EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

8.7. RADIATED EMISSIONS

TEST SETUP

The EUT is placed on the wooden table. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4/1992.

The EUT is set to transmit in a continuous mode.

TEST PROCEDURE

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz, the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels within the 2.4 GHz band.

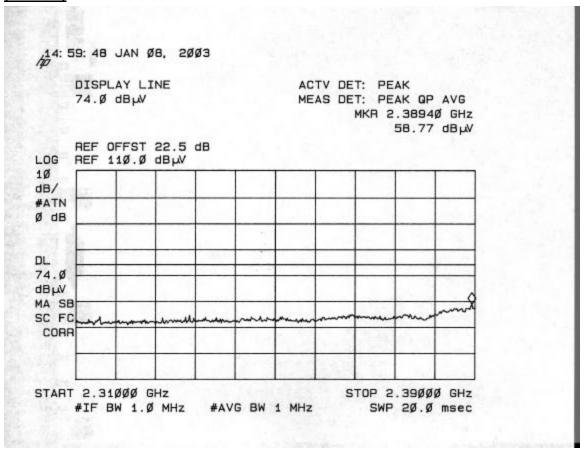
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels within the 5.8 GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The frequency span is set small enough to easily differentiate between broadcast stations, intermittent ambient signals and EUT emissions. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the suspected signal. Measurements were made with the antenna polarized in both the vertical and the horizontal positions.

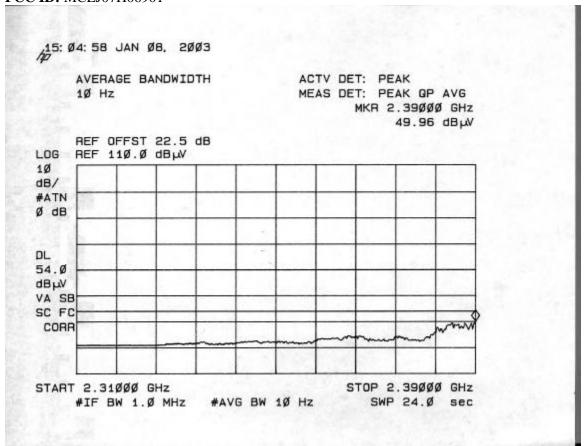
TEST RESULTS

No non-compliance noted:

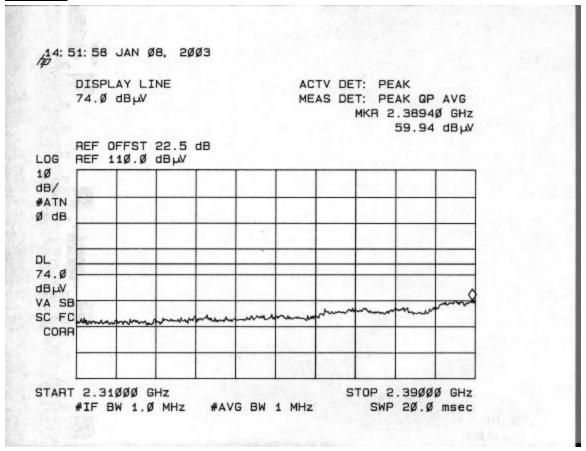
RESTRICTED BAND RADIATED EMISSIONS (LOW CHANNEL, HORIZONTAL POLARIZATION) (B MODE)



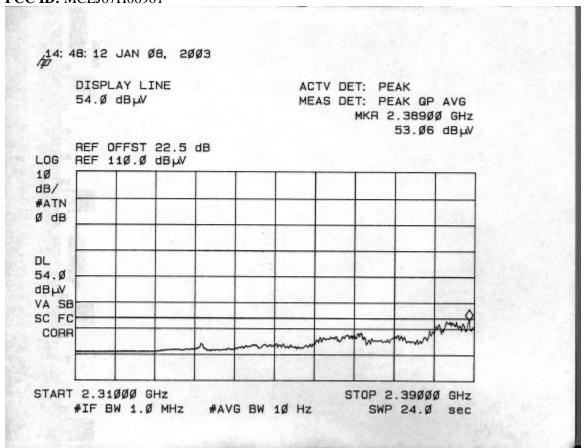
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



