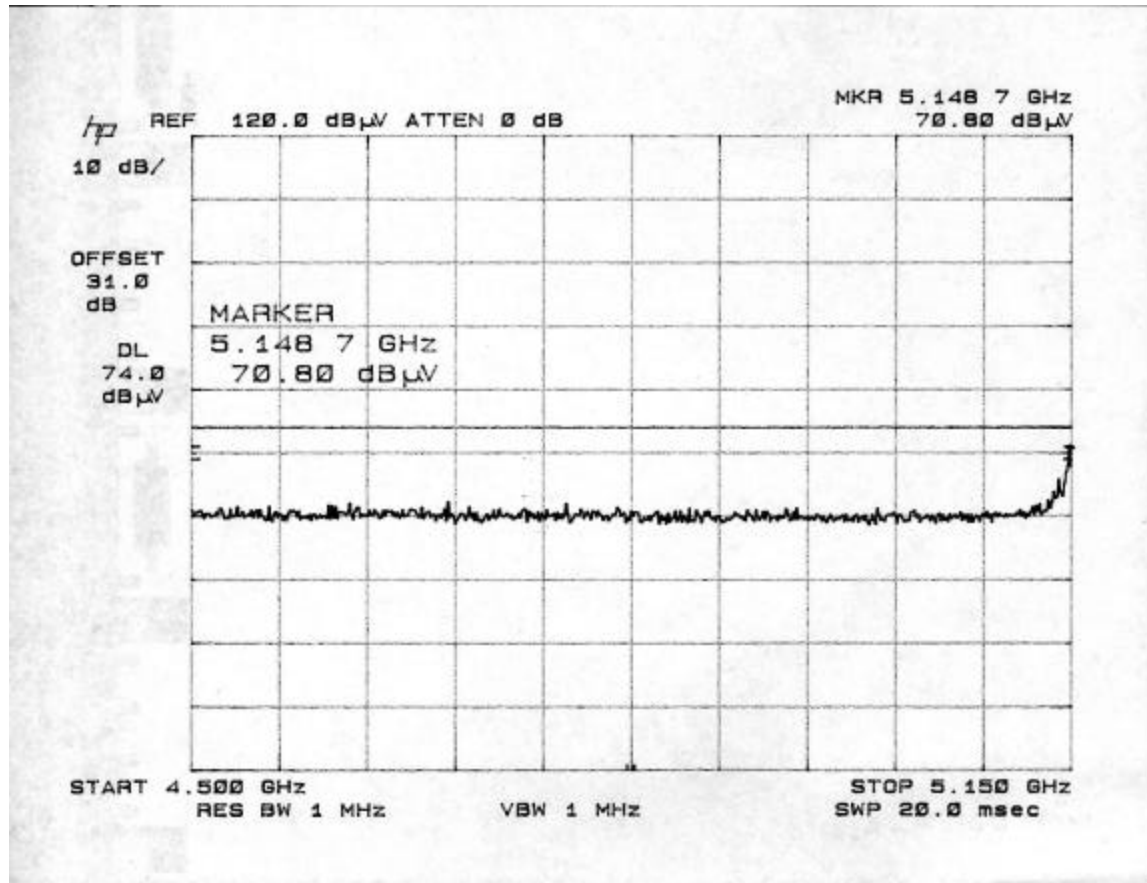
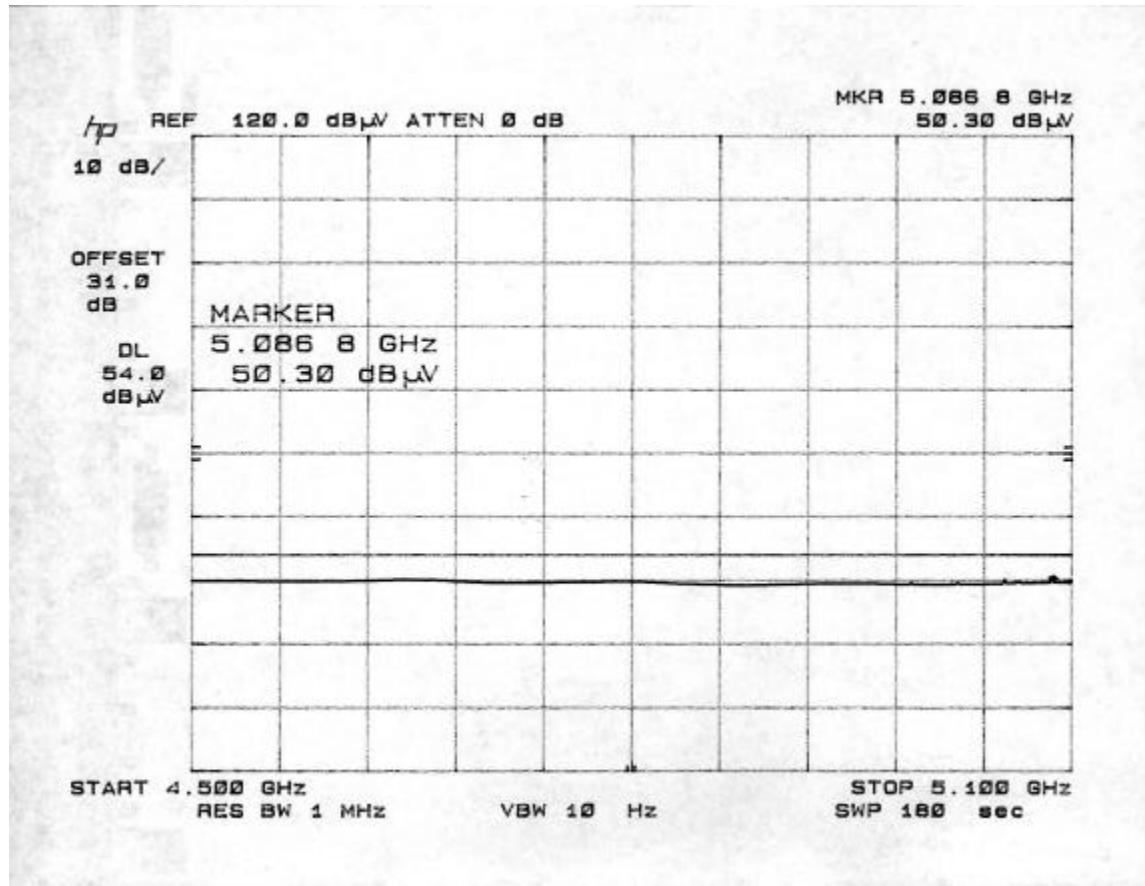
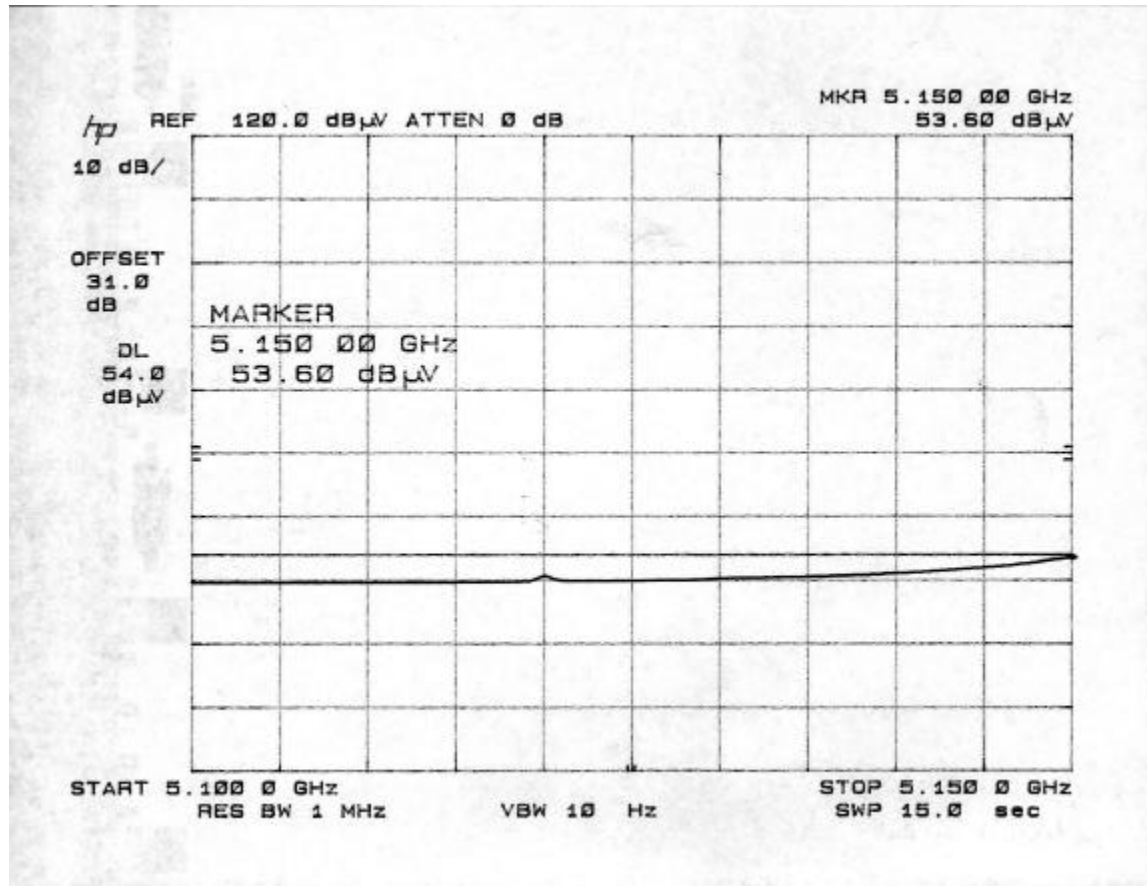


