

Marstech Limited

11 Kelfield Street, Etobicoke, Ontario, Canada, M9W 5A1
Telephone (416) 246-1116, Fax (416) 246-1020

Authorized by:
Professional Engineers
Ontario



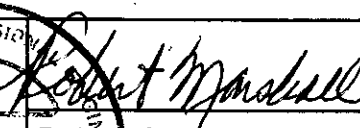
Engineering &
Administrative



Testing For FCC
Submissions/Verifications

Industry Canada
Industrie Canada
Approved Test Facility



TEST REPORT		
REPORT DATE:	20 August 1998	REPORT NO: 98287D
CONTENTS:	See Table of Contents	
SUBMITTOR:	TEC CORPORATION 6-78 Minami-Cho Mishima-Shi, Shizuoka-Ken 411-8520 JAPAN	
SUBJECT:	Model Nos:	TF 471
	FCC ID:	BJIOH-98002
TEST SPECIFICATION	FCC CFR 47 Sections: 15, Subpart B NOTE: Tests Conducted Are "Type" Tests.	
DATE SAMPLE RECEIVED:	N/A	DATE TESTED: 27 May 1998
RESULTS:	Equipment tested complies with referenced specification.	
ALTERATIONS	None	
Tested By:	EMC Japan Corporation	Approved and Certified by:  R. G. MARSHALL Robert G. Marshall, P. Eng. Date: 24 Aug 98
THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF MARSTECH LIMITED. This report was prepared by Marstech Limited for the account of the "Submittor". The material in it reflects Marstech's judgement in light of the information available to it at the time of preparation. Any use which a Third Party makes of this report, or any reliance on decisions to be made based on it, are the responsibility of such Third Parties. Marstech accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.		

TECHNICAL REPORT - FCC 2.1033(b)

Applicant

TEC Corporation
6-78 Minami-Cho, Mishima-Shi
Shizuoka-Ken, JAPAN

FCC Identifier

BJIOH-98002

Manufacturer

TIM Electronics SDN BHD
Bayan Lepas, Penang
MALAYSIA

TABLE OF CONTENTS

<u>Exhibit</u>	<u>Description</u>	<u>FCC Ref.</u>	<u>Page</u>
A	Installation and Operating Instructions Furnished to the User.	2.1033(b)(3)	Exhibit A Exhibit A(1)
B	Description of Circuit Functions	2.1033(b)(4)	Exhibit B Exhibit B(1)
C	Block and Schematic Diagrams	2.1033(b)(5)	Exhibit C
	Block Diagram		Exhibit C(1)-1 to -3
	Schematic Diagram		Exhibit C(2)-1 to -23
D	Report of Measurements/Test Facility/ Test Equipment List	2.1033(b)(6)	Exhibit D Exhibit D(1) [36 Pages]
E	Photographs	2.1033(b)(7)	Exhibit E
	Label		Exhibit E(1)-1 to -2
	Equipment		Exhibit E(2)-1 to -16

EXHIBIT D

(FCC Ref. 2.1033(b)(6))

"Report of Measurements/Test Facility/Test Equipment List"



EMC Japan Corp.

TEST REPORT

ORDER No. : 98051083

DATE : Jun. 3, 1998

CUSTOMER : TEC CORPORATION

EMC Japan Corporation

EMC TEST REPORT

Test Order NO. : 98051083

1. APPLICANT

Jun. 3, 1998

• Company name : TEC CORPORATION
: 6-78, Minami-cho, Mishima-shi, Shizuokaken.
411-8520 Japan
Phone: 0559-76-7293

2. EQUIPMENT UNDER TEST (E. U. T.)

• Device Name : Facsimile
• Model Number : TF471
• Serial Number : 97120006

3. SUMMARY OF TEST RESULTS

Emission test item	Basic standard	Result
RADIATED EMISSION MEASUREMENTS	FCC Part 15 Subpart B Class B: 1996	Complies
CONDUCTED EMISSION MEASUREMENTS	FCC Part 15 Subpart B Class B: 1996	Complies

4. DATE OF TEST

• Test Item received : May. 26, 1998
• Test Completed on : May. 27, 1998

• Test Performed by : E. Okuyama Date : May. 26, 27, 1998

• Test Report Made by : Y. Suzuki Date : Jun. 3, 1998

• Test Report Approved by : Y. Suzuki Date : Jun. 3, 1998

5. TEST PLACE

• Place : EMC Japan Corporation TSUKUI TEST SITE NO. 1
• Address : 2142 Negoya Tsukui-Machi
Kanagawa, 220-0203 Japan

This report shall not be reproduced, except in full without the written approval of EMC Japan.
The results in this report apply only to the sample tested.

EQUIPMENT

No.	Equipment	Manufacturer	Model No.	Serial No.	Note
1	Facsimile	TEC CORPORATION	TF471	97120006	EUT
2	PC	TOSHIBA	PA1196U	8516346	FCC ID: 16CHUK323
3	Printer	HEWLETT PACKARD COMPANY	3630A	3040A643/3	FCC ID: BSD533630A
4	Telephone	NORTHWESTERN BELL PHONES	BELL PHONE	k: J7802	FCC ID: DHT6C3-14584-TE-
5	Mouse	Microsoft Corporation	68874	2311996	FCC ID: C3KKZB1
6	Facsimile	TEC CORPORATION	TF421	95060043	FCC ID: BJJ0H-95003 (CONTROLLER)

USED CABLE

No.	Cable Name	Manufacturer	Length (m)	Bundled Length	Shield	Core	Note
a	AC Cable	TEC CORPORATION	2.0 m	1.0 m	none	none	
b	Modular Cable	TEC CORPORATION	2.0 m	1.0 m	none	none	
c	Modular Cable	TEC CORPORATION	2.0 m	0.8 m	none	none	
d	RS232C Cable	BELKIN	1.5 m	0.5 m	none	none	
e	Parallel Cable	ABEERC CORPORATION	1.8 m	1.2 m	none	none	
f	RGB Cable	—————	0.05m	—————	———	———	

This report shall not be reproduced, except in full without the written approval of EMC Japan.
The results in this report apply only to the sample tested.



EMC Japan Corp.

Order No. 98051083 Page 3 of 36

RADIATED EMISSION

FCC Part 15 Subpart B Class B:1996

List of measurement equipment

ITEM	MANUFACTURER	MODEL	Serial No.
TEST RECEIVER	ROHDE SCHWARZ	ESV	8918147025
TEST RECEIVER	ROHDE SCHWARZ	ESH2	8922377016
SPECTRUM ANALIZER	HEWLETT PACKARD	8567A	2841A00377/ 2848A17271
RF PRE AMP	HEWLETT PACKARD	8447D	2727A05810
LISN	ROHDE SCHWARZ	ESH2-Z5	8926027006
SPECTRUM ANALIZER	HEWLETT PACKARD	8562B	2923A 00418
RF PRE AMP	HEWLETT PACKARD	8449B	3008A00791
CAL. DIPOLE ANTENNA	SCHWARZBECK	VHAP	450/451
CAL. DIPOLE ANTENNA	SCHWARZBECK	UHAP	429/430
DIPOLE ANTENNA	SCHWARZBECK	VHA9103	none
DIPOLE ANTENNA	SCHWARZBECK	UHA9105	none
BICONICAL ANTENNA	SCHWARZBECK	BBA9106	none
LOG-PERT ANTENNA	SCHWARZBECK	UHAP9107	none
LOOP ANTENNA	ROHDE SCHWARZ	MFH2-Z2	893.1037003
HORN ANTENNA	SCHWARZBECK	BBHA 9120-B	121
HORN ANTENNA	SCHWARZBECK	BBHA 9120-B	122
HORN ANTENNA	EMCO(CMT)	3160-07	9603-1048
HORN ANTENNA	EMCO(CMT)	3160-08	9508-1035
HORN ANTENNA	EMCO(CMT)	3160-09	9707-1086
HORN ANTENNA	EMCO(CMT)	3160-10	9704-1051

This report shall not be reproduced, except in full without the written approval of EMC Japan.
The results in this report apply only to the sample tested.

T e s t P l a n

DATE: May. 26, 1998, May. 27, 1998	Condition: 16 C 55%, 18 C 86%
The size of EUT	(347.5(W) × 146.5(H) × 397.5(D)mm) 7.0 kg
Representative operating conditions of the EUT	STANDBY MODE, COPY MODE, TRANSMITTING MODE, RECEIVING MODE, PC PRINT MODE, PC SCAN MODE
Disposition	Table Top, above the ground plane 0.5m
The type of test facility	Open site
The position of the receiving antenna	Height 1-4m at 3 meters distance from the EUT
The type of antenna to be used	Biconical (BBA9106), Log-Peri (UHALP9107)
Test frequency	30MHz-1000MHz
The performance criteria which are acceptable	EUT Complies with Limits of FCC Part 15 Subpart B Class B:1996
Power Supply	A. C. 120V / 1.5A

This report shall not be reproduced, except in full without the written approval of EMC Japan.
The results in this report apply only to the sample tested.

Radiated Emissions Test Setup

TYPE : TF471



Setup1 : 30MHz~1000MHz FRONT&REAR

This report shall not be reproduced, except in full without the written approval of EMC Japan.
The results in this report apply only to the sample tested.