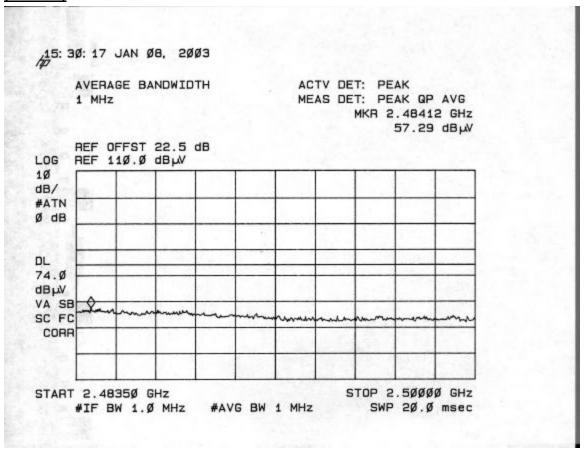
RESTRICTED BAND RADIATED EMISSIONS (LOW CHANNEL, VERTICAL POLARIZATION) (B MODE)

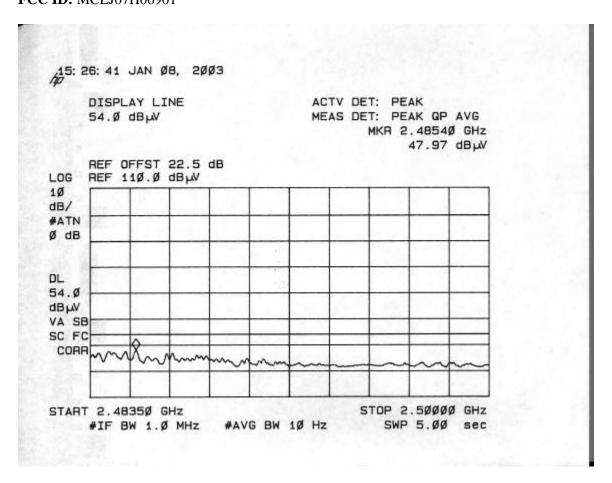


EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

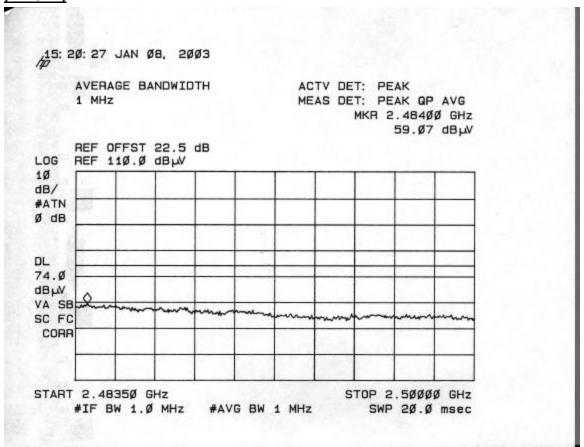


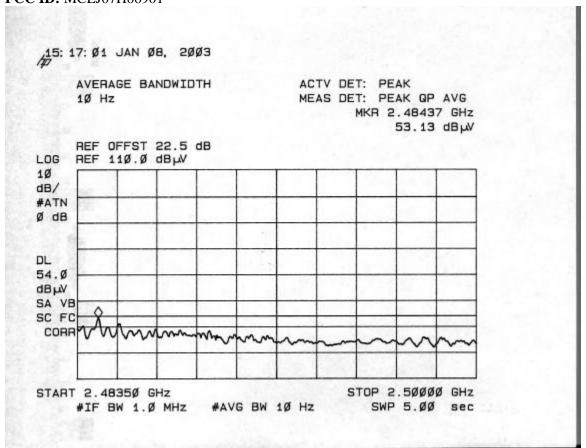
RESTRICTED BAND RADIATED EMISSIONS (HIGH CHANNEL, HORIZONTAL POLARIZATION) (B MODE)





RESTRICTED BAND RADIATED EMISSIONS (HIGH CHANNEL, VERTICAL POLARIZATION) (B MODE)



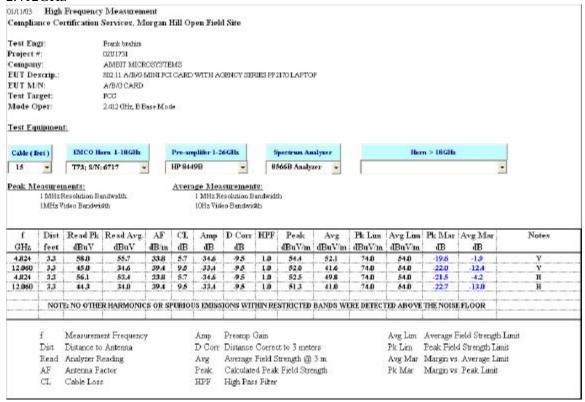


EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

HARMONIC AND SPURIOUS RADIATED EMISSIONS (2.4 GHZ BAND) (B MODE)