RESTRICTED BAND RADIATED EMISSIONS (TURBO MODE, VERTICAL POLARIZATION)
(5.21GHz)





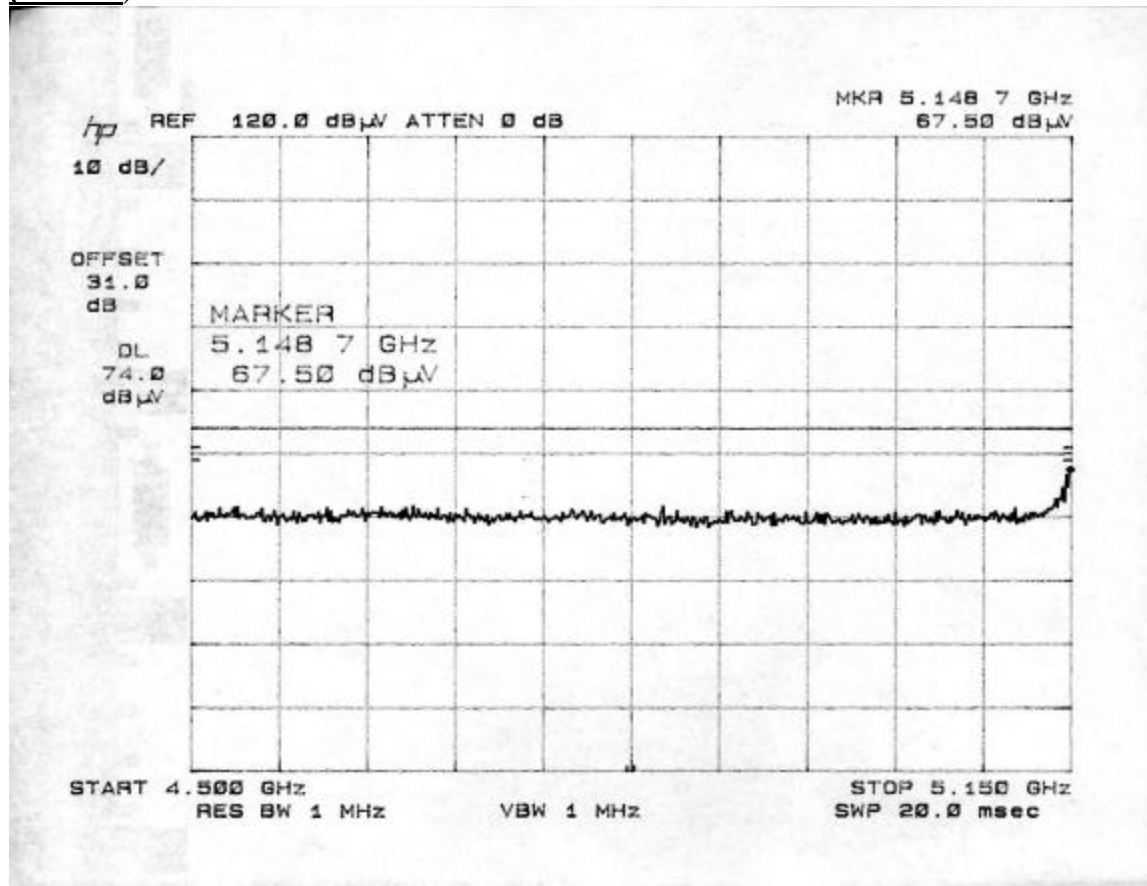


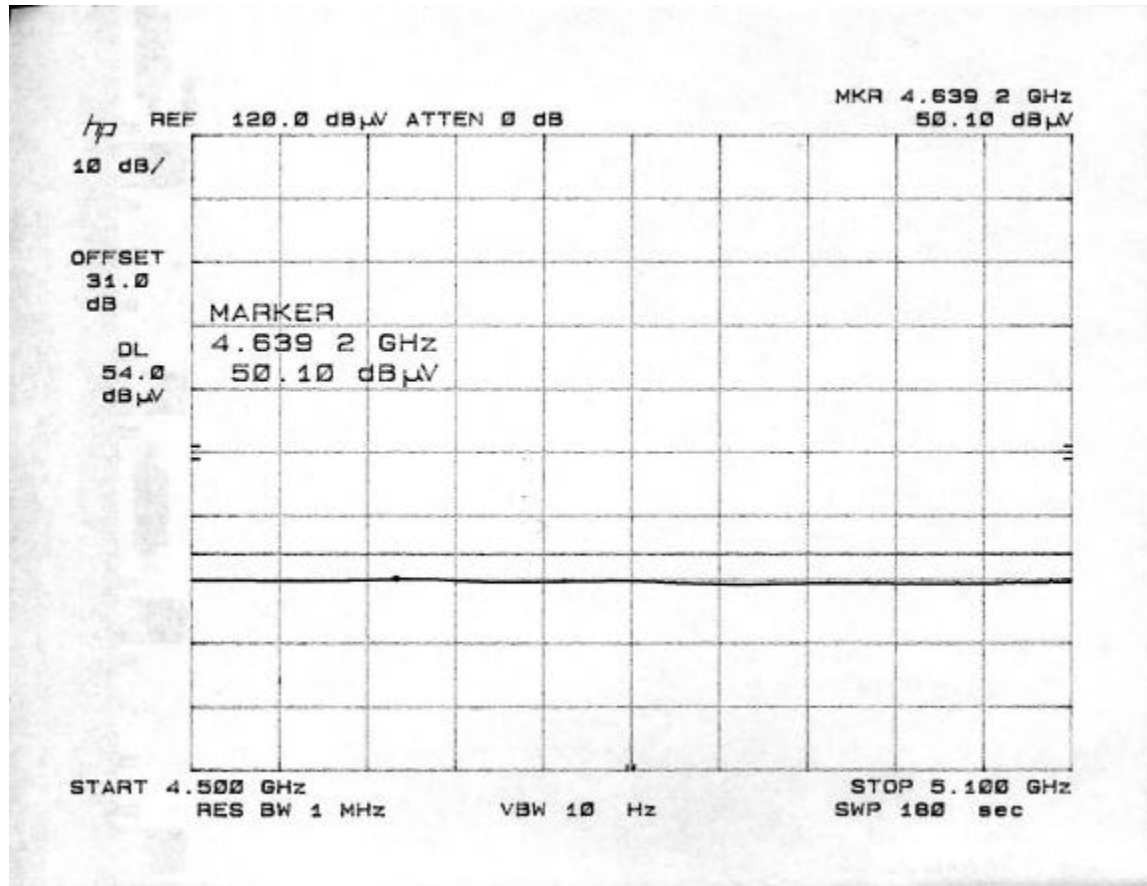
REPORT NO: 02U1731-1B DATE: FEBRUARY 20, 2003

