EMC
TEST REPORT

Report No. : EME-011106
Model No. : XI-325H
Issued Date : Feb. 05, 2002

Applicant : Z-COM, Inc.
7F-2, No. 9, Prosperity 1St RD., Science-Based Industrial Park, Hsinchu, Taiwan, R.O.C.

Test By : Intertek Testing Services Taiwan Ltd.
No. 11, Ko-Tze-Nan Chia-Tung Li, Shiang-Shan District, Hsinchu, Taiwan, R.O.C.

Test Engineer

Elton Chen

Approved By

J. T. CHEN
MANAGER (EMC LABORATORY)
ETL SEMKO DIVISION

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1. General information

1.1 Identification of the EUT

Manufacturer	: Z-COM, Inc.
Product	: 2.4GHz wireless LAN card
Model No.	: XI-325H
FCC ID.	: M4Y-0325H
Frequency Range	: 2412MHz to 2462MHz
Channel Number	: 11 channels
Frequency of Each Channel	: 2412MHz, 2417MHz, 2422MHz, 2427MHz, 2432MHz, 2437MHz, 2442MHz, 2447MHz, 2452MHz, 2457MHz, 2462MHz
Type of Modulation	: CCK (11Mps, 5.5Mbps), DQPSK (2Mbps), DBPSK (1Mbps)
Power Supply	: 3.3/5Vdc
Power Cord	: N/A
Sample Received	: Dec. 27, 2001
Test Date(s)	: Dec. 27, 2001 to Jan. 2, 2002

A FCC DoC report has been generated for the client.

1.2 Additional information about the EUT

The EUT is an IEEE802.11/802.11b-compliant PCMCIA Type II DSSS wireless LAN adapter. It fully supports wireless networking under Windows 98/ME/NT/2000/XP, it can be operated in Ad-Hoc or Infrastructure network configurations. *Ad-Hoc mode* allows 11Mbps Wireless LAN PC Card users to join a Basic Service Set (i.e., peer-to-peer mode, without access point). *Infrastructure mode* allows 11Mbps Wireless PC Card users to join an Extended Basic Service Set (i.e., connect to an Access Point).

For more detail features, please refer to User's manual as file name “installation guide.pdf”

1.3 Antenna description

The antenna is affixed to the EUT using a unique connector, which allows for replacement of a broken antenna, but DOES NOT use a standard antenna jack or electrical connector.

Antenna Gain : 0dBi max
Antenna Type : Path antenna

1.4 Peripherals equipment

1. Notebook PC
   Manufacturer : Twinhead
   Serial No. : H0905483
   Product No. : P79T

2. Printer
   Product No. : C2642A
   Serial No. : TH86K1N2ZB
   Manufacturer : HP

3. Modem
   Product No. : V1456VQE
   Serial No. : 700V23100066865
   Manufacturer : Aski

2. Test specifications

2.1 Test standard

The EUT was performed according to the procedures in FCC Part 15 Subpart C Section §15.207、§15.209 、§15.247 and ANSI C63.4/1992.

2.2 Operation mode

Plug the EUT into Notebook and turn on the power of notebook then run the test program “RF.EXE”.

Select the wanted mode (Continuously Transmit) to perform all the tests.

2.3 Modifications required for compliance

No modification were installed during test performance to bring the product into compliance (Please note that this list does not include changes made specifically by Z-COM Inc. Prior to compliance testing.)