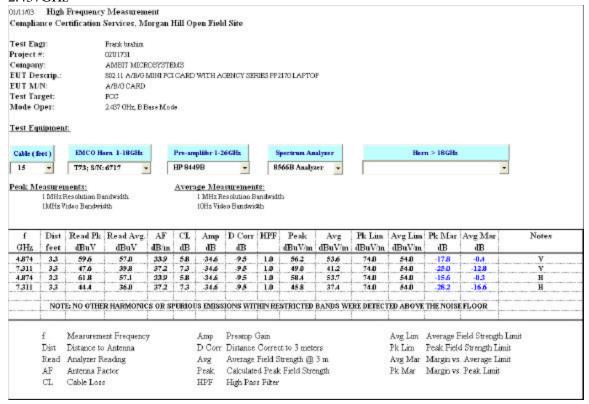
2.412GHz



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

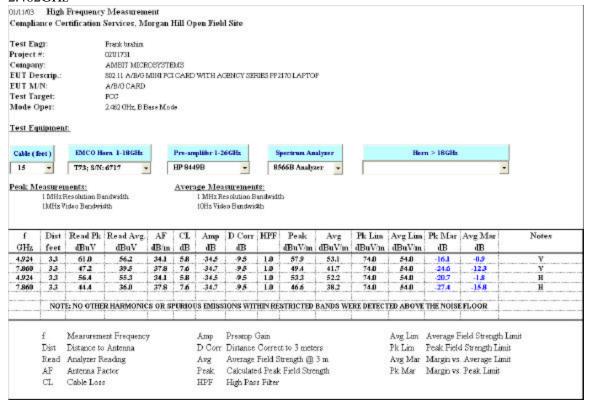
2.437GHz



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

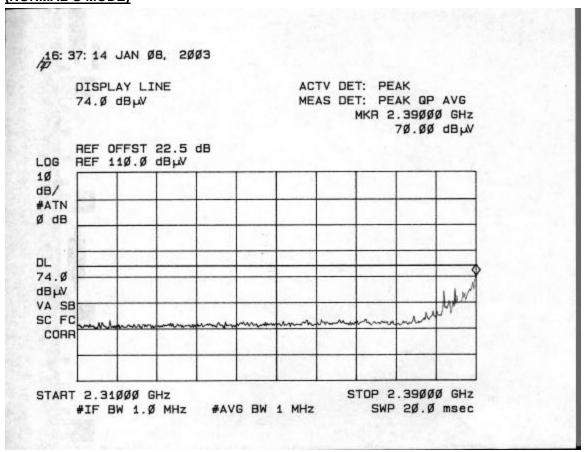
2.462GHz



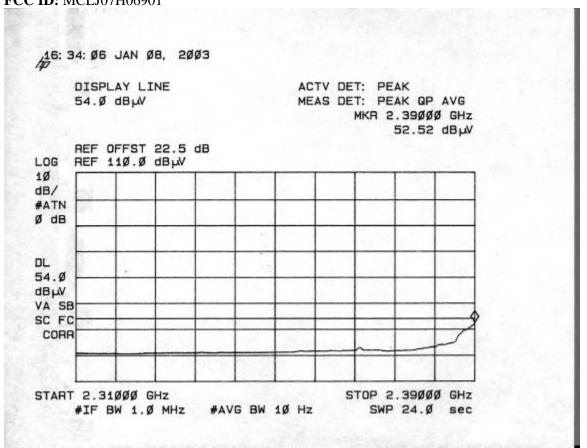
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

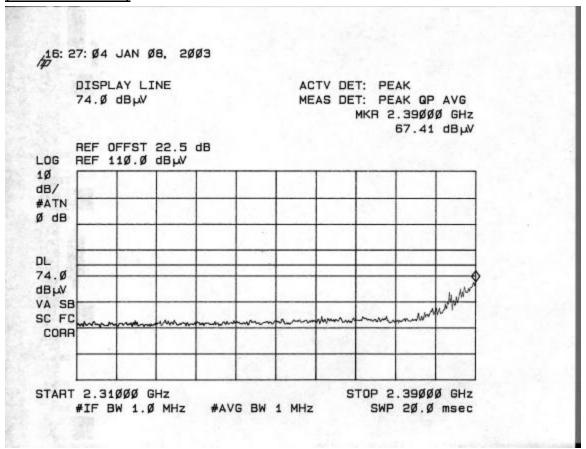
RESTRICTED BAND RADIATED EMISSIONS (LOW CHANNEL, HORIZONTAL POLARIZATION) (NORMAL G MODE)