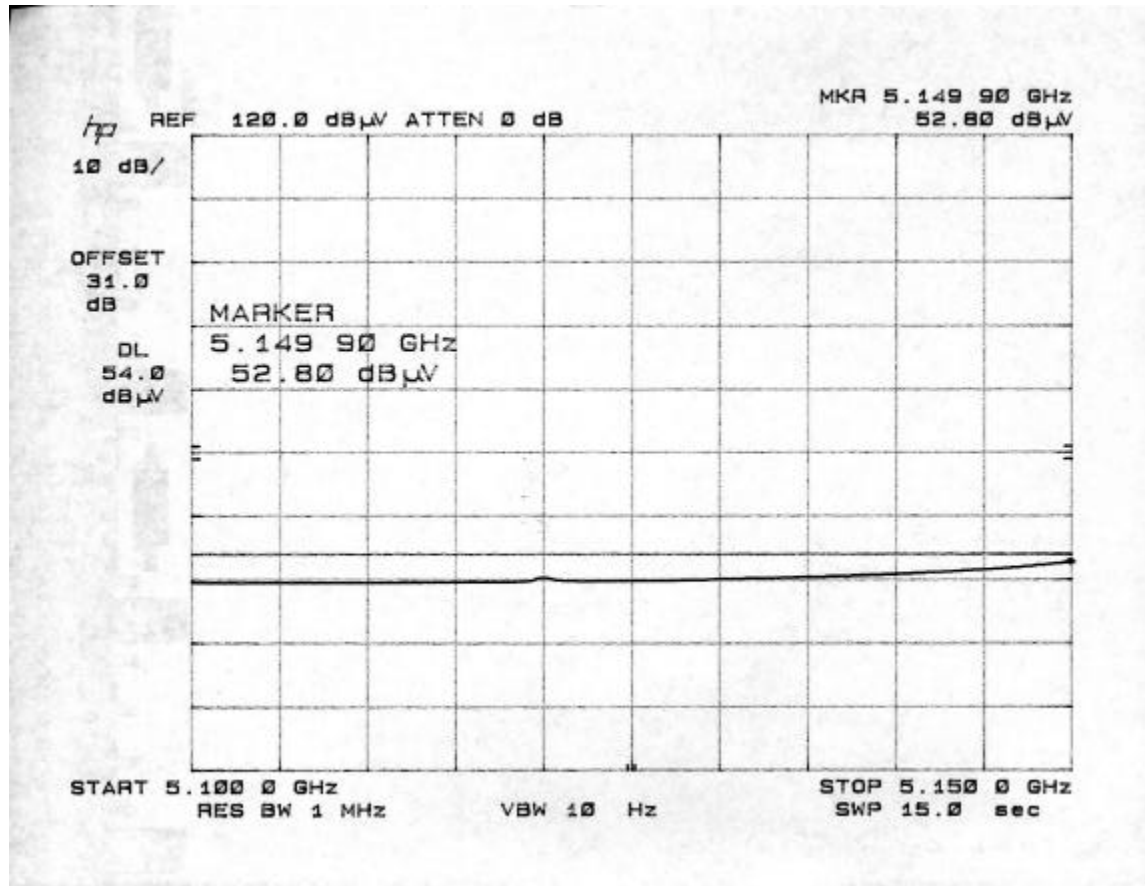
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP

FCC ID: MCLJ07H06901

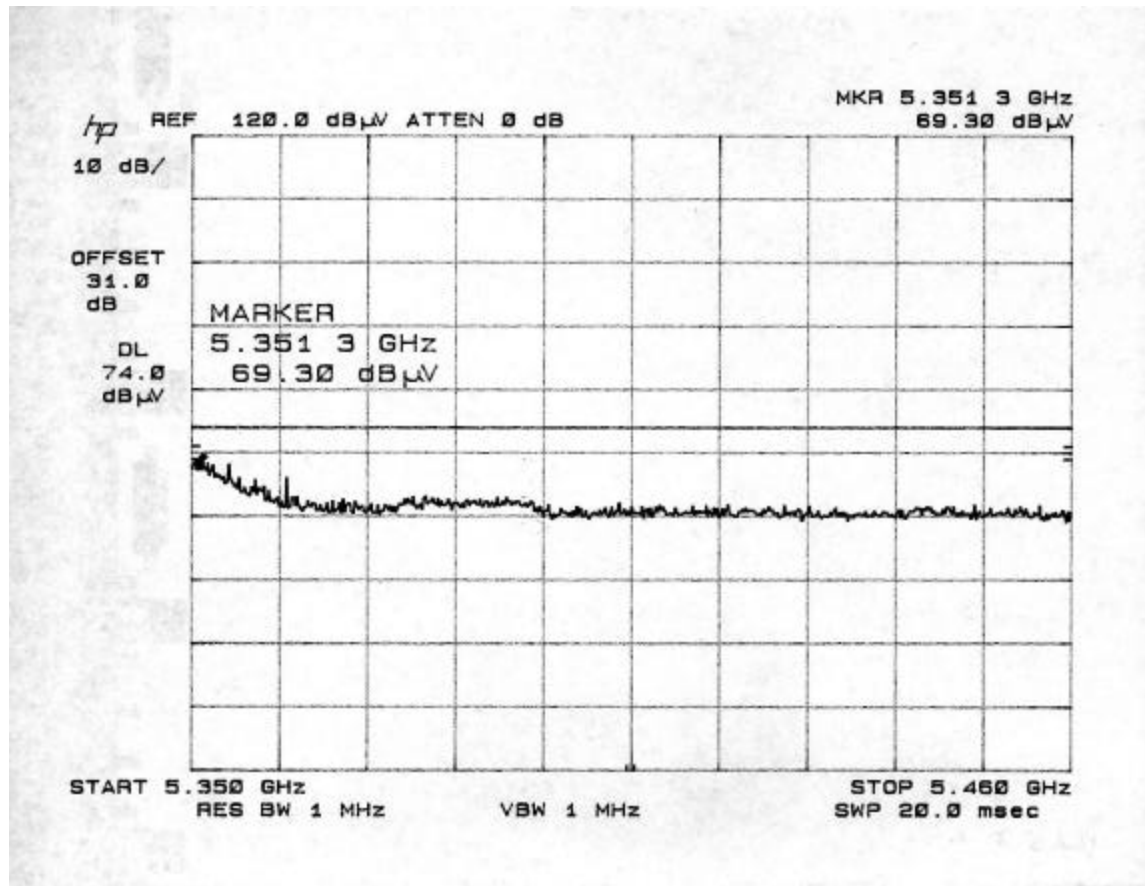
RESTRICTED BAND RADIATED EMISSIONS (TURBO MODE, HORIZONTAL POLARIZATION)
(5.21GHz)

