



Test Report

Applicant : ZyXEL Communications Corporation
Equipment Type : ISDN TA
Model : Omni.net LCD PLUS
FCC ID : I88omnetlcdplusu

Report No. : 996H009FI



Test Report Certification

QuieTek Corporation

No.75-1, Wang-Yeh Valley, Yung-Hsing, Chiung-Lin,
Hsin-Chu County, Taiwan, R.O.C.

Tel : 886-3-592-8858, Fax: 886-3-592-8859

E-Mail : quietek@ms24.hinet.net

Accredited by NIST(NVLAP), VCCI, BSMI, DNV, TUV

Applicant : ZyXEL Communications Corporation
 Address : No.6 Innovation Rd. II , Science-Based Industrial Park , Hsin-Chu , Taiwan , R.O.C.
 Equipment Type : ISDN TA
 Model : Omni.net LCD PLUS
 FCC ID. : I88omnetlcdplusu
 Measurement Standard : CISPR 22/1994
 Measurement Procedure : ANSI C63.4 /1992
 Operation Voltage : 120Vac/60Hz
 Classification : Class B
 Test Result : Complied
 Test Date : June 24 , 1999
 Report No. : 996H009FI



The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented by: Lisa Chen

Test Engineer: Rico Sung

Approved: Gene Chang

Lisa Chen

Rico Sung

Gene Chang



TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION.....	4
1.1 EUT DESCRIPTION	4
1.2 TESTED SYSTEM DETAILS.....	5
1.3 EUT CONFIGURATION	7
1.4 EUT EXERCISE SOFTWARE.....	8
1.5 TEST PERFORMED	8
1.6 TEST FACILITY	9
2. CONDUCTED EMISSION	10
2.1 TEST EQUIPMENT LIST	10
2.2 TEST SETUP	10
2.3 LIMITS	10
2.4 TEST PROCEDURE.....	11
2.5 TEST RESULTS	11
3. RADIATED EMISSION.....	12
3.1 TEST EQUIPMENT	12
3.2 TEST SETUP	12
3.3 LIMITS	13
3.4 TEST PROCEDURE.....	13
3.5 TEST RESULTS	13
4. SUMMARY OF TEST RESULTS	14
5. EMI REDUCTION METHOD DURING COMPLIANCE TESTING	23
6. TEST PHOTOGRAPHS.....	24
7. EUT DETAILED PHOTOGRAPHS	28
ATTACHMENT	
LABORATORY OF LICENSE	

1. General Information

1.1 EUT Description

Applicant	: ZyXEL Communications Corporation
Address	No.6 Innovation Rd. II , Science-Based Industrial Park , Hsin-Chu , Taiwan , R.O.C.
Equipment Type	: ISDN TA
Model	: Omni.net LCD PLUS
FCC ID	: I88omnetlcdplusu
Operation Voltage	: 120Vac/60Hz
Data Cable	: 25Pin female to 25Pin male, Non-Shielded , 1.8m
USB Cable	: Non-Shielded , 1.6m
Power Adaptor	: 25Pin male to 9Pin female ,(16V AC)Non-Shielded , 1.8m.



1.2 Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

1.2.1 Notebook

Model Number : EXTENSA 503T
Serial Number : 9145B0160C91000CF2M
FCC ID : DoC
Manufacturer : Acer
Data Cable : Shield , 15m

1.2.2 Joystick (USB)

Model Number : JPD110
Serial Number : 9814A15646
FCC ID : DoC
Manufacturer : Maxxtro
Data Cable : Shielded, 1.7m

1.2.3 Modem

Model Number : 1414
Serial Number : 980033038
FCC ID : IFAXDM1414
Manufacturer : ACEEX
Data Cable : Shielded, 1.5m
Power Adapter : ACCEX, M/N: SCP41-91000A
Cable Output : Shielded, 1.5m

1.2.4 Printer

Model Number : C2642A
Serial Number : MY75N1D2BC
FCC ID : B94C2642X
Manufacturer : HP
Data Cable : Shielded, 1.2m
Power Adapter : NMB, M/N: C2175A
Cable for AC IN: Non-Shielded, 0.7m
Cable for AC Out: Non-Shielded, 1.5m