2.4 Test equipment

Equipment	Brand	Frequency range	Model No.	Series No.	Next Cal.Date
EMI Receiver	Rohde & Schwarz	9kHz~2.75GHz	ESCS 30	825788/014	May 29, 2002
Pulse Limiter	Rohde & Schwarz	9kHz~30MHz	ESH3-Z2	848.766/052	N/A
Spectrum Analyzer	Rohde & Schwarz	9kHz~30GHz	FSP 30	100137	July 9, 2002
Horn Antenna	EMCO	1GHz~18GHz	3115	9906-5822	Sep. 10, 2002
Horn Antenna	SCHWARZBECK	14GHz~40GHz	BBHA 9170	159	June 21, 2002
Bilog Antenna	SCHWARZBECK	25MHz~1.7GHz	VULB 9160	3111	June 21, 2002
Turn Table	HDGmbH	N/A	DS 420S	420/669/01	N/A
Antenna Tower	HDGmbH	N/A	MA 240	240/573	N/A
RF Power Meter	Boonton	10kHz~100GHz	4230	27003	June 12, 2002
Power Sensor	Boonton	30MHz~8GHz	51011-EMC	30395	June 12, 2002
Power Sensor	Boonton	30MHz~8GHz	51011-EMC	30417	June 12, 2002

Note:
1. The calibration interval of the above instruments is 12 months.

3. Minimum 6dB Bandwidth test

3.1 Operating environment

Temperature: 19 ℃
Relative Humidity: 59 %

3.2 Test setup & procedure

The minimum 6dB bandwidth per FCC §15.247(a)(2) was measured using a 50 ohm spectrum analyzer with the resolutions bandwidth set at 300kHz, the video bandwidth set at 1MHz, and the SPAN>>RBW. The test was performed at 3 channels (lowest, middle and highest channel). The minimum 6-dB modulation bandwidth is in the following Table. See Minimum 6dB Bandwidth plot as file name "Minimum 6dB Bandwidth plot.pdf"

3.3 Measured data of Minimum 6dB Bandwidth test results

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit
Low	2142.28	8.80	＞500kHz
Middle	2437.32	8.76	＞500kHz
High	2462.32	8.76	＞500kHz

4. Maximum Output Power test

4.1 Operating environment

Temperature: 22 ℃
Relative Humidity: 60 %

4.2 Test setup & procedure

The power output per FCC §15.247(b) was measured on the EUT using a 50 ohm SMA cable connected to power meter via power sensor. Power was read directly and cable loss correction (0.5dB) was added to the reading to obtain power at the EUT antenna terminals. The test was performed at 3 channels (lowest, middle and highest channel).

4.3 Measured data of Maximum Output Power test results

Channel	Frequency (MHz)	C.B.L. (dB)	Reading (dBm)	Power Output		Limit (W)
				(dBm)	(mW)	
Lowest	2412	0.5	20.93	21.43	139.0	1
Middle	2437	0.5	21.83	22.33	171.0	1
Highest	2462	0.5	20.97	21.47	140.3	1

5. RF Antenna Conducted test

5.1 Operating environment

Temperature: 19 ℃
Relative Humidity: 59 %

5.2 Test setup & procedure

RF antenna conducted per FCC 15.247 (c) was measured from the EUT antenna port using a 50ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 300 kHz.
Harmonics and spurious noise must be at least 20dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. The table below is the results from the highest emission for each channel within the authorized band. This table was used to determine the spurious limits for each channel. See RF Antenna Conducted plot as file name "RF Antenna Conducted plot.pdf"

5.3 Measured data of the highest RF Antenna Conducted test result

Channel	Max level at Frequency (MHz)	Emission level (dBm)	Limit (dB)
Low	2875.00	-18.63	-10.72
Middle	1783.70	-21.41	-10.63
High	1813.34	-20.78	-10.63

Note: 1. Limit = peak power output (in 100kHz RBW) – 20dB
2. All the other emissions were very low the limit.