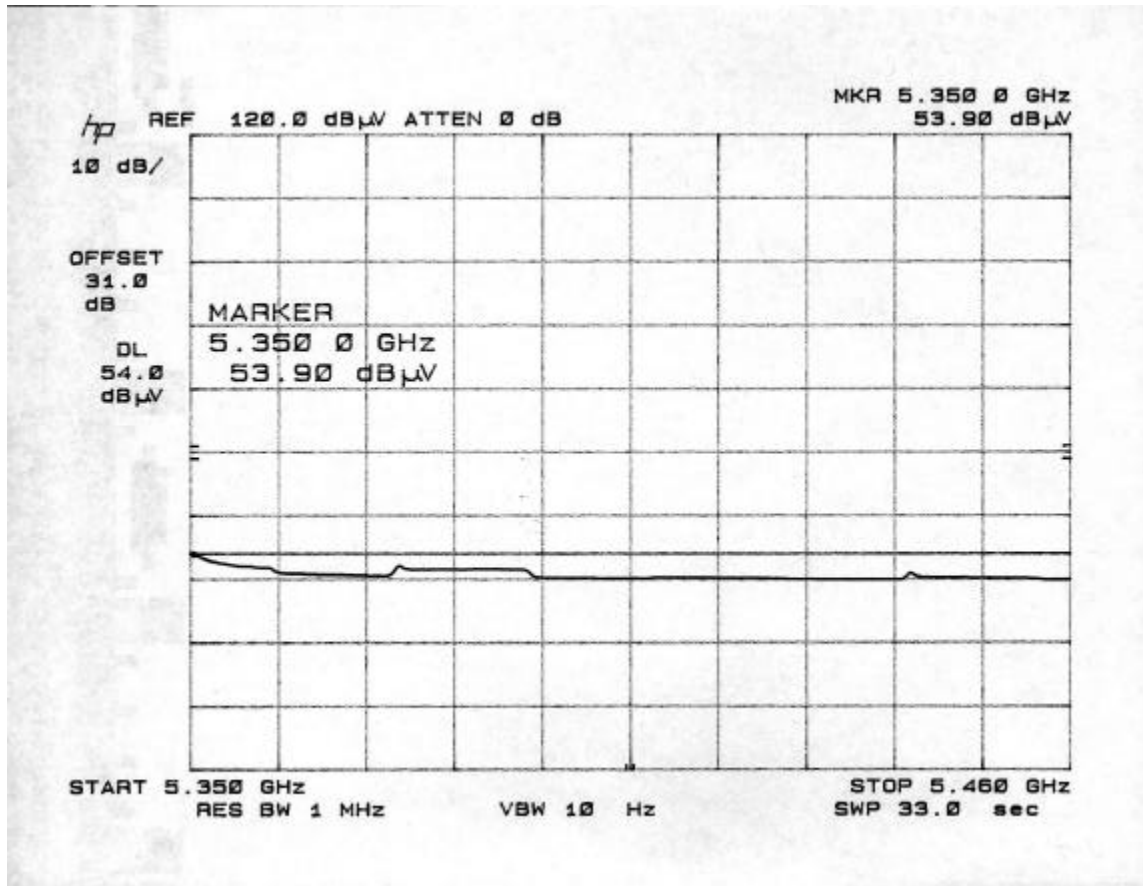




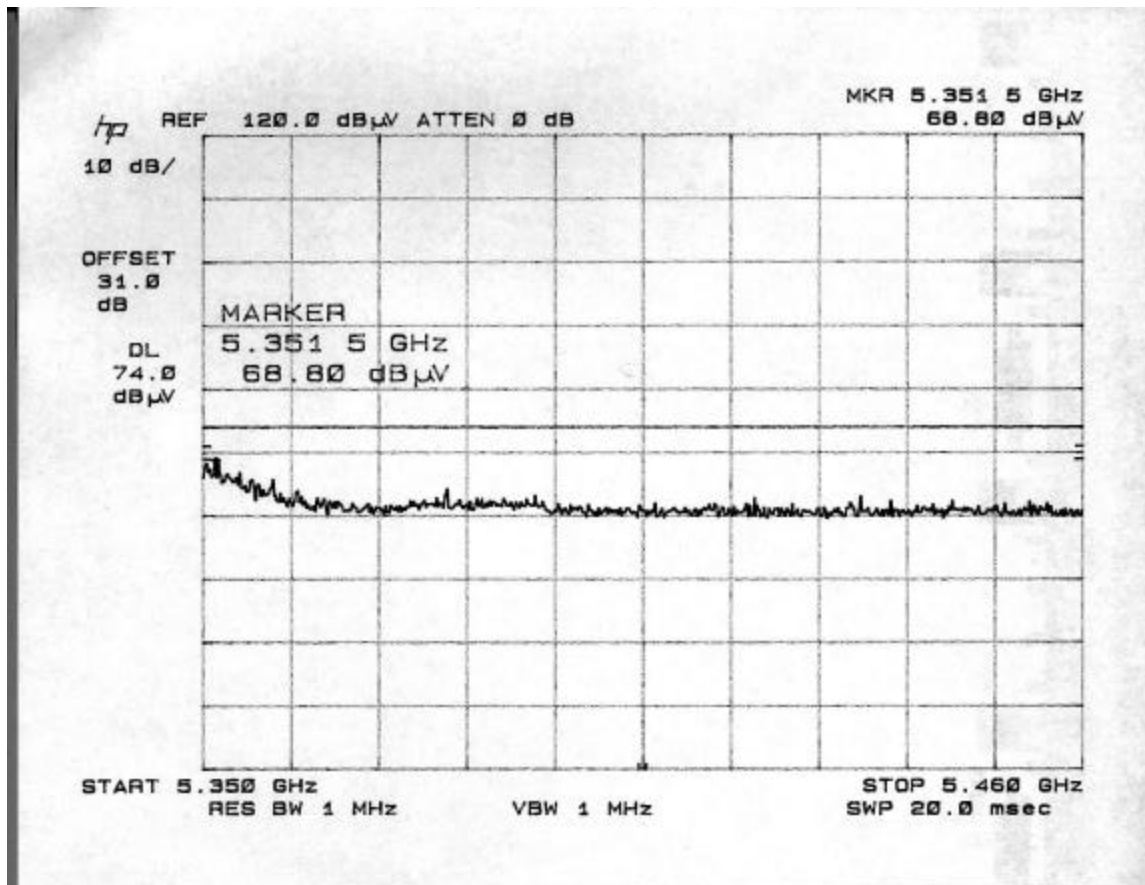


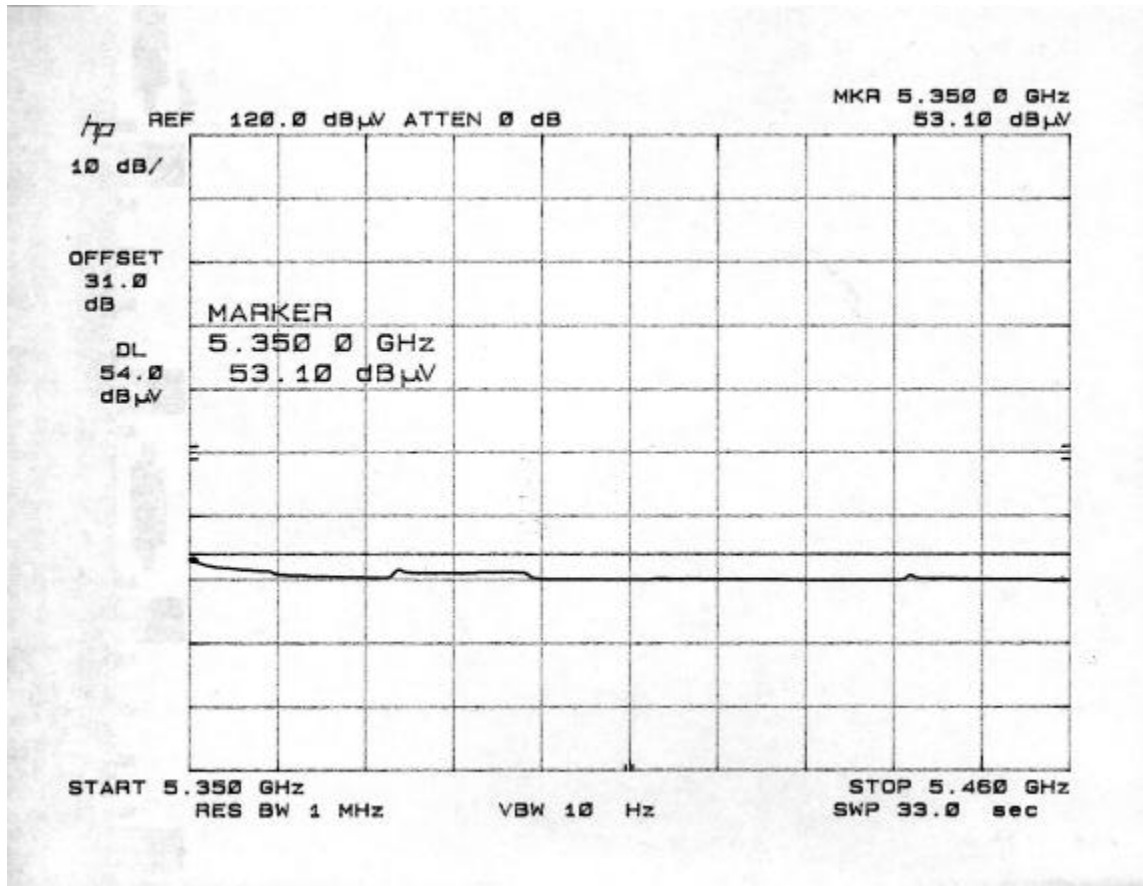
RESTRICTED BAND RADIATED EMISSIONS (NORMAL MODE, VERTICAL POLARIZATION)
(5.32GHz)





RESTRICTED BAND RADIATED EMISSIONS (TURBO MODE, HORIZONTAL POLARIZATION)
(5.32GHz)