1.2.5 Telephone A

Model Number : K-903S
Serial Number : 103378
Manufacturer : TENTE
Data Cable : Non-Shield , 2m

1.2.6 Telephone B

Model Number : K-903S
Serial Number : 131868
Manufacturer : TENTE
Data Cable : Shield , 2m

Partner PC**1.2.7 Host Personal Computer**

Model Number : P2L97
Serial Number : 9837
FCC ID : DoC
Manufacturer : ASUS
LAN Cord : 500TX
Power Cord : Non-Shielded, 1.8m

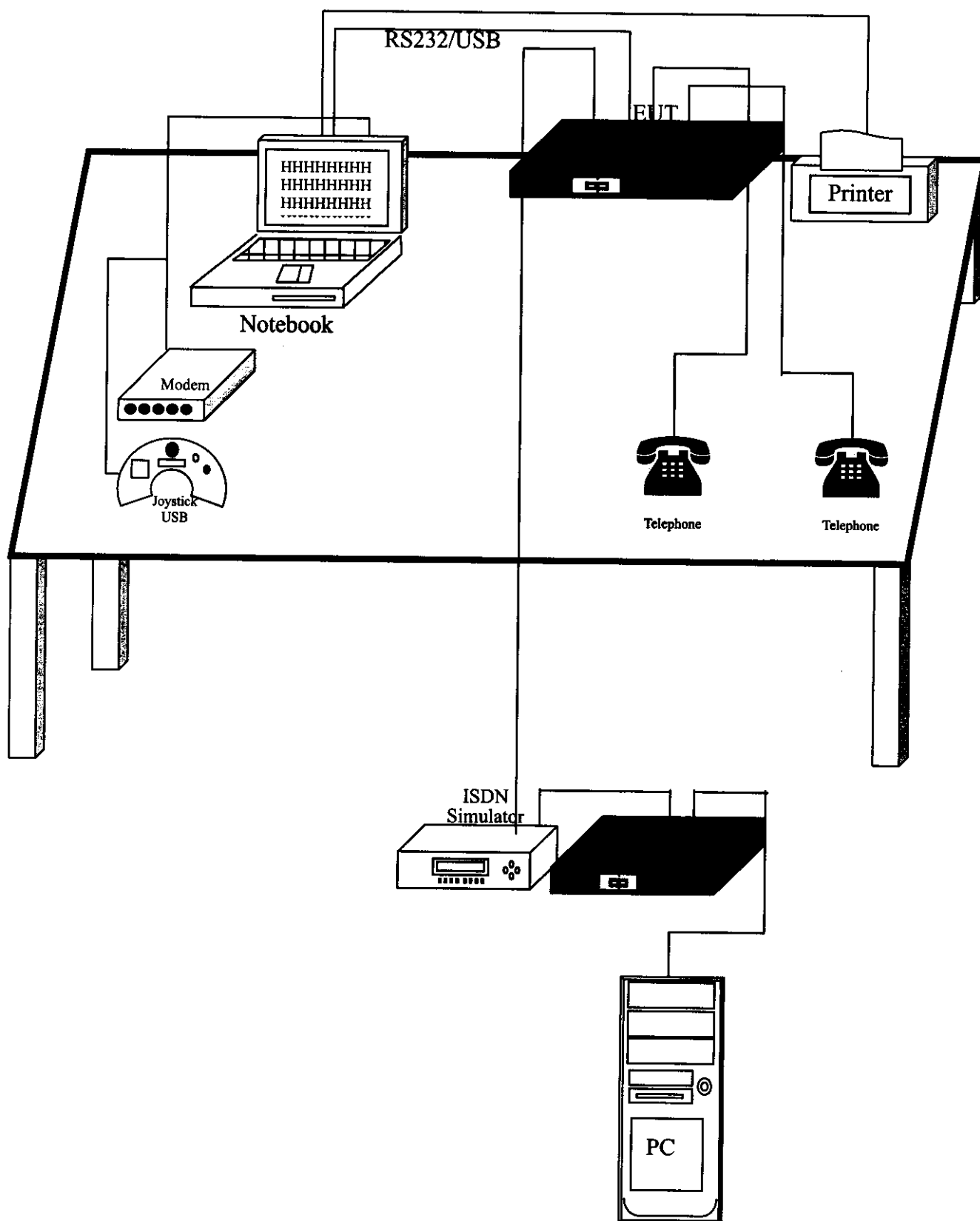
1.2.8 ISDN Simulator

Model Number : ISDN 2000AF
Serial Number : AF96013076
Manufacturer : MERGE Technologies Group, Inc.
Data Cable : Non-Shield , 15m

1.2.9 ISDN TA

Model Number : RT 338
Serial Number : N/A
Manufacturer : ZyXEL
Power Adapter : Non-Shielded, 1.8m
Data Cable : Non-Shield , 15m

1.3 EUT Configuration



1.4 EUT Exercise Software

The EUT exercise program used during conducted testing was designed to exercise the EUT in a manner similar to a typical use. The exercise sequence is listed as below:

- 1.4.1 Setup the EUT and simulators as shown on 1.3.
- 1.4.2 Turn on the power of all equipment.
- 1.4.3 Boot the PC from Hard Disk .
- 1.4.4 Data will communicate between personal computer and partner notebook personal computer through ISDN Router (EUT) that is connected to USB port of personal computer.
- 1.4.5 The personal computer's and partner notebook personal computer's monitor will show the transmitting and receiving characteristics when the communication is success.