FCC Part 15 Subpart B Class B:1996
RADIATED EMISSION TEST RESULTS

COMPANY : TEC CORPORATION
 MODEL NAME : Facsimile
 MODEL NO. : TF471
 POWER : 120V 1.8A 60Hz
 TEMP : 16°C 88%
 DESCRIPTION : SERIAL NO. 97120006

REPORT NO. : 98051083
 STANDARD : FCC Part 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : STANDBY MODE
 ENGINEER : E. OKUYAMA

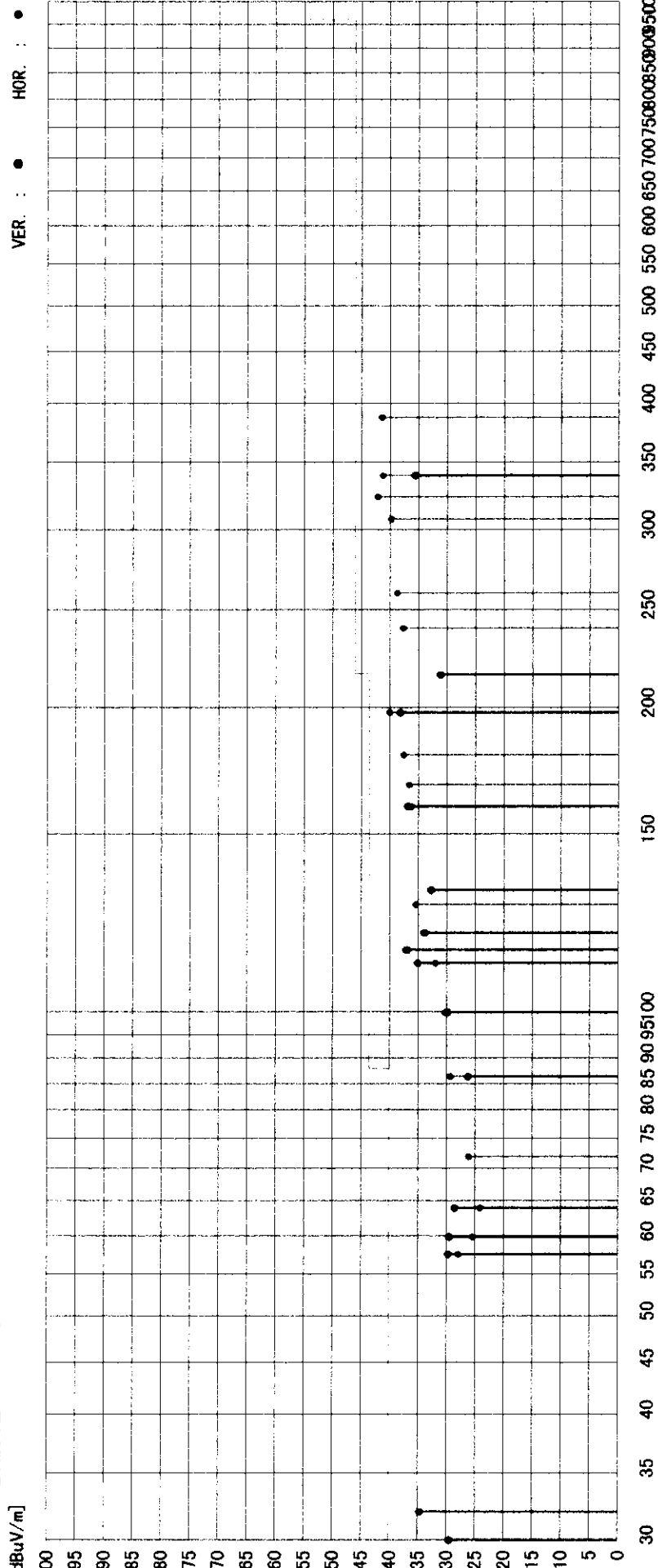
LIMIT1 : FCC Part15 Subpart.B Class B (3m)
 LIMIT2 :

	FREQUENCY [MHz]	METER READING		FACTOR [dB]	FIELD STRENGTH		LIMITS [dBuV/m]	MARGIN		MEMO
		VER. [dBuV]	HOR. [dBuV]		VER. [dBuV/m]	HOR. [dBuV/m]		VER. [dBuV/m]	HOR. [dBuV/m]	
							40.0	10.6		BROAD NOISE
1	30.000	36.5		-7.1	29.4		40.0	5.4		
2	32.000	42.5		-7.9	34.6		40.0			
3	57.600	46.2	44.4	-16.6	29.6	27.8	40.0	10.4	12.2	
4	59.900	46.6	42.5	-17.2	29.4	25.3	40.0	10.6	14.7	
5	63.900	46.1	41.6	-17.6	28.5	24.0	40.0	11.5	16.0	
6	71.900		44.2	-18.2		26.0	40.0		14.0	
7	86.400	43.1	46.2	-16.9	26.2	29.3	40.0	13.8	10.7	
8	99.850	43.2	43.6	-13.4	29.8	30.2	43.5	13.7	13.3	
9	111.800	46.8	43.7	-11.8	35.0	31.9	43.5	8.5	11.6	
10	115.200	48.2	48.5	-11.4	36.8	37.1	43.5	6.7	6.4	
11	119.800	44.7	44.5	-10.8	33.9	33.7	43.5	9.6	9.8	
12	127.800		45.5	-10.2		35.3	43.5		8.2	
13	131.950	42.5		-9.8	32.7		43.5	10.8		
14	159.750	44.2	43.6	-7.4	36.8	36.2	43.5	6.7	7.3	
15	167.750		43.5	-7.0		36.5	43.5		7.0	
16	179.700		43.8	-6.3		37.5	43.5		6.0	
17	197.950	43.6	45.4	-5.5	38.1	39.9	43.5	5.4	3.6	
18	215.650	36.3		-5.2	31.1		43.5	12.4		
19	239.600		42.6	-5.0		37.6	46.0		8.4	
20	259.600		43.1	-4.5		38.6	46.0		7.4	
21	307.500		44.5	-4.8		39.7	46.0		6.3	
22	323.450		46.6	-4.6		42.0	46.0		4.0	
23	339.450	39.9	45.5	-4.3	35.6	41.2	46.0	10.4	4.8	
24	387.400		45.1	-3.7		41.4	46.0		4.6	

COMPANY : TEC CORPORATION
MODEL NAME : Facsimile
MODEL NO. : TF471
POWER : 120V 1.8A 60Hz
TEMP : 16°C 88%
DESCRIPTION : SERIAL NO. 97120006
LIMIT1 : FCC Part15 Subpart. B Class B (3m)
LIMIT2 :

REPORT NO. : 98051083
STANDARD : FCC Part 15
CLASS : B
DISTANCE : 3m
TEST MODE : STANDBY MODE
ENGINEER : E. OKUYAMA

VER. : • HOR. : •



COMPANY : TEC CORPORATION
 MODEL NAME : Facsimile
 MODEL NO. : TF471
 POWER : 120V 1.8A 60Hz
 :
 TEMP : 16°C 88%
 DESCRIPTION : SERIAL NO. 97120006
 :

REPORT NO. : 98051083
 STANDARD : FCC Part 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : COPY MODE
 ENGINEER : E. OKUYAMA

LIMIT1 : FCC Part15 Subpart.B Class B (3m)
 LIMIT2 :