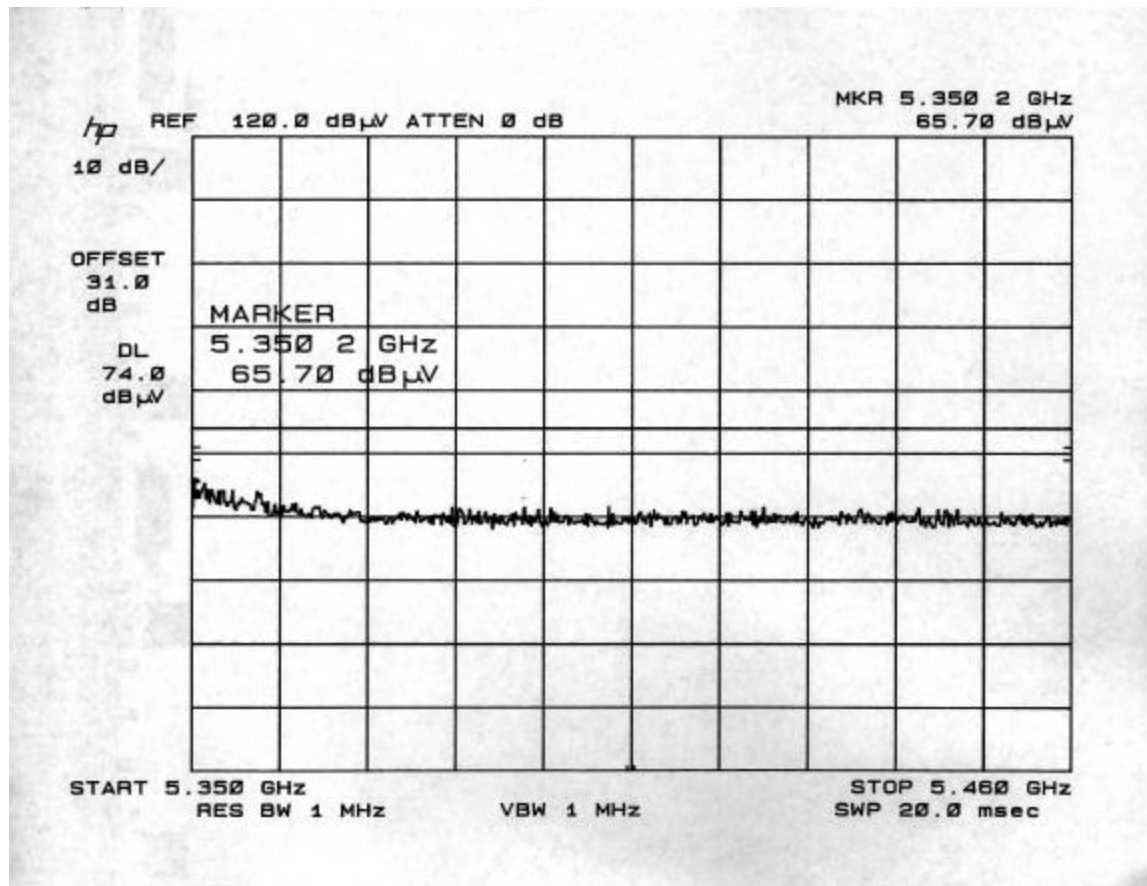


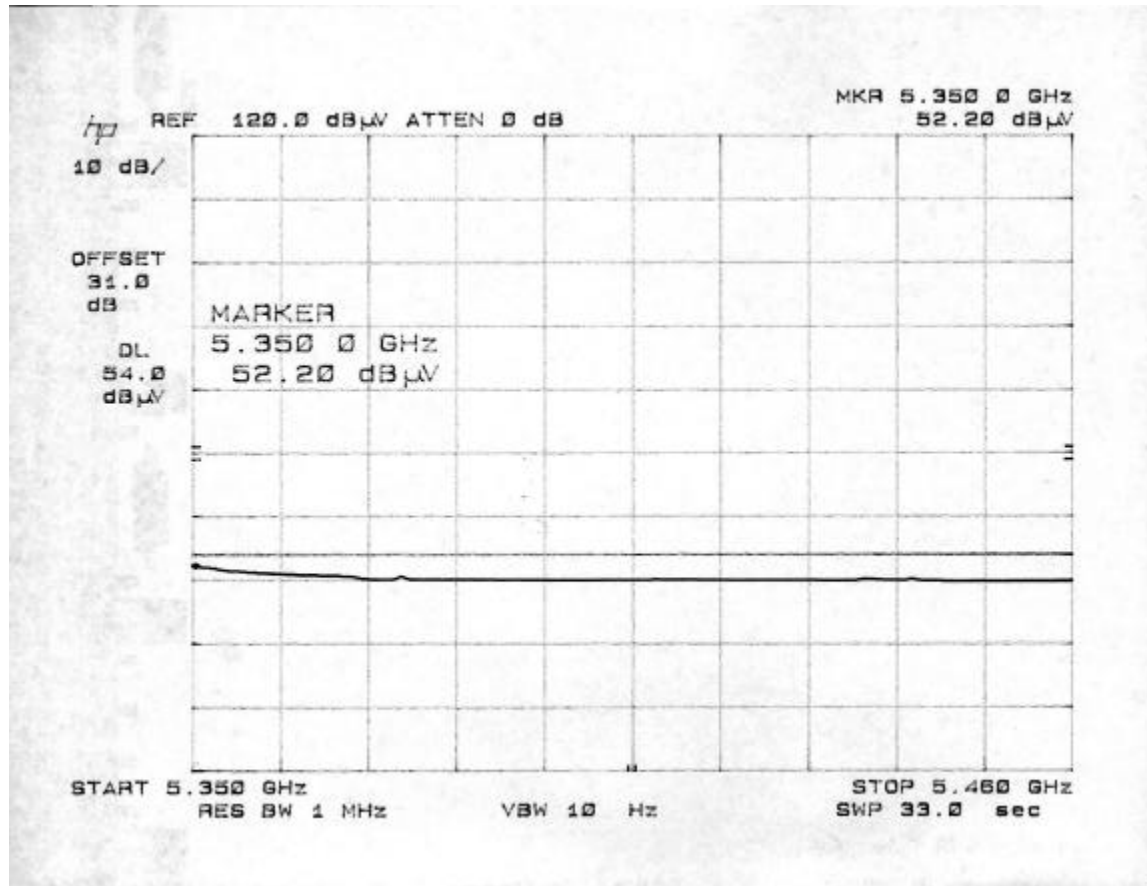
REPORT NO: 02U1731-1B DATE: FEBRUARY 20, 2003

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

FCC ID: MCLJ07H06901

RESTRICTED BAND RADIATED EMISSIONS (TURBO MODE, VERTICAL POLARIZATION)
(5.29GHz)