- 1.4.6 Printer and modem will keep at standby mode during EUT operation.
- 1.4.7 Telecom signal was communicate between personal computer and partner notebook PC A through the ISDN port of the EUT
- 1.4.8 Repeat the above procedure 1.4.4 to 1.4.7

1.5 Test performed

Conducted emissions were invested over the frequency range from **0.15MHz to 30MHz** using a receiver bandwidth of 9kHz.

Radiated emissions were invested over the frequency range from **30MHz to 1000MHz** using a receiver bandwidth of 120kHz. Radiated testing was performed at an antenna to EUT distance of 10 meters .

1.6 Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: November 3, 1998 File on

Federal Communications Commission

FCC Engineering Laboratory

7435 Oakland Mills Road

Columbia, MD 21046

Reference 31040/SIT1300F2



September 30, 1998 Accreditation on NVLAP

NVLAP Lab Code: 200347-0



February 23, 1999 Accreditation on DNV

Statement No. : 413-99-LAB11

December 8, 1998 Registration on VCCI

Registration No. for No.2 Shielded Room C-858

Registration No. for No.1 Open Area Test Site R-823

Registration No. for No.2 Open Area Test Site R-835



January 04, 1999 Accreditation on TÜV Rheinland

Certificate No.: I9865712-9901



Name of firm : QuieTek Corporation

Site location : No.75-1, Wang-Yeh Valley, Yung-Hsing Tsuen,
Chiung-Lin, Hsin-Chu County, Taiwan, R.O.C.