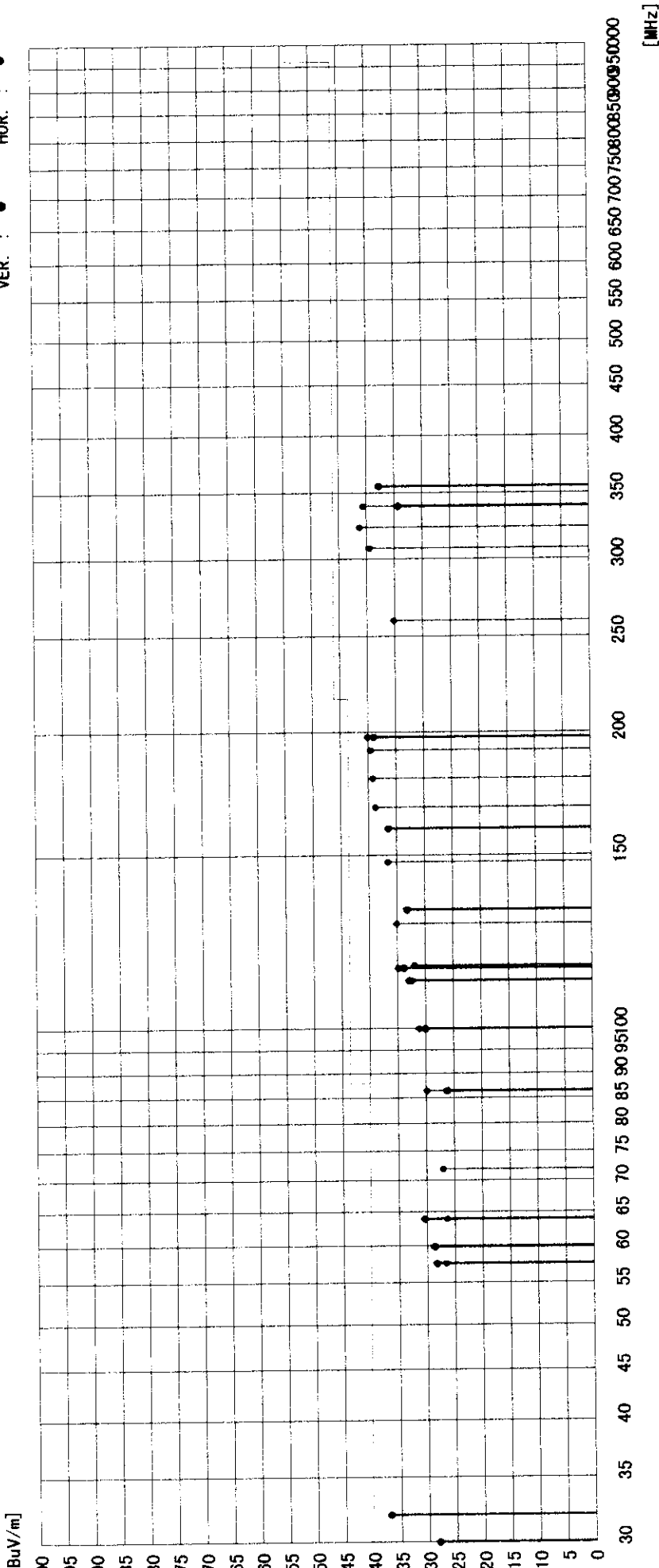
	FREQUENCY [MHz]	METER READING		FACTOR [dB]	FIELD STRENGTH		LIMITS [dBuV/m]	MARGIN		MEMO
		VER. [dBuV]	HOR. [dBuV]		VER. [dBuV/m]	HOR. [dBuV/m]		VER. [dBuV/m]	HOR. [dBuV/m]	
1	30.000	35.1		-7.1	28.0		40.0	12.0		BROAD NOISE
2	32.000	44.8		-7.9	36.9		40.0	3.1		
3	57.600	44.8	43.1	-16.6	28.2	26.5	40.0	11.8	13.5	
4	59.900	45.7	45.9	-17.2	28.5	28.7	40.0	11.5	11.3	
5	63.900	47.9	43.9	-17.6	30.3	26.3	40.0	9.7	13.7	
6	71.900		45.2	-18.2		27.0	40.0		13.0	
7	86.400	43.1	46.7	-16.9	26.2	29.8	40.0	13.8	10.2	
8	99.850	43.4	44.5	-13.4	30.0	31.1	43.5	13.5	12.4	
9	111.800	44.6	44.1	-11.8	32.8	32.3	43.5	10.7	11.2	
10	115.200	45.1	46.2	-11.4	33.7	34.8	43.5	9.8	8.7	
11	115.800		43.1	-11.3		31.8	43.5		11.7	
12	127.800		45.2	-10.2		35.0	43.5		8.5	
13	131.950	42.9		-9.8	33.1		43.5	10.4		
14	147.750		45.1	-8.6		36.5	43.5		7.0	
15	159.750	43.8		-7.4	36.4		43.5	7.1		
16	167.750		45.6	-7.0		38.6	43.5		4.9	
17	179.700		45.4	-6.3		39.1	43.5		4.4	
18	191.700		45.2	-5.8		39.4	43.5		4.1	
19	197.750	44.4	45.5	-5.5	38.9	40.0	43.5	4.6	3.5	
20	259.600		39.6	-4.5		35.1	46.0		10.9	
21	307.500		44.1	-4.8		39.3	46.0		6.7	
22	323.450		45.7	-4.6		41.1	46.0		4.9	
23	339.450	38.6	44.9	-4.3	34.3	40.6	46.0	11.7	5.4	
24	355.450	41.8		-4.1	37.7		46.0	8.3		

COMPANY : TEC CORPORATION
MODEL NAME : Facsimile
MODEL NO. : TF471
POWER : 120V 1.8A 60Hz
TEMP : 16°C 88%
DESCRIPTION : SERIAL NO. 97120006

REPORT NO. : 98051083
STANDARD : FCC Part 15
CLASS : B
DISTANCE : 3m
TEST MODE : COPY MODE
ENGINEER : E. OKUYAMA

LIMIT1 :
LIMIT2 :
FCC Part15 Subpart. B Class B (3m)

VER. : • • HOR. : •



COMPANY : TEC CORPORATION
 MODEL NAME : Facsimile
 MODEL NO. : TF471
 POWER : 120V 1.8A 60Hz
 :
 TEMP : 16°C 88%
 DESCRIPTION : SERIAL NO.97120006
 :

REPORT NO. : 98051083
 STANDARD : FCC Part 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : TRANSMITTING MODE
 ENGINEER : E. OKUYAMA

LIMIT1 : FCC Part15 Subpart.B Class B (3m)
 LIMIT2 :

	FREQUENCY [MHz]	METER READING		FACTOR [dB]	FIELD STRENGTH		LIMITS [dBuV/m]	MARGIN		MEMO
		VER. [dBuV]	HOR. [dBuV]		VER. [dBuV/m]	HOR. [dBuV/m]		VER. [dBuV/m]	HOR. [dBuV/m]	
1	30.000	34.3		-7.1	27.2		40.0	12.8		BROAD NOISE
2	32.000	44.1	39.3	-7.9	36.2	31.4	40.0	3.8	8.6	
3	57.600	43.4		-16.6	26.8		40.0	13.2		
4	59.900	47.7	42.6	-17.2	30.5	25.4	40.0	9.5	14.6	
5	63.900	46.2	42.8	-17.6	28.6	25.2	40.0	11.4	14.8	
6	71.900		44.9	-18.2		26.7	40.0		13.3	
7	86.400		46.7	-16.9		29.8	40.0		10.2	
8	99.850	44.7	44.8	-13.4	31.3	31.4	43.5	12.2	12.1	
9	111.800	47.3	44.1	-11.8	35.5	32.3	43.5	8.0	11.2	
10	115.200	46.9	48.2	-11.4	35.5	36.8	43.5	8.0	6.7	
11	115.800		44.6	-11.3		33.3	43.5		10.2	
12	119.800	44.5	45.1	-10.8	33.7	34.3	43.5	9.8	9.2	
13	127.800		46.9	-10.2		36.7	43.5		6.8	
14	159.750	43.4		-7.4	36.0		43.5	7.5		
15	167.750		43.9	-7.0		36.9	43.5		6.6	
16	179.700		42.2	-6.3		35.9	43.5		7.6	
17	197.950	44.6	45.1	-5.5	39.1	39.6	43.5	4.4	3.9	
18	203.650		43.6	-5.4		38.2	43.5		5.3	
19	215.650		39.8	-5.2		34.6	43.5		8.9	
20	243.600		42.2	-5.0		37.2	46.0		8.8	
21	259.600		43.4	-4.5		38.9	46.0		7.1	
22	307.500		45.1	-4.8		40.3	46.0		5.7	
23	323.500	38.4	46.6	-4.6	33.8	42.0	46.0	12.2	4.0	
24	339.450		45.3	-4.3		41.0	46.0		5.0	
25	355.450	42.5	42.6	-4.1	38.4	38.5	46.0	7.6	7.5	
26	387.400		43.2	-3.7		39.5	46.0		6.5	

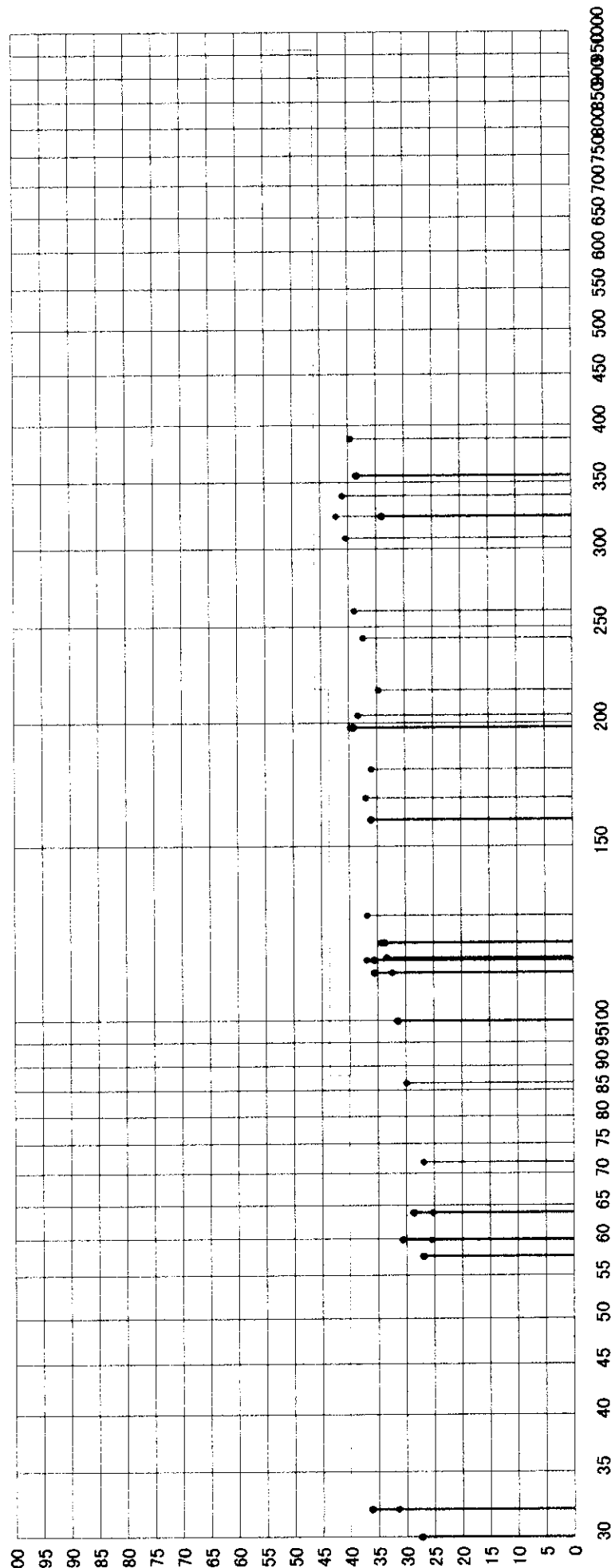
COMPANY : TEG CORPORATION
MODEL NAME : Facsimile
MODEL NO. : TF471
POWER : 120V 1.8A 60Hz
TEMP : 16°C 88%
DESCRIPTION : SERIAL NO. 97120006

