## EMI TESTING REPORT

MODEL: APRI-76  FCCID: F825K4APRI76  PREPARED FOR:  DTK COMPUTER INC.  770 EPPERSON DRIVE  CIDY OF INDUSTRY, CA 91748,	EUT : <u>PC SYSTEM</u>
PREPARED FOR:  DTK COMPUTER INC.  770 EPPERSON DRIVE  CIDY OF INDUSTRY, CA 91748,	MODEL: APRI-76
DTK COMPUTER INC.  770 EPPERSON DRIVE  CIDY OF INDUSTRY, CA 91748,	FCCID: F825K4APRI76
U.S.A.	DTK COMPUTER INC. 770 EPPERSON DRIVE

# PREPARED BY:

SPECTRUM RESEARCH & TESTING LABORATORY INC.

NO. 101-10, LING 8, SHAN-TONG LI CHUNG-LI CITY, TAOYUAN, TAIWAN, R.O.C.

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PAGE : 2 OF 41

## TABLE OF CONTENTS

1.	TEST REPORT CERTIFICATION4
2.	TEST STATEMENT
	2.1 TEST STATEMENT5
	2.2 DEPARTURE FROM DOCUMENT POLICIES, PROCEDURE OR SPECIFICATIONS6
3.	EUT MODIFICATIONS7
4.	MODIFICATION LETTER8
5.	CONDUCTED POWER LINE TEST
	5.1 TEST EQUIPMENT9
	5.2 TEST PROCEDURE10-11
	5.3 EUT OPERATING CONDITION12
	5.4 TEST PROCEDURE13
	5.5 TEST SETUP14
	5.6 RADIATED EMISSION LIMIT15
	5.7 CONDUCTED POWER LINE TEST RESULT16-17
6.	RADIATED EMISSION TEST
	6.1 TEST EQUIPMENT18
	6.2 CONFIGURATION OF THE EUT19
	6.3 EUT OPERATING CONDITION19
	6.4 TEST PROCEDURE19
	6.5 TEST SETUP20-21
	6.6 RADIATED EMISSION LIMIT22
	6.7 RADIATED EMISSION TEST RESULT23-24
7.	PHOTOS OF TESTING25-41

PAGE : 3 OF 41

Spectrum Research & Testing Lab. FCC ID: F825K4APRI76 Report#: T7K19-
1. TEST REPORT CERTIFICATION
APPLICANT :DTK COMPUTER INC
ADDRESS: 770 EPPERSON DRIVE  CIDY OF INDUSTRY, CA 91748,  U.S.A.
EUT DESCRIPTION : PC SYSTEM
(A) POWER SUPPLY :115/230V
(B) MODEL : APRI-76
(C) FCC ID : <u>F825K4APRI76</u>
FINAL TEST DATE : <u>12/18/1997</u>
MEASUREMENT PROCEDURE USED :
PART 15 SUB PART B OF FCC RULES AND
REGULATIONS ( 47 CFR PART 15 )
FCC / ANSI C63.4 - 1992
WE HEREBY SHOW THAT:
THE MEASUREMENTS SHOWN IN THE ATTACHMENT WERE
MADE IN ACCORDANCE WITH THE PROCEDURES INDICATED,
AND THE ENERGY EMITTED BY THE EQUIPMENT WAS
FOUND TO BE WITHIN THE LIMITS APPLICABLE.
TESTING ENGINEER: Site out Date 13/19/99
SUPERVISOR: DATE 12 /19 /97
APPROVED BY: DATEDATE

PAGE : 4 OF 41

## 2. TEST STATEMENT

## 2.1 TEST STATEMENT

TO whom it may concern,

This letter is to explain the test condition of this project. The EUT be tested as the following status.

CPU: PENTIUM - 233 MHz
CPU: PENTIUM - 266 MHz
CPU: PENTIUM - 300 MHz

CPU Clock Signal: 66 MHz
CPU Clock Signal: 66 MHz
CPU Clock Signal: 66 MHz

The data shown in this report reflects the worst-case data for each condition as listed ablve.

Please disregard any other conditions that shown in this user manual.

PAGE : 5 OF 41

## 2. TEST STATEMENT

2.2 DEPARTURE FROM DOCUMENT POLICIES, PROCEDURE OR SPECIFICATIONS

DID	HAVE ANY DEPARTURE FROM DOCUMENT POLICIES & PROCEDURES OR FROM SPECIFICATIONS.
	YES , NON/A
	IF YES, THE DESCRIPTION AS BELOW.

