



ANYDATA.NET INC. TEST REPORT

FOR THE

CDMA DATA MODEM W/DTSS-800

FCC PART 15 SUBPART B SECTIONS 15.107 AND 15.109 CLASS B

AND

FCC PART 22

COMPLIANCE

DATE OF ISSUE: FEBRUARY 28, 2002

PREPARED FOR:

AnyDATA.NET Inc. Hanvit Bank Bldg. 7th Fl., 1-12 Byulyang-dong

Kwachon City, Kyunggi-do, Korea, 427-040

P.O. No.: ANY-0008 W.O. No.: 78420

PREPARED BY:

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Date of test: February 19 –

March 22, 2002

Report No.: FC02-023

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CKC Laboratories, Inc. has received Certificates of Accreditation from the following agencies:

A2LA (USA); BSMI (Taiwan); Nemko (Norway); and GOST (Russia).

CKC Laboratories, Inc has received test site Registration Acceptance from the following agencies:

FCC (USA); VCCI (Japan); and Industry Canada.

CKC Laboratories, Inc. has received Letters of Acceptance through an MRA for the following agencies:

ACA/NATA (Australia); SABS (South Africa); SWEDAC (Sweden); Radio Communications Agency (RA); HOKLAS (Hong Kong); Bakom (Swiss); BIPT (Belgium); Denmark Telestyrelsen; RvA (Netherlands); SEE (Luxembourg) SITTEL (Bolivia); and UKAS (UK).

ADMINISTRATIVE INFORMATION

DATE OF TEST: February 19 – March 22, 2002

DATE OF RECEIPT: February 19, 2002

PURPOSE OF TEST: To demonstrate the compliance of the CDMA Data

Modem w/ DTSS-800 with the requirements for Part 15 Subpart B Sections 15.107 and 15.109 Class

B and FCC Part 22 devices.

TEST METHOD: ANSI C63.4 (1992), FCC Part 22, TIA/EIA 603,

TIA/EIA 95A

FREQUENCY RANGE TESTED: 9 kHz - 9 GHz

MANUFACTURER: AnyDATA.NET Inc.

Hanvit Bank Bldg. 7th Fl., 1-12 Byulyang-dong Kwachon City, Kyunggi-do, Korea, 427-040

REPRESENTATIVE: John Kim

TEST LOCATION: CKC Laboratories, Inc.

110 Olinda Place, Brea, CA 92621

5473A Clouds Rest, Mariposa, CA 95338

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SUMMARY OF RESULTS

As received, the AnyDATA.NET Inc. CDMA Data Modem w/ DTSS-800 was found to be fully compliant with the following standards and specifications:

- <u>United States</u>
 ➤ FCC Part 15 Subpart B Sections 15.107 and 15.109 Class B using:
 - > ANSI C63.4 (1992) method
- > FCC Part 22 also using TIA/EIA 603, TIA/EIA 95A

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

QUALITY ASSURANCE:	TEST PERSONNEL:
Dannisward	Besse Clark
Dennis Ward, Quality Manager	Randy Clark, EMC Engineer
SapA	Store
Septimiu Apahidean, EMC/Lab Manager	Eddie Wong, EMC Engineer
Chuck Kendall FMC/Lah Manager	

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EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The EUT tested by CKC Laboratories was representative of a production unit. External CDMA Data Modem Transceiver.

EQUIPMENT UNDER TEST

CDMA Data Modem w/ DTSS-800

Manuf: AnyDATA.NET Inc.

Model: EMII-800 Serial: 0201K10210 FCC ID: P4M (pending)

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Laptop

Manuf: Samsung
Model: Academy 680
Serial: 558791ANB00124

FCC ID: DoC

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within $+15^{\circ}$ C and $+35^{\circ}$ C. The relative humidity was between 20% and 75%.

MEASUREMENT UNCERTAINTY

Associated with data in this report is a \pm 2.94dB measurement uncertainty for radiated emissions and \pm 1.56dB measurement uncertainty for conducted emissions.

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2.1033(c)(3) USER'S MANUAL

The necessary information is contained in a separate document.

2.1033 (c)(4) **TYPE OF EMISSIONS**

The necessary information is contained in a separate document.

2.1033(c)(5) FREQUENCY RANGE

Transmits on 824 – 849 MHz.

Receives on 869 – 894 MHz.

2.1033(c)(6) OPERATING POWER

The maximum ERP power allowed is .4467 Watts.

2.1033(c)(7) MAXIMUM POWER RATING

The ERP of mobile transmitter and auxiliary test transmitter must not exceed 7 Watts.

2.1033(c)(8) DC VOLTAGES

The dc voltages are 6-12V DC.

2.1033(c)(9) TUNE-UP PROCEDURE

The necessary information is contained in a separate document.

2.1033(c)(10) SCHEMATICS AND CIRCUITRY DESCRIPTION

The necessary information is contained in a separate document.

2.1033(c)(11) LABEL AND PLACEMENT

The necessary information is contained in a separate document.

2.1033(c)(12) SUBMITTAL PHOTOS

The necessary information is contained in a separate document.

2.1033(c)(13) MODULATION INFORMATION

The necessary information is contained in a separate document.

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2.1033(c)(14)/2.1046(a)/22.913 - RF POWER OUTPUT

Effective Radiated Power Limit (Effective Radiated Power)

Antenna Substitution method (TIA/EIA 603 Par 2.2.17) was used. The peak RF field strength of the EUT was first measured with a tune dipole antenna. The EUT is then replaced with a transmitting tuned Dipole antenna. A signal generator fed RF signal to the transmitting antenna via a RF power amplifier. The signal level of the signal generator was adjusted to produce RF field strength equal to the transmitted field strength of the EUT.

The signal level is recorded as ERP after applicable RF power amplifier gain (+54.4 dB) and Cable Loss (-2.4 dB).

RWB=VBW= 3MHz

Spec limit: The ERP of mobile transmitter and auxiliary test transmitter must not exceed 7 Watts.

_			
	Freq in MHz	Sig Gen Level	ERP
		dBuV (with correction)	(Watts)
	824.038	136.5	0.4467
	836.516	136.2	0.4169
	848.974	135.6	0.3631

Data Conversion:

dBuV to V

 $V = 1 \times 10^{-6} \text{ x Anti Log } 10 \text{ (dBuV / 20)}$

Power = V^2 / R

 $= V^2 / 50$

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Carrier Output Power to Antenna

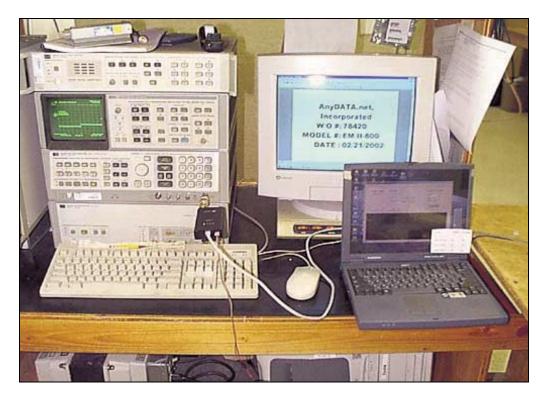
RF power to antenna was measured at the antenna terminal using a power meter.

Freq in MHz	Power
	Watts
824.07	0.44
836.54	0.33
848.97	0.38

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	01865	HP	8566B	2532A02509	092801	092802
Signal Generator	00089	HP	8656A	2245A04166	090201	090602
Power Meter	02082	HP	435B	2445A11881	082101	032102
Amplifier	00627	AR	50W1000A	14335	010402	010403

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Direct Connect Test Setup



Direct Connect Test Setup

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$\frac{2.1033(c)(14)/2.1047(a)/22.915(a) - MODULATION \ CHARACTERISTICS - AUDIO}{FREQUENCY \ RESPONSE}$

The necessary information is contained in a separate document.

$\frac{2.1033(c)(14)/2.1047(b)/22.915(a)\ MODULATION\ CHARACTERISTICS-Modulation}{Limiting\ Response}$

The necessary information is contained in a separate document.

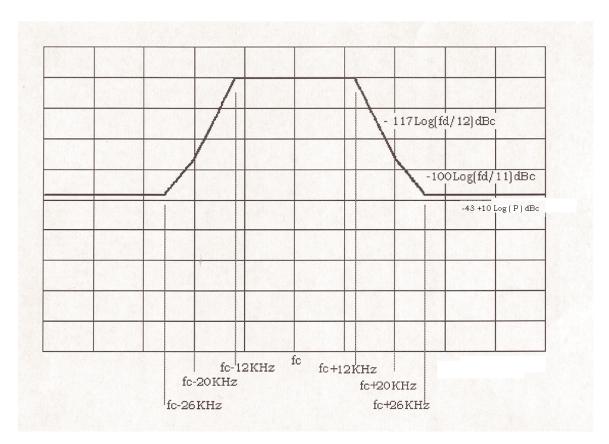
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2.1033(c)(14)/2.1049(i)/22.917(c)- EMISSIONS MASK & OCCUPIED BANDWIDTH

Alternative F3E/F3D emission mask Calculation

- The mean power of any emission removed from the carrier frequency by a displacement frequency (Fd in kHz) must be attenuated below the mean power of un-modulated carrier (P) as follows
 - (i) On any frequency removed from the carrier frequency by more than 12 kHz but not more than 20 kHz: at least 117 Log (Fd / 12) dB;
 - (ii) On any frequency removed from the carrier frequency by more than 20 kHz, up to the first multiple of the carrier frequency: at least 100 Log(fd/11) dB or 60 dB or 43+10 Log P which ever is the lesser attenuation.
- For mobile stations, modulating signal other than the supervisory audio tone in the frequency rage of 5.9 to 6.1 kHz must be attenuated, relative to the level at 1 kHz, at least 35 dB.



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Calculation:

- (i) For 12 KHz < Fd < 20 KHz, Attenuation = 117 Log (Fd/12) dB.
- (ii) For 20 KHz < Fd < Fc x 2,

Attenuation = 100 Log (Fd/11) dB

or

$\underline{Attenuation = 60 \text{ dB}}$

or

$\underline{Attenuation} = 43 + 10 \underline{\text{Log P}}$

Whichever is the lesser attenuation.

Applying customer supplied rated EUT power of 0.316 Watts,

Therefore: attenuation of 60 dB is not used.