REPORT NO. : 98051083
STANDARD : FCC Part 15
CLASS : B
DISTANCE : 3m
TEST MODE : TRANSMITTING MODE
ENGINEER : E. OKUYAMA

LIMIT1 : FCC Part15 Subpart. B Class B (3m)
LIMIT2 :

dBuV/m]

VER. : • • HOR. : •



[MHz]

COMPANY : TEC CORPORATION
 MODEL NAME : Facsimile
 MODEL NO. : TF471
 POWER : 120V 1.8A 60Hz
 :
 TEMP : 16°C 88%
 DESCRIPTION : SERIAL NO.97120006
 :

REPORT NO. : 98051083
 STANDARD : FCC Part 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : RECEIVING MODE
 ENGINEER : E. OKUYAMA

LIMIT1 : FCC Part15 Subpart.B Class B (3m)
 LIMIT2 :

	FREQUENCY [MHz]	METER READING		FACTOR [dB]	FIELD STRENGTH		LIMITS [dBuV/m]	MARGIN		MEMO
		VER. [dBuV]	HOR. [dBuV]		VER. [dBuV/m]	HOR. [dBuV/m]		VER. [dBuV/m]	HOR. [dBuV/m]	
1	32.00	44.7	39.2	-7.9	36.8	31.3	40.0	3.2	8.7	
2	59.90	53.6	46.7	-17.2	36.	29.5	40.0	3.6	10.5	
3	63.900	52.1	43.1	-17.6	34.5	25.5	40.0	5.5	14.5	
4	71.900		45.4	-18.2		27.2	40.0		12.8	
5	86.400		44.5	-16.9		27.6	40.0		12.4	
6	87.900		44.7	-16.7		28.0	40.0		12.0	
7	99.850	43.1	44.2	-13.4	29.7	30.8	43.5	13.8	12.7	
8	111.800	47.1	44.3	-11.8	35.3	32.5	43.5	8.2	11.0	
9	115.200	44.3	47.6	-11.4	32.9	36.2	43.5	10.6	7.3	
10	115.800		43.6	-11.3		32.3	43.5		11.2	
11	119.800	45.8	43.9	-10.8	35.0	33.1	43.5	8.5	10.4	
12	127.800	43.5	44.7	-10.2	33.3	34.5	43.5	10.2	9.0	
13	167.750		44.8	-7.0		37.8	43.5		5.7	
14	179.700		43.6	-6.3		37.3	43.5		6.2	
15	189.600		44.1	-5.9		38.2	43.5		5.3	
16	197.950	44.6	44.7	-5.5	39.1	39.2	43.5	4.4	4.3	
17	203.650		42.7	-5.4		37.3	43.5		6.2	
18	215.650	37.2	41.2	-5.2	32.0	36.0	43.5	11.5	7.5	
19	243.600		41.9	-5.0		36.9	46.0		9.1	
20	259.600		42.1	-4.5		37.6	46.0		8.4	
21	307.500		43.4	-4.8		38.6	46.0		7.4	
22	323.500	37.6	46.5	-4.6	33.0	41.9	46.0	13.0	4.1	
23	339.450		45.4	-4.3		41.1	46.0		4.9	
24	355.450	42.2	42.7	-4.1	38.1	38.6	46.0	7.9	7.4	
25	387.400		44.7	-3.7		41.0	46.0		5.0	
26	403.350		43.5	-3.5		40.0	46.0		6.0	

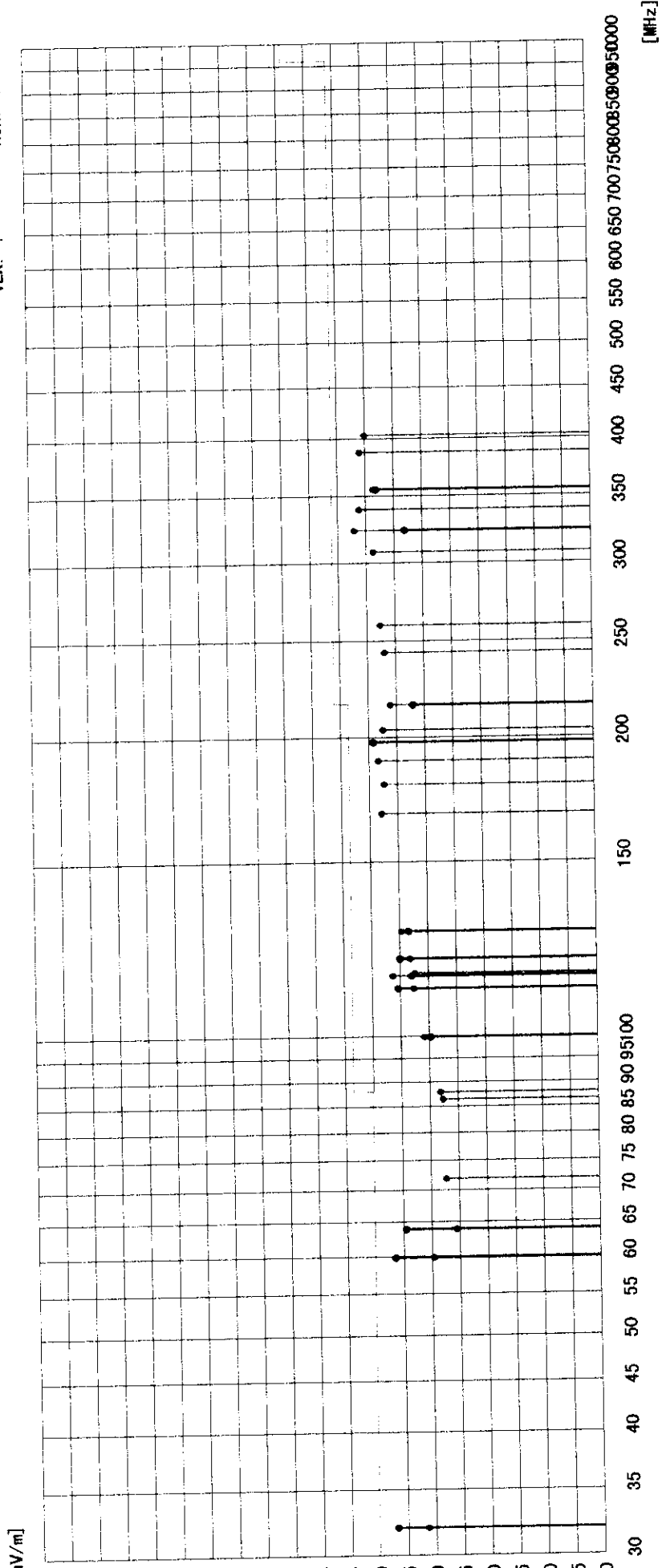
1998/05/26

N01 SITE

C JAPAN Corporation

COMPANY	: TEC CORPORATION	REPORT NO.	: 98051083
MODEL NAME	: Facsimile	STANDARD	: FCC Part 15
MODEL NO.	: TF471	CLASS	: B
POWER	: 120V 1.8A 60Hz	DISTANCE	: 3m
TEMP	: 16°C 88%	TEST MODE	: RECEIVING MODE
DESCRIPTION	: SERIAL NO. 97120006	ENGINEER	: E. OKUYAMA
LIMIT1	: FCC Part15 Subpart. B Class B (3m)		
LIMIT2	:		

VER. : • • HOR. : •



COMPANY : TEC CORPORATION
 MODEL NAME : Facsimile
 MODEL NO. : TF471
 POWER : 120V 1.8A 60Hz
 :
 TEMP : 18°C 86%
 DESCRIPTION : SERIAL NO. 97120006
 :

REPORT NO. : 98051083
 STANDARD : FCC Part 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : PC PRINT MODE
 ENGINEER : E. OKUYAMA

LIMIT1 : FCC Part15 Subpart B Class B (3m)
 LIMIT2 :