### 2.3 TEST STATEMENT

- 1. THE CERTIFICATE OR REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY.
- 2. THE REPORT MUST NOT BE USED BY THE CLIENT TO CLAIM PRODUCT ENDORSEMENT BY NVLAP OR ANY AGENCY OF THE U.S. GOVERNMENT.

PAGE : 6 OF 41

### 3. EUT MODIFICATIONS

THE FOLLOWING ACCESSORIES WERE ADDED TO THE EUT DURING TESTING:

- 1).ADDED ONE GROUND WIRE FROM COM1, COM2 AND LPT CONTACT TO LOGIC GROUND.
- 2).ADDED ONE GROUND WIRE FROM KEYBOARD AND MOUSE CONTACT TO LOGIC GROUND.
- 3).SHORTED L12.
- 4).ADDED 220PF CAPS FROM COM1 AND COM2 PIN 1 TO 9 TO GROUND. GROUND.
- 5).ADDED 27PF CAPS FROM RS1 PIN 5 AND PIN 8 TO GROUND.
- 6).ADDED 27PF CAPS FROM RS3 PIN 5, 6 AND PIN 8 TO GROUND.
- 7).ADDED BEADS (30 OHM AT 100MHz) AND 15PF CAPS FROM RS7 PIN 5 AND PIN 6 SERIES TO GROUND.
- 8).ADDED 27PF CAPS FROM POWER GOOD TO GROUND.
- 9).ADDED BEAD(400 OHM AT 100MHz) FROM DC50 AND DC51 SERIES TO GROUND.
- 10).ADDED 27PF CAP FROM RS5 PIN 5 TO GROUND.
- 11).ADDED 27pf CAP FROM RS4 PIN 5, 7 AND PIN 8 TO GROUND.
- 12).ADDED 4 OHM SERIES ON L13 AND L14 LOCATION.
- 13).ADDED 27PF CAPS FROM RS2 PIN 5, 7 AND PIN 8 TO GROUND.
- 14). IMPROVED BACK METEL PAD OF I/O PORTS TO CONTACT CHASSIS GROUND.
- 15).ADDED ONE CORE AT POWER SUPPLY CONNECTOR.

PAGE: 7 OF 41

4. MODIFICATION LETTER

THIS SECTION CONTAINS THE FOLLOWING DOCUMENTS:

A. LETTER OF MODIFICATIONS

Federal Communications Commission Authorization and Evaluation Division 7435 Oakland Mills Road Columbia, MD 21046

Dear Sir/Madam:

This is to serve as proper notice that our company agrees to make all modifications to FCC ID listed in section 3.0 of the test report submitted by Spectrum Research and Testing Laboratory, Inc.

Respectfully,

Harvey Liu

Managing Director

Date: 1-1-98 TO 1-1-99

## 5. CONDUCTED POWER LINE TEST

# 5.1 TEST EQUIPMENT

THE FOLLOWING TEST EQUIPMENT WAS USED DURING THE CONDUCTED POWER LINE TEST :

EQUIPMENT/ FACILITIES	SPECIFICAT -IONS	MANUFACTURER	MODEL#/ SERIAL#	DATE OF CAL. & CAL.CENTER	DUE DATE
SPECTRUM ANALZER	9 KHz TO 1 GHz	НР	8590L/ 3624A01317	OCT, 1997 ETC	1Y
EMI TEST RECEIVER	9 KHz TO 30 MHz	ROHDE & SCHWARZ	ESHS30/ 893517/013	OCT, 1997 ETC	1Y
LISN	50 uH, 50 ohm	SOLAR ELECTRONICS	9252-50- R24-BNC/ 951315	AUGUST, 1997 ETC	1Y
LISN	50 uH, 50 ohm	SOLAR ELECTRONICS	9252-50- R24-BNC/ 951318	AUGUST, 1997 ETC	1Y
SIGNAL GENERATOR	9 KHz TO 1080 MHz	ROHDE & SCHWARZ	SMY01/ 841104/019	MAY, 1997 ETC	1Y
POWER CONVERTER	0 TO 300 VAC 47 - 500 Hz	AFC	AFC-1KW/ 850510	APRIL, 1997 SRT	1Y

PAGE : 9 OF 41

## 5.2 CONFIGURATION OF THE EUT

THE EUT WAS CONFIGURED ACCORDING TO ANSI C63.4 - 1992. ALL INTERFACE PORTS WERE CONNECTED TO THE APPROPRIATE PERIPHERALS. ALL PERIPHERALS AND CABLES ARE LISTED BELOW.