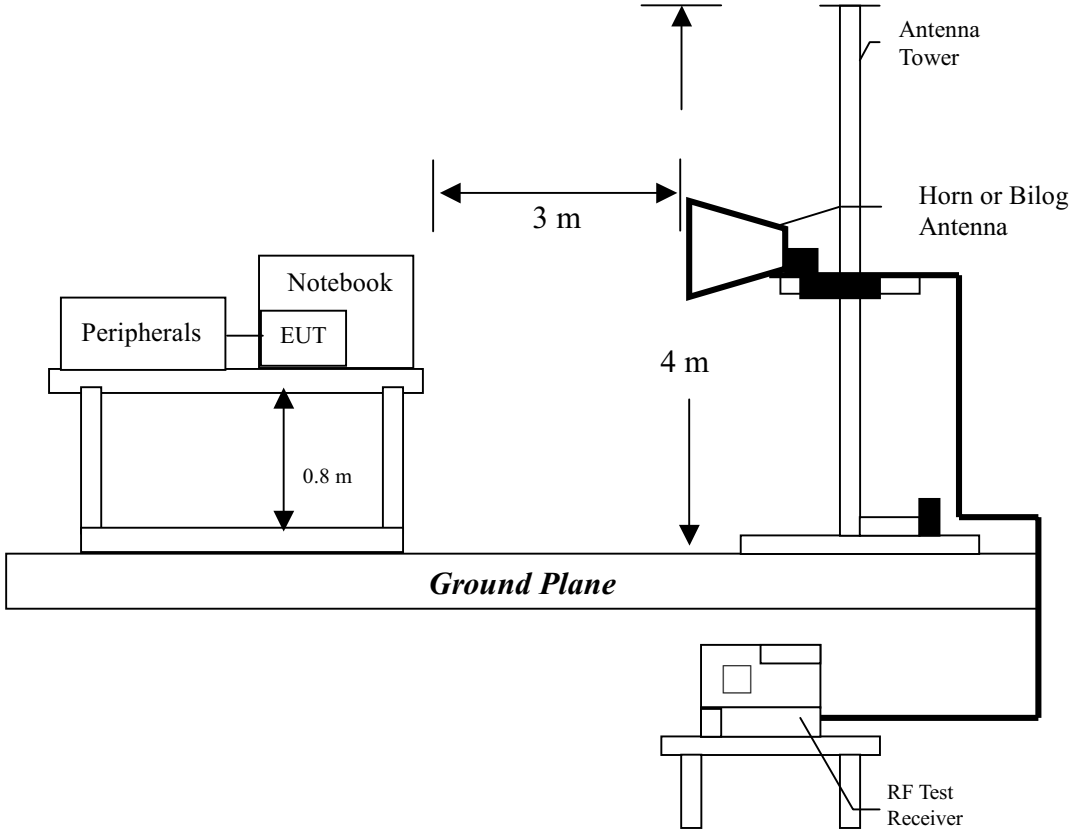
6. Radiated Emission test

6.1 Operating environment

Temperature:	19	℃
Relative Humidity:	59	%

6.2 Test setup & procedure

The Diagram below shows the test setup, which is utilized to make these measurements.



The signal is maximized through rotation and placement in the three orthogonal axes. The EUT and its peripherals are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4/1992 on radiated measurement. Radiated emission measurement were performed from 30MHz to 40GHz or to the tenth harmonic of the highest fundamental frequency, which is lower.
The bandwidth below 1GHz setting on the field strength meter (ESMI) is 120kHz and above 1GHz is 1MHz.

6.3 Emission limits

The spurious Emission shall test through the 10th harmonic. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

Frequency (MHz)	Limits (dB μ V/m@3m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Remark:
1. In the above table, the tighter limit applies at the band edges.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

   Uncertainty was calculated in accordance with NAMAS NIS 81. In the General Radiated Emission Test, the uncertainty is within ±2.5dB