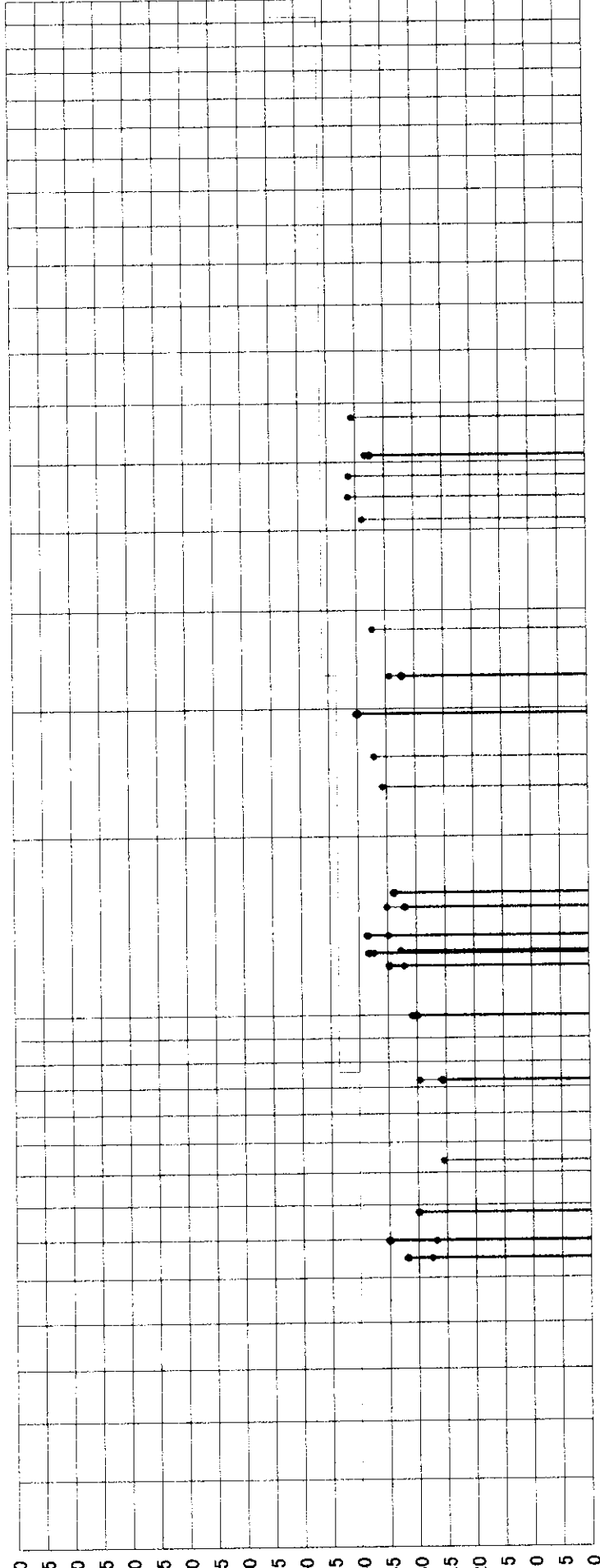
	FREQUENCY [MHz]	METER READING		FACTOR [dB]	FIELD STRENGTH		LIMITS [dBuV/m]	MARGIN		MEMO
		VER. [dBuV]	HOR. [dBuV]		VER. [dBuV/m]	HOR. [dBuV/m]		VER. [dBuV/m]	HOR. [dBuV/m]	
1	57.60	48.3	44.1	-16.6	31.	27.5	40.0	8.3	12.5	
2	59.900	52.1	43.9	-17.2	34.9	26.7	40.0	5.1	13.3	
3	63.900	47.4		-17.6	29.8		40.0	10.2		
4	71.900		43.6	-18.2		25.4	40.0		14.6	
5	86.400	42.5	46.4	-16.9	25.6	29.5	40.0	14.4	10.5	
6	99.850	43.4	44.1	-13.4	30.0	30.7	43.5	13.5	12.8	
7	111.800	46.4	43.9	-11.8	34.6	32.1	43.5	8.9	11.4	
8	115.200	49.6	48.7	-11.4	38.2	37.3	43.5	5.3	6.2	
9	115.800		43.9	-11.3		32.6	43.5		10.9	
10	119.800	49.2	45.5	-10.8	38.4	34.7	43.5	5.1	8.8	
11	127.800	42.1	45.2	-10.2	31.9	35.0	43.5	11.6	8.5	
12	131.950	43.6		-9.8	33.8		43.5	9.7		
13	167.750		42.6	-7.0		35.6	43.5		7.9	
14	179.700		43.4	-6.3		37.1	43.5		6.4	
15	197.950	45.3	45.6	-5.5	39.8	40.1	43.5	3.7	3.4	
16	215.650	37.4	39.5	-5.2	32.2	34.3	43.5	11.3	9.2	
17	239.600		42.2	-5.0		37.2	46.0		8.8	
18	307.500		43.6	-4.8		38.8	46.0		7.2	
19	323.500		45.8	-4.6		41.2	46.0		4.8	
20	339.450		45.4	-4.3		41.1	46.0		4.9	
21	355.450	41.6	42.4	-4.1	37.5	38.3	46.0	8.5	7.7	
22	387.400		44.3	-3.7		40.6	46.0		5.4	

COMPANY : TEC CORPORATION
MODEL NAME : Facsimile
MODEL NO. : TF471
POWER : 120V 1.8A 60Hz
TEMP : 18°C 86%
DESCRIPTION : SERIAL NO. 97120006
LIMIT1 : FCC Part15 Subpart. B Class B (3m)
LIMIT2 :

REPORT NO. : 98051083
STANDARD : FCC Part 15
CLASS : B
DISTANCE : 3m
TEST MODE : PC PRINT MODE
ENGINEER : E. OKUYAMA

VER. : • • • • •
HOR. : •

3uV/m]



30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

[MHz]

COMPANY : TEC CORPORATION
 MODEL NAME : Facsimile
 MODEL NO. : TF471
 POWER : 120V 1.8A 60Hz
 :
 TEMP : 18°C 86%
 DESCRIPTION : SERIAL NO. 97120006
 :

REPORT NO. : 98051083
 STANDARD : FCC Part 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : PC SCAN MODE
 ENGINEER : E. OKUYAMA

LIMIT1 : FCC Part15 Subpart B Class B (3m)
 LIMIT2 :

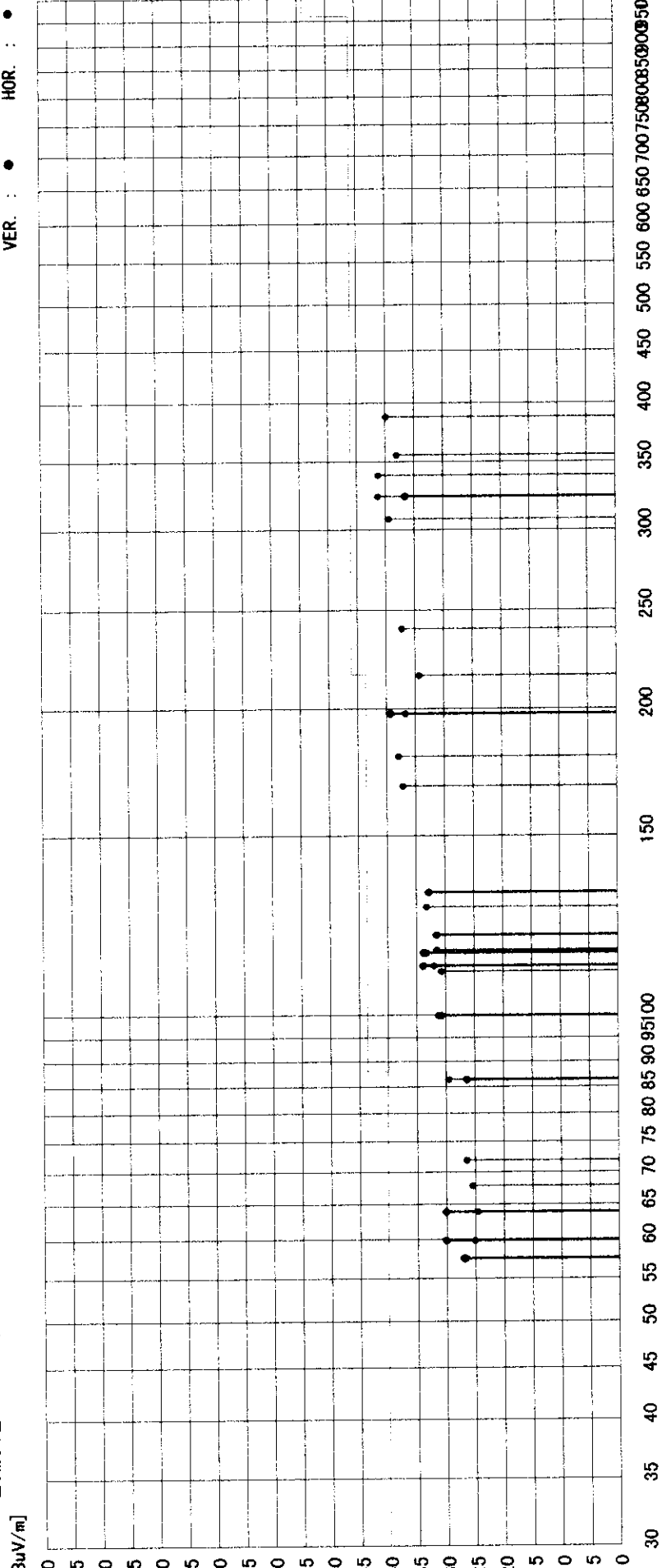
	FREQUENCY [MHz]	METER READING		FACTOR [dB]	FIELD STRENGTH		LIMITS [dBuV/m]	MARGIN		MEMO
		VER. [dBuV]	HOR. [dBuV]		VER. [dBuV/m]	HOR. [dBuV/m]		VER. [dBuV/m]	HOR. [dBuV/m]	
1	57.600	43.5	43.2	-16.6	26.9	26.6	40.0	13.1	13.4	
2	59.900	47.2	42.2	-17.2	30.0	25.0	40.0	10.0	15.0	
3	63.900	47.6	42.1	-17.6	30.0	24.5	40.0	10.0	15.5	
4	67.900		43.4	-18.0		25.4	40.0		14.6	
5	71.900		44.6	-18.2		26.4	40.0		13.6	
6	86.400	43.2	46.3	-16.9	26.3	29.4	40.0	13.7	10.6	
7	99.850	44.1	44.6	-13.4	30.7	31.2	43.5	12.8	12.3	
8	110.400		42.6	-12.0		30.6	43.5		12.9	
9	111.800	45.6	43.7	-11.8	33.8	31.9	43.5	9.7	11.6	
10	115.200	45.1	44.6	-11.4	33.7	33.2	43.5	9.8	10.3	
11	115.800		42.7	-11.3		31.4	43.5		12.1	
12	119.800	42.3		-10.8	31.5		43.5	12.0		
13	127.800		43.3	-10.2		33.1	43.5		10.4	
14	131.950	42.6		-9.8	32.8		43.5	10.7		
15	167.750		44.1	-7.0		37.1	43.5		6.4	
16	179.700		44.2	-6.3		37.9	43.5		5.6	
17	197.950	44.7	42.1	-5.5	39.2	36.6	43.5	4.3	6.9	
18	215.650		39.4	-5.2		34.2	43.5		9.3	
19	239.600		42.2	-5.0		37.2	46.0		8.8	
20	307.500		44.1	-4.8		39.3	46.0		6.7	
21	323.500	41.1	45.8	-4.6	36.5	41.2	46.0	9.5	4.8	
22	339.450		45.5	-4.3		41.2	46.0		4.8	
23	355.450		42.1	-4.1		38.0	46.0		8.0	
24	387.400		43.5	-3.7		39.8	46.0		6.2	