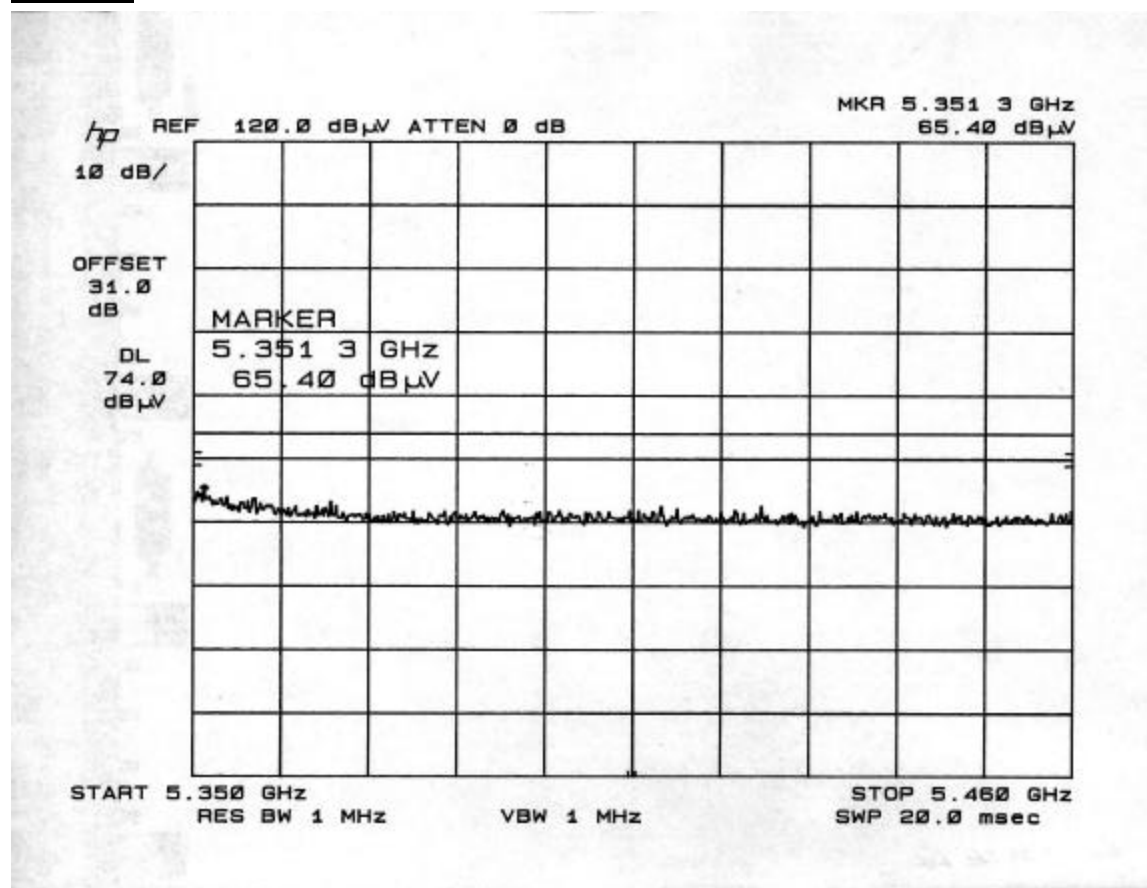


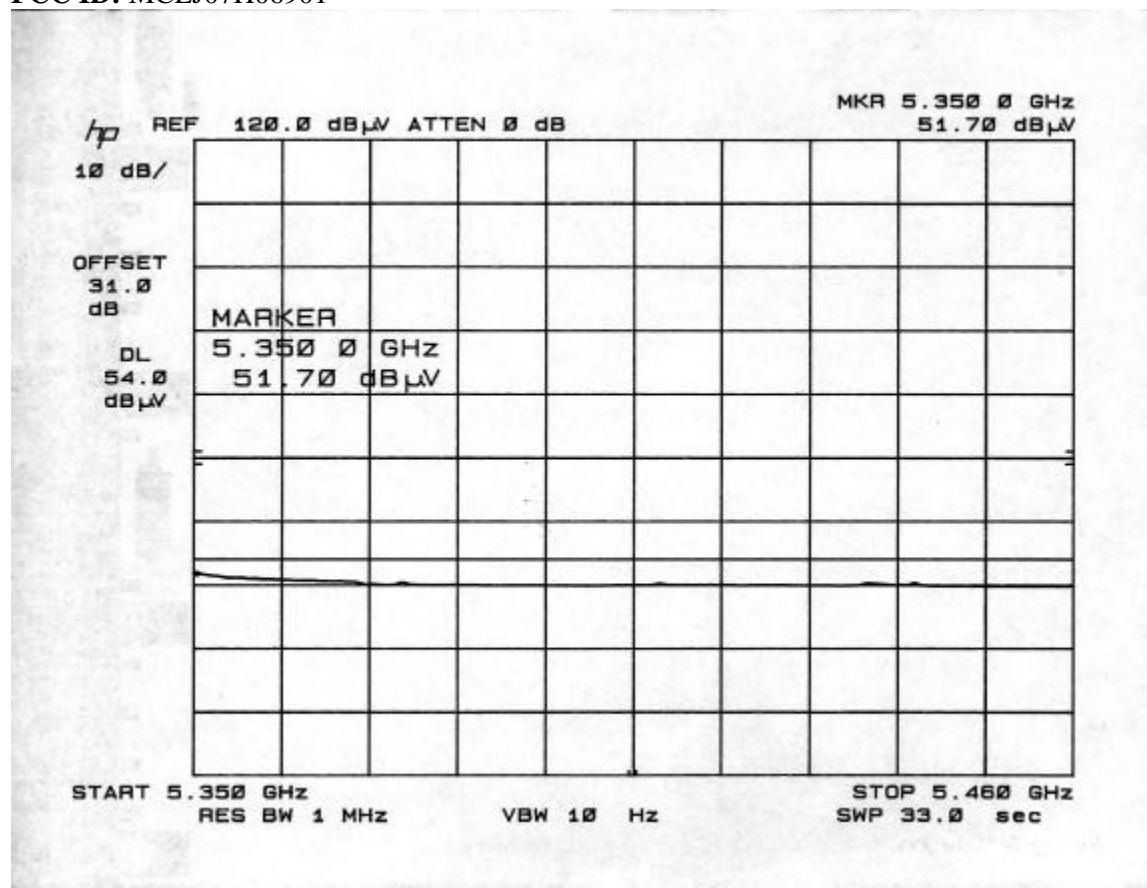
REPORT NO: 02U1731-1B DATE: FEBRUARY 20, 2003

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

FCC ID: MCLJ07H06901

RESTRICTED BAND RADIATED EMISSIONS (TURBO MODE, HORIZONTAL POLARIZATION)
(5.29GHz)





HARMONIC AND SPURIOUS RADIATED EMISSIONS (NORMAL MODE)

01/01/03 High Frequency Measurement

Compliance Certification Services, Morgan Hill Open Field Site

Test Engr: NEELESH RAJ
Project #: 02U1731
Company: AMET MICROSYSTEMS
EUT Descrip.: 802.11 A/B/G MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP
EUT M/N: A/B/G CARD
Test Target: FCC
Mode Oper: TX

Test Equipment:

Cable (feet)	EMCO Horn 1-18GHz	Pre-amplifier 1-26GHz	Spectrum Analyzer	Horn > 18GHz
15	T73; S/N: 0717 @1m	HP 8449B	8566B Analyzer	

T73; S/N: 0717

HP 8449B

Peak Measurements:

1 MHz Resolution Bandwidth
100 Hz Video Bandwidth

Average Measurements:

1 MHz Resolution Bandwidth
100 Hz Video Bandwidth

Limit

FCC 15.205

f GHz	Dist feet	Read Pk dBuV	Read Avg. dBuV	AF dBm	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes
*NORMAL MODE (restricted band)															
HARMONICS 5.18GHZ															
15.540	3.3	48.7	38.9	38.9	11.4	-33.0	-9.5	1.0	57.6	47.8	74.0	54.0	-16.4	-6.2	V
15.540	3.3	48.7	38.9	38.9	11.4	-33.0	-9.5	1.0	57.6	47.8	74.0	54.0	-16.4	-6.2	H
HARMONICS 5.24GHZ															
15.720	3.3	42.6	30.0	38.8	11.5	-33.0	-9.5	1.0	51.5	39.0	74.0	54.0	-22.5	-15.1	V
15.720	3.3	42.3	30.1	38.8	11.5	-33.0	-9.5	1.0	51.2	39.0	74.0	54.0	-22.8	-15.0	H
HARMONICS OF 5.26GHZ															
15.783	3.3	38.1	30.2	38.8	11.6	-33.0	-9.5	1.0	47.0	39.1	74.0	54.0	-27.0	-14.9	V
15.783	3.3	38.7	30.3	38.8	11.6	-33.0	-9.5	1.0	47.6	39.2	74.0	54.0	-26.4	-14.8	H
HARMONICS 5.32GHZ															
10.640	3.3	46.5	36.2	39.2	8.9	-34.2	-9.5	1.0	51.9	41.6	74.0	54.0	-22.1	-12.4	V
10.640	3.3	46.5	36.2	39.2	8.9	-34.2	-9.5	1.0	51.9	41.6	74.0	54.0	-22.1	-12.4	H
15.960	3.3	48.7	38.9	38.7	11.7	-32.9	-9.5	1.0	57.7	47.9	74.0	54.0	-16.3	-6.1	V
15.960	3.3	48.7	38.9	38.7	11.7	-32.9	-9.5	1.0	57.7	47.9	74.0	54.0	-16.3	-6.1	H
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit		
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit		
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit		
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit		
CL	Cable Loss					HPF	High Pass Filter								

Test Eng: NEELESH RAJ
 Project #: 02U1731
 Company: AMET MICROSYSTEMS
 EUT Descrip.: 802.11 A/B/G MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP
 EUT M/N: A/B/G CARD
 Test Target: FCC
 Mode Oper: TX

Test Equipment:

Cable (Ref):	EMCO Horn 1-18GHz	Pre-amplifier 1-26GHz	Spectrum Analyzer	Horn > 18GHz
15	T73; S/N: 6717 @1m	HP 8449B	8566B Analyzer	

T72; S/N: 6739

Miteq HSP266-44

Peak Measurements:

1 MHz Resolution Bandwidth
 1 MHz Video Bandwidth

Average Measurements:

1 MHz Resolution Bandwidth
 10 Hz Video Bandwidth

Limit

f GHz	Dist foot	Read Pk dBuV	AF dBm	CL dB	Amp dB	D Corr dB	HPF	Peak dBuV/m	EIRP Corr	Peak dBm	Pk Lim EIRP dBm	Pk Mar dB	Notes
*NORMAL MODE (non-restricted band)													
HARMONICS 5.18GHZ													
10.360	3.3	46.5	39.5	8.8	-34.4	-9.5	1.0	52.0	95.2	-43.2	-7.0	-36.2	V
10.360	3.3	46.5	39.5	8.8	-34.4	-9.5	1.0	52.0	95.2	-43.2	-7.0	-36.2	H
HARMONICS 8.24GHZ													
10.480	3.3	40.3	39.2	8.9	-34.3	-9.5	1.0	45.6	95.2	-49.6	-7.0	-42.6	V
10.480	3.3	40.2	39.2	8.9	-34.3	-9.5	1.0	45.5	95.2	-49.7	-7.0	-42.7	H
HARMONICS OF 5.26GHZ													
10.524	3.3	60.0	39.2	8.9	-34.3	-9.5	1.0	65.3	95.2	-29.9	-7.0	-22.9	V
10.524	3.3	59.9	39.2	8.9	-34.3	-9.5	1.0	65.2	95.2	-30.0	-7.0	-23.0	H

f GHz	Dist foot	Read Avg dBuV	AF dBm	CL dB	Amp dB	D Corr dB	HPF	Avg dBuV/m	EIRP Corr	Avg dBm	Avg Lim EIRP dBm	Avg Mar dB	Notes
HARMONICS 5.18GHZ													
10.360	3.3	36.2	39.5	8.8	-34.4	-9.5	1.0	41.7	95.2	-53.5	-27.0	-26.5	V
10.360	3.3	36.2	39.5	8.8	-34.4	-9.5	1.0	41.7	95.2	-53.5	-27.0	-26.5	H
HARMONICS 8.24GHZ													
10.480	3.3	31.1	39.2	8.9	-34.3	-9.5	1.0	36.4	95.2	-58.8	-27.0	-31.8	V
10.480	3.3	32.0	39.2	8.9	-34.3	-9.5	1.0	37.3	95.2	-57.9	-27.0	-30.9	H
HARMONICS OF 5.26GHZ													
10.524	3.3	32.8	39.2	8.9	-34.3	-9.5	1.0	38.1	95.2	-57.1	-27.0	-30.1	V
10.524	3.3	33.0	39.2	8.9	-34.3	-9.5	1.0	38.3	95.2	-56.9	-27.0	-29.9	H

f Measurement Frequency
 Dist Distance to Antenna
 Read Analyzer Reading
 AF Antenna Factor
 CL Cable Loss
 Amp Preamp Gain
 D Corr Distance Correct to 3 meters
 Avg Average Field Strength @ 3 m
 Peak Calculated Peak Field Strength
 HPF High Pass Filter
 Avg Lim Average Field Strength Limit
 Pk Lim Peak Field Strength Limit
 Avg Mar Margin vs. Average Limit
 Pk Mar Margin vs. Peak Limit