# -<u>EUT</u>

DEVICE	MANUFACTURER	MODEL #	FCCID
PC SYSTEM	DTK COMPUTER INC.	APRI-76	F825K4APRI76

## -REMARK

## - INTERNAL DEVICES

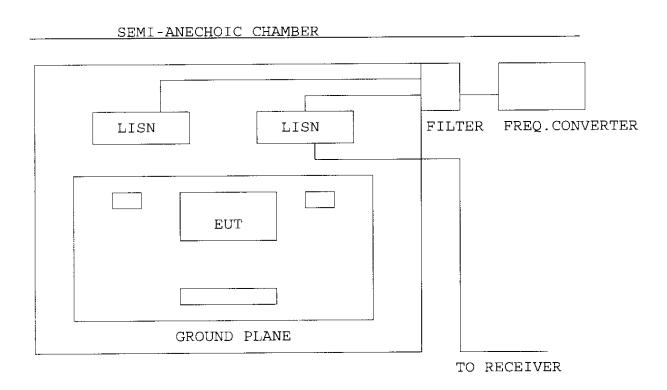
<u>DEVICE</u> <u>MANU</u>		<del> </del>
MAIN BOARD DTK POWER SUPPLY DTK HDD QUAN FDD(3.5") TEAC VGA CARD TAUS	FD-235HF	N/A N/A N/A N/A N/A

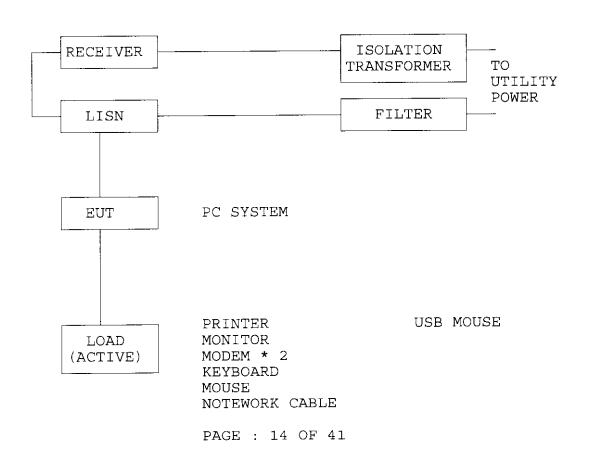
PAGE : 10 OF 41

## 5.4 TEST PROCEDURE

THE EUT WAS TESTED ACCORDING TO ANSI C63.4 - 1992. THE CONDUCTED TEST WAS PERFORMED IN AN ANECHOIC CHAMBER. THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. THE LISN USED WAS 50 ohm / 50 UHENRY AS SPECIFIED BY SECTION 5.1 OF ANSI C63.4 - 1992.CABLES AND PERIPHERALS WERE MOVED TO FIND THE MAXIMUM EMISSION LEVELS FOR EACH FREQUENCY.

## 5.5 TEST SETUP





# 5.6 CONDUCTED POWER LINE EMISSION LIMIT

FREQUENCY RANGE (MHz)	CLASS A	CLASS B
0.045 - 1.705	1000 uV	250 uV
1.705 - 30	3000 uV	250 uV

NOTE: IN THE ABOVE TABLE, THE TIGHTER LIMIT APPLIES AT THE BAND EDGES.

PAGE : 15 OF 41

### 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : <u>28</u> C

HUMIDITY: <u>78</u> %RH

FREQUENCY (MHz)	LINE 1 (uv)	LINE 2 (uv)	LIMIT (uv)
0.715	61.0	56.2	250
0.853	59.6	57.5	250
2.220	24.0	22.1	250
6.150	*	48.8	250
9.270	45.2	36.7	250
13.970	22.4	22.9	250
23.920	63.1	59.6	250

REMARKS: (1).\* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY

- (2).UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB
- (3).CPU: PENTIUM 233MHz CLOCK CHIP: 66MHz
- (4).TEST CONFIGURATION PLEASE SEE 4.2
- (5).TEST EQUIPMENT PLEASE SEE 4.1
- (6).ANY DEPARTURE FROM SPECIFICATION : N/A

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SIGNED	ву	TESTING	ENGINEER	:		6	11	Ş	3	nut;	/1

PAGE : 16 OF 41

## 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : <u>28</u> C

HUMIDITY : \_\_\_\_\_\_\_\_ %RH

FREQUENCY (MHz)	LINE 1 (uv)	LINE 2 (uv)	LIMIT (uv)
0.576	70.8	57.5	250
0.846	58.9	56.9	250
1.120	50.1	45.2	250
2.210	24.3	21.4	250
6.120	17.0	27.5	250
10.410	33.9	37.6	250
25.460	61.7	61.0	250