2. Conducted Emission

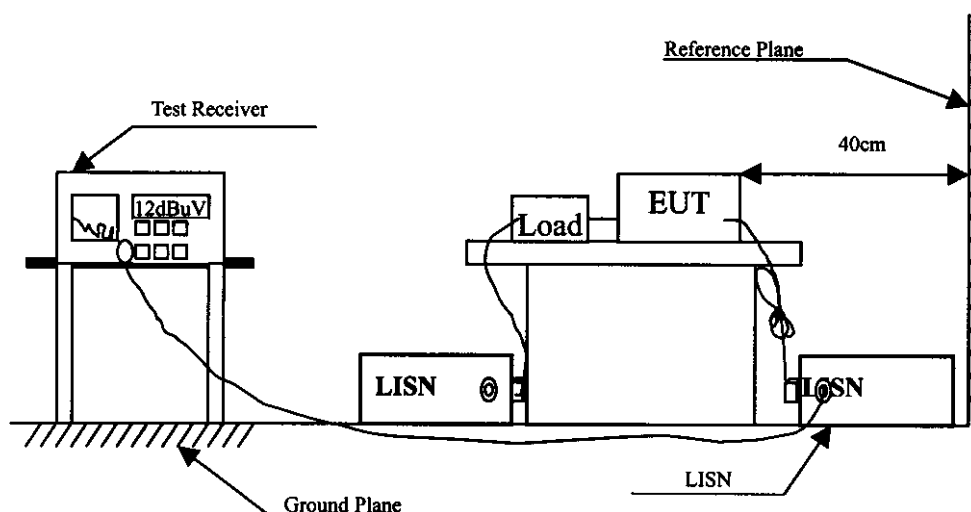
2.1 Test Equipment List

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 1999	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 1999	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 1999	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	N/A	
5	N0.2 Shielded Room			N/A	

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2.2 Test Setup



2.3 Limits

CISPR 22 Limits (dBuV)					FCC Part 15 Subpart B (dBuV)				
Frequency MHz	Class A		Class B		Frequency MHz	Class A		Class B	
	QP	AV	MHz	AV		uV	dBuV	uV	dBuV
0.15 - 0.50	79	66	66-56	56-46	0.45-1.705	1000	60.0	250	48.0
0.50-5.0	73	60	56	46	1.705-30	3000	69.5	250	48.0
5.0 - 30	73	60	60	50					

Remarks : In the above table, the tighter limit applies at the band edges.

2.4 Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). 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. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. 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.

2.5 Test Results

The emission from the EUT was below the specified limits. The worst case emissions are shown in Chapter 4. The acceptance criterion was met and the EUT passed the test.