REPORT NO: 02U1731-1B DATE: FEBRUARY 20, 2003
EUT: 802.11 a/b/g MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP
FCC ID: MCLJ07H06901

01/11/03 High Frequency Measurement

Compliance Certification Services, Morgan Hill Open Field Site

Test Eng: NGBLESH RAJ
Project #: 02U1731
Company: AMBIT MICROSYSTEMS
EUT Descr.: 802.11 A/B/G MINI PCI CARD WITH AGENCY SERIES PP2170 LAPTOP
EUT M/N: A/B/G CARD
Test Target: FCC
Mode Oper: TX

Test Equipment:

Cable (feet)	EMCO Horn 1-18GHz	Pre-amplifier 1-26GHz	Spectrum Analyzer	Horn > 18GHz
15	TT3; S/N: 6717 @1m	HP 8449B	8506B Analyzer	

TT3: S/N: 6739

Miteq HSP2406-44

Peak Measurements:

1 MHz Resolution Bandwidth
1 MHz Video Bandwidth

Average Measurements:

1 MHz Resolution Bandwidth
10 Hz Video Bandwidth

1 MHz Resolution Bandwidth						1 MHz Resolution Bandwidth						Limit		
f GHz	Dist feet	Read Pk dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Peak BuV/m	EIRP Corr	Peak dBm	Pk Lim EIRP dBm	Pk Mar dB	Notes	
*TURBO MODE (non-restricted band)														
HARMONICS 5.21GHZ TURBO														
10.420	3.3	46.5	39.4	8.9	-34.3	-9.5	1.0	51.9	-95.2	-43.3	-7.0	-36.3	V	
10.420	3.3	46.5	39.4	8.9	-34.3	-9.5	1.0	51.9	-95.2	-43.3	-7.0	-36.3	H	
HARMONICS 5.25GHZ TURBO														
10.500	3.3	40.1	39.2	8.9	-34.3	-9.5	1.0	45.4	-95.2	-49.8	-7.0	-42.8	V	
10.500	3.3	39.0	39.2	8.9	-34.3	-9.5	1.0	44.3	-95.2	-50.9	-7.0	-43.9	H	
HARMONICS OF 5.29GHZ TURBO														
10.580	3.3	46.5	39.2	8.9	-34.3	-9.5	1.0	51.9	-95.2	-43.3	-7.0	-36.3	V	
10.580	3.3	46.5	39.2	8.9	-34.3	-9.5	1.0	51.9	-95.2	-43.3	-7.0	-36.3	H	
f GHz	Dist feet	Read Avg dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	HPF	Avg BuV/m	EIRP Corr	Avg dBm	Avg Lim EIRP dBm	Avg Mar dB	Notes	
HARMONICS 5.21GHZ TURBO														
10.420	3.3	36.2	39.4	8.9	-34.3	-9.5	1.0	41.6	-95.2	-53.6	-27.0	-26.6		
10.420	3.3	36.2	39.4	8.9	-34.3	-9.5	1.0	41.6	-95.2	-53.6	-27.0	-26.6	V	
HARMONICS 5.25GHZ TURBO														
10.500	3.3	30.8	39.2	8.9	-34.3	-9.5	1.0	36.1	-95.2	-59.1	-27.0	-32.1	H	
10.500	3.3	31.0	39.2	8.9	-34.3	-9.5	1.0	36.3	-95.2	-58.9	-27.0	-31.9	V	
HARMONICS OF 5.29GHZ TURBO														
10.580	3.3	36.2	39.2	8.9	-34.3	-9.5	1.0	41.6	-95.2	-53.6	-27.0	-26.6	V	
10.580	3.3	36.2	39.2	8.9	-34.3	-9.5	1.0	41.6	-95.2	-53.6	-27.0	-26.6	H	
f	Measurement Frequency						Amp	Preamp Gain				Avg Lim	Average Field Strength Limit	
Dist	Distance to Antenna						D Corr	Distance Correct to 3 meters				Pk Lim	Peak Field Strength Limit	
Read	Analyzer Reading						Avg	Average Field Strength @ 3 m				Avg Mar	Margin vs. Average Limit	
AF	Antenna Factor						Peak	Calculated Peak Field Strength				Pk Mar	Margin vs. Peak Limit	
CL	Cable Loss						HPF	High Pass Filter						

8.12. 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.

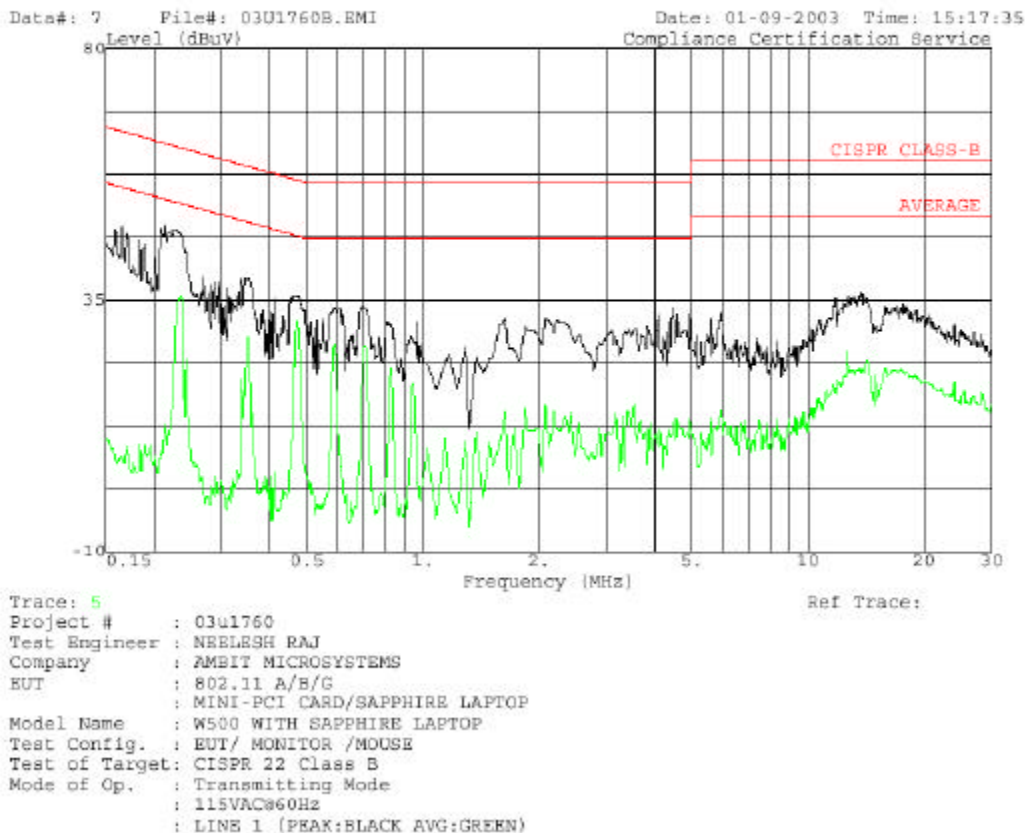
RESULTS

No non-compliance noted:

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	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									