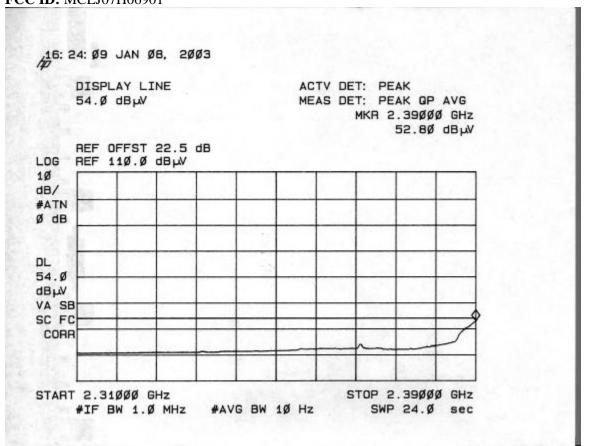
REPORT NO: 02U1731-1ADATE: FEBRUARY 23, 2003 EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



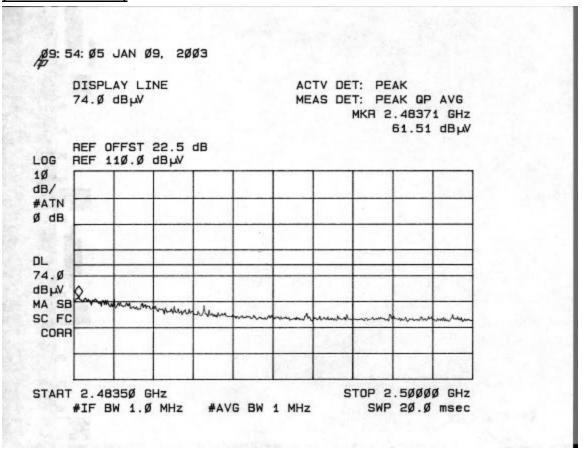
RESTRICTED BAND RADIATED EMISSIONS (LOW CHANNEL, VERTICAL POLARIZATION) (NORMAL G MODE)



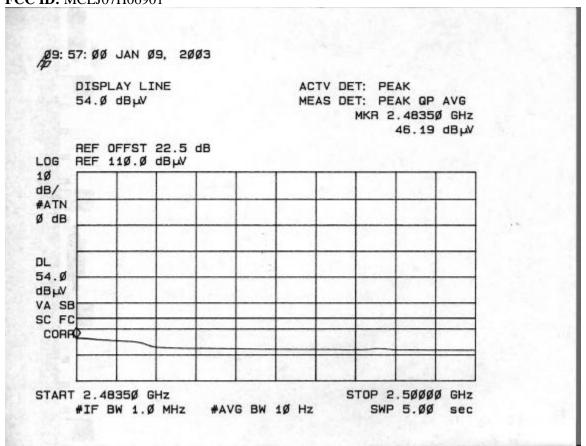
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



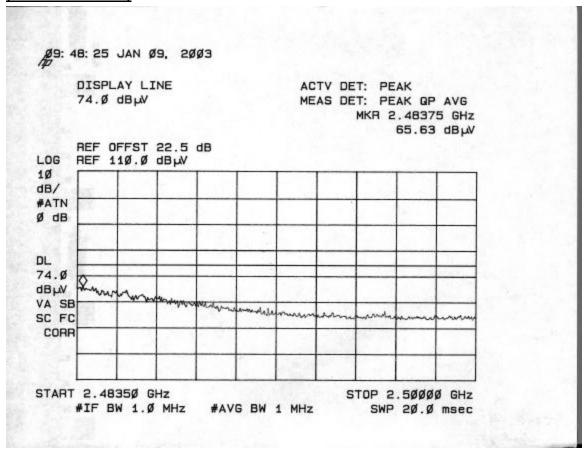
RESTRICTED BAND RADIATED EMISSIONS (HIGH CHANNEL, HORIZONTAL POLARIZATION) (G NORMAL MODE)