3. Radiated Emission

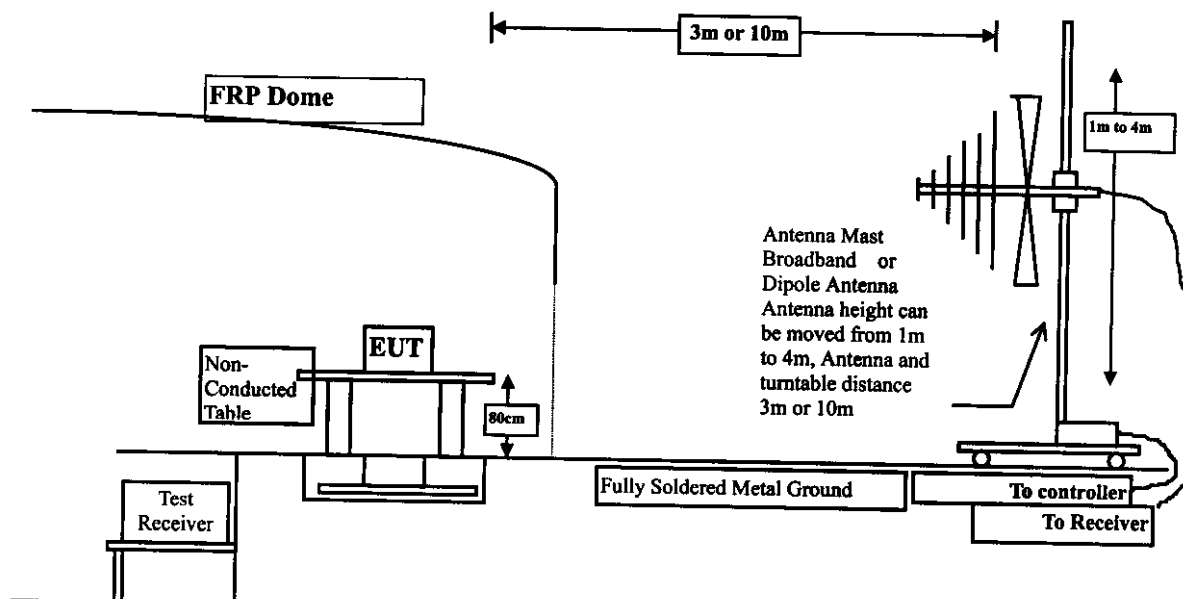
3.1 Test Equipment

The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 1	X	Test Receiver	R & S	ESCS 30 / 825442/14	May, 1999
		Spectrum Analyzer	Advantest	R3261C / 71720140	May, 1999
		Pre-Amplifier	HP	8447D/3307A01812	May, 1999
	X	Bilog Antenna	Chase	CBL6112B / 12452	Sep., 1998
	X	Horn Antenna	EM	EM6917 / 103325	May, 1999
SITE # 2	X	Test Receiver	R & S	ESCS 30 / 825442/17	May, 1999
		Spectrum Analyzer	Advantest	R3261C / 71720609	May, 1999
		Pre-Amplifier	HP	8447D/3307A01814	May, 1999
	X	Bilog Antenna	Chase	CBL6112B / 2455	Sep., 1998
	X	Horn Antenna	EM	EM6917 / 103325	May, 1999

- Note: 1. All equipment upon which need to calibrated are with calibration period of 1 year.
 2.. Mark "X" test instruments are used to measure the final test results.

3.2 Test Setup



3.3 Limits

CISPR 22 Limits (dBuV)					FCC Part 15 Subpart B (dBuV)				
Frequency MHz	Class A		Class B		Frequency	Class A		Class B	
	Distance (m)	dBuV/m	Distance (m)	dBuV/m		uV	dBuV	uV	dBuV
30 – 230	10	40	10	30	30 – 88	90	39	100	40.0
230 – 1000	10	47	10	37	88 – 216	150	43.5	150	43.5
					216 – 960	210	46.5	200	46.0
					960 - 2000	300	49.5	500	54.0

Remark: 1. The tighter limit shall apply at the edge between two frequency bands.

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.

3. RF Line Voltage (dBuV) = 20 log RF Line Voltage (uV)

3.4 Test Procedure

The EUT and its simulators 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 10 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 polarization 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.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCS 30) is 120 kHz.

3.5 Test Results

The emission from the EUT was below the specified limits. The worst case emissions are shown in Chapter 4. The acceptance criterion was met and the EUT passed the test.

4. Summary of Test Results

The test results in the emission was and were performed according to the requirements of measurement standard and process. QuieTek Corporation is assumed full responsibility for the accuracy and completeness of these measurements. The test data of the emission is listed as the attached data.

All the tests were carried out with the EUT in normal operation, which was defined as:

Mode 1: RS232

Mode 2: USB

The EUT passed all the tests.

The uncertainty is calculated in accordance with NAMAS NIS 81, The total uncertainty for this test is as follows:

➤ **Emission Test**

- Uncertainty in the Conducted Emission Test: $< \pm 2.0 \text{ dB}$
- Uncertainty in the field strength measured: $< \pm 4.0 \text{ dB}$

CONDUCTED EMISSION DATA

Date of Test : June 24 , 1999 EUT : ISDN TA
 Test Mode : Mode 1 Detect Mode : Quasi-Peak & Average

Frequency	Cable	LISN	Reading Level	Measurement Level	Limits
MHz	Loss	Factor	Line1	Line1	
	dB	dB	dBuV	dBuV	dBuV
2.305	0.15	0.14	25.43	25.72	56.00
2.497	0.16	0.14	26.14	26.44	56.00
5.059	0.20	0.17	23.47	23.84	60.00
*15.360	0.33	0.33	33.84		60.00
24.575	0.38	0.53	23.55	24.45	60.00
29.571	0.40	0.59	23.94	24.93	60.00

Average:

2.305	0.15	0.14	21.80	22.09	46.00
2.497	0.16	0.14	22.10	22.40	46.00
5.059	0.20	0.17	14.90	15.27	50.00
15.360	0.33	0.36	30.40	31.08	50.00
24.575	0.38	0.53	23.50	24.40	50.00
29.571	0.40	0.59	21.40	22.39	50.00

Remarks:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " * ", means this data is the worse emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.