REMARKS: (1).\* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY

- (2).UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB
- (3).CPU: PENTIUM 266MHz CLOCK CHIP: 66MHz
- (4). TEST CONFIGURATION PLEASE SEE 4.2
- (5).TEST EQUIPMENT PLEASE SEE 4.1
- (6).ANY DEPARTURE FROM SPECIFICATION : N/A

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PAGE: 17 OF 41

### 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : 28 C

HUMIDITY: <u>78</u> %RH

FREQUENCY (MHz)	LINE 1 (uv)	LINE 2 (uv)	LIMIT (uv)	
0.576	73.3	58.9	250	
0.848	63.8	59.6	250	
2.210	22.9	17.2	250	
5.910	5.910 24.5		250	
10.600	39.8	62.4	250	
24.230	64.6	37.2	250	

REMARKS : (1).\* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY

- (2).UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB
- (3).CPU: PENTIUM 300MHz CLOCK CHIP: 66MHz
- (4).TEST CONFIGURATION PLEASE SEE 4.2
- (5).TEST EQUIPMENT PLEASE SEE 4.1
- (6).ANY DEPARTURE FROM SPECIFICATION: N/A

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PAGE : 18 OF 41

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### 5.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT 3 METERS.

THE MEASUREMENTS <u>ABOVE 1 GHz</u> WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 C HUMIDITY : 78 %RH

FREQ.	CABLE	ANT.			EMISS	LMTS	
(MHz)	LOSS (dB)	FACTOR (dB)	HORIZ	VERT	HORIZ	VERT	(uV)
42.10	0.80	9.80	26.4	26.2	70.79	69.18	100
136.7	1.40	10.0	26.0	24.8	74.13	64.57	150
470.0	2.60	17.0	17.9	17.1	74.99	68.39	200
502.2	2.70	17.2	19.9	18.0	97.72	77.62	200
539.3	2.90	18.6	20.5	18.5	125.9	100.0	200
607.2	3.00	19.0	18.6	18.5	107.2	105.9	200
672.6	3.30	20.1	17.8	19.5	114.8	139.6	200

- REMARKS: (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.
  - (2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.
  - (3). CPU: PENTIUM 233MHz CLOCK CHIP: 66MHz

  - (5). TEST EQUIPMENT PLEASE SEE 5.1
  - (6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS <+/-4dB
  - (7). ANY DEPARTURE FROM SPECIFICATION : N/A

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0101100		12011110						,

#### 5.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM <u>30 MHz</u> TO <u>1 GHz</u> WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT <u>3</u> METERS. THE MEASUREMENTS <u>ABOVE 1 GHz</u> WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF <u>3</u> METERS.

TEMPERATURE: 28 C HUMIDITY: 78 %RH

FREQ.	CABLE	ANT.	· · · · · · · · · · · · · · · · · · ·		EMISS	LMTS	
(MHz)	LOSS (dB)	FACTOR (dB)	HORIZ	VERT	HORIZ	VERT	(uV)
42.10	0.8	9.80	27.2	26.5	77.62	71.61	100
97.90	1.2	7.40	25.5	*	50.70	*	150
127.0	1.4	8.10	*	25.6	*	56.89	150
201.1	1.7	9.90	25.4	27.3	70.79	88.10	150
437.4	2.7	16.4	19.8	*	88.10	*	200
502.1	2.7	17.2	20.1	18.6	100.0	84.14	200
539.2	2.9	18.6	21.7	19.1	144.5	107.2	200
672.6	3.3	20.1	18.0	20.5	117.5	156.7	200

REMARKS: (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

- (2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.
  - (3). CPU: PENTIUM 266MHz CLOCK CHIP: 66MHz
- (4). SAMPLE CALCULATION
  20 LOG(EMISSION)uV/m = CABLE LOSS(dB)+FACTOR(dB)+READING
  (dBuV/m)
  - (5). TEST EQUIPMENT PLEASE SEE 5.1
- (6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS <+/-4dB
  - (7). ANY DEPARTURE FROM SPECIFICATION : N/A

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## 5.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 1 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT 3 METERS.