6.4 Radiated spurious emission test data

6.4.1 Measurement results: frequencies equal to or less than 1 GHz

EUT : XI-325H
Test Mode : Transmit mode

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Reading (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
43.00000	QP	V	0	15.83	18.57	34.40	40	-5.60
66.20000	QP	V	0	10.52	28.18	38.70	40	-1.30
300.00000	QP	V	0	16.31	24.99	41.30	46	-4.70
532.40000	QP	V	0	23.87	14.43	38.30	46	-7.70
655.60000	QP	V	0	24.80	15.40	40.20	46	-5.80
690.60000	QP	V	0	25.46	12.74	38.20	46	-7.80
66.20000	QP	H	0	10.52	21.58	32.10	40	-7.90
266.50000	QP	H	0	15.73	25.17	40.90	46	-5.10
300.00000	QP	H	0	16.31	28.59	44.90	46	-1.10
332.20000	QP	H	0	18.14	25.96	44.10	46	-1.90
655.60000	QP	H	0	24.80	14.40	39.20	46	-6.80
666.80000	QP	H	0	25.46	14.94	40.40	46	-5.60

Remark:
1.Corrected Level = Reading Level + Correction Factor－Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. All Readings below 1GHz are Peak, above are average value
4. All the Harmonics don’t show on the above table were undetectable.
5. “-“ means the value was undetectable.

6.5 Radiated Emission test data

Worst case radiated emission
at High Channel, 7386MHz, margin: -2.63 dB

This is within the stated measurement uncertainty, this may affect compliance determined in other test arrangements.

EUT : XI-325H
Test Channel : Low channel
Test Mode : Transmitted

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Average Factor (dB)	Reading (dBuV)	Corrected Reading (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
4824	PK	H	-	36.15	-	20.18	56.33	74	-17.67
4824	AV	H	-	36.15	-	13.41	49.56	54	-4.44
7236	PK	H	-	45.16	-	11.46	56.62	74	-17.38
7236	AV	H	-	45.16	-	4.81	49.97	54	-4.03
9648	PK	H	-	46.9	-	5.27	52.17	74	-21.83
9648	AV	H	-	46.9	-	-2.13	44.77	54	-9.23
12060	PK	H	-	48.97	-	-	-	74	-
12060	AV	H	-	48.97	-	-	-	54	-
2037.75	PK	H	-	30.85	-	10.38	41.23	74	-32.77
2037.75	AV	H	-	30.85	-	3.46	34.31	54	-19.69
4075.5	PK	H	-	37.2	-	5.11	42.31	74	-31.69
4075.5	AV	H	-	37.2	-	-1.84	35.36	54	-18.64

Remark:
1.Corrected Level = Reading Level + Correction Factor + Average Factor − Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. All Readings below 1GHz are Peak, above are average value
4. All the Harmonics don't show on the above table were undetectable.
5. "-" means the value was undetectable.

EUT : XI-325H
Test Channel : Low channel
Test Mode : Transmitted

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Average Factor (dB)	Reading (dBuV)	Corrected Reading (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
4824	PK	V	-	36.15	-	22.43	58.58	74	-15.42
4824	AV	V	-	36.15	-	14.67	50.82	54	-3.18
7236	PK	V	-	45.16	-	11.27	56.43	74	-17.57
7236	AV	V	-	45.16	-	4.38	49.54	54	-4.46
9648	PK	V	-	46.9	-	6.41	53.31	74	-20.69
9648	AV	V	-	46.9	-	-1.55	45.35	54	-8.65
12060	PK	V	-	48.97	-	-	-	74	-
12060	AV	V	-	48.97	-	-	-	54	-
2037.75	PK	V	-	30.85	-	15.87	46.72	74	-27.28
2037.75	AV	V	-	30.85	-	11.72	42.57	54	-11.43
4075.5	PK	V	-	37.2	-	7.64	44.84	74	-29.16
4075.5	AV	V	-	37.2	-	-1.3	35.9	54	-18.1

Remark:
1.Corrected Level = Reading Level + Correction Factor + Average Factor − Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. All Readings below 1GHz are Peak, above are average value
4. All the Harmonics don't show on the above table were undetectable.
5. "-" means the value was undetectable.