CONDUCTED EMISSION DATA

Date of Test	: June 24 , 1999	EUT	: ISDN TA
Test Mode	: Mode 1	Detect Mode	: Quasi-Peak & Average

Frequency	Cable	LISN	Reading Level	Measurement Level	Limits
MHz	Loss	Factor	Line2	Line2	
	dB	dB	dBuV	dBuV	dBuV
0.156	0.00	0.10	41.18	41.28	65.65
2.304	0.15	0.14	25.11	25.40	56.00
5.361	0.21	0.17	22.21	22.59	60.00
13.287	0.31	0.30	27.06	27.67	60.00
*15.359	0.33	0.36	35.27	35.95	60.00
29.877	0.40	0.60	25.13	26.13	60.00

Average:

0.156	0.00	0.10	22.80	22.90	55.67
2.304	0.15	0.14	21.60	21.89	46.00
5.361	0.21	0.17	14.40	14.78	50.00
13.287	0.31	0.30	23.90	24.51	50.00
15.359	0.33	0.36	32.00	32.68	50.00
29.877	0.40	0.60	21.40	22.40	50.00

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
- 2.“ * ”, means this data is the worse emission level.
- 3.Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.

CONDUCTED EMISSION DATA

Date of Test	June 24 , 1999	EUT	ISDN TA
Test Mode	Mode 2	Detect Mode	Quasi-Peak & Average

Frequency	Cable	LISN	Reading Level	Measurement Level	Limits
	Loss	Factor	Line1	Line1	
MHz	dB	dB	dBuV	dBuV	dBuV
*0.158	0.00	0.10	41.32	41.42	65.58
2.498	0.16	0.14	27.29	27.59	56.00
5.123	0.20	0.17	23.74	24.11	60.00
15.361	0.33	0.36	33.52	34.20	60.00
24.576	0.38	0.53	23.90	24.80	60.00
29.570	0.40	0.59	26.92	27.91	60.00

Average:

0.158	0.00	0.10	24.30	24.40	55.57
2.498	0.16	0.14	23.00	23.30	46.00
5.123	0.20	0.17	13.70	14.07	50.00
15.361	0.33	0.36	30.40	31.08	50.00
24.576	0.38	0.53	23.30	24.20	50.00
29.570	0.40	0.59	24.10	25.09	50.00

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
- 2.“ * ”, means this data is the worse emission level.
- 3.Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.

CONDUCTED EMISSION DATA

Date of Test	: June 24 , 1999	EUT	: ISDN TA
Test Mode	: Mode 2	Detect Mode	: Quasi-Peak & Average

Frequency	Cable	LISN	Reading Level	Measurement Level	Limits
	Loss	Factor	Line2	Line2	
MHz	dB	dB	dBuV	dBuV	dBuV
0.151	0.00	0.10	41.68	41.78	65.95
2.202	0.15	0.13	22.16	22.44	56.00
2.498	0.16	0.14	27.31	27.61	56.00
4.841	0.20	0.17	20.23	20.60	56.00
*15.360	0.33	0.36	35.37	36.05	60.00
29.576	0.40	0.59	29.69	30.68	60.00

Average:

0.151	0.00	0.10	19.00	19.10	55.94
2.202	0.15	0.13	19.00	19.28	46.00
2.498	0.16	0.14	23.30	23.60	46.00
4.841	0.20	0.17	11.40	11.77	46.00
15.360	0.33	0.36	32.10	32.78	50.00
29.576	0.40	0.59	26.90	27.89	50.00

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
- 2.“ * ”, means this data is the worse emission level.
- 3.Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.