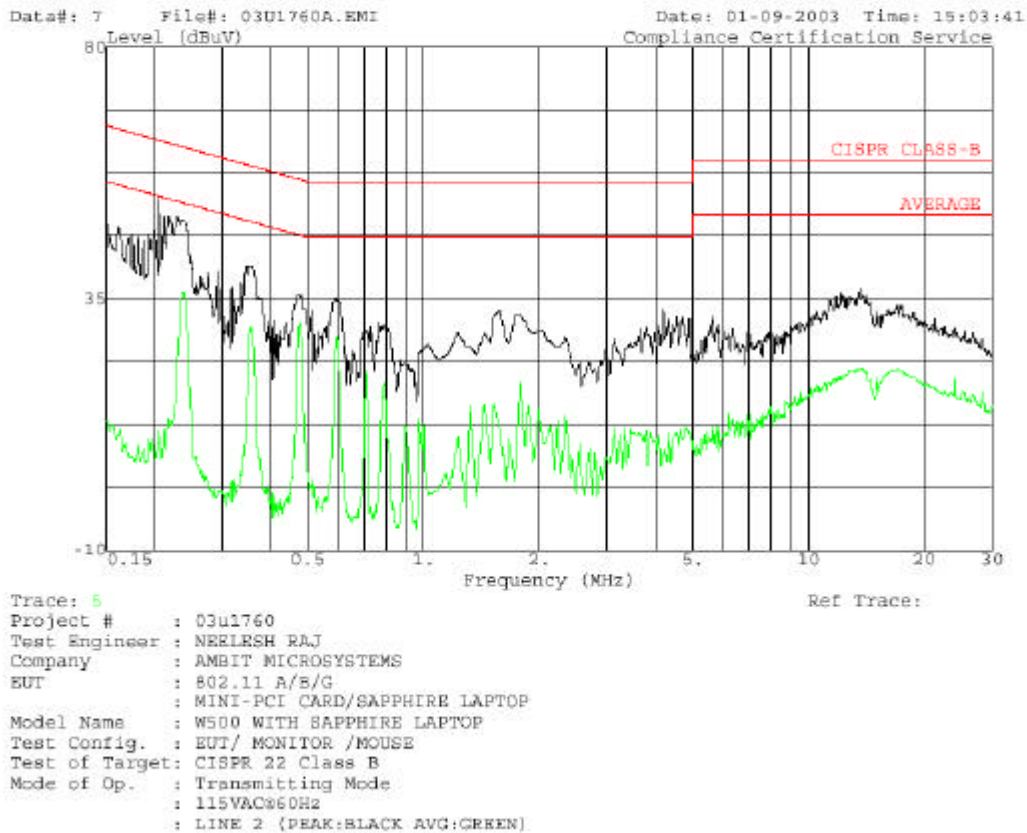


561F Monterey Road,
San Jose, CA 95037 USA
Tel: (408) 463-0885
Fax: (408) 463-0888



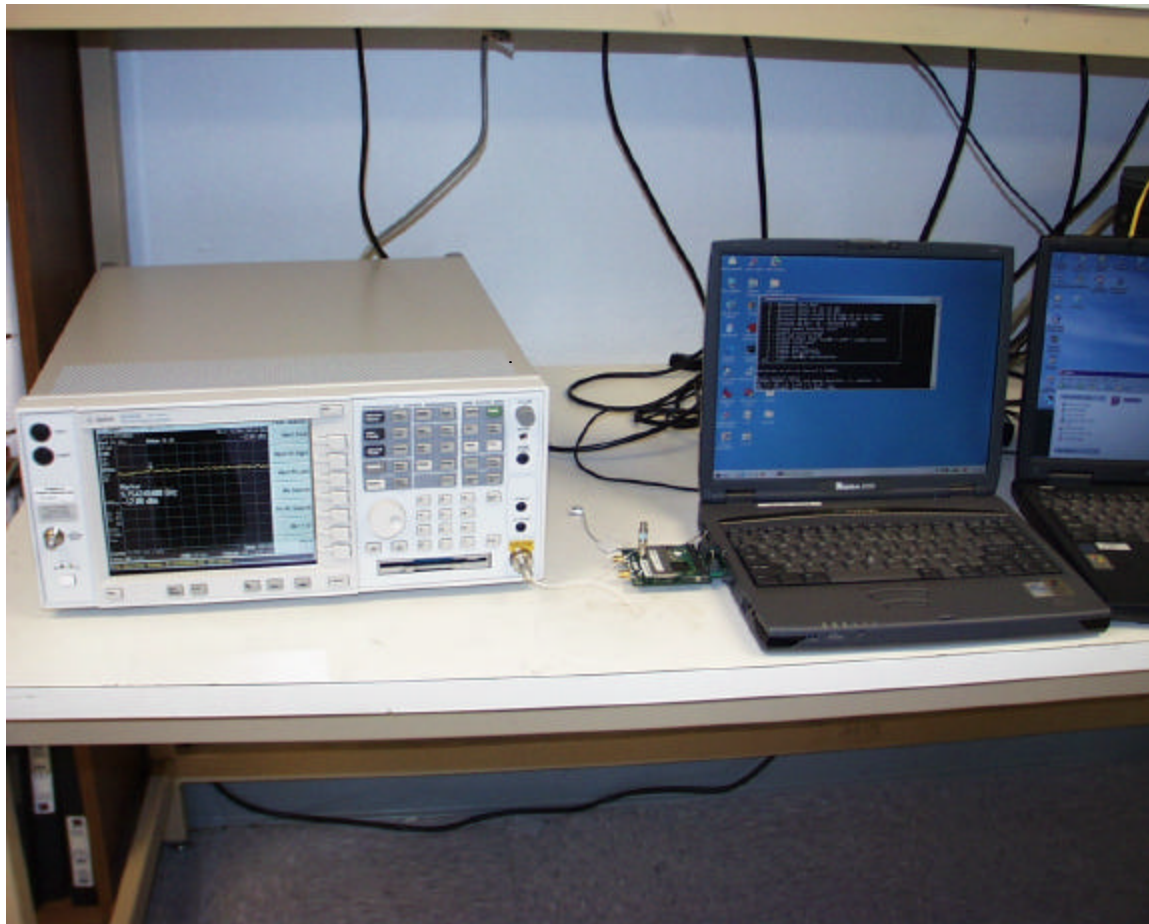


561F Monterey Road,
San Jose, CA 95037 USA
Tel: (408) 463-0885
Fax: (408) 463-0888



8.13. SETUP PHOTOS

ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP



RADIATED RF MEASUREMENT SETUP





REPORT NO: 02U1731-1B DATE: FEBRUARY 20, 2003

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

FCC ID: MCLJ07H06901

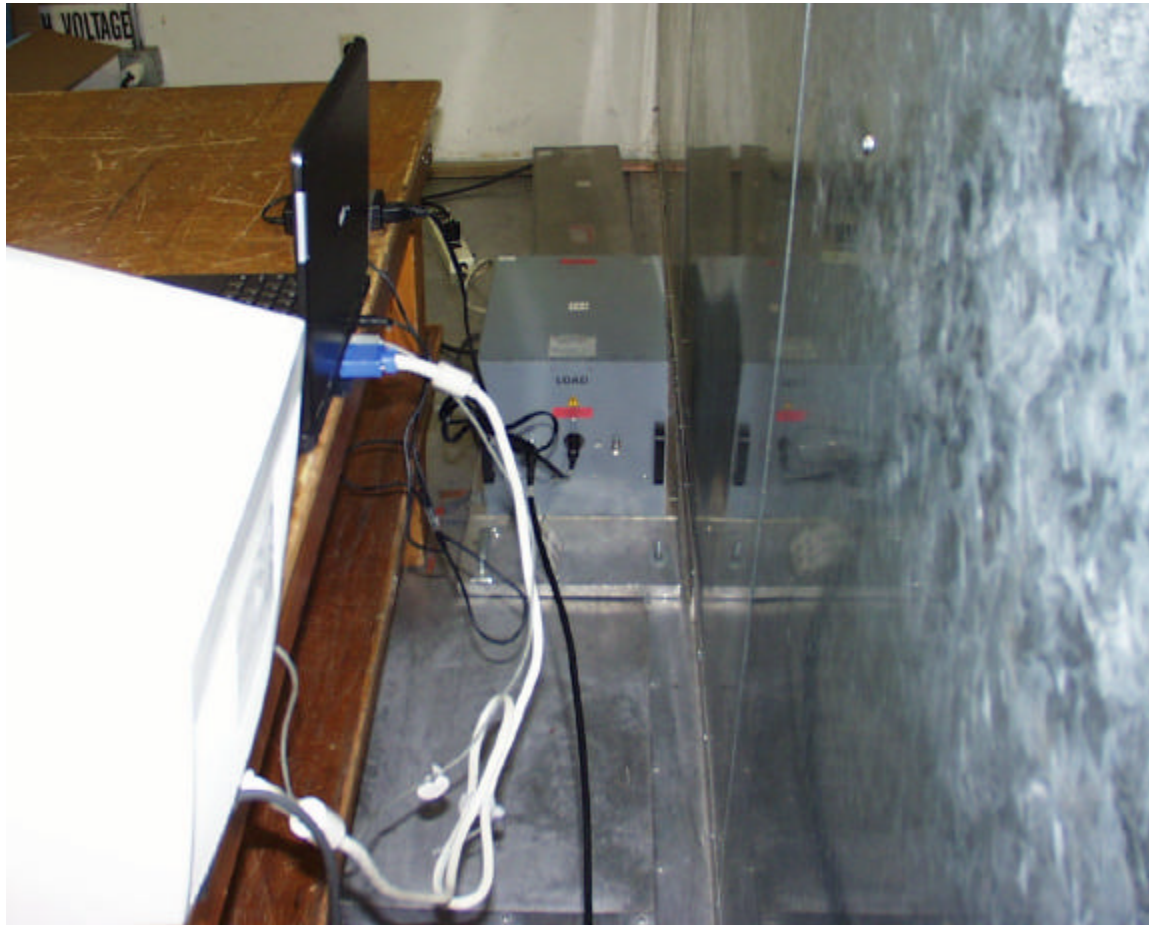
DIGITAL DEVICE RADIATED EMISSIONS MEASUREMENT SETUP





POWERLINE CONDUCTED EMISSIONS MEASUREMENT SETUP





END OF REPORT