EUT : XI-325H
Test Channel : Middle channel
Test Mode : Transmitted

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Average Factor (dB)	Reading (dBuV)	Corrected Reading (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
4874	PK	H	-	36.15	-	17.38	53.53	74	-20.47
4874	AV	H	-	36.15	-	10.51	46.66	54	-7.34
7311	PK	H	-	45.16	-	10.44	55.6	74	-18.4
7311	AV	H	-	45.16	-	5.1	50.26	54	-3.74
9748	PK	H	-	46.9	-	4.61	51.51	74	-22.49
9748	AV	H	-	46.9	-	-1.33	45.57	54	-8.43
12185	PK	H	-	48.97	-	-	-	74	-
12185	AV	H	-	48.97	-	-	-	54	-
2062.75	PK	H	-	30.85	-	10.21	41.06	74	-32.94
2062.75	AV	H	-	30.85	-	2.19	33.04	54	-20.96
4125.5	PK	H	-	37.2	-	4.41	41.61	74	-32.39
4125.5	AV	H	-	37.2	-	-2.34	34.86	54	-19.14

Remark:
1.Corrected Level = Reading Level + Correction Factor + Average Factor − Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. All Readings below 1GHz are Peak, above are average value
4. All the Harmonics don't show on the above table were undetectable.
5. "-" means the value was undetectable.

EUT : XI-325H
Test Channel : Middle channel
Test Mode : Transmitted

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Average Factor (dB)	Reading (dBuV)	Corrected Reading (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
4874	PK	V	-	36.15	-	23.46	59.61	74	-14.39
4874	AV	V	-	36.15	-	14.81	50.96	54	-3.04
7311	PK	V	-	45.16	-	13.08	58.24	74	-15.76
7311	AV	V	-	45.16	-	5.19	50.35	54	-3.65
9748	PK	V	-	46.9	-	6.33	53.23	74	-20.77
9748	AV	V	-	46.9	-	-0.81	46.09	54	-7.91
12185	PK	V	-	48.97	-	-	-	74	-
12185	AV	V	-	48.97	-	-	-	54	-
2062.75	PK	V	-	30.85	-	15.56	46.41	74	-27.59
2062.75	AV	V	-	30.85	-	5.63	36.48	54	-17.52
4125.5	PK	V	-	37.2	-	7.64	44.84	74	-29.16
4125.5	AV	V	-	37.2	-	-2.07	35.13	54	-18.87

Remark:
1.Corrected Level = Reading Level + Correction Factor + Average Factor − Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. All Readings below 1GHz are Peak, above are average value
4. All the Harmonics don't show on the above table were undetectable.
5. "-" means the value was undetectable.

EUT : XI-325H
Test Channel : High channel
Test Mode : Transmitted

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Average Factor (dB)	Reading (dBuV)	Corrected Reading (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
4924	PK	H	-	36.15	-	21.45	57.6	74	-16.4
4924	AV	H	-	36.15	-	14.29	50.44	54	-3.56
7386	PK	H	-	45.16	-	13.34	58.5	74	-15.5
7386	AV	H	-	45.16	-	5.27	50.43	54	-3.57
9848	PK	H	-	46.9	-	5.31	52.21	74	-21.79
9848	AV	H	-	46.9	-	-2.09	44.81	54	-9.19
12310	PK	H	-	48.97	-	-	-	74	-
12310	AV	H	-	48.97	-	-	-	54	-
2087.75	PK	H	-	30.85	-	13.11	43.96	74	-30.04
2087.75	AV	H	-	30.85	-	4.92	35.77	54	-18.23
4175.5	PK	H	-	37.2	-	3.12	40.32	74	-33.68
4175.5	AV	H	-	37.2	-	-2.03	35.17	54	-18.83

Remark:
1.Corrected Level = Reading Level + Correction Factor + Average Factor − Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. All Readings below 1GHz are Peak, above are average value
4. All the Harmonics don't show on the above table were undetectable.
5. "-" means the value was undetectable.