RADIATED EMISSION DATA

Date of Test	June 24, 1999	EUT	ISDN TA
Test Mode	Mode 1	Detect Mode	Quasi-Peak

Freq.	Cable	Probe	PreAMP	Reading	Measurement	Margin	Limit	Ant	Turn
		Loss Factor		Level	Horizontal				
MHz		dB	dB/m	dB	dBuV	dBuV/m	dB	dBuV/m	cm deg
48.000		1.33	8.92	0.00	1.82	12.07	17.93	30.00	393 115
61.440		1.45	5.39	0.00	9.10	15.94	14.06	30.00	393 198
122.880		2.05	11.93	0.00	1.55	15.53	14.47	30.00	393 112
153.600		2.35	10.98	0.00	3.04	16.37	13.63	30.00	393 21
*184.320		2.64	9.18	0.00	11.01	22.82	7.18	30.00	393 139
192.000		2.71	9.00	0.00	6.12	17.83	12.17	30.00	393 22
215.040		2.93	9.01	0.00	2.61	14.55	15.45	30.00	393 27
240.000		3.17	11.32	0.00	9.10	23.59	13.41	37.00	393 14
245.760		3.23	12.21	0.00	7.71	23.16	13.84	37.00	393 31
276.480		3.52	12.91	0.00	0.99	17.43	19.57	37.00	393 118
288.000		3.63	13.11	0.00	11.43	28.17	8.83	37.00	393 100
307.200		3.79	13.43	0.00	4.46	21.67	15.33	37.00	393 158
336.000		3.94	13.76	0.00	8.05	25.75	11.25	37.00	393 152
384.000		4.19	15.11	0.00	10.49	29.79	7.21	37.00	393 126
399.360		4.27	15.82	0.00	3.32	23.41	13.59	37.00	320 203

Remarks:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " * ", means this data is the worse emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.

RADIATED EMISSION DATA

Date of Test : June 24 , 1999 EUT : ISDN TA
 Test Mode : Mode 1 Detect Mode : Quasi-Peak

Freq.	Cable	Probe	PreAMP	Reading	Measurement	Margin	Limit	Ant	Turn
MHz	Loss	Factor	Level	Vertical					
	dB	dB/m	dB	dBuV	dBuV/m	dB	dBuV/m	cm	deg
30.720	1.16	17.79	0.00	3.15	22.10	7.90	30.00	102	43
46.080	1.31	9.76	0.00	11.45	22.51	7.49	30.00	102	20
48.000	1.33	8.03	0.00	8.08	17.44	12.56	30.00	102	42
*61.440	1.45	6.15	0.00	19.68	27.23	2.77	30.00	102	203
76.800	1.60	7.23	0.00	17.24	26.07	3.93	30.00	102	200
122.880	2.05	11.33	0.00	11.20	24.57	5.43	30.00	102	201
138.240	2.20	11.20	0.00	9.18	22.57	7.43	30.00	102	158
144.000	2.24	10.86	0.00	10.61	23.71	6.29	30.00	102	129
153.600	2.35	10.33	0.00	7.31	19.99	10.01	30.00	102	33
168.960	2.49	9.62	0.00	3.52	15.63	14.37	30.00	102	199
184.320	2.64	9.01	0.00	15.01	26.65	3.35	30.00	102	181
192.000	2.71	8.88	0.00	11.65	23.24	6.76	30.00	102	183
199.680	2.78	9.07	0.00	11.63	23.49	6.51	30.00	102	163
215.040	2.93	9.03	0.00	7.28	19.25	10.75	30.00	102	183
230.400	3.07	10.23	0.00	6.36	19.67	17.33	37.00	102	200
240.000	3.17	11.22	0.00	8.52	22.91	14.09	37.00	102	123
245.760	3.23	12.01	0.00	9.20	24.45	12.55	37.00	102	11
288.000	3.63	13.17	0.00	8.96	25.77	11.23	37.00	102	14
291.840	3.67	13.41	0.00	4.15	21.23	15.77	37.00	102	203
307.200	3.79	13.84	0.00	6.19	23.81	13.19	37.00	102	191
336.000	3.94	14.63	0.00	9.04	27.61	9.39	37.00	102	21
384.000	4.19	15.50	0.00	9.77	29.46	7.54	37.00	102	18
414.720	4.35	16.64	0.00	5.04	26.03	10.97	37.00	102	14
480.000	4.69	17.20	0.00	2.21	24.10	12.90	37.00	102	178

Remarks:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " * ", means this data is the worse emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.