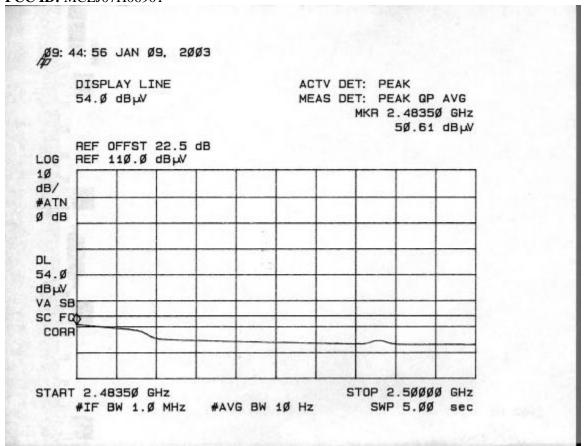
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



RESTRICTED BAND RADIATED EMISSIONS (HIGH CHANNEL, VERTICAL POLARIZATION) (G NORMAL MODE)



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



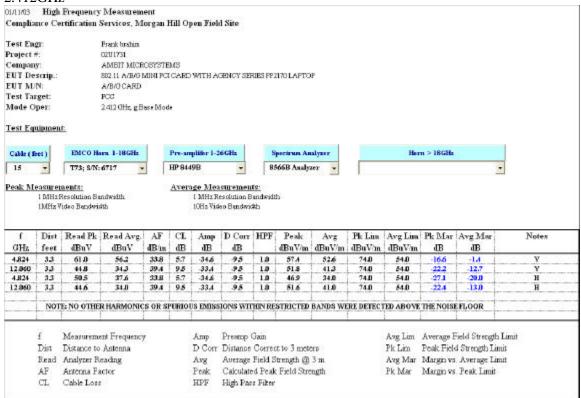
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

HARMONIC AND SPURIOUS RADIATED EMISSIONS (2.4 GHZ BAND) (G NORMAL MODE) AND (G TURBO MODE)