THE MEASUREMENTS ABOVE 1 GHz WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE: 28 C HUMIDITY: 78 %RH

FREQ.	CABLE	ANT.			EMISS:	LMTS	
(MHz)	LOSS (dB)	FACTOR (dB)	HORIZ	VERT	HORIZ	VERT	(uV)
42.1	0.8	9.80	25.5	26.8	68.30	74.13	100
127.1	1.4	8.10	27.0	27.5	66.83	70.19	150
201.2	1.7	9.90	26.2	27.0	77.62	85.11	150
437.4	2.7	16.4	19.7	*	87.09	*	200
502.2	2.7	17.2	20.6	19.1	105.9	89.13	200
539.2	2.9	18.6	18.1	19.5	95.50	112.2	200
607.1	3.0	19.0	17.5	18.3	94.41	103.5	200
672.6	3.3	20.1	18.1	20.9*	118.9	164.1	200

REMARKS : (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

- (2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.
  - (3). CPU: PENTIUM 300MHz CLOCK CHIP: 66MHz
- (4). SAMPLE CALCULATION
  20 LOG(EMISSION)uV/m = CABLE LOSS(dB)+FACTOR(dB)+READING
  (dBuV/m)
- (5). TEST EQUIPMENT PLEASE SEE 5.1
- (6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS <+/-4dB

		(7).	ANY	DEPA	RTURE	FROM	SPECIFICATION	:	<u>N/A</u>	:	
							$\neg$	1	10	arth	
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## 6. RADIATED EMISSION TEST

# 6.1 TEST EQUIPMENT

THE FOLLOWING TEST EQUIPMENT WAS USED DURING THE RADIATED EMISSION TEST:

			+	<del> </del>	
EQUIPMENT / FACILITIES	SPECIFICAT -IONS	MANUFACTUR -ER	MODEL#/ SERIAL#	DATE OF CAL. & CAL. CENTER	DUE DATE
RECEIVER	20 MHz TO 1000 MHz	R&S	ESVS 30/ 841977/003	MARCH, 1997 ITRI	1Y
SPECTRUM ANALYZER	100 Hz TO 1500 MHz	НР	8568B/ 3019A05294	OCT , 1997 ETC	1Y
SPECTRUM ANALYZER	9 KHz TO 22 GHz	НР	8593E/ 3322A00670	OCT, 1997 ETC	1Y
SPECTRUM ANALYZER	100 Hz TO 1000 MHz	IFR	A-7550/ 2684/1248	AUGUST, 1997 ETC	1Y
SPECTRUM ANALYZER	9 KHz TO 2900 MHz	НР	8594A/ 3229A00399	MAY, 1997 ETC	1Y
SIGNAL GENERATOR	9 KHz TO 1080 MHz	ROHDE & SCHWARZ	SMY01/ 841104/019	MAY, 1997 ETC	1Y
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/ 9003-535	MARCH, 1997 SRT	1Y
DIPOLE ANTENNA	28 MHz TO 1000 MHz	EMCO	3121C/ 9611-1239	DEC, 1997 SRT	1Y
BI-LOG ANTENNA	26 MHz TO 2000 MHz	EMCO	3142/ 96081-1073	DEC, 1997 SRT	1Y
BI-LOG ANTENNA	26 MHz TO 1100 MHz	EMCO	3143/ 9509-1152	DEC, 1997 SRT	1Y
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	НР	8447D/ 2944A08402	MARCH, 1997 ETC	1Y
PRE-AMPLIFIER	0.1 MHz TO 1300 MHz	HP	8447D/ 2944A06412	OCT, 1997 ETC	1Y
HORN ANTENNA	1 GHz TO 18 GHz	EMCO	3115/ 9012-3619	DEC, 1997 SRT	1Y

PAGE : 19 OF 41

### 6.2 CONFIGURATION OF THE EUT

SAME AS SECTION 5.4 OF THIS REPORT.

### 6.3 EUT OPERATING CONDITION

SAME AS SECTION 5.3 OF THIS REPORT.

### 6.4 TEST PROCEDURE

THE EUT WAS TESTED ACCORDING TO ANSI C63.4 - 1992. THE RADIATED TEST WAS PERFORMED AT SRT LAB'S OPEN SITE. THIS SITE IS ON FILE WITH THE FCC LABORATORY DIVISION, REFERENCE 31040/SIT.