RADIATED EMISSION DATA

Date of Test	: June 24 , 1999	EUT	:	ISDN TA
Test Mode	: Mode 2	Detect Mode	:	Quasi-Peak

Freq.	Cable	Probe	PreAMP	Reading	Measurement	Margin	Limit	Ant	Turn
		Loss Factor		Level	Horizontal				
MHz		dB	dB/m	dB	dBuV	dBuV/m	dB	dBuV/m	cm deg
48.000		1.33	8.92	0.00	0.88	11.13	18.87	30.00	393 203
61.440		1.45	5.39	0.00	7.47	14.31	15.69	30.00	393 46
122.880		2.05	11.93	0.00	1.61	15.59	14.41	30.00	393 124
*144.000		2.24	11.15	0.00	10.80	24.20	5.00	30.00	393 40
153.600		2.35	10.98	0.00	3.48	16.81	13.19	30.00	393 94
184.320		2.64	9.18	0.00	9.84	21.65	8.35	30.00	393 126
192.000		2.71	9.00	0.00	8.30	20.01	9.99	30.00	393 203
215.040		2.93	9.01	0.00	2.99	14.93	15.07	30.00	393 30
240.000		3.17	11.32	0.00	9.47	23.96	13.04	37.00	393 18
245.760		3.23	12.21	0.00	5.52	20.97	16.03	37.00	393 162
288.000		3.63	13.11	0.00	8.14	24.88	12.12	37.00	393 108
307.200		3.79	13.43	0.00	4.06	21.27	15.73	37.00	393 201
336.000		3.94	13.76	0.00	8.50	26.20	10.80	37.00	393 194
384.000		4.19	15.11	0.00	11.35	30.65	6.35	37.00	393 134
399.360		4.27	15.82	0.00	2.82	22.91	14.09	37.00	393 156
480.000		4.69	17.00	0.00	2.13	23.82	13.18	37.00	393 119

Remarks:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. " * ", means this data is the worse emission level.
3. Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.



RADIATED EMISSION DATA

Date of Test	: June 24 , 1999	EUT	:	ISDN TA
Test Mode	: Mode 2	Detect Mode	:	Quasi-Peak

Freq.	Cable	Probe	PreAMP	Reading	Measurement	Margin	Limit	Ant	Turn
		Loss Factor		Level	Vertical				
MHz		dB	dB/m	dB	dBuV	dBuV/m	dB	dBuV/m	cm deg
30.720		1.16	17.79	0.00	6.19	25.14	4.86	30.00	102 15
48.000		1.33	8.03	0.00	8.53	17.89	12.11	30.00	102 7
61.440		1.45	6.15	0.00	19.98	27.57	2.43	30.00	102 199
122.880		2.05	11.33	0.00	9.91	23.28	6.72	30.00	102 200
144.000		2.24	10.86	0.00	8.84	21.94	8.06	30.00	102 9
153.600		2.35	10.33	0.00	8.78	21.46	8.54	30.00	102 123
*184.320		2.64	9.01	0.00	16.30	27.94	2.06	30.00	102 97
192.000		2.71	8.88	0.00	11.51	23.10	6.90	30.00	102 191
215.040		2.93	9.03	0.00	5.67	17.64	12.36	30.00	102 61
240.000		3.17	11.22	0.00	7.07	21.46	15.54	37.00	102 65
245.760		3.23	12.01	0.00	7.73	22.98	14.02	37.00	102 38
276.480		3.52	12.66	0.00	1.73	17.91	19.09	37.00	102 139
288.000		3.63	13.17	0.00	7.23	24.04	12.96	37.00	102 36
307.200		3.79	13.84	0.00	4.76	22.38	14.62	37.00	102 72
336.000		3.94	14.63	0.00	9.51	28.08	8.92	37.00	102 6
368.640		4.11	15.60	0.00	0.32	20.03	16.97	37.00	102 170
384.000		4.19	15.50	0.00	9.51	29.20	7.80	37.00	102 80
432.000		4.44	16.83	0.00	2.69	23.97	13.03	37.00	102 46
480.000		4.69	17.20	0.00	2.76	24.65	12.35	37.00	102 189

Remarks:

- 1.All Readings below 1GHz are Quasi-Peak, above are average value.
- 2.“ * ”, means this data is the worse emission level.
- 3.Emission Level = Reading Level + Antenna Factor + Cable loss

Attached individual pages of peak scan curve data sheets.



5. EMI Reduction Method During Compliance Testing

No modification was made during testing.