NORMAL MODE

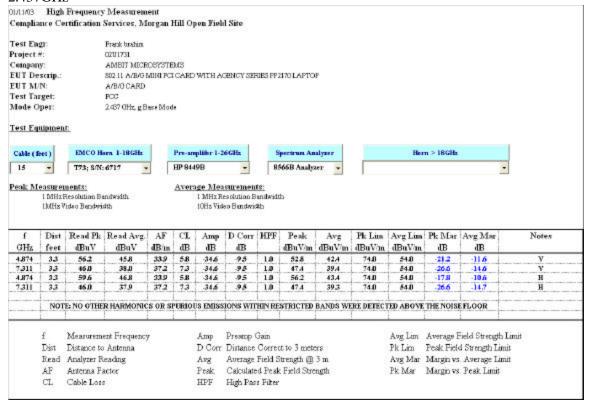
2.412GHz



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

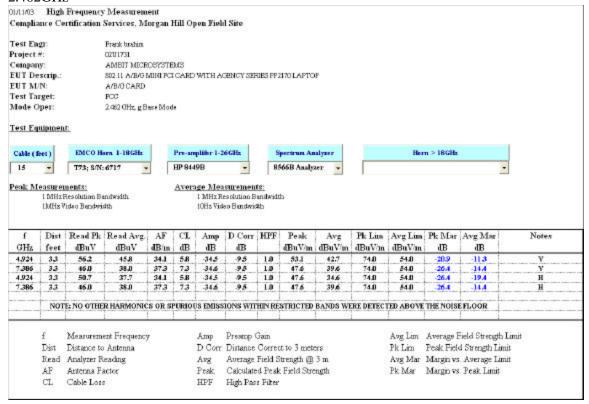
2.437GHz



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

2.462GHz

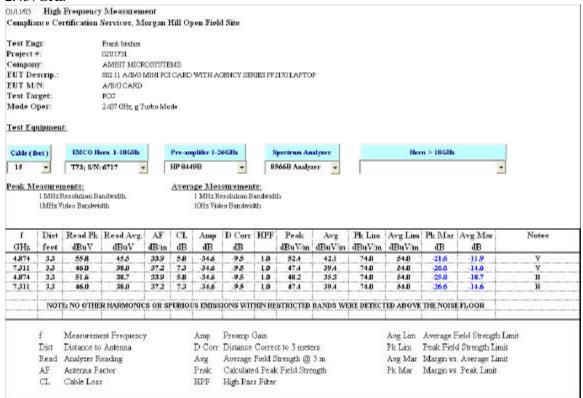


EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

TURBO MODE

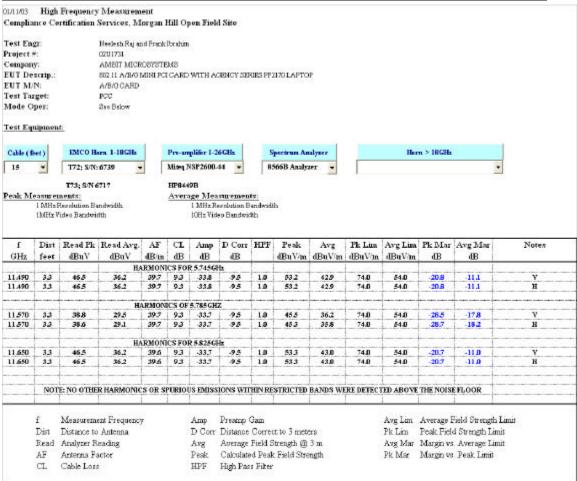
2.437GHz



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

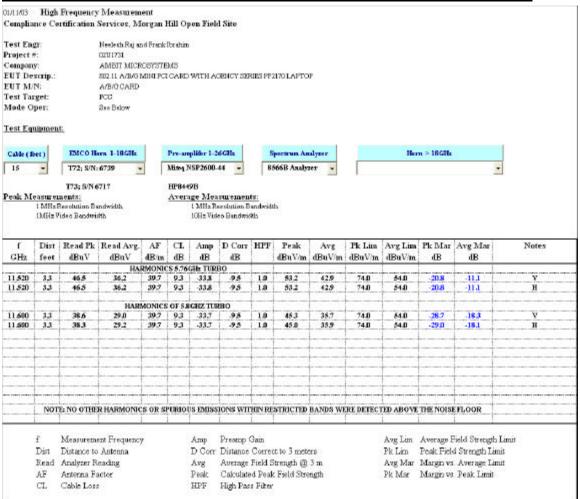
HARMONIC AND SPURIOUS RADIATED EMISSIONS (5.8 GHZ BAND, NORMAL MODE)



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

HARMONIC AND SPURIOUS RADIATED EMISSIONS (5.8 GHZ BAND, TURBO MODE)



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

DIGITAL DEVICE RADIATED EMISSIONS

COMPLIANCE Certification Services

> FCC, VCCI, CISPR, CE, AUSTEL, NZ UL, CSA, TUV, BSMI, DHHS, NVLAP

561F MONTEREY ROAD, SAN JOSE, CA 95037-9001 PHONE: (408) 463-0885 FAX: (408) 463-0888

Company: AMBIT MICROSYSTEMS

EUT Description: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

Test Configuration: EUT/AC ADAPTER/MONITOR/USB MOUSE

Type of Test: CISPR22-B

Mode of Operation: TX

<< Main Sheet

Project #: 02u1731 Report #: 021303b1 Date& Time: 02/13/03 2:48 PM

Test Engr: neelesh raj

Sec. 1	55 30										
Freq.	Reading	AF		Pre-amp	Level	Limit	Margin	Pol	Az	Height	Mark
(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	EN_B	(dB)	(H/√)	(Deg)	(Meter)	(P/Q/A)
628.67	36.96	18.74	6.45	28.96	33.20	37.00	-3.80	10mV	180.00	3.00	QP
133.33	38.80	11.33	2.86	28.34	24.66	30.00	-5.34	10mV	180.00	1.00	Р
133.33	38.20	11.33	2.86	28.34	24.06	30.00	-5.94	10mH	180.00	1.00	Р
624.10	34.70	18.74	6.42	28.95	30.91	37.00	-6.09	10m∨	180.00	1.00	P
628.68	34.20	18.74	6.45	28.96	30.44	37.00	-6.56	10mH	135.00	1.00	Р
624.10	33.90	18.74	6.42	28.95	30.11	37.00	-6.89	10mH	180.00	1.00	Р
6 Worst	Data										
	: 3			15		4 3		:		6	

Page 99 of 109

EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

8.8. POWERLINE CONDUCTED EMISSIONS

TEST SETUP

The EUT is placed on a wooden table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane on the floor.

The EUT is set to transmit in a continuous mode.