COMPANY : TEC CORPORATION
MODEL NAME : Facsimile
MODEL NO. : TF471
POWER : 120V 1.8A 60Hz
TEMP : 18°C 86%
DESCRIPTION : SERIAL NO. 97120006

REPORT NO. : 98051083
STANDARD : FCC Part 15
CLASS : B
DISTANCE : 3m
TEST MODE : PC SCAN MODE
ENGINEER : E. OKUYAMA

LIMIT1 :
LIMIT2 :
FCC Part15 Subpart. B Class B (3m)

VER. : • • HOR. : •



[MHz]

EMCJ

EMC Japan Corp.

Order No. 98051083 Page 20 of 36

CONDUCTED POWER LINE

FCC Part 15 Subpart B Class B:1996

List of measurement equipment

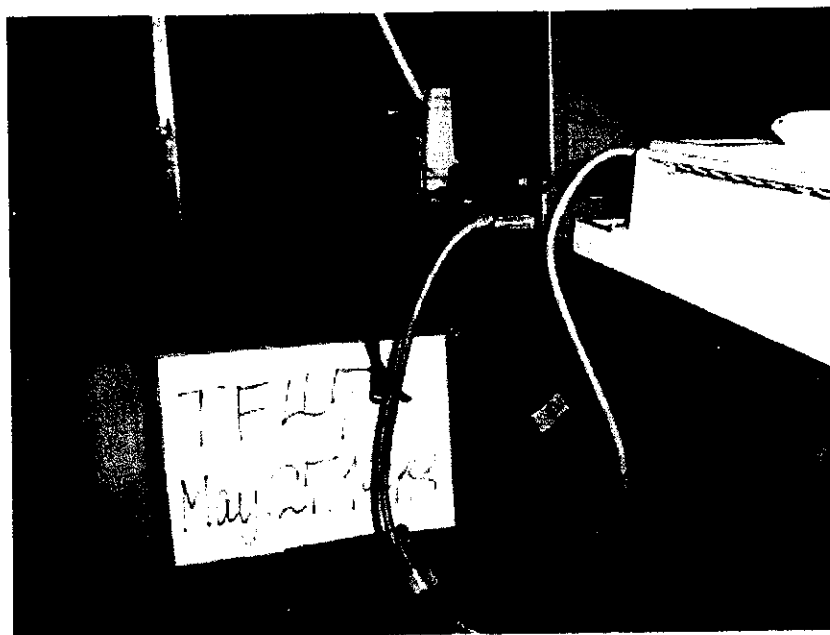
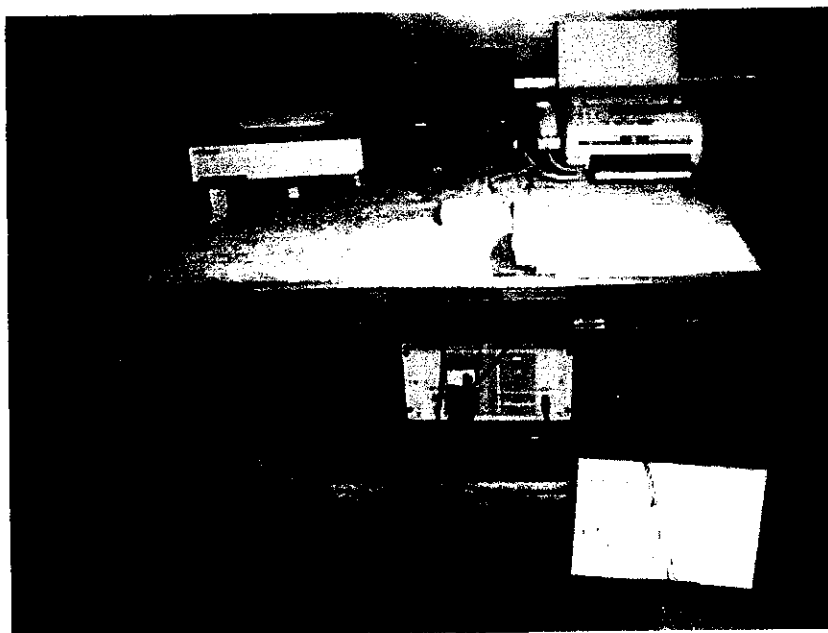
ITEM	MANUFACTURER	MODEL	Serial No.
TEST RECEIVER	ROHDE SCHWARZ	ESH2	892237/016
SPECTRUM ANALYZER	HEWLETT PACKARD	8567A	2841A 00577/ 2848A 17271
LISN	ROHDE SCHWARZ	ESH2-Z5	892602/006

T e s t P l a n

DATE: May. 27, 1998	Condition: 24°C / 74%
The size of EUT	(347.5(W) × 146.5(H) × 397.5(D)mm) 7.0 kg
Representative operating conditions of the EUT	STANDBY MODE, COPY MODE, TRANSMITTING MODE, RECEIVING MODE, PC PRINT MODE, PC SCAN MODE
Disposition	Table Top, above the ground plane 0.5m
The type of test facility	Shield Room
Test frequency	450kHz-30MHz
The performance criteria which are acceptable	EUT Complies with Limits of FCC Part 15 Subpart B Class B:1996
Power Supply	A.C. 120V / 1.8A

Conducted Emissions Test Setup

TYPE : TF471



Setup1 : 450kHz~30MHz FRONT&REAR

This report shall not be reproduced, except in full without the written approval of EMC Japan.
The results in this report apply only to the sample tested.

FCC Part 15 Subpart B Class B:1996
CONDUCTED POWER LINE TEST RESULTS

EMCJ

Report No. : 98051083

EMC Japan Corp.

Results of Conducted Power Line Measurements. : Quasi Peak

Measuring Method : FCC 15 Sub.B Class B:1996.

N / L1 : Measured Value

EUT : Facsimile

Model : TF471

Serial No. : 97120006

Test Mode : STANDBY MODE

Description : A.C.120V / 1.8A

Temp. : 24 C

*** Remarks ***

Frequency (MHz)	RFI Voltage (dBuV)		Limit (dBuV)	Margin (dBuV)
	N	L1		
0.450	15.9	15.9	18.0	32.1
0.832	10.0	40.1	18.0	7.9
1.039	38.7	38.8	18.0	9.2
2.167	33.6	34.0	18.0	11.0
12.920	31.1	30.6	18.0	16.0
20.097	38.4	38.6	18.0	9.4
30.000	23.4	25.2	18.0	22.8

Conclusion : EUT Complies With Limits
of FCC 15 Sub.B Class B:1996.