To determine Fd, where the attenuation of 43+10Log P occurs,

$$43 + 10 \text{ Log P} = 100 \text{ Log (Fd/11)}$$

$$Fd = 11 \text{ x AntiLog (10)} \qquad 43 + 10 \text{ Log P}$$

$$100$$

$$Fd = 26 \text{ KHz}.$$

Therefore the breakpoint from a attenuation slope of -100Log(Fd/11) dBc to 43+10 Log P occurs at (Fc + 26 KHz)MHz and (Fc - 26 KHz)MHz

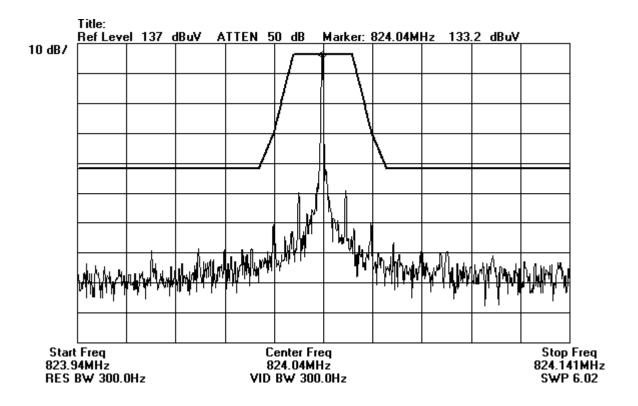
Sample calculation table:

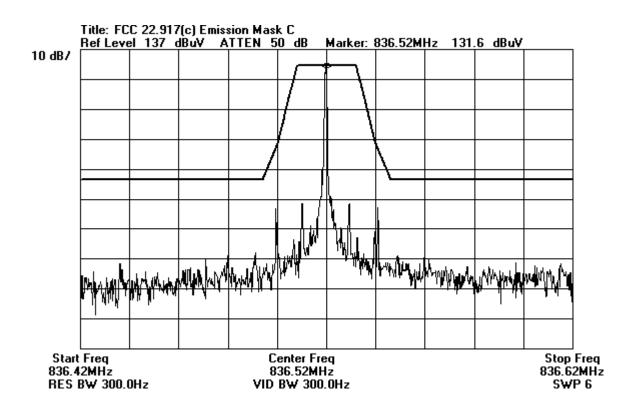
Freq (MHz)		Required attenuation	EMItest limit line
	0.009	38.00	91.4
	824.014	38.00	91.4
	824.014	38.00003068	91.4
	824.020	25.964	103.4
	824.020	25.95630371	103.4
	824.028	0.00	129.4
	824.052	0.00	129.4
	824.060	25.95630371	103.4
	824.060	25.96373105	103.4
	824.066	38.00003068	91.4
	824.066	38.00	91.4
	10000	38.00	91.4

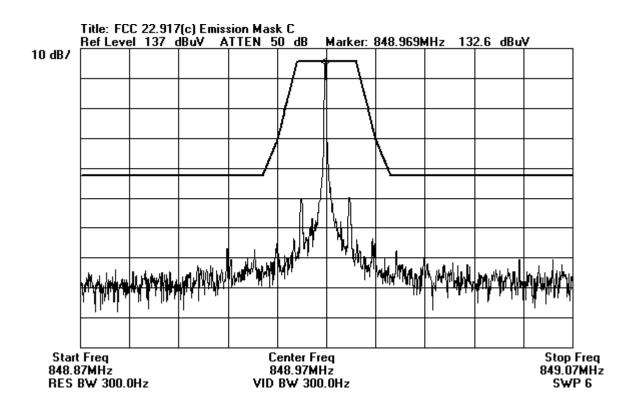
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Title: FCC 22.917(c) Emission Mask C









Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATS

 Work Order #:
 78420
 Date:
 2/22/02

 Test Type:
 Maximized Emissions
 Time:
 11:57:33

Equipment: External CDMA Data Modem Sequence#: 8

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*	•		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 824.01MHz. Range of measurement 9 kHz - 30MHz. Required attenuation = 43+10Log (P) = 43+10 Log (0.01262) = -24dBc. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

Transactor Ecgena.	
T1=Active Loop Antenna	T2=Cable #15 120602

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	‡	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
		MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
	1	21.970M	35.3	+9.9	+0.8			+0.0	46.0	94.0	-48.0	None
								42				99

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATS

Work Order #: 78420 Date: 2/22/02
Test Type: Maximized Emissions Time: 12:01:35
Equipment: External CDMA Data Modem Sequence#: 9

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

=quipilient entire = test (
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 836.52MHz Range of measurement 9 kHz - 30MHz. Required attenuation = 43+10Log (0.01384) = -24dBc. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

T1=Active Loop Antenna	T2=Cable #15 120602
------------------------	---------------------

Measur	ement Data:	Re	eading lis	ted by ma	argin.		Те	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
1	23.610M	35.5	+9.6	+0.8			+0.0	45.9	94.0	-48.1	None
							296				99

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATS

Work Order #: 78420 Date: 2/22/02
Test Type: Maximized Emissions Time: 12:04:15
Equipment: External CDMA Data Modem Sequence#: 10

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

(
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 849.97MHz. Range of measurement 9 kHz - 30MHz. Required attenuation = 43+10Log (P) = 43+10 Log (0.01384) = -24dBc. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

T1=Active Loop Antenna	T2=Cable #15 120602
------------------------	---------------------

Measure	ement Data:	Re	eading lis	ted by ma	argın.		Te	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m \\$	dB	Ant
1	5.880M	35.3	+11.3	+0.4			+0.0	47.0	94.0	-47.0	None
							274				99

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATS

 Work Order #:
 78420
 Date:
 2/22/02

 Test Type:
 Maximized Emissions
 Time:
 11:41:03

Equipment: External CDMA Data Modem Sequence#: 5

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 824.04 MHz. Range of measurement 30 - 1000MHz. Required attenuation = 43+10Log (P) = 43+10 Log (0.01262) = -24dBc. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

T1=Bicon 092401	T2=Log 331 092401	
T3=Cable #10 071601	T4=Cable #15 120602	
T5=Preamp 8447D 090501		

Measur	rement Data:	Re	eading lis	ted by ma	argin.		Te	est Distanc	e: 3 Meters		
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	824.040M	117.4	+0.0	+21.9	+0.6	+5.7	+0.0	118.0	118.0	+0.0	Horiz
			-27.6				110		Un modula	ited	127
2	824.040M	117.4	+0.0	+21.9	+0.6	+5.7	+0.0	118.0	118.0	+0.0	Vert
			-27.6				360		Un modula	ited	127
3	824.320M	81.3	+0.0	+21.9	+0.6	+5.7	+0.0	81.9	94.0	-12.1	Horiz
			-27.6				360		Un modula	ited	127
4	823.840M	72.9	+0.0	+21.9	+0.6	+5.7	+0.0	73.5	94.0	-20.5	Horiz
			-27.6				247		Un modula	ited	127
5	825.270M	70.6	+0.0	+21.9	+0.6	+5.8	+0.0	71.2	94.0	-22.8	Vert
			-27.7				360		Un modula	ited	127
6	822.820M	70.1	+0.0	+21.9	+0.6	+5.7	+0.0	70.7	94.0	-23.3	Vert
			-27.6				360		Un modula	ited	127
7	825.290M	68.3	+0.0	+21.9	+0.6	+5.8	+0.0	68.9	94.0	-25.1	Horiz
			-27.7				204		Un modula	ited	127
8	822.830M	68.2	+0.0	+21.9	+0.6	+5.7	+0.0	68.8	94.0	-25.2	Horiz
			-27.6				359		Un modula	ited	127
9	244.000M	34.0	+17.7	+0.0	+0.3	+2.9	+0.0	26.7	94.0	-67.3	Horiz
			-28.2				292		Noise floor	ſ	99

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATs

 Work Order #:
 78420
 Date:
 2/22/02

 Test Type:
 Maximized Emissions
 Time:
 11:42:16

Equipment: External CDMA Data Modem Sequence#: 6

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*	_		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 836.52 MHz. Range of measurement 30 - 1000MHz. Required attenuation = $43+10 \log (P) = 43+10 \log (0.01384) = -24 dBc$. 12Vdc, $23^{\circ}C$, 45° relative humidity.

Transducer Legend:

T1=Bicon 092401	T2=Log 331 092401	
T3=Cable #10 071601	T4=Cable #15 120602	
T5=Preamp 8447D 090501		

Measu	Measurement Data: Reading listed by margin.					Test Distance: 3 Meters					
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	dBµV/m	$dB\mu V/m$	dB	Ant
1	836.521M	117.6	+0.0	+22.1	+0.6	+5.8	+0.0	118.4	118.4	+0.0	Horiz
			-27.7						Un modula	ted	136
2	836.523M	116.2	+0.0	+22.1	+0.6	+5.8	+0.0	117.0	118.4	-1.4	Vert
			-27.7				240		Un modula	ted	149
3	836.725M	78.3	+0.0	+22.1	+0.6	+5.8	+0.0	79.1	94.0	-14.9	Vert
			-27.7				240		Un modulated		149
4	836.733M	75.4	+0.0	+22.1	+0.6	+5.8	+0.0	76.2	94.0	-17.8	Horiz
			-27.7				301		Un modula	ted	136
5	837.105M	74.0	+0.0	+22.1	+0.6	+5.8	+0.0	74.8	94.0	-19.2	Vert
			-27.7				138		Un modula	ted	149
6	836.243M	73.9	+0.0	+22.1	+0.6	+5.8	+0.0	74.7	94.0	-19.3	Vert
			-27.7				240		Un modula	ted	149
7	836.310M	71.5	+0.0	+22.1	+0.6	+5.8	+0.0	72.3	94.0	-21.7	Horiz
			-27.7				171		Un modula	ted	136
8	836.085M	69.8	+0.0	+22.1	+0.6	+5.8	+0.0	70.6	94.0	-23.4	Vert
			-27.7				279		Un modulated		149
9	835.300M	67.9	+0.0	+22.0	+0.6	+5.8	+0.0	68.6	94.0	-25.4	Horiz
			-27.7				265		Un modula	ted	136

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	10	837.730M	64.4	+0.0	+22.1	+0.6	+5.8	+0.0	65.2	94.0	-28.8	Horiz
				-27.7				327		Un modula	ted	136
	11	837.730M	60.0	+0.0	+22.1	+0.6	+5.8	+0.0	60.8	94.0	-33.2	Vert
				-27.7				56		Un modula	ted	149
Ī	12	831.620M	50.0	+0.0	+22.0	+0.6	+5.8	+0.0	50.7	94.0	-43.3	Horiz
				-27.7				90		Un modula	ted	136
Ī	13	184.000M	33.0	+17.2	+0.0	+0.3	+2.5	+0.0	24.7	94.0	-69.3	Vert
				-28.3				20		Noise floor	•	99

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATs

Work Order #: **78420** Date: 2/22/02 Test Type: **Maximized Emissions** Time: 11:43:24

Equipment: External CDMA Data Modem Sequence#: 7

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*	_		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 848.97 MHz. Range of measurement 30 - 1000MHz. Required attenuation = $43+10 \log (P) = 43+10 \log (0.01384) = -24 dBc$. 12Vdc, $23^{\circ}C$, 45° relative humidity.

Transducer Legend:

T1=Bicon 092401	T2=Log 331 092401	
T3=Cable #10 071601	T4=Cable #15 120602	
T5=Preamp 8447D 090501		

Measur	ement Data:	Re	Reading listed by margin.					Test Distance: 3 Meters			
#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	848.971M	116.9	+0.0	+22.3	+0.6	+5.8	+0.0	117.9	117.9	+0.0	Vert
			-27.7				33		Un modula	ıted	158
2	848.973M	116.6	+0.0	+22.3	+0.6	+5.8	+0.0	117.6	117.9	-0.3	Horiz
			-27.7				68		Un modula	ited	99
3	849.185M	76.4	+0.0	+22.3	+0.6	+5.8	+0.0	77.4	94.0	-16.6	Vert
			-27.7				323		Un modula	ited	158
4	848.405M	71.3	+0.0	+22.2	+0.6	+5.8	+0.0	72.2	94.0	-21.8	Vert
			-27.7				234		Un modula	ited	158
5	849.545M	69.0	+0.0	+22.3	+0.6	+5.8	+0.0	70.0	94.0	-24.0	Vert
			-27.7				338		Un modula	ited	158
6	847.750M	67.0	+0.0	+22.2	+0.6	+5.8	+0.0	67.9	94.0	-26.1	Horiz
			-27.7				332		Un modula	ited	99
7	847.760M	67.0	+0.0	+22.2	+0.6	+5.8	+0.0	67.9	94.0	-26.1	Vert
			-27.7				39		Un modula	ited	158
8	847.760M	67.0	+0.0	+22.2	+0.6	+5.8	+0.0	67.9	94.0	-26.1	Vert
			-27.7				43		Un modula	ited	158

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9	850.210M	66.7	+0.0	+22.3	+0.6	+5.8	+0.0	67.7	94.0	-26.3	Horiz
			-27.7				178		Un modula	ited	99
10	850.200M	65.7	+0.0	+22.3	+0.6	+5.8	+0.0	66.7	94.0	-27.3	Vert
			-27.7				32		Un modula	ited	158
11	274.000M	34.7	+20.0	+0.0	+0.3	+3.1	+0.0	29.8	94.0	-64.2	Horiz
			-28.3				147		Noise floor	•	99

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATS

 Work Order #:
 78420
 Date:
 2/22/02

 Test Type:
 Maximized Emissions
 Time:
 14:04:15

Equipment: External CDMA Data Modem Sequence#: 8
Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

(— /-		
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 824.04 MHz. Range of measurement 1 - 9 GHz. Required attenuation = 43+10Log (P) = 43+10Log (0.01262) = -24dBc. 12Vdc, $23^{\circ}C$, 45° relative humidity.

Transducer Legend:

T1=Horn Antenna sn6246	T2=HP3017A sn3123A00281 11-Sept-01
T3=Heliax #18 70' 11Sept2001	T4=1.5 GHz HPF

Measu	Measurement Data: Reading list				ted by margin. Test l				t Distance: 3 Meters		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	1648.110M	66.3	+25.1	-38.6	+3.5	+0.8	+0.0	57.1	94.0	-36.9	Vert
							360				113
2	1648.000M	59.9	+25.1	-38.6	+3.5	+0.8	+0.0	50.7	94.0	-43.3	Horiz
							123				100
3	1081.000M	60.8	+24.0	-40.2	+2.8	+0.0	+0.0	47.4	94.0	-46.6	Vert
							4				99
4	2472.130M	53.0	+27.7	-38.7	+4.2	+0.3	+0.0	46.5	94.0	-47.5	Vert
							360				113

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATs

 Work Order #:
 78420
 Date:
 2/22/02

 Test Type:
 Maximized Emissions
 Time:
 14:09:28

Equipment: External CDMA Data Modem Sequence#: 9

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	d EMII-800	0201K10210
Modem*	-		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 836.52 MHz. Range of measurement 1 - 9GHz. Required attenuation = 43+10Log (P) = 43+10 Log (0.01384) = -24dBc. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

T1=Horn Antenna sn6246	T2=HP3017A sn3123A00281 11-Sept-01
T3=Heliax #18 70' 11Sept2001	T4=1.5 GHz HPF

Measu	ırement Data:	Re	eading lis	ted by ma	argin.		Те	est Distance	e: 3 Meters	.	
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m \\$	dB	Ant
1	1673.000M	62.5	+25.2	-38.6	+3.6	+0.9	+0.0	53.6	94.0	-40.4	Vert
											113
2	1081.000M	66.7	+24.0	-40.2	+2.8	+0.0	+0.0	53.3	94.0	-40.7	Vert
							42				107
3	1673.000M	59.5	+25.2	-38.6	+3.6	+0.9	+0.0	50.6	94.0	-43.4	Horiz
							127				100
4	2510.000M	46.4	+27.8	-38.9	+4.1	+0.2	+0.0	39.6	94.0	-54.4	Vert
							198				113

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(c) Emission Mask OATs

Work Order #:78420Date:2/22/02Test Type:Maximized EmissionsTime:14:16:59Equipment:External CDMA Data ModemSequence#:10

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

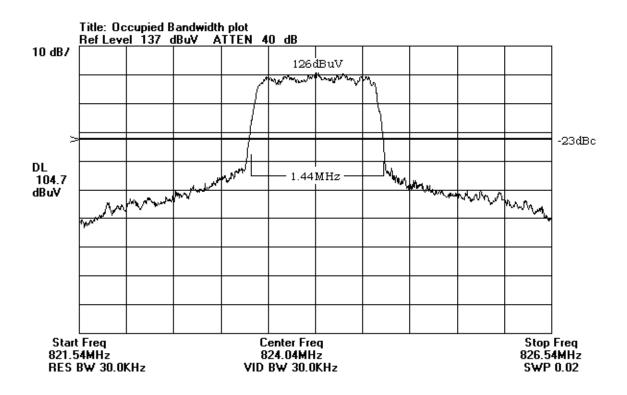
EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=30kHz. Tx = 848.97 MHz. Range of measurement 1-9 GHz Required attenuation = 43+10Log (P) = 43+10 Log (0.01384) = -24dBc. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

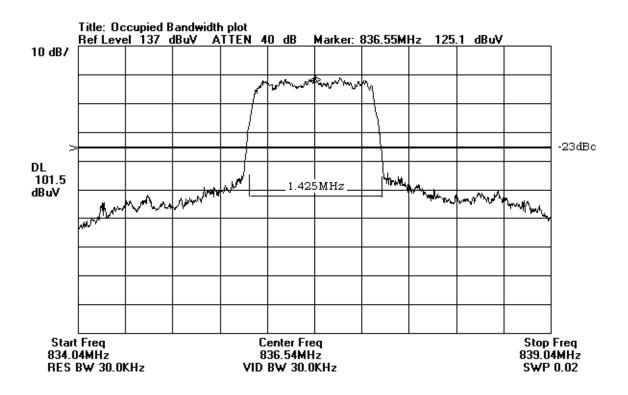
Transact Ecgena.	
T1=Horn Antenna sn6246	T2=HP3017A sn3123A00281 11-Sept-01
T3=Heliax #18 70' 11Sept2001	T4=1.5 GHz HPF

Measu	rement Data:	Re	eading lis	ted by ma	argin.		Te	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
1	2423.000M	68.6	+27.6	-38.4	+4.3	+0.3	+0.0	62.4	94.0	-31.6	Horiz
							167				100
2	1951.000M	69.1	+26.2	-38.4	+3.8	+0.6	+0.0	61.3	94.0	-32.7	Horiz
							247				107
3	1698.000M	69.7	+25.3	-38.6	+3.6	+0.7	+0.0	60.7	94.0	-33.3	Horiz
							57				107
4	1699.000M	60.6	+25.3	-38.6	+3.6	+0.7	+0.0	51.6	94.0	-42.4	Vert
							88				113
5	1035.000M	63.4	+24.0	-40.5	+2.7	+0.0	+0.0	49.6	94.0	-44.4	Vert
							1				107
6	2546.600M	52.9	+28.0	-38.8	+4.2	+0.2	+0.0	46.5	94.0	-47.5	Vert
							225				100
7	2416.000M	47.5	+27.6	-38.4	+4.3	+0.3	+0.0	41.3	94.0	-52.7	Vert
							277				113

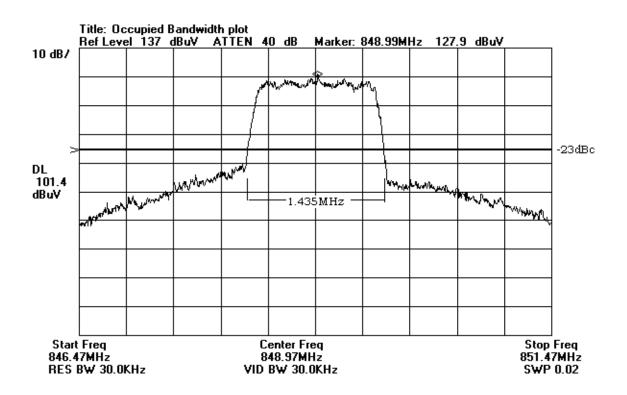
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Antenna terminal

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	01865	HP	8566B	2532A02509	092801	092802
Signal Generator	00089	HP	8656A	2245A04166	090201	090602

(Open Area Test Site) 30- 1000 MHz

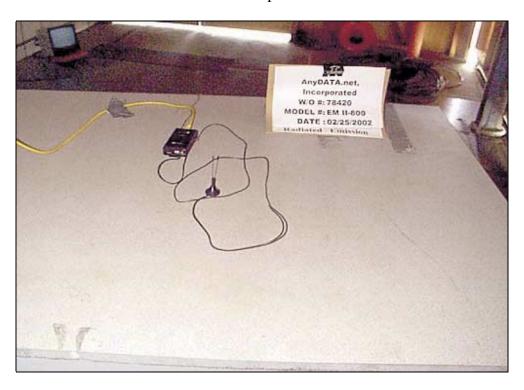
50- 1000 WIIIZ	A 4 !!	3.7 6 4	34 11//	0 • 1 //	C ID 4	CID
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
9 kHz- 30 MHz						
Spectrum Analyzer	02467	Agilent	E7405A	US40240225	041001	041002
Antenna cable	NA	NA	RG214	Cable#15	122001	122002
Active loop antenna	2014	Emco	6502	2014	073101	073102
30- 1000 MHz						
Spectrum Analyzer	02467	Agilent	E7405A	US40240225	041001	041002
Bicon Antenna	306	AH	SAS200/540	220	092401	092402
Log Periodic Antenna	331	АН	SAS 00/516	330	092401	092402
Pre-amp	00309	HP	8447D	1937A02548	090501	090502
Antenna cable	NA	NA	RG214	Cable#15	122001	122002
Pre-amp to SA cable	NA	Harbour	RG223/U	Cable#10	071601	071602
1000-90,000 MHz						
Spectrum Analyzer	02467	Agilent	E7405A	US40240225	041001	041002
Horn Antenna	0646	EMCO	3115	4683	022801	022802
Microwave Pre-amp	00786	HP	83017A	3123A00281	091201	091202
1/4" Heliax Coaxial Cable	NA	Andrew	LDF1-50	Cable#18 (70 ft)	091101	091102
High Pas Filter	01415	HP	84300- 80037	3643A00026	021901	021902

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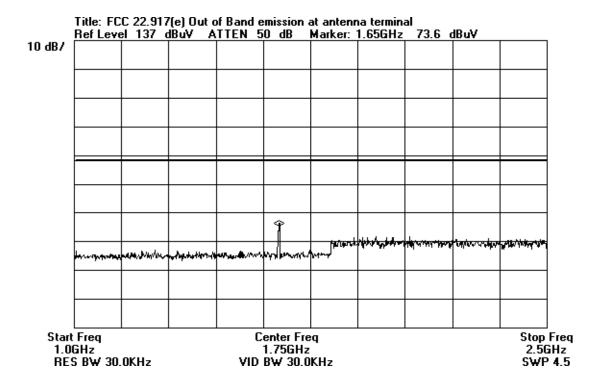
OATS Test Setup - Front View



OATS Test Setup - Back View

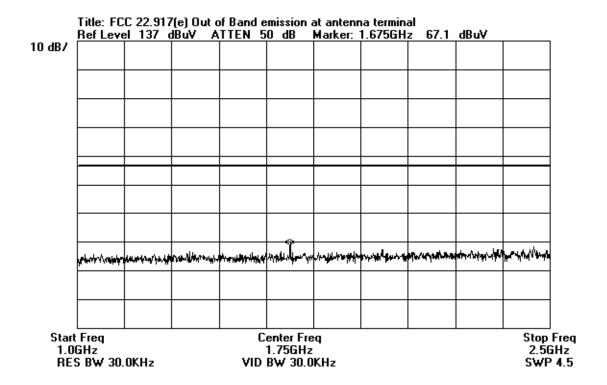


2.1033(c)(14)/2.1051/22.917(e)- OUT OF BANDEMISSIONS AT ANTENNA TERMINAL



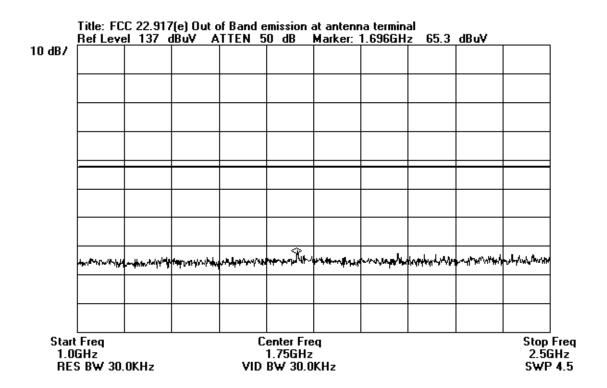
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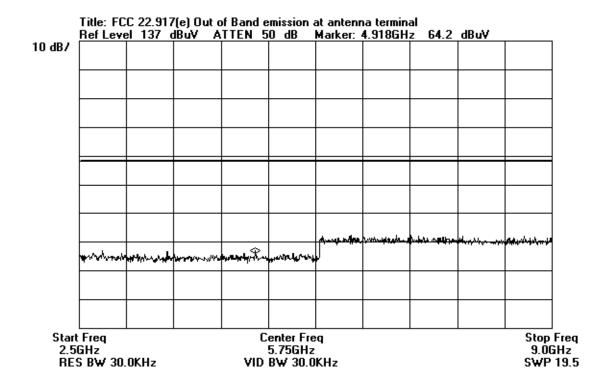
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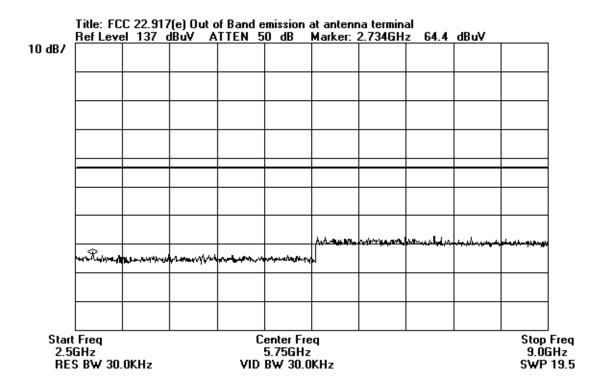
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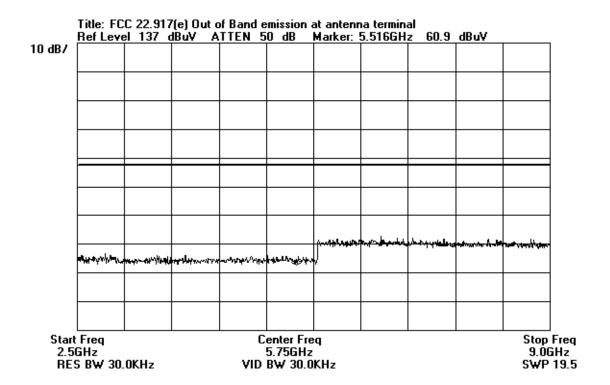
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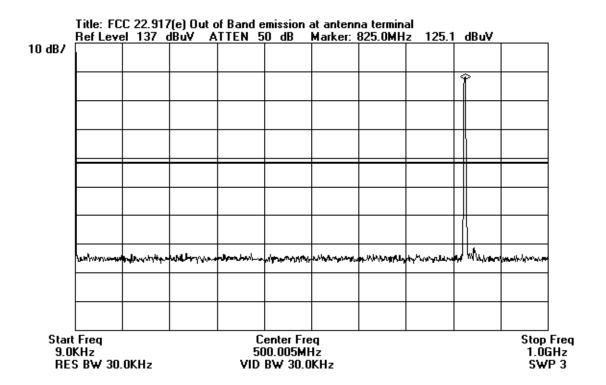
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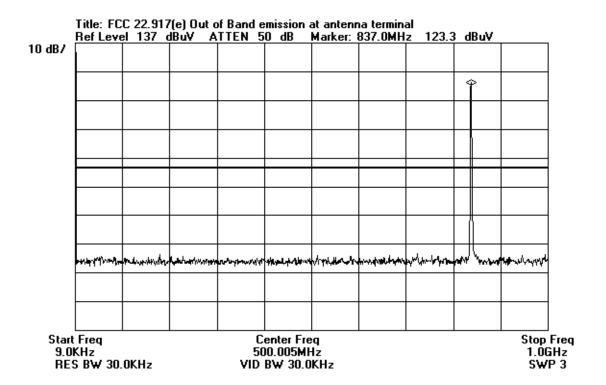
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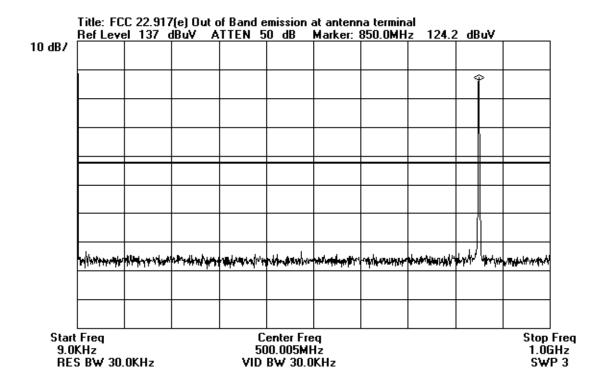
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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(e) Out of band emissions Ant term

 Work Order #:
 78420
 Date:
 2/21/02

 Test Type:
 Conducted Emissions
 Time:
 10:16:54

Equipment: External CDMA Data Modem Sequence#: 2

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Test Equipment:

Function	S/N	Calibration Date	Cal Due Date	Asset #
spectrum analyzer	hp	12/28/2001	12/28/2001	5566

Equipment Under Test (* = EUT):

Equipment Chaci I est	(- 20 2).			
Function	Manufacturer	Model #	S/N	
External CDMA Data	AnyDATA.net Incorp	oorated EMII-800	0201K10210	
Modem*				

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. Out of Band emission. EUT operate in wide band data mode. Tx = 824.04MHz. Required attenuation = 43+10 Log P dB= -39.2 dBc RBW=VBW=30KHz. Range of measurement = 9 KHz-9 GHz. 12Vdc, 20°C, 57% relative humidity.

Transducer Legend:

Measu	irement Data:	Re	Reading listed by margin.		nargin.			Test Lead	d: Antenna	terminal	
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
1	825.974M	83.3					+0.0	83.3	95.3	-12.0	Anten
2	822.305M	80.3					+0.0	80.3	95.3	-15.0	Anten
3	1648.470M	73.1					+0.0	73.1	95.3	-22.2	Anten

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(e) Out of Band emission Ant term

 Work Order #:
 78420
 Date:
 2/21/02

 Test Type:
 Conducted Emissions
 Time:
 10:42:55

Equipment: **External CDMA Data Modem** Sequence#: 3
Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

(— /-		
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. Out of Band emission. EUT operate in wide band data mode. Tx = 836.52MHz. Required attenuation = 43+10 Log P dB= -37.6 dBc RBW=VBW=30KHz. Range of measurement = 9 KHz-9 GHz. 12Vdc, 20°C, 57% relative humidity.

Transducer Legend:

Measu	rement Data:	Re	Reading listed by margin.				Test Lead	d: Antenna	terminal		
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m \\$	dB	Ant
1	834.605M	79.7					+0.0	79.7	93.6	-13.9	Anten
2	1672.680M	68.5					+0.0	68.5	93.6	-25.1	Anten

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Customer: AnyDATA.net Incorporated

Specification: FCC 22.917(e) Out of Band emission Ant term

 Work Order #:
 78420
 Date:
 2/21/02

 Test Type:
 Conducted Emissions
 Time:
 10:57:24

Equipment: External CDMA Data Modem Sequence#: 4

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

1 1	-):		
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. Out of Band emission. EUT operate in wide band data mode. Tx = 848.97MHz. Required attenuation = 43+10 Log P dB= -38.6 dBc RBW=VBW=30KHz. Range of measurement = 9 KHz-9 GHz. 12Vdc, 20°C, 57% relative humidity.

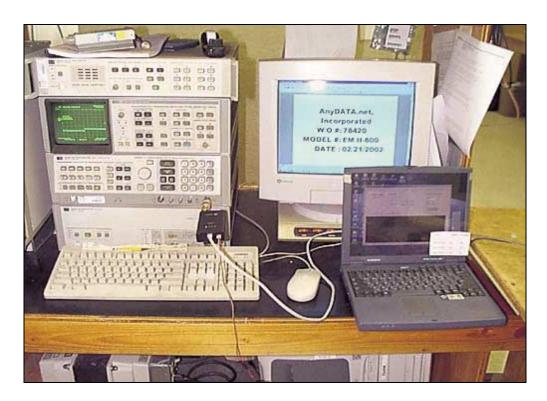
Transducer Legend:

1	Measu	rement Data:	R	eading	listed by m	argin.			Test Lead	d: Antenna	terminal	
	#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
		MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
	1	846.780M	75.4					+0.0	75.4	94.6	-19.2	Anten
	2	1699.500M	65.7					+0.0	65.7	94.6	-28.9	Anten

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	01865	HP	8566B	2532A02509	092801	092802
Signal Generator	00089	HP	8656A	2245A04166	090201	090602

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Direct Connect Test Setup



Direct Connect Test Setup

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$\frac{2.1033(c)(14)/2.1053/22.917(e)\ OUT\ OF\ BAND\ EMISSIONS-OATS}{Not\ Applicable}$

2.1033(c)(14)/2.1055/22.355 FREQUENCY STABILITY

Frequency Stability

Customer:	AnyData.net
WO:	78420
Model:	78420 EMII - 800
FCC Part:	2.1055 / 22.355
Test Engineer:	Randal Clark

_		_
Ambient Temperature:	72.00	22.2 °C
Relative Humidity:	41	%
Authorized Band:	824.04-848.97	MHz
CH1 Operating Frequency in MHz:	824.04	MHz
CH2 Operating Frequency in MHz:	836.52	MHz
CH3 Operating Frequency in MHz:	848.97	MHz
CH1 Frequency Limit:	1236	(1.5 PPM)
CH2 Frequency Limit:	1255	(1.5 PPM)
CH3 Frequency Limit:	1273	(1.5 PPM)
Nominal Operating Voltage:	12.00	VDC
85% of Nominal (V-)	10.20	VDC
115% of Nominal (V+)	13.80	VDC
Maximum Deviation:	680.00	PPM

Temperature Stability

	Chanr	nel 1
	Frequency MHz	Frequency Error PPM Pass/Fail
000	004.00000	400 5400
-30°	824.039900	-100 PASS
-20°C	824.039870	-130 PASS
-10°C	824.039860	-140 PASS
0°C	824.040340	340 PASS
+10°C	824.040000	0 PASS
+20°C	824.040010	10 PASS
+30°C	824.040190	190 PASS
+40°C	824.040380	380 PASS
+50°C	824.040580	580 PASS

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	Chanr	nel 2
	Frequency MHz	Frequency Error PPM Pass/Fail
-30°	836.519870	-130 PASS
-20°C	836.520010	10 PASS
-10°C	836.520040	40 PASS
0°C	836.520230	230 PASS
+10°C	836.520020	20 PASS
+20°C	836.520070	70 PASS
+30°C	836.520310	310 PASS
+40°C	836.520500	500 PASS
+50°C	836.520570	570 PASS

	Chanr	nel 3	
	Frequency MHz	Frequency Error PPM	Pass/Fail
		_	
-30°	848.969950	-50	PASS
-20°C	848.970010	10	PASS
-10°C	848.970060	60	PASS
0°C	848.970150	150	PASS
+10°C	848.970070	70	PASS
+20°C	848.970150	150	PASS
+30°C	848.970390	390	PASS
+40°C	848.970620	620	PASS
+50°C	848.970540	540	PASS

Voltage Variations

Ambient Temperature is 22.0 °C

	Channel 1								
Voltage	Frequency MHz	Frequency Error PPM Pass/Fail							
10.2	824.040670	670 PASS							
12.0	824.040640	640 PASS							
13.8	824.040630	630 PASS							

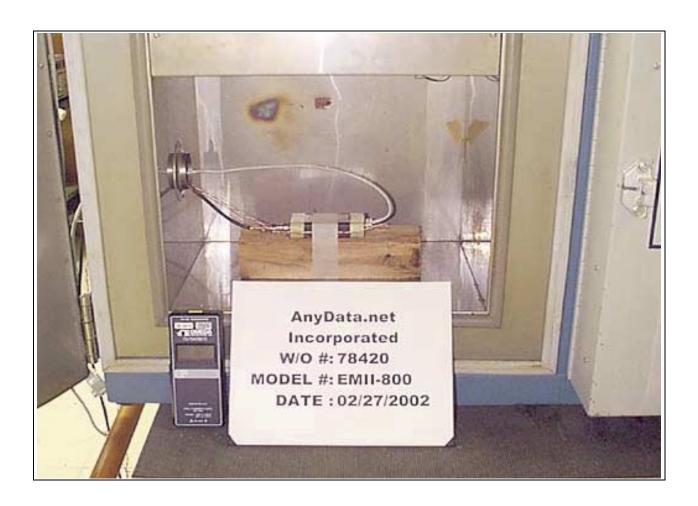
Channel 2								
Voltage Frequency MHz Frequency Error PPM Pass/Fail								
10.2	836.520650	650 PASS						
12.0	836.520660	660 PASS						
13.8	836.520650	650 PASS						

Channel 3								
Voltage	Frequency MHz	Frequency Error PPM Pass/Fail						
10.2	848.970670	670 PASS						
12.0	848.970680	680 PASS						
13.8	848.970670	670 PASS						

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Equipment Manufacturer		Model # Serial #		Asset #	Cal Date	Cal Due
Frequency Counter	HP	5340A	1532A03198	01253	9/5/01	9/5/02
Power Supply, DC HP		6205C	2228A01775	00762	5/31/2001	5/31/02
QP Adapter HP		85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	S/A Display HP		2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03
Temp Chamber Thermotron		S-1.2 MiniMax	11899	01879	3/29/2001	3/29/02
Thermometer Omega		HH-26K	T-202884	02242	7/26/01	7/26/02



Temperature Testing Setup

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2.1091 – MPE CALCULATIONS

Maximum Permissible Exposure Calculations

Date of Report: February 26th, 2002

Calculations prepared for: Calculations prepared by:

AnyDATA.net Incorporated Eddie Wong

18902 Bardeen Ave. 110 N. Olinda Place Irvine, CA 92612 Brea, CA 9283

Model Number: EMII-800

FCC Identification:

Fundamental Operating Frequency: 824.04-848.97MHz

Maximum Rated Output Power: 0.3162Watts
Measured Maximum Output Power: 0.16 watts ERP

MPE limit in accordance with FCC part 1.1311, table 1

Limit for Maximum permissible exposure: (B) Limit for General population/uncontrolled Exposure.

For frequency range of 300-1500 MHz, the MPE is $f/1500 \text{ (mW/cm}^2)$

Power Output	Distance	Power Density	Limit	Result
(Watts)	(Meters)	(mW/cm^2)	(mW/cm^2)	
0.3162	0.2	0.1031	0.5573	PASS
0.1600	0.2	0.0522	0.5573	PASS

Power Density $(W/M^2) = (30 * P_t * G) / (d^2 * Z_0)$

 P_t = Power Delivered to the Antenna

G = Antenna Gain

d = Distance in meters

Zo = Impedance of Free Space

Under normal operating conditions, the antenna is designed to maintain a separation distance of 20 cm from all persons. As can be seen from the MPE results, this device passes the limits specified in 1.1311 at a distance of 20 cm and at the rated output power of 0.3162 Watts

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15.107 - AC CONDUCTED EMISSIONS - RECEIVER/DIGITAL

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: AnyDATA.net Incorporated

Specification: FCC 15.107 Class B

Work Order #:78420Date:2/25/02Test Type:Conducted EmissionsTime:13:49:11Equipment:External CDMA Data ModemSequence#:17

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=9KHz. Receiver mode with Tx freq = 824.04 MHz. Range of measurement 450KHz-30MHz. 12Vdc (DC power supply at 110 Vac, 60Hz), 17°C, 57% relative humidity.

Transducer Legend:

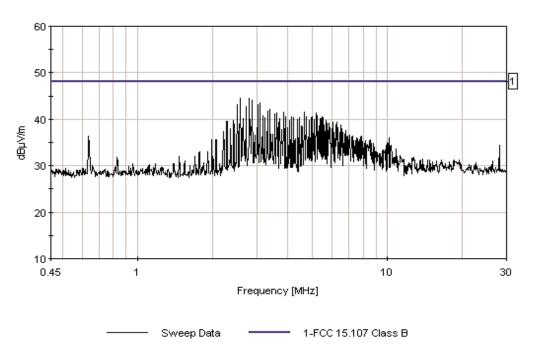
Measure	ement Data	Re	eading 1	listed by m	nargin.			Test Lead	d: Black		
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
1	2.795M	43.6					+0.0	43.6	48.0	-4.4	Black
Q)P										
٨	2.795M	44.6					+0.0	44.6	48.0	-3.4	Black
3	3.091M	43.6					+0.0	43.6	48.0	-4.4	Black
4	2.504M	43.2					+0.0	43.2	48.0	-4.8	Black
5	3.022M	43.1					+0.0	43.1	48.0	-4.9	Black
6	2.728M	42.7					+0.0	42.7	48.0	-5.3	Black

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7	2.580M)P	42.4	+0.0	42.4	48.0	-5.6	Black
٨	2.580M	44.6	+0.0	44.6	48.0	-3.4	Black
9	2.872M)P	42.1	+0.0	42.1	48.0	-5.9	Black
^	2.872M	44.1	+0.0	44.1	48.0	-3.9	Black
11	3.385M	42.1	+0.0	42.1	48.0	-5.9	Black
12	3.313M	41.7	+0.0	41.7	48.0	-6.3	Black
13	4.670M	41.5	+0.0	41.5	48.0	-6.5	Black
14	3.851M	41.5	+0.0	41.5	48.0	-6.5	Black
15	5.175M	41.3	+0.0	41.3	48.0	-6.7	Black
16	3.607M	41.3	+0.0	41.3	48.0	-6.7	Black
17	3.535M	41.2	+0.0	41.2	48.0	-6.8	Black
18	3.168M	40.7	+0.0	40.7	48.0	-7.3	Black
1							







Customer: AnyDATA.net Incorporated

Specification: FCC 15.107 Class B

Work Order #: **78420** Date: 2/25/02 Test Type: **Conducted Emissions** Time: 1:49:48 PM

Equipment: External CDMA Data Modem Sequence#: 18

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=9KHz. Receiver mode with Tx freq = 824.04 MHz. Range of measurement 450KHz-30MHz 12Vdc (DC power supply at 110 Vac, 60Hz), 17°C, 57% relative humidity.

Transducer Legend:

Measu	rement Data.	Re	eading li	isted by n	nargin.			Test Lead	d: White		
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
1	2.798M	45.4					+0.0	45.4	48.0	-2.6	White
	QP										
٨	2.800M	46.5					+0.0	46.5	48.0	-1.5	White
3	2.577M	45.1					+0.0	45.1	48.0	-2.9	White
	QP	4.5.0					0.0	4.5.0	10.0	2.0	****
^	2.580M	46.0					+0.0	46.0	48.0	-2.0	White
5	3.022M	44.7					+0.0	44.7	48.0	-3.3	White
	QP										
٨	3.022M	45.8					+0.0	45.8	48.0	-2.2	White
7	2.503M	44.4					+0.0	44.4	48.0	-3.6	White
	QP										
^	2.509M	45.3					+0.0	45.3	48.0	-2.7	White
9	2.724M	44.0					+0.0	44.0	48.0	-4.0	White
	QP										
٨	2.728M	45.3					+0.0	45.3	48.0	-2.7	White

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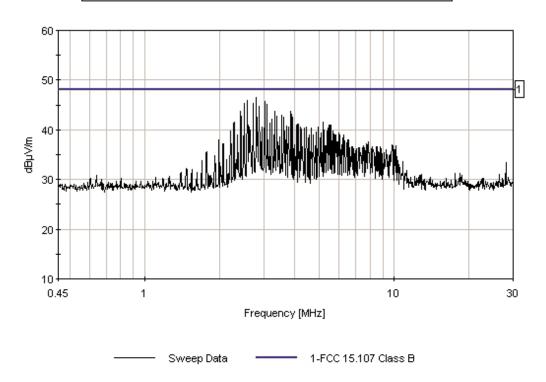


11	3.092M	43.9	+	0.0	43.9	48.0	-4.1	White
	P	13.5		0.0	13.7	10.0		vv inte
^	3.096M	45.1	+	0.0	45.1	48.0	-2.9	White
13	3.851M	43.8	+	0.0	43.8	48.0	-4.2	White
14	3.313M	43.7	+	0.0	43.7	48.0	-4.3	White
15	2.427M	43.7	+	0.0	43.7	48.0	-4.3	White
						10.0		
16	2.871M	43.5	+	0.0	43.5	48.0	-4.5	White
	P							
^	2.876M	44.8	+	0.0	44.8	48.0	-3.2	White
18	3.535M	42.9		0.0	42.9	48.0	-5.1	White
10	3.333WI	42.9	т	0.0	42.9	40.0	-3.1	vv inte
19	3.392M	42.7	+	0.0	42.7	48.0	-5.3	White
20	3.933M	42.6	+	0.0	42.6	48.0	-5.4	White
21	3.612M	42.5	+	0.0	42.5	48.0	-5.5	White
- 22	2 2201 5	10.1		0.0	10.1	40.0		****
22	3.239M	42.1	+	0.0	42.1	48.0	-5.9	White

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CKC Laboratories, Inc.	Date: 02/25/2002	Time: 1:49:48 PM	WO#: 78420
FCC 15.107 Class B	Test Lead: White	Sequence#:	18



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Customer: AnyDATA.net Incorporated

Specification: FCC 15.107 Class B

Work Order #: **78420** Date: 2/25/02 Test Type: **Conducted Emissions** Time: 2:05:16 PM

Equipment: External CDMA Data Modem Sequence#: 20

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*	_		

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=9KHz. Receiver mode with Tx freq = 836.52 MHz. Range of measurement 450KHz-30MHz 12Vdc (DC power supply at 110 Vac, 60Hz), 17°C, 57% relative humidity.

Transducer Legend:

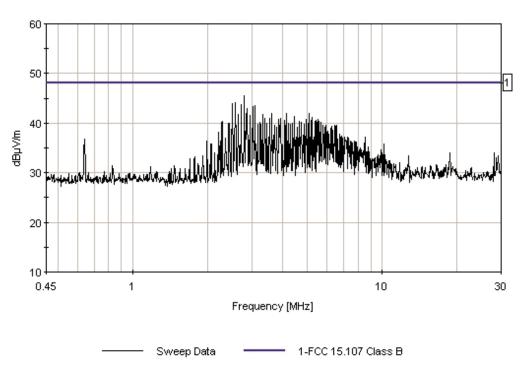
Measur	ement Data.	Re	eading li	sted by n	nargin.			Test Lead	d: Black		
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	\overline{MHz}	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	2.796M	44.5					+0.0	44.5	48.0	-3.5	Black
Ç)P										
^	2.800M	45.6					+0.0	45.6	48.0	-2.4	Black
3	2.504M	43.9					+0.0	43.9	48.0	-4.1	Black
4	2.728M	43.8					+0.0	43.8	48.0	-4.2	Black
5	3.091M	43.5					+0.0	43.5	48.0	-4.5	Black
6	2.575M	43.3					+0.0	43.3	48.0	-4.7	Black
Ç)P										
^	2.580M	44.1					+0.0	44.1	48.0	-3.9	Black
8	3.022M	43.3					+0.0	43.3	48.0	-4.7	Black
9	2.872M	43.0					+0.0	43.0	48.0	-5.0	Black
10	5.107M	42.0					+0.0	42.0	48.0	-6.0	Black

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11	4.152M	42.0	+0.0	42.0	48.0	-6.0	Black
12	3.612M	41.9	+0.0	41.9	48.0	-6.1	Black
13	3.316M	41.8	+0.0	41.8	48.0	-6.2	Black
14	2.647M	41.8	+0.0	41.8	48.0	-6.2	Black
15	2.943M	41.5	+0.0	41.5	48.0	-6.5	Black
16	4.445M	41.4	+0.0	41.4	48.0	-6.6	Black
17	5 057N/	41.1	. 0 0	41.1	40.0	<i>(</i> 0	D11
17	5.257M	41.1	+0.0	41.1	48.0	-6.9	Black







Customer: AnyDATA.net Incorporated

Specification: FCC 15.107 Class B

Work Order #: **78420** Date: 2/25/02 Test Type: **Conducted Emissions** Time: 1:58:17 PM

Equipment: External CDMA Data Modem Sequence#: 19

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

1 1	-):		
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=9KHz. Receiver mode with Tx freq = 836.52 MHz. Range of measurement 450KHz-30MHz 12Vdc (DC power supply at 110 Vac, 60Hz), 17°C, 57% relative humidity.

Transducer Legend:

Measur	rement Data	: R	eading 1	isted by m	nargin.		Test Lead: White				
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
1	2.796M	45.7					+0.0	45.7	48.0	-2.3	White
	QP										
^	2.800M	46.5					+0.0	46.5	48.0	-1.5	White
3	2.574M	44.7					+0.0	44.7	48.0	-3.3	White
	QP										
^	2.576M	45.9					+0.0	45.9	48.0	-2.1	White
5	2.502M	44.5					+0.0	44.5	48.0	-3.5	White
(QP										
^	2.504M	45.7					+0.0	45.7	48.0	-2.3	White
7	2.722M	44.0					+0.0	44.0	48.0	-4.0	White
	QP										
^	2.728M	45.0					+0.0	45.0	48.0	-3.0	White
9	2.872M	44.0					+0.0	44.0	48.0	-4.0	White
10	2.647M	43.7					+0.0	43.7	48.0	-4.3	White

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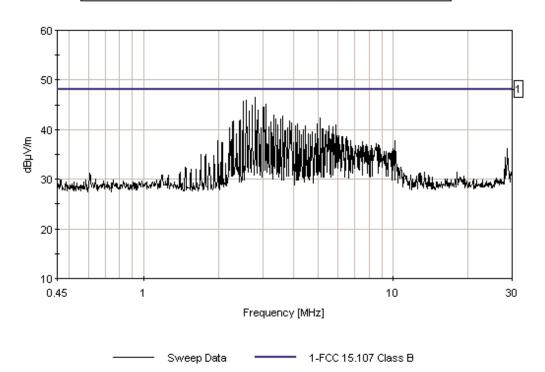


11	3.017M	43.5		+0.0	43.5	48.0	-4.5	White
Q	P							
٨	3.020M	44.6		+0.0	44.6	48.0	-3.4	White
13	3.090M P	43.4		+0.0	43.4	48.0	-4.6	White
^	3.096M	45.1		+0.0	45.1	48.0	-2.9	White
	22127	10.0		0.0	12.0	40.0		****
15	3.316M	42.9		+0.0	42.9	48.0	-5.1	White
1.0	2.60714	10.7		. 0. 0	12.7	40.0	<i>5.</i> 2	XX71. 14
16	3.607M	42.7		+0.0	42.7	48.0	-5.3	White
17	5.107M	42.3		+0.0	42.3	48.0	-5.7	White
1.0	2 2021/	42.2		. 0. 0	42.2	49.0	<i>5</i> 0	XX71-:4
18	3.392M	42.2		+0.0	42.2	48.0	-5.8	White
19	3.540M	42.1		+0.0	42.1	48.0	-5.9	White
17	3.340W	72.1		10.0	72.1	70.0	-3.7	Willie
20	2.432M	41.9		+0.0	41.9	48.0	-6.1	White
20	2.1321,1	11.7		. 0.0	11.7	10.0	0.1	,,,,,,,,
21	2.284M	41.8		+0.0	41.8	48.0	-6.2	White

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CKC Laboratories, Inc.	Date: 02/25/2002	Time: 1:58:17 PM	WO#: 78420
FCC 15.107 Class B	Test Lead: White	Sequence#:	19



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Customer: AnyDATA.net Incorporated

Specification: FCC 15.107 Class B

Work Order #: **78420** Date: 2/25/02 Test Type: **Conducted Emissions** Time: 2:10:34 PM

Equipment: External CDMA Data Modem Sequence#: 21

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=9KHz. Receiver mode with Tx freq = 849.97 MHz. Range of measurement 450KHz-30MHz 12Vdc (DC power supply at 110 Vac, 60Hz), 17°C, 57% relative humidity.

Transducer Legend:

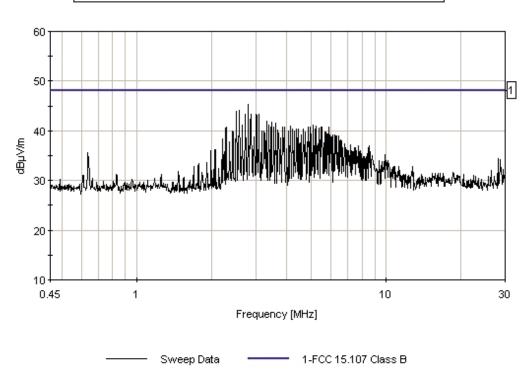
Measure	ement Data.	Re	eading li	sted by m	nargin.			Test Lead	d: Black		
#	Freq	Rdng		-			Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	2.795M	44.5					+0.0	44.5	48.0	-3.5	Black
Ç)P										
٨	2.800M	45.4					+0.0	45.4	48.0	-2.6	Black
3	2.501M	44.0					+0.0	44.0	48.0	-4.0	Black
4	3.091M	43.4					+0.0	43.4	48.0	-4.6	Black
5	2.872M	43.4					+0.0	43.4	48.0	-4.6	Black
6	2.728M	43.4					+0.0	43.4	48.0	-4.6	Black
7	3.020M	43.3					+0.0	43.3	48.0	-4.7	Black
8	2.575M)P	43.2					+0.0	43.2	48.0	-4.8	Black
^	2.576M	44.2					+0.0	44.2	48.0	-3.8	Black
10	3.313M	42.0					+0.0	42.0	48.0	-6.0	Black

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11	3.464M	41.8	+0.0	41.8	48.0	-6.2	Black
12	3.612M	41.6	+0.0	41.6	48.0	-6.4	Black
13	3.387M	41.2	+0.0	41.2	48.0	-6.8	Black
14	2.652M	41.2	+0.0	41.2	48.0	-6.8	Black
15	5.107M	41.1	+0.0	41.1	48.0	-6.9	Black
16	5.244M	41.0	+0.0	41.0	48.0	-7.0	Black
17	4.152M	40.9	+0.0	40.9	48.0	-7.1	Black

CKC Laboratories, Inc.	Date: 02/25/2002	Time: 2:10:34 PM WO#: 78420
FCC 15.107 Class B	Test Lead: Black	Sequence#: 21



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Customer: AnyDATA.net Incorporated

Specification: FCC 15.107 Class B

Work Order #: **78420** Date: 2/25/02 Test Type: **Conducted Emissions** Time: 2:19:32 PM

Equipment: External CDMA Data Modem Sequence#: 22

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=9KHz. Receiver mode with Tx freq = 849.97 MHz. Range of measurement 450KHz-30MHz 12Vdc (DC power supply at 110 Vac, 60Hz), 17°C, 57% relative humidity.

Transducer Legend:

Measur	rement Data	: Re	eading 1	isted by m	nargin.		Test Lead: White				
#	Freq	Rdng					Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m \\$	$dB\mu V/m$	dB	Ant
1	2.797M	45.7					+0.0	45.7	48.0	-2.3	White
(QP										
^	2.800M	46.9					+0.0	46.9	48.0	-1.1	White
3	2.576M	45.2					+0.0	45.2	48.0	-2.8	White
	QP										
٨	2.576M	46.1					+0.0	46.1	48.0	-1.9	White
5	2.503M	44.6					+0.0	44.6	48.0	-3.4	White
(QP										
٨	2.501M	45.6					+0.0	45.6	48.0	-2.4	White
7	2.872M	43.5					+0.0	43.5	48.0	-4.5	White
	QP										
^	2.872M	44.6					+0.0	44.6	48.0	-3.4	White
9	3.092M	43.5					+0.0	43.5	48.0	-4.5	White
	QP										
٨	3.096M	44.7					+0.0	44.7	48.0	-3.3	White

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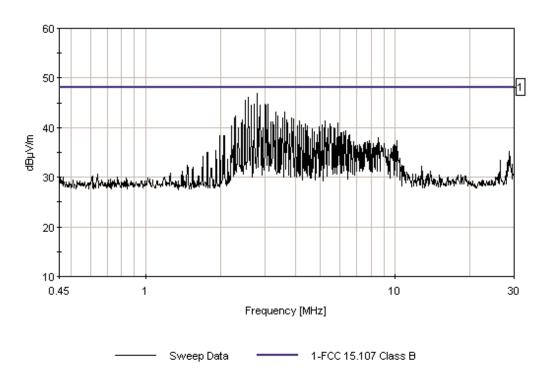


11	2.725M)P	43.4	+1	0.0	43.4	48.0	-4.6	White
^	2.728M	44.7	+1	0.0	44.7	48.0	-3.3	White
13	3.018M	43.3	+1	0.0	43.3	48.0	-4.7	White
^	3.020M	44.7	+1	0.0	44.7	48.0	-3.3	White
15	3.612M	43.2	+1	0.0	43.2	48.0	-4.8	White
16	3.313M	43.2	+	0.0	43.2	48.0	-4.8	White
17	3.387M	42.4	+1	0.0	42.4	48.0	-5.6	White
18	2.284M	42.4	+	0.0	42.4	48.0	-5.6	White
19	3.838M	42.0	+	0.0	42.0	48.0	-6.0	White
20	3.535M	41.9	+	0.0	41.9	48.0	-6.1	White
21	3.920M	41.8	+	0.0	41.8	48.0	-6.2	White
22	2.651M	38.9	+	0.0	38.9	48.0	-9.1	White
^	2.647M	44.5	+1	0.0	44.5	48.0	-3.5	White

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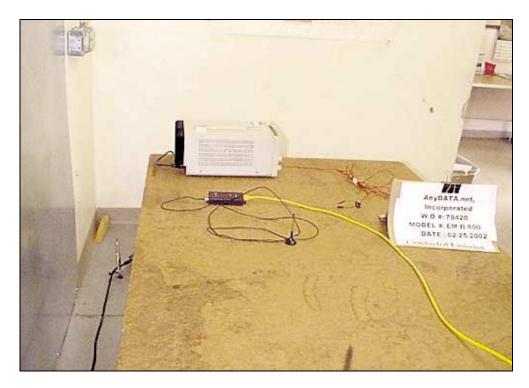
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	01865	HP	8566B	2532A02509	092801	092802
QP Adapter	01437	HP	85650A	3303A01884	092801	092802
LISN	02128	EMCO	3816/2NM	9809-1090	030701	030702
LISN	00847	EMCO	3816/2NM	1104	101501	101502

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AC Conducted Emissions Test Setup - Front View



AC Conducted Emissions Test Setup - Back View

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15.109 - RADIATED EMISSIONS - RECEIVER/DIGITAL

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: AnyDATA.net Incorporated

Specification: FCC 15.109 Class B

Work Order #: 78420 Date: 2/25/02
Test Type: Maximized Emissions Time: 12:07:01
Equipment: External CDMA Data Modem Sequence#: 14

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

	,			
Function	Manufacturer	Model #	S/N	
External CDMA Data	AnyDATA.net Incorpor	rated EMII-800	0201K10210	
Modem*				

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=120KHz. Receiver mode with Tx freq = 824.04 MHz. Range of measurement 30-1000MHz. 12Vdc, 17°C, 57% relative humidity.

Transducer Legend:

T1=Log 331 092401	T2=Bicon 092401	
T3=Cable #10 071601	T4=Cable #15 120602	
T5=Preamp 8447D 090501		

Meas	urement Data:	Re	eading lis	ted by ma	argin.		Te	est Distanc	e: 3 Meters	3	
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	dBµV/m	dBμV/m	dB	Ant
1	954.411M	37.4	+23.7	+0.0	+0.6	+6.3	+0.0	40.3	46.0	-5.7	Horiz
	QP		-27.7				325		Receiver L	.O. Freq	99
2	954.408M	37.2	+23.7	+0.0	+0.6	+6.3	+0.0	40.1	46.0	-5.9	Horiz
	QP		-27.7				176		Receiver L	.O. Freq,	99
									up right.		
^	954.442M	38.5	+23.7	+0.0	+0.6	+6.3	+0.0	41.4	46.0	-4.6	Horiz
			-27.7				325		Receiver L	.O. Freq	99
^	954.408M	38.3	+23.7	+0.0	+0.6	+6.3	+0.0	41.2	46.0	-4.8	Horiz
			-27.7				176		Receiver L	.O. Freq,	99
									up right.		
^	954.408M	34.1	+23.7	+0.0	+0.6	+6.3	+0.0	37.0	46.0	-9.0	Horiz
			-27.7				237		Receiver L	.O. Freq,	169
									up right.		

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782.305M	39.6	+21.7	+0.0	+0.6	+5.6	+0.0	39.8	46.0	-6.2	Vert
		-27.7				212				100
782.310M	42.3	+21.7	+0.0	+0.6	+5.6	+0.0	42.5	46.0	-3.5	Vert
		-27.7				212				100
954.410M	35.8	+23.7	+0.0	+0.6	+6.3	+0.0	38.7	46.0	-7.3	Vert
		-27.7				151		Receiver L	.O. Freq	194
782.327M	37.6	+21.7	+0.0	+0.6	+5.6	+0.0	37.8	46.0	-8.2	Horiz
		-27.7				1				99
782.309M	40.1	+21.7	+0.0	+0.6	+5.6	+0.0	40.3	46.0	-5.7	Horiz
		-27.7				1				99
51.217M	38.3	+0.0	+17.4	+0.2	+2.2	+0.0	29.7	43.5	-13.8	Horiz
		-28.4				283				156
521.499M	30.5	+17.4	+0.0	+0.4	+4.5	+0.0	24.3	46.0	-21.7	Horiz
		-28.5				84				99
59.856M	28.4	+0.0	+17.6	+0.2	+2.3	+0.0	20.2	43.5	-23.3	Vert
		-28.3				349				101
52.700M	23.0	+16.3	+0.0	+0.4	+4.0	+0.0	15.0	46.0	-31.0	Horiz
		-28.7				311				99
7	82.310M 54.410M 82.327M 82.309M 51.217M 21.499M 59.856M	82.310M 42.3 54.410M 35.8 82.327M 37.6 82.309M 40.1 51.217M 38.3 21.499M 30.5 59.856M 28.4	27.7 82.310M 42.3 +21.7 -27.7 54.410M 35.8 +23.7 -27.7 82.327M 37.6 +21.7 -27.7 82.309M 40.1 +21.7 -27.7 51.217M 38.3 +0.0 -28.4 21.499M 30.5 +17.4 -28.5 59.856M 28.4 +0.0 -28.3 52.700M 23.0 +16.3	2.7.7 82.310M 42.3 +21.7 +0.0 -27.7 54.410M 35.8 +23.7 +0.0 -27.7 82.327M 37.6 +21.7 +0.0 -27.7 82.309M 40.1 +21.7 +0.0 -27.7 51.217M 38.3 +0.0 +17.4 -28.4 21.499M 30.5 +17.4 +0.0 -28.5 59.856M 28.4 +0.0 +17.6 -28.3 52.700M 23.0 +16.3 +0.0	-27.7 82.310M 42.3 +21.7 -27.7 54.410M 35.8 +23.7 -27.7 82.327M 37.6 +21.7 -27.7 82.309M 40.1 +21.7 -27.7 51.217M 38.3 +0.0 -27.7 51.217M 38.3 +0.0 +17.4 -28.4 21.499M 30.5 +17.4 -28.5 59.856M 28.4 +0.0 +17.6 +0.2 -28.3 -28.3 52.700M 23.0 +16.3 +0.0 +0.4	27.7 82.310M 42.3 +21.7 -27.7 54.410M 35.8 +23.7 -27.7 82.327M 37.6 +21.7 -27.7 82.309M 40.1 +21.7 -27.7 51.217M 38.3 +0.0 +17.4 -28.4 21.499M 30.5 +17.4 +0.0 +0.6 +5.6 -28.5 59.856M 28.4 +0.0 +17.6 +0.2 +2.3 -28.3 -28.3 52.700M 23.0 +16.3 +0.0 +17.6 +0.2 +2.3 -28.3	212 82.310M	212 82.310M	212 82.310M	212 82.310M

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Customer: AnyDATA.net Incorporated

Specification: FCC 15.109 Class B

Work Order #: 78420 Date: 2/25/02
Test Type: Maximized Emissions Time: 11:19:05
Equipment: External CDMA Data Modem Sequence#: 15

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

1 1	/			
Function	Manufacturer	Model #	S/N	
External CDMA Data Modem*	AnyDATA.net	EMII-800	0201K10210	
	Incorporated			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=120KHz. Receiver mode with Tx freq = 836.52 MHz. Range of measurement 30-1000MHz. 12Vdc, 17°C, 57% relative humidity.

Transducer Legend:

Transaucer Begena.		
T1=Log 331 092401	T2=Bicon 092401	
T3=Cable #10 071601	T4=Cable #15 120602	
T5=Preamp 8447D 090501		

Measur	rement Data:	Re	eading lis	ted by ma	argin.		Te	est Distanc	e: 3 Meters	1	
#	Freq	Rdng	T1	T2	Т3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	dBµV/m	dBμV/m	dB	Ant
1	782.322M	39.0	+21.7	+0.0	+0.6	+5.6	+0.0	39.2	46.0	-6.8	Vert
(QP		-27.7				95				100
٨	782.290M	40.1	+21.7	+0.0	+0.6	+5.6	+0.0	40.3	46.0	-5.7	Vert
			-27.7				95				100
3	782.338M	38.3	+21.7	+0.0	+0.6	+5.6	+0.0	38.5	46.0	-7.5	Horiz
(QP		-27.7				360				106
^	782.306M	41.5	+21.7	+0.0	+0.6	+5.6	+0.0	41.7	46.0	-4.3	Horiz
			-27.7				360				106
5	966.872M	38.5	+23.9	+0.0	+0.6	+6.5	+0.0	41.7	54.0	-12.3	Horiz
			-27.8				68		Receiver L	.O. Freq	99
6	966.881M	38.1	+23.9	+0.0	+0.6	+6.5	+0.0	41.3	54.0	-12.7	Vert
			-27.8				112		Receiver L	.O. Freq	111
7	569.240M	26.2	+18.3	+0.0	+0.4	+4.7	+0.0	21.2	46.0	-24.8	Horiz
			-28.4				71				132
8	214.670M	26.9	+0.0	+17.1	+0.3	+2.7	+0.0	18.7	43.5	-24.8	Vert
			-28.3				155				101
9	430.860M	28.3	+16.0	+0.0	+0.4	+3.9	+0.0	20.0	46.0	-26.0	Horiz
			-28.6				71				132
10	68.717M	33.4	+0.0	+7.0	+0.1	+1.5	+0.0	13.4	40.0	-26.6	Horiz
			-28.6				132				156

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Customer: AnyDATA.net Incorporated

Specification: FCC 15.109 Class B

Work Order #: 78420 Date: 2/25/02
Test Type: Maximized Emissions Time: 11:02:45
Equipment: External CDMA Data Modem Sequence#: 16

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data Modem*	AnyDATA.net Incorporated	EMII-800	0201K10210

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=120KHz. Receiver mode with Tx freq = 848.97 MHz. Range of measurement 30-1000MHz. 12Vdc, 17°C, 57% relative humidity.

Transducer Legend:

T1=Log 331 092401	T2=Bicon 092401	
T3=Cable #10 071601	T4=Cable #15 120602	
T5=Preamp 8447D 090501		

Measu	rement Data:	Re	eading lis	ted by ma	argin.		Te	est Distanc	e: 3 Meters	;	
#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5								
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m$	dB	Ant
1	782.303M	39.8	+21.7	+0.0	+0.6	+5.6	+0.0	40.0	46.0	-6.0	Vert
	QP		-27.7				253				100
٨	782.304M	40.9	+21.7	+0.0	+0.6	+5.6	+0.0	41.1	46.0	-4.9	Vert
			-27.7				253				100
3	782.305M	38.7	+21.7	+0.0	+0.6	+5.6	+0.0	38.9	46.0	-7.1	Horiz
	QP		-27.7				360				100
٨	782.309M	41.2	+21.7	+0.0	+0.6	+5.6	+0.0	41.4	46.0	-4.6	Horiz
			-27.7				360				111
5	979.366M	40.3	+24.0	+0.0	+0.6	+6.7	+0.0	43.8	54.0	-10.2	Horiz
			-27.8				67		Receiver L	.O. Freq	100
6	979.366M	37.4	+24.0	+0.0	+0.6	+6.7	+0.0	40.9	54.0	-13.1	Vert
			-27.8				108		Receiver L	.O. Freq	110
7	844.780M	25.7	+22.2	+0.0	+0.6	+5.8	+0.0	26.6	46.0	-19.4	Horiz
			-27.7				116				124
8	154.035M	29.7	+0.0	+17.5	+0.2	+2.2	+0.0	21.2	43.5	-22.3	Vert
			-28.4				53				101
9	237.704M	27.2	+0.0	+17.6	+0.3	+2.8	+0.0	19.7	46.0	-26.3	Horiz
			-28.2				330				156
10	365.100M	22.6	+17.7	+0.0	+0.3	+3.6	+0.0	16.0	46.0	-30.0	Horiz
			-28.2				116				124

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Customer: AnyDATA.net Incorporated

Specification: FCC 15.109 Class B

Work Order #: 78420 Date: 2/22/02
Test Type: Maximized Emissions Time: 15:36:26
Equipment: External CDMA Data Modem Sequence#: 11

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

(— /-		
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=1 MHz. Receiver mode with Tx freq = 824.04 MHz. Range of measurement 1-9 GHz. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

Transaucer Legena.	
T1=Horn Antenna sn6246	T2=HP3017A sn3123A00281 11-Sept-01
T3=Heliax #18 70' 11Sept2001	

Med	isurement Data:	Re	eading lis	ted by ma	argin.		Te	est Distance	e: 3 Meters	,	
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
	1 1908.820M	40.2	+26.1	-38.3	+3.6		+0.0	31.6	54.0	-22.4	Horiz
							358				100
	2 2589.700M	30.1	+28.2	-38.6	+4.2		+0.0	23.9	54.0	-30.1	Vert
							141				100
	3 1048.800M	29.6	+24.0	-40.4	+2.7		+0.0	15.9	54.0	-38.1	Vert
							50				100

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Customer: AnyDATA.net Incorporated

Specification: FCC 15.109 Class B

Work Order #:78420Date:2/22/02Test Type:Maximized EmissionsTime:15:17:53Equipment:External CDMA Data ModemSequence#:12

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

(— /-		
Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. Tx/RX antenna is connected to the antenna port. RBW=VBW=1 MHz. Receiver mode with Tx freq = 836.52 MHz. Range of measurement 1-9 GHz. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

Transaucer Legena.	
T1=Horn Antenna sn6246	T2=HP3017A sn3123A00281 11-Sept-01
T3=Heliax #18 70' 11Sept2001	

Meas	urement Data:	Re	eading lis	ted by ma	argin.		Te	est Distance	e: 3 Meters		
#	Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\mu V/m$	$dB\mu V/m \\$	dB	Ant
1	1933.780M	43.5	+26.2	-38.3	+3.7		+0.0	35.1	54.0	-18.9	Horiz
							248				100
2	2 3292.000M	28.8	+30.6	-37.5	+5.6		+0.0	27.5	54.0	-26.5	Vert
							330				100
3	3 1327.000M	33.2	+24.3	-39.1	+3.1		+0.0	21.5	54.0	-32.5	Vert
							320				100

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Customer: AnyDATA.net Incorporated

Specification: FCC 15.109 Class B

Work Order #: 78420 Date: 2/22/02
Test Type: Maximized Emissions Time: 15:15:16
Equipment: External CDMA Data Modem Sequence#: 13

Manufacturer: AnyDATA.net Incorporated Tested By: Eddie Wong

Model: EMII-800 S/N: 0201K10210

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
External CDMA Data	AnyDATA.net Incorporated	l EMII-800	0201K10210
Modem*			

Support Devices:

Function	Manufacturer	Model #	S/N
Laptop	Samsung	Academy 680	558791ANB00124

Test Conditions / Notes:

EUT placed on the bench. RS232 port connected to remote laptop. 12Vdc is obtained from a support power supply. Laptop running test software to exercise the EUT. TX/RX antenna is connected to the antenna port. RBW=VBW=1 MHz. Receiver mode with Tx freq = 848.97 MHz. Range of measurement 1-9 GHz. 12Vdc, 23°C, 45% relative humidity.

Transducer Legend:

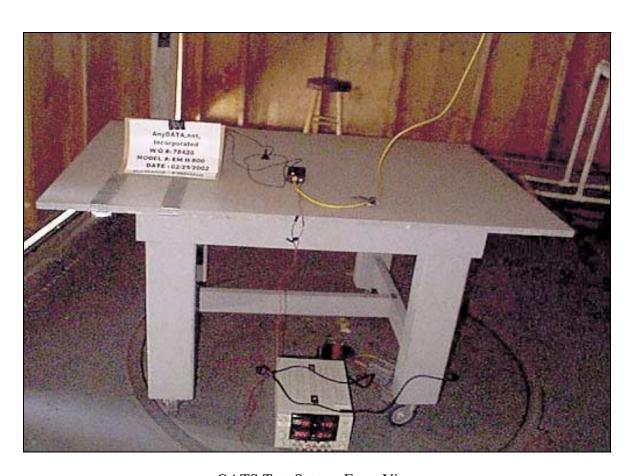
Transancer Legena.	
T1=Horn Antenna sn6246	T2=HP3017A sn3123A00281 11-Sept-01
T3=Heliax #18 70' 11Sept2001	

Me	easurement De	ata: R	eading lis	sted by ma	argin.		Te	est Distance	e: 3 Meters	,	
7	# Freq	Rdng	T1	T2	Т3		Dist	Corr	Spec	Margin	Polar
	MHz	dΒμV	dB	dB	dB	dB	Table	$dB\muV/m$	$dB\mu V/m$	dB	Ant
	1 3917.300	OM 37.1	+31.8	-37.6	+6.1		+0.0	37.4	54.0	-16.6	Horiz
							179				100
	2 1958.600	M 42.5	+26.3	-38.4	+3.8		+0.0	34.2	54.0	-19.8	Horiz
											100
	3 6983.800	OM 23.4	+35.5	-37.4	+8.0	•	+0.0	29.5	54.0	-24.5	Vert
							71				100

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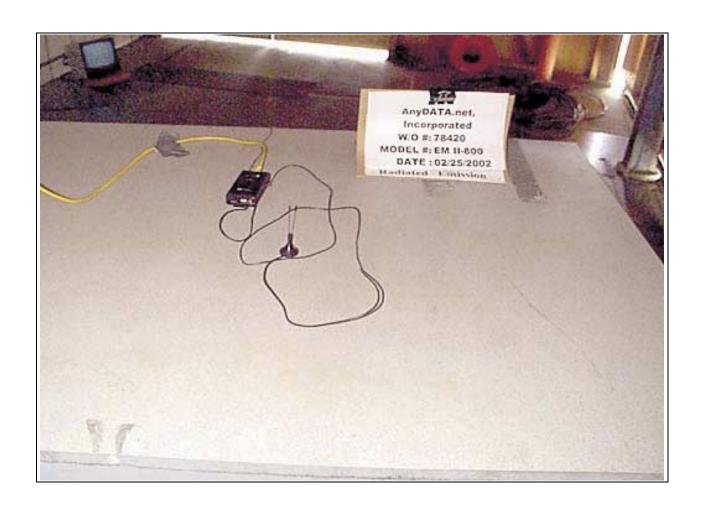
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	01865	HP	8566B	2532A02509	092801	092802
QP Adapter	01437	HP	85650A	3303A01884	092801	092802
Bicon Antenna	306	AH	SAS200/540	220	092401	092402
Log Periodic	331	AH	SAS 00/516	330	092401	092402
Antenna						
Pre-amp	00309	HP	8447D	1937A02548	090501	090502
Antenna cable	NA	NA	RG214	Cable#15	122001	122002
Pre-amp to SA cable	NA	Harbour	RG223/U	Cable#10	071601	071602
1000-90,000 MHz						
Spectrum Analyzer	01865	HP	8566B	2532A02509	092801	092802
QP Adapter	01437	HP	85650A	3303A01884	092801	092802
Horn Antenna	0646	EMCO	3115	4683	022801	022802
Microwave Pre-amp	00786	HP	83017A	3123A00281	091201	091202
1/4" Heliax Coaxial Cable	NA	Andrew	LDF1-50	Cable#18 (70 ft)	091101	091102



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OATS Test Setup - Back View

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