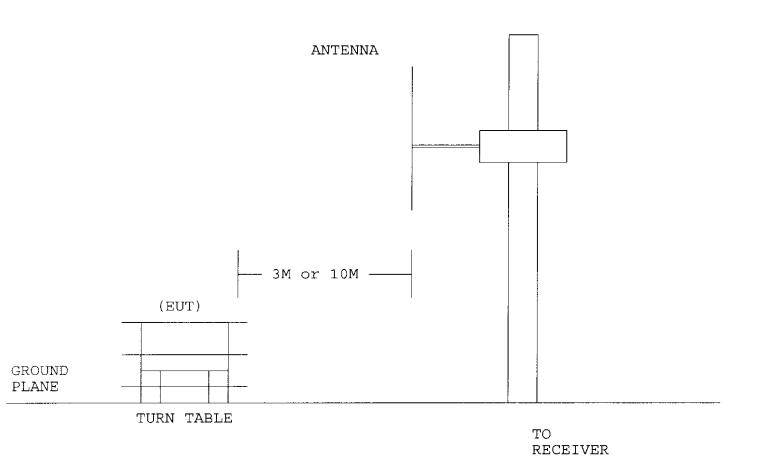
THE FREQUENCY SPECTRUM FROM 30 MHz TO 2 GHz WAS INVESTIGATED.MEASUREMENTS WERE MADE AT THREE METERS WITH AN ADJUSTABLE DIPOLE ANTENNA. PERIPHERALS, CABLES, EUT ORIENTATION, AND ANTENNA HEIGHT WERE VARIED TO FIND THE MAXIMUM EMISSION FOR EACH FREQUENCY.

THE FREQUENCY SPECTRUM FROM 30 MHz TO 2 GHz WAS INVESTIGATED. THE MEASUREMENTS <u>UNDER 1 GHz</u> WITH RESOLUTION BANDWIDTH OF 120 KHz ARE QUASI-PEAK READING MADE AT THREE METERS USING AN ADJUSTABLE DIPOLE ANTENNA. PERIPHERALS, CABLES, EUT ORIENTATION, AND ANTENNA HEIGHT WERE VARIED TO FIND THE MAXTMUM EMISSION FOR EACH FREQUENCY.

THE MEASUREMENTS  $\underline{ABOVE}$  1  $\underline{GHz}$  WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF THREE METERS WITH A HORN ANTENNA.

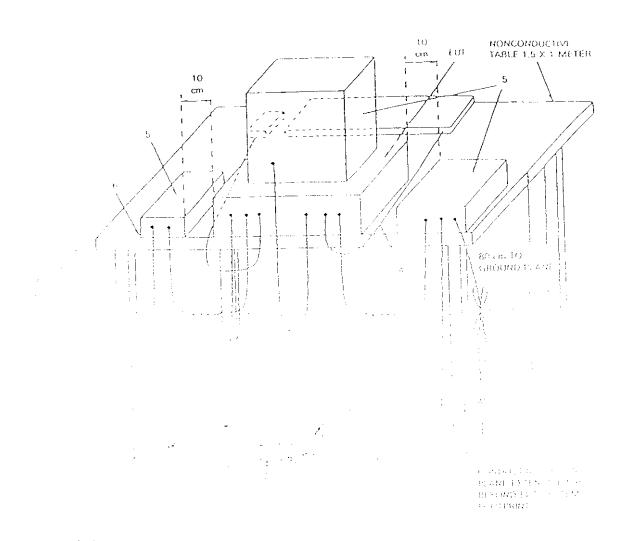
PAGE : 20 OF 41

## 6.5 RADIATED TEST SETUP



PAGE : 21 OF 41

#### 6.5 RADIATED TEST SETUP



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- intersymmetric righted that thing claser than 40 cm to the ground plane shall be tolded back and to the forming a bundle 30 to 40 cm king, hanging approximately in the middle between ground plane and table.
- . Whicables that are connected to a peripheral shall be buildled in center. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1 in
- It HSNs are kept in the test setup for radiated emissions, sie preferred that they be installed under the 1990 José piane with the receptable flesh with the ground plane.
- trables of hand operate Courses, such as keytwards, on the left have bette placed in the left per subjects the recognise
- We will all compare on the control becomes been presented.
   The representation may properly the content considerations of the content of objects the content of t
- 1. We vertical conduction wall reset
- in . However, it's drape to the Casa and are routed over to religible.

### 6.6 RADIATED EMISSION LIMIT

ALL EMISSION FROM A DIGITAL DEVICE, INCLUDING ANY NETWORK OF CONDUCTORS AND APPARATUS CONNECTED THERETO, SHALL NOT EXCEED THE LEVEL OF FIELD STRENGTH SPECIFIED BELOW:

CLASS B

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (uV/m)
30 - 88	3	100
88 - 216	3	150
216 - 960	3	200
ABOVE 960	3	500

CLASS B ( OPEN CASE )

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (uV/m)			
30 - 88	3	199.5			
88 - 216	3	298.5			
216 - 960	3	398.1			

CLASS A

FREQUENCY (MHz)	DISTANCE (m)	FIELD STRENGTH (uV/m)
30 - 88	3	316.3
88 - 216	3	473.2
216 - 960	3	613.0
ABOVE 960	3	1000.0

- NOTE: 1. IN THE EMISSION TABLES ABOVE, THE TIGHTER LIMIT APPLIES AT THE BAND EDGES.
  - 2. DISTANCE REFERS TO THE DISTANCE BETWEEN MEASURING INSTRUMENT, ANTENNA, AND THE CLOSEST POINT OF ANY PART OF THE DEVICE OR SYSTEM.