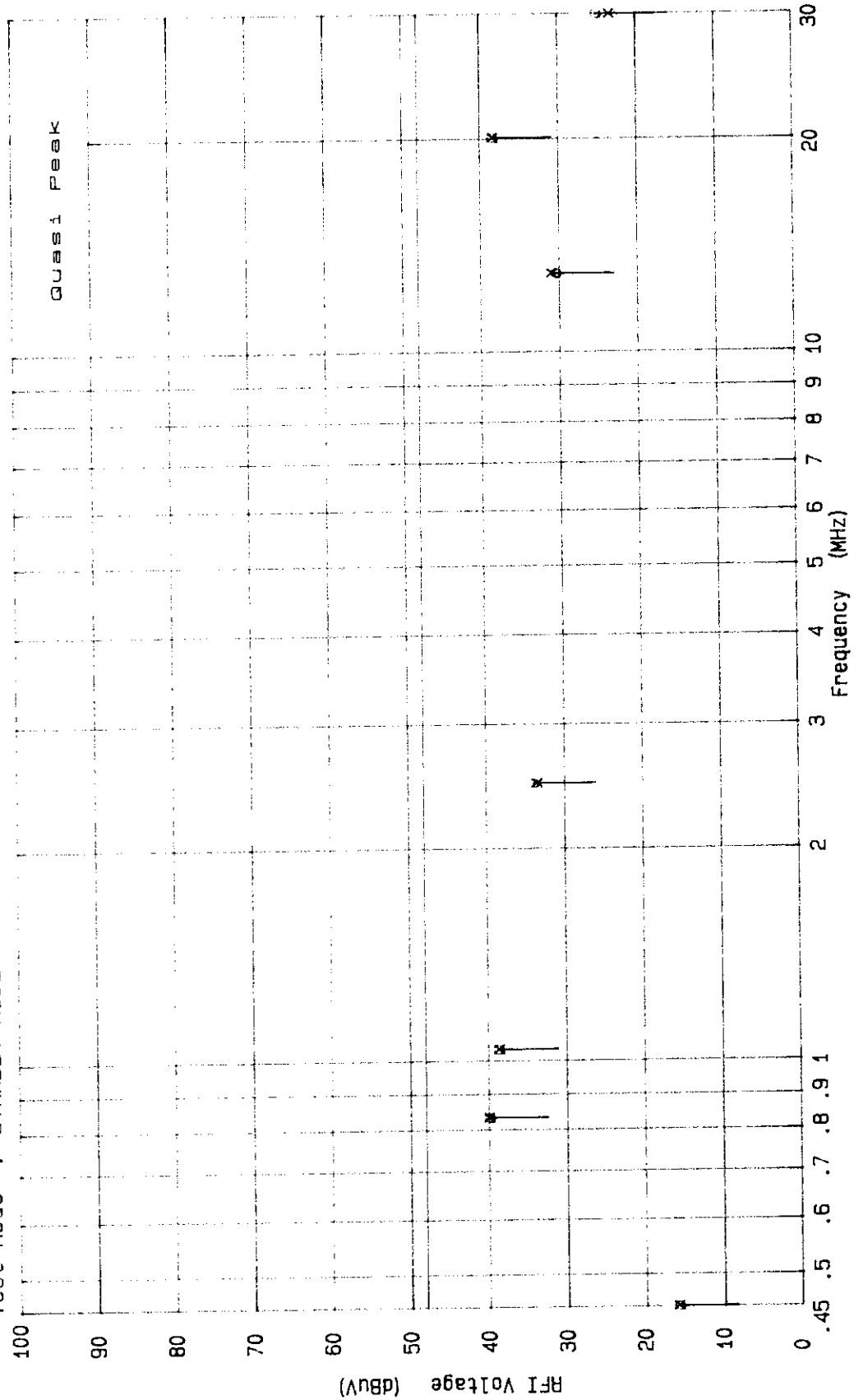
Results of Conducted Power Line Measurements.

Measuring Method : FCC 15 Sub.B Class B:1996.

Report No. : 98051083

EUT : Facsimile
Model : TF471
Serial No. : 97120006
Test Mode : STANDBY MODE

— : Limit Line
x : Measured Value (N)
 : Measured Value (L1)



Report No. : 98051083

EMC Japan Corp.

Results of Conducted Power Line Measurements. : Quasi Peak

Measuring Method : FCC 15 Sub.B Class B:1996.

N / L1 : Measured Value

EUT : Facsimile

Model : TF471

Serial No. : 97120006

Test Mode : COPY MODE

Description : A.C.120V / 1.8A

Temp. : 24 C

*** Remarks ***

Frequency (MHz)	RFI Voltage (dBuV)		Limit (dBuV)	Margin (dBuV)
	N	L1		
0.150	30.1	31.2	48.0	16.8
0.531	41.1	41.5	48.0	6.5
1.056	40.1	40.6	48.0	7.4
1.242	39.9	40.3	48.0	7.7
12.749	34.1	33.6	48.0	13.9
16.663	38.9	38.5	48.0	9.1
30.000	24.1	26.2	48.0	21.8

Conclusion : EUT Complies With Limits
of FCC 15 Sub.B Class B:1996.

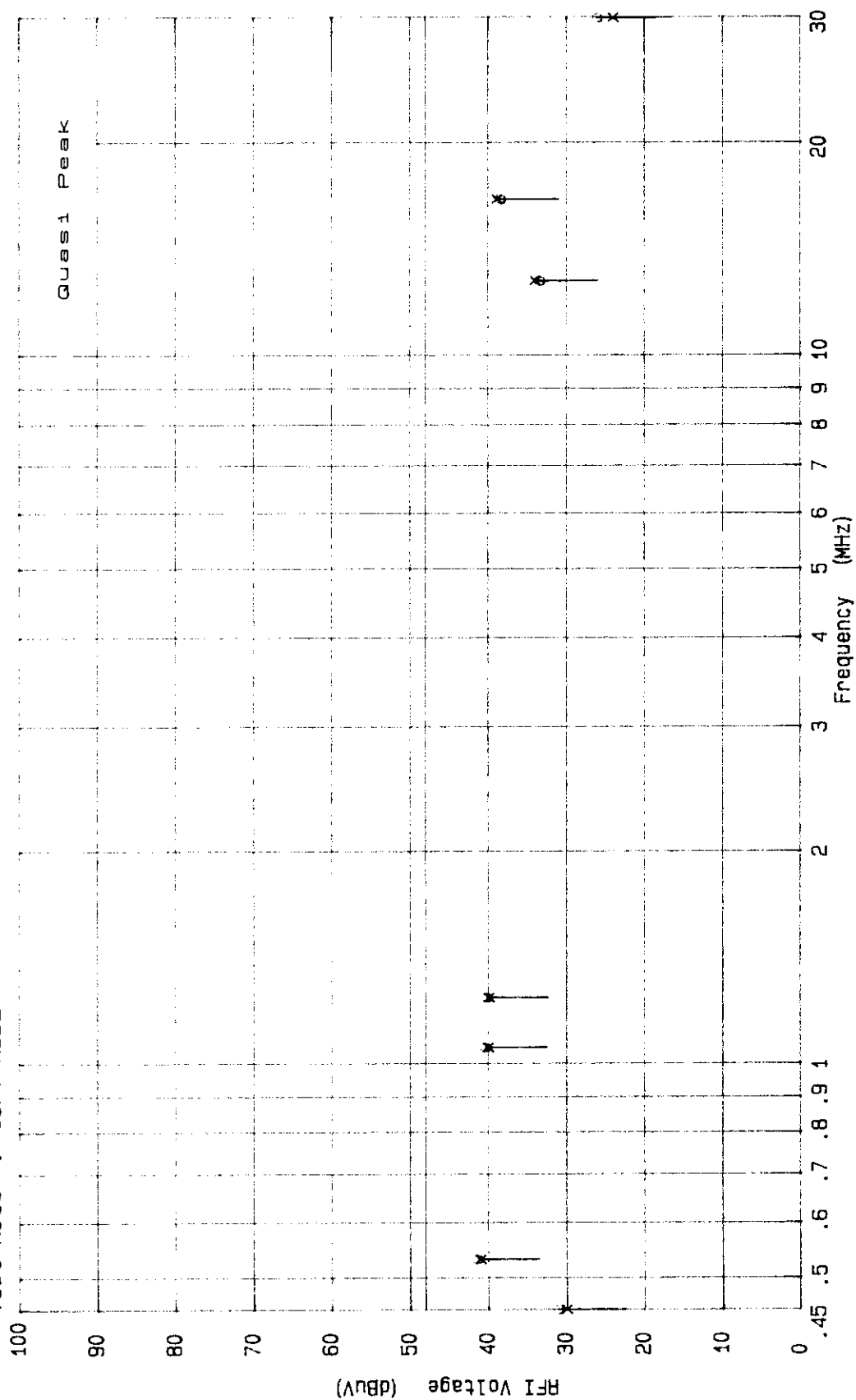
Results of Conducted Power Line Measurements.

Measuring Method : FCC 15 Sub.B Class B: 1996.

Report No. : 98051083

EUT : Facsimile
Model : TF471
Serial No. : 97120006
Test Mode : COPY MODE

— : Limit Line
x : Measured Value (N)
| : Measured Value (L1)





Report No. : 08051083

EMC Japan Corp.

Results of Conducted Power Line Measurements. : Quasi Peak

Measuring Method : FCC 15 Sub.B Class B:1996.

N / L1 : Measured Value

EUT : Facsimile

Model : TF471

Serial No. : 97120006

Test Mode : TRANSMITTING MODE

Description : A.C.120V / 1.8A

Temp. : 24 °C

*** Remarks ***

Frequency (MHz)	RFI Voltage (dBuV)		Limit (dBuV)	Margin (dBuV)
	N	L1		
0.450	28.4	29.1	48.0	18.9
0.478	40.1	40.1	48.0	7.9
0.534	38.3	38.4	48.0	9.6
1.240	39.8	40.0	48.0	8.0
12.783	31.6	31.7	48.0	16.3
17.380	37.2	37.2	48.0	10.8
20.864	38.6	39.1	48.0	8.9
30.000	24.4	26.2	48.0	21.8

Conclusion : EUT Complies With Limits
of FCC 15 Sub.B Class B:1996.

Results of Conducted Power Line Measurements.