TEST PROCEDURE

The resolution bandwidth is set to 10 kHz for both peak detection and quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Line conducted data is recorded for both NEUTRAL and HOT lines.

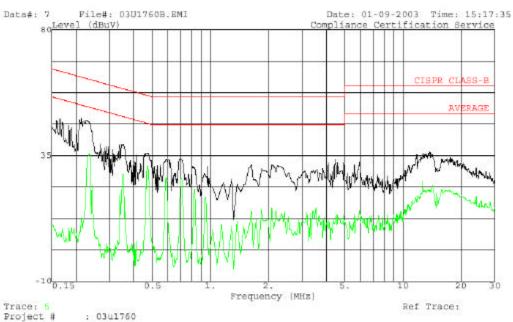
RESULTS

No non-compliance noted:

Freq.	Freq. Reading				Limit	EN_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1/L2
0.21	48.42		12.85	0.00	64.17	54.17	-15.75	-41.32	L1
0.17	48.12		6.84	0.00	65.57	55.57	-17.45	-48.73	L1
0.18	45.84		9.16	0.00	65.06	55.06	-19.22	-45.90	L1
0.21	52.82		11.35	0.00	64.43	54.43	-11.61	-43.08	L2
0.22	49.76		13.66	0.00	64.09	54.09	-14.33	-40.43	L2
0.35	40.55		29.86	0.00	60.17	50.17	-19.62	-20.31	L2
6 Worst Data									



561F Monterey Road, San Jose, CA 95037 Tel: (408) 463-0885 Pax: (408) 463-0888



Test Engineer : NEBLESH RAJ Company : AMBIT MICROSYSTEMS

EUT

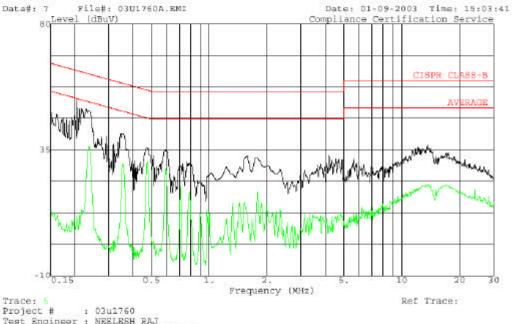
: 802.11 A/B/G : MINI-PCI CARD/SAPPHIRE LAPTOP : W500 WITH SAPPHIRE LAPTOP : EUT/ MONITOR /MOUSE Model Name

Test Config. : EUT/ MONITOR /MOU Test of Target: CISPR 22 Class B Mode of Op. : Transmitting Mode : Transmitting Mode : 115VAC860Hz

: LINE 1 (PEAK: BLACK AVG: GREEN)



561F Monterey Road, San Jose, CA 95037 US/ Tel: (408) 463-0885 Fax: (408) 463-0888



Project # : 03u1760 Test Engineer : NEELESH RAJ Company : AMBIT MICROSYSTEMS BUT : 802.11 A/B/G

EUT : 802.11 A/B/G : MINI-PCI CARD/SAPPHIRE LAPTOP Model Name : W500 WITH BAPPHIRE LAPTOP Test Config. : EUT/ MONITOR /MOUSE

Test Config. : EUT/ MONITOR /MOUSE Test of Target: CISPR 22 Class B Mode of Op. : Transmitting Mode : 115VAC@60H2

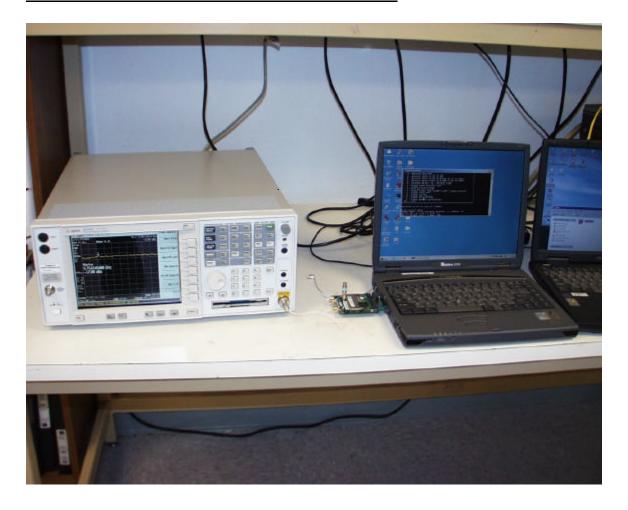
: LINE 2 (PEAK:BLACK AVG:GREEN)