### 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 2 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT 3 METERS.

THE MEASUREMENTS <u>ABOVE 1 GHz</u> WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF <u>3</u> METERS.

TEMPERATURE: 28 C HUMIDITY: 78 %RH

FREQ.	CABLE	ANT.	READIN	G(dBuV)	EMISS	LMTS	
(MHz)	LOSS (dB)	FACTOR (dB)	HORIZ	VERT	HORIZ	VERT	(uV)
42.1	0.8	9.8	23.9	24.8	53.10	58.90	100
136.7	1.4	10.0	25.6	*	70.80	*	150
437.4	2.5	16.3	13.8	11.7	42.70	33.50	200
539.3	2.9	18.2	18.0	18.9	90.20	100.0	200
672.6	3.3	20.1	16.7	19.7	101.2	142.9	200
941.8	4.0	22.2	9.90	11.2	63.80	74.10	200

REMARKS: (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

- (2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.
- (3). CPU: PENTIUM 233MHz CLOCK CHIP: 66MHz
- (5). TEST EQUIPMENT PLEASE SEE 5.1
- (6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS <+/-4dB
- (7). ANY DEPARTURE FROM SPECIFICATION: N/A

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PAGE: 24 OF 41

#### 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 2 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT 3 METERS.

THE MEASUREMENTS <u>ABOVE 1 GHZ</u> WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 C HUMIDITY : 78 %RH

FREQ.	CABLE	ANT.	READING	G(dBuV)	EMISS	LMTS	
(MHz)	LOSS (dB)	FACTOR (dB)	HORIZ	VERT	HORIZ	VERT	(uV)
127.0	1.4	8.1	*	26.3	*	61.70	150
403.5	2.2	15.6	15.9	19.9	48.40	76.70	200
539.2	2.9	18.2	21.0	*	127.4	*	200
672.6	3.3	20.1	17.7	21.5	113.5	175.8	200
873.9	3.8	22.1	10.9	12.4	69.20	82.20	200

REMARKS: (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

- (2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.
- (3). CPU: PENTIUM 266MHz CLOCK CHIP: 66MHz
- (5). TEST EQUIPMENT PLEASE SEE 5.1
- (6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS <+/-4dB
- (7). ANY DEPARTURE FROM SPECIFICATION: N/A

SIGNED	ву	TESTING	ENGINEER	:	· W	alth
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PAGE: 25 OF 41

### 6.7 RADIATED EMISSION TEST RESULT

THE FREQUENCY SPECTRUM FROM 30 MHz TO 2 GHz WAS INVESTIGATED. ALL READINGS UNDER 1 GHz ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 120 KHZ. MEASUREMENTS WERE MADE AT 3 METERS.

THE MEASUREMENTS <u>ABOVE 1 GHZ</u> WITH A RESOLUTION BANDWIDTH OF 1 MHz ARE PEAK READING AT A DISTANCE OF 3 METERS.

TEMPERATURE : 28 C HUMIDITY : 78 %RH

FREQ.	CABLE	ANT.	READIN(	G(dBuV)	EMISS	LMTS	
(MHz)	LOSS (dB)	FACTOR (dB)	HORIZ	HORIZ VERT		VERT	(uV)
39.7	0.8	9.8	22.4	25.9	44.70	66.80	100
202.2	1.7	9.9	26.1	22.4	76.70	50.10	150
304.0	2.2	14.5	12.6	16.9	29.20	47.90	200
539.3	2.9	18.2	17.9	15.5	89.10	67.60	200
672.6	3.3	20.1	15.4	19.5	87.10	139.6	200
907.8	3.9	22.6	11.4	15.0	78.50	118.9	200

REMARKS: (1). MEASUREMENT DOES NOT APPLY FOR THIS FREQUENCY.