EUT : XI-325H
Test Channel : High channel
Test Mode : Transmitted

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Average Factor (dB)	Reading (dBuV)	Corrected Reading (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
4924	PK	V	-	36.15	-	22.34	58.49	74	-15.51
4924	AV	V	-	36.15	-	13.31	49.46	54	-4.54
7386	PK	V	-	45.16	-	15.61	60.77	74	-13.23
7386	AV	V	-	45.16	-	6.21	51.37	54	-2.63
9848	PK	V	-	46.9	-	7.34	54.24	74	-19.76
9848	AV	V	-	46.9	-	-0.58	46.32	54	-7.68
12310	PK	V	-	48.97	-	-	-	74	-
12310	AV	V	-	48.97	-	-	-	54	-
2087.75	PK	V	-	30.85	-	15.13	45.98	74	-28.02
2087.75	AV	V	-	30.85	-	5.03	35.88	54	-18.12
4175.5	PK	V	-	37.2	-	6.31	43.51	74	-30.49
4175.5	AV	V	-	37.2	-	-1.14	36.06	54	-17.94

Remark:
1.Corrected Level = Reading Level + Correction Factor + Average Factor − Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. All Readings below 1GHz are Peak, above are average value
4. All the Harmonics don't show on the above table were undetectable.
5. "-" means the value was undetectable.

7. Power Spectrum Density test

7.1 Operating environment

Temperature: 19 ℃
Relative Humidity: 59 %

7.2 Test setup & procedure

The power spectrum density per FCC §15.247(d) was measured from the antenna port of the EUT using a 50ohm spectrum analyzer with the resolution bandwidth set at 3kHz, the video bandwidth set at 10kHz, a span of 1.5 MHz, and the sweep time set at 500 seconds. The test was performed at 3 channels (lowest, middle and highest channel). The Power Spectral Density measured result is in the following table. See Power Spectrum Density plot as file name "Power Spectrum Density plot.pdf"

7.3 Measured data of Power Spectrum Density test results

Channel	Frequency (MHz)	Measured level (dBm)	Limit (dBm)
Low	2412.34	-6.13	8
Middle	2437.34	-5.04	8
High	2462.34	-5.34	8

8. Emission on the band edge §FCC 15.247(C)

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

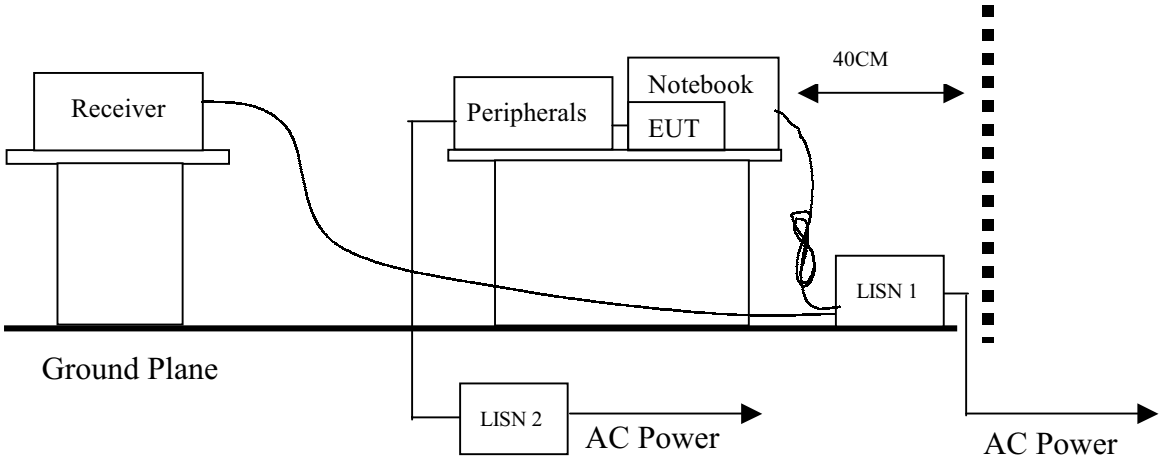
See band-edge plot as file name “Band-edge plot.pdf”.