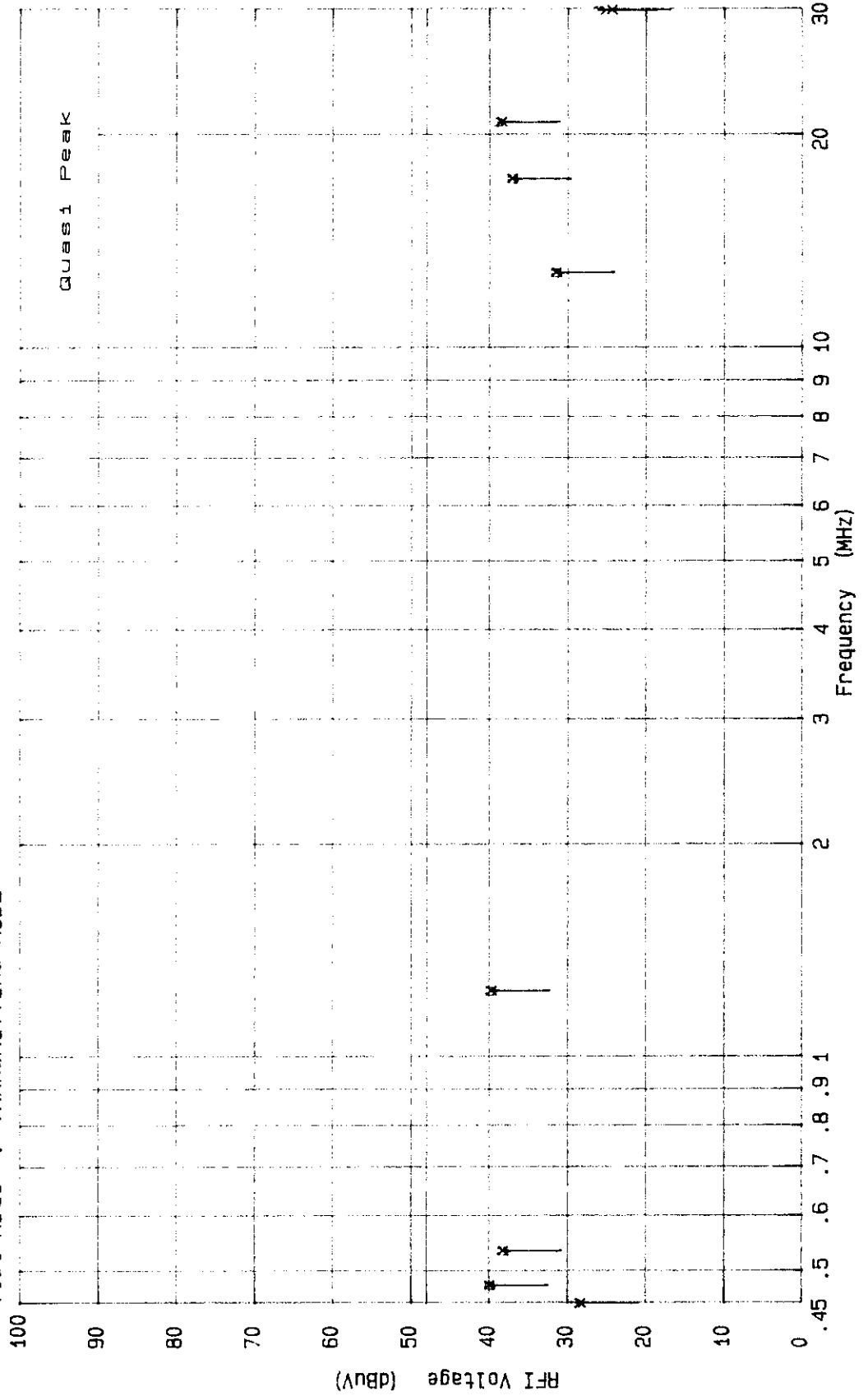
Measuring Method : FCC 15 Sub.B Class B: 1996.

Report No. : 98051083

EUT : Facsimile
Model : TF471
Serial No. : 97120006

Test Mode : TRANSMITTING MODE

— : Limit Line
x : Measured Value (N)
o : Measured Value (L1)





EMC Japan Corp.

Results of Conducted Power Line Measurements. : Quasi Peak

Measuring Method : FCC 15 Sub.B Class B:1996.

N / L1 : Measured Value

EUT : Facsimile

Model : TF171

Serial No. : 97120006

Test Mode : RECEIVING MODE

Description : A.C. 120V / 1.8A

Temp. : 24 C

*** Remarks ***

Frequency (MHz)	RFI Voltage (dBuV)		Limit (dBuV)	Margin (dBuV)
	N	L1		
0.450	33.1	30.5	18.0	14.9
0.475	39.6	39.3	18.0	8.4
0.522	39.4	40.6	18.0	7.4
13.108	31.7	31.9	18.0	16.1
17.093	39.6	39.8	18.0	8.2
21.170	38.2	38.3	18.0	9.7
30.000	24.4	26.4	18.0	21.6

Conclusion : EUT Complies With Limits
of FCC 15 Sub.B Class B:1996.

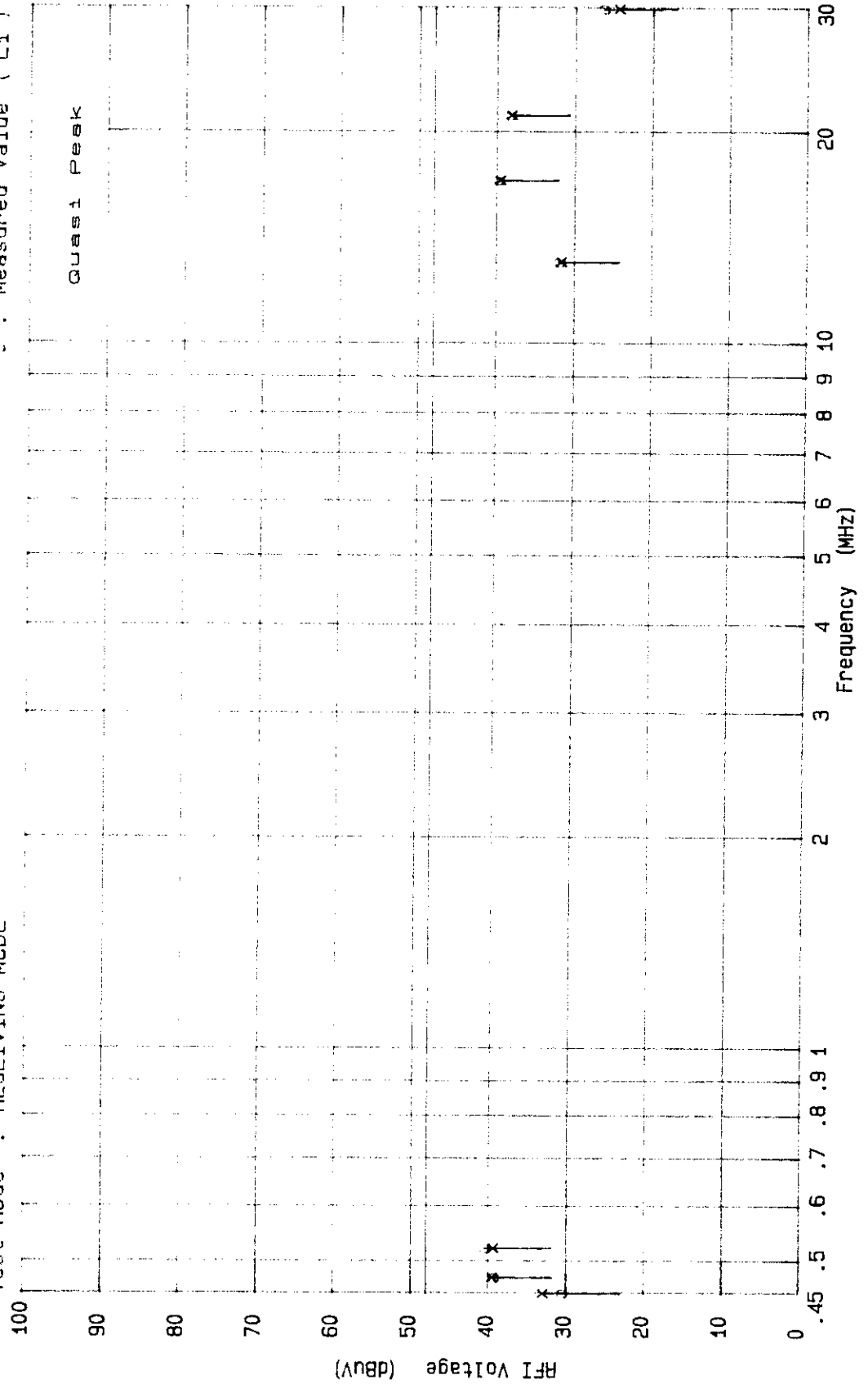
Results of Conducted Power Line Measurements.

Measuring Method : FCC 15 Sub.B Class B:1996.

Report No. : 98051083

EUT : Facsimile
Model : TF471
Serial No. : 97120006
Test Mode : RECEIVING MODE

— : Limit Line
x : Measured Value (N)
· : Measured Value (L1)





Report No. 98051083

EMC Japan Corp.

Results of Conducted Power Line Measurements. : Quasi Peak

Measuring Method : FCC 15 Sub.B Class B:1996.

X / L1 : Measured Value

EUT : Facsimile

Model : TF171

Serial No. : 97120006

Test Mode : PC PRINT MODE

Description : A.C.120V / 1.8A

Temp. : 24 °C

*** Remarks ***

Frequency (MHz)	RFI Voltage (dBuV)		Limit (dBuV)	Margin (dBuV)
	X	L1		
0.150	27.1	27.3	18.0	29.7
0.180	38.8	39.2	18.0	20.8
0.533	38.7	39.1	18.0	20.9
2.668	34.4	34.6	18.0	16.4
12.617	33.7	33.2	18.0	15.7
17.164	40.7	40.2	18.0	22.8
30.000	22.5	24.2	18.0	21.8

Conclusion : EUT Complies With Limits
of FCC 15 Sub.B Class B:1996.

EMCJ

EMC Japan Corp.

Results of Conducted Power Line Measurements.

Measuring Method : FCC 15 Sub.B Class B:1996.

Report No. : 98051083