- (2). THE MAXIMUM CONDITION WAS WITH THE MONITOR POWER CORD CONNECTED TO THE PERSONAL COMPUTER.
- (3). CPU: PENTIUM 300MHz CLOCK CHIP: 66MHz
- (5). TEST EQUIPMENT PLEASE SEE 5.1
- (6). UNCERTAINTY IN RADIATED EMISSION MEASURED IS <+/-4dB
- (7). ANY DEPARTURE FROM SPECIFICATION: N/A

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## - PERIPHERALS

DEVICE	MANUFAC -TURER	MODEL# / SERIAL#	FCCID	CABLE
MONITOR	PHILIPS	14B1320W	A3KM064	POWER-S DATA -S
PRINTER	HP	2225C	BS46XU2225C	POWER-UNS DATA -S
MODEM	SMARTEAM	103/212A	EF56A5103/212A	POWER-UNS DATA -S
MODEM	SMARTEAM	103/212A	EF56A5103/212A	POWER-UNS DATA-S
KEYBOARD	EPSON	N860-4871-T001	C9SKB4870	DATA-S
MOUSE	LOGITECH	M-S34	DZL211029	DATA-S
MOUSE	ABIT	97M32U	(M5497M32Ù	DATA-UNS
CASE	DTK	7200	N/A	DATA-UNS

### - <u>REMARK</u>

(1). CABLE - UNS : UNSHIELDED CABLE S : SHIELDED CABLE

(2). CABLES - ALL 1m OR GREATER IN LENGTH-BUNDLED ACCORDING TO ANSI C63.4 - 1992.

PAGE : 11 OF 41

## 5.3 EUT OPERATING CONDITION

OPERATING CONDITION IS ACCORDING TO ANSI C63.4 - 1992.

- 1. EUT POWER ON.
- 2. "H" PATTERN SENT TO THE FOLLOWING PERIPHERALS:
  - PRINTER
  - MONITOR
  - MODEM \* 2
- 3. CPU: PENTIUM 233MHz

CLOCK CHIP : 66MHz

CPU : PENTIUM - 266MHz

CLOCK CHIP : 66MHz

CPU : PENTIUM - 300MHz

CLOCK CHIP : 66MHz

PAGE : 12 OF 41

## 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : <u>28</u> C

HUMIDITY: <u>78</u> %RH

FREQUENCY(MHz)	LINE 1 (dBuv)	LINE 2 (dBuv)	LIMIT (dBuv)	
0.7	41.3	41.0	48	
1.1	40.1	40.1	48	
2.2	33.7	33.1	48	
4.3	30.2	*	48	
28.9	29.5	*	48	

REMARKS: (1).\* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY

- (2).UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB
- (3).CPU: PENTIUM 300MHz CLOCK CHIP: 66MHz
- (4). TEST CONFIGURATION PLEASE SEE 4.2
- (5). TEST EQUIPMENT PLEASE SEE 4.1
- (6) ANY DEPARTURE FROM SPECIFICATION : N/A

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PAGE: 17 OF 41

### 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : 28 C

HUMIDITY: \_\_78\_ %RH

FREQUENCY (MHz)	LINE 1 (dBuv)	LINE 2 (dBuv)	LIMIT (dBuv)
0.7	40.3	40.2	48
1.1	39.9	39.6	48
2.2	34.9	34.4	48
4.8	29.1	*	48
29.7	30.2	29.9	48

REMARKS: (1).\* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY

- (2).UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB
- (3).CPU: PENTIUM 233MHz CLOCK CHIP: 66MHz
- (4). TEST CONFIGURATION PLEASE SEE 4.2
- (5).TEST EQUIPMENT PLEASE SEE 4.1
- (6).ANY DEPARTURE FROM SPECIFICATION : N/A

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PAGE : 15 OF 41

### 5.7 CONDUCTED POWER LINE TEST RESULT

THE FREQUENCY SPECTRUM FROM 0.45 MHz TO 30 MHz WAS INVESTIGATED. ALL READINGS ARE QUASI-PEAK VALUES WITH A RESOLUTION BANDWIDTH OF 9 KHZ.

TEMPERATURE : <u>28</u> C

HUMIDITY: <u>78</u> %RH

FREQUENCY (MHz)	LINE 1 (dBuv)	LINE 2 (dBuv)	LIMIT (dBuv)
0.7	41.1	40.7	48
1.1	40.2	39.9	48
2.2	34.4	33.8	48
4.5	29.2	*	48
30.0	29.3	29.9	48

REMARKS: (1).\* = MEMENT DOES NOT APPLY FOR THIS FREQUENCY

- (2).UNCERTAINTY IN CONDUCTED EMISSION MEASURED IS <+/-2dB
- (3).CPU: PENTIUM 266MHz CLOCK CHIP: 66MHz
- (4). TEST CONFIGURATION PLEASE SEE 4.2
- (5).TEST EQUIPMENT PLEASE SEE 4.1
- (6) ANY DEPARTURE FROM SPECIFICATION: N/A

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PAGE: 16 OF 41