REPORT NO: 02U1731-1ADATE: FEBRUARY 23, 2003 EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

8.9. SETUP PHOTOS

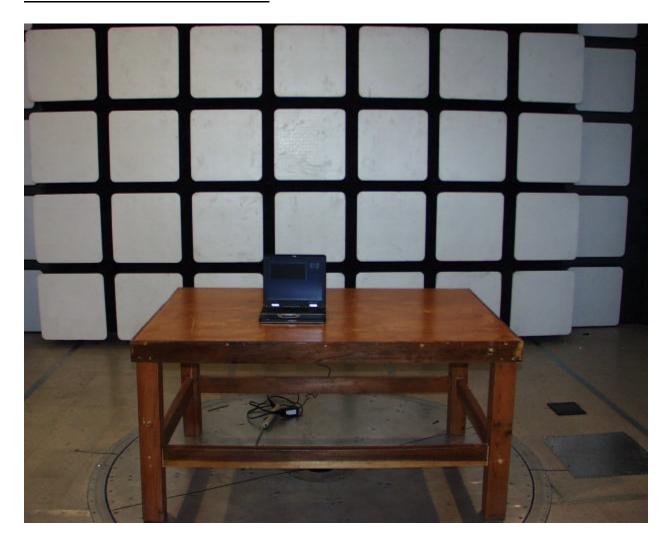
ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

RADIATED RF MEASUREMENT SETUP



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



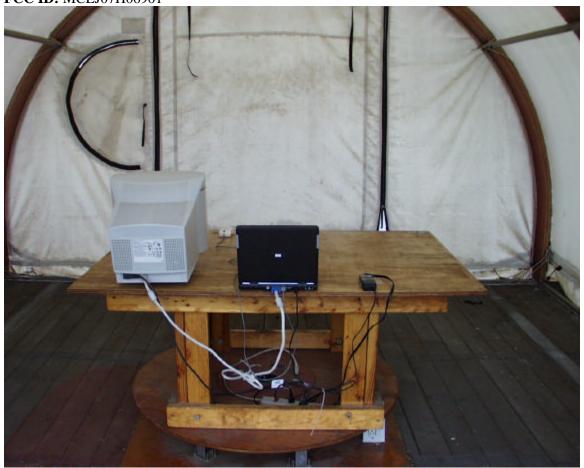
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

DIGITAL DEVICE RADIATED EMISSIONS MEASUREMENT SETUP



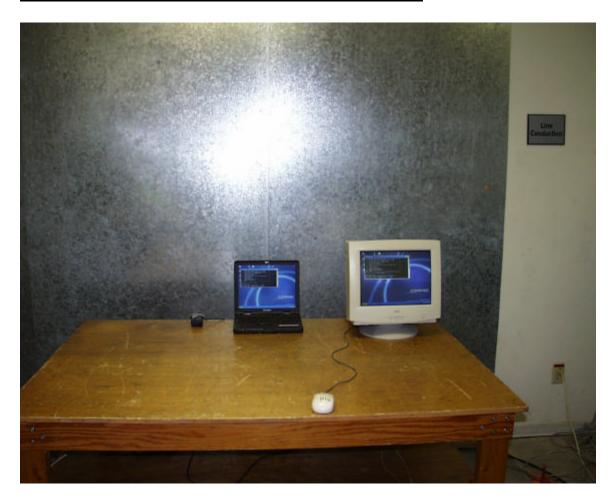
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

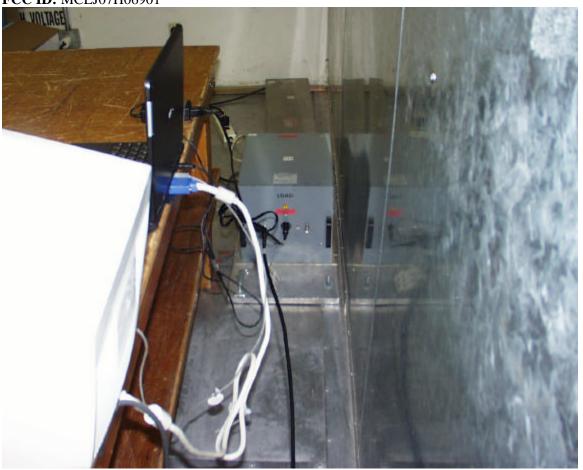
FCC ID: MCLJ07H06901

POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP



EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901



END OF REPORT