dBuV	Margin QP dB	Level AVG dBuV	Corr Level dBuV	Limit AVG dBuV	Margin AVG dB
0.157	50.0	10.1	1.8	62.0	65.6	-3.6	15.2	27.1	55.6	-28.5
0.173	49.5	10.1	1.6	61.3	64.8	-3.5	14.0	25.7	54.8	-29.1
0.224	45.2	10.2	1.2	56.6	62.7	-6.1	7.6	19.0	52.7	-33.7
0.774	27.9	10.4	0.5	38.9	56.0	-17.1	3.8	14.8	46.0	-31.2
1.824	13.8	10.5	0.3	24.6	56.0	-31.4	1.7	12.5	46.0	-33.5
3.335	10.4	10.5	0.4	21.3	56.0	-34.7	10.4	21.3	46.0	-24.7
3.871	8.7	10.5	0.4	19.6	56.0	-36.4	8.7	19.6	46.0	-26.4
7.169	7.9	11.2	0.5	19.6	60.0	-40.4	7.9	19.6	50.0	-30.4