9. Power Line Conducted Emission test §FCC 15.207

9.1 Operating environment

Temperature: 22 ℃
Relative Humidity: 60 %

9.2 Test setup & procedure



The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50 ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.
Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4/1992 on conducted measurement.
The bandwidth of the field strength meter (R & S Test Receiver ESCS 30) is set at 9kHz.

See Power Line Conducted Emission plot as file name "Power Line Conducted Emission plot.pdf".

Emission Limit

FCC Part 15 Paragraph 15.207		
Freq. (MHz)	Maximum RF Line Voltage	
	uV	dBuV
0.45 - 30	250	48.0

9.3 Power Line Conducted Emission test data

Worst case conducted emission
at High Channel, Line 6.426MHz ,margin:-14.0 dB

EUT : XI-325H
Test Mode : Low Channel
Test Condition : Transmitted Mode

Power Line (circle)	Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Margin (dB) QP
LINE	4.35400	30.9	48.00	-17.10
LINE	4.81800	32.5	48.00	-15.50
LINE	5.18600	27.3	48.00	-20.70
LINE	5.93000	32.6	48.00	-15.40
LINE	6.48200	19.1	48.00	-28.90
LINE	7.13000	21.2	48.00	-26.80
NEUTRAL	4.17800	22.7	48.00	-25.30
NEUTRAL	4.36200	17.9	48.00	-30.10
NEUTRAL	4.82600	16.5	48.00	-31.50
NEUTRAL	5.29000	15.2	48.00	-32.80
NEUTRAL	6.21800	15.0	48.00	-33.00
NEUTRAL	20.34600	14.8	48.00	-33.20

Remark:
1. The reading value including cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81. In the Conducted Emission Test, the uncertainty is within ±2dB
3. The average measurement was not performed when the peak measured data under the limit of average detection.

EUT : XI-325H
Test Mode : Middle Channel
Test Condition : Transmitted Mode

Power Line (circle)	Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Margin (dB) QP
LINE	4.28200	31.4	48.00	-16.60
LINE	4.65000	29.9	48.00	-18.10
LINE	5.30600	33.7	48.00	-14.30
LINE	6.41800	30.4	48.00	-17.60
LINE	6.69800	30.7	48.00	-17.30
LINE	7.35400	31.8	48.00	-16.20
NEUTRAL	5.21000	31.5	48.00	-16.50
NEUTRAL	5.49000	32.4	48.00	-15.60
NEUTRAL	6.33000	33.6	48.00	-14.40
NEUTRAL	6.51400	32.9	48.00	-15.10
NEUTRAL	21.49800	28.2	48.00	-19.80
NEUTRAL	28.29000	15.5	48.00	-32.50

Remark:
1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81. In the Conducted Emission Test, the uncertainty is within ±2dB
3. The average measurement was not performed when the peak measured data under the limit of average detection.

EUT : XI-325H
Test Mode : High Channel
Test Condition : Transmitted Mode

Power Line (circle)	Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Margin (dB) QP
LINE	4.18600	29.3	48.00	-18.70
LINE	4.93000	30.2	48.00	-17.80
LINE	5.12200	33.7	48.00	-14.30
LINE	5.95400	31.0	48.00	-17.00
LINE	6.42600	34.0	48.00	-14.00
LINE	6.97800	29.6	48.00	-18.40
NEUTRAL	4.74600	28.9	48.00	-19.10
NEUTRAL	5.40200	32.6	48.00	-15.40
NEUTRAL	5.96200	33.3	48.00	-14.70
NEUTRAL	6.42600	33.1	48.00	-14.90
NEUTRAL	6.98600	32.5	48.00	-15.50
NEUTRAL	21.49800	27.5	48.00	-20.50

Remark:
1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81. In the Conducted Emission Test, the uncertainty is within ±2dB
3. The average measurement was not performed when the peak measured data under the limit of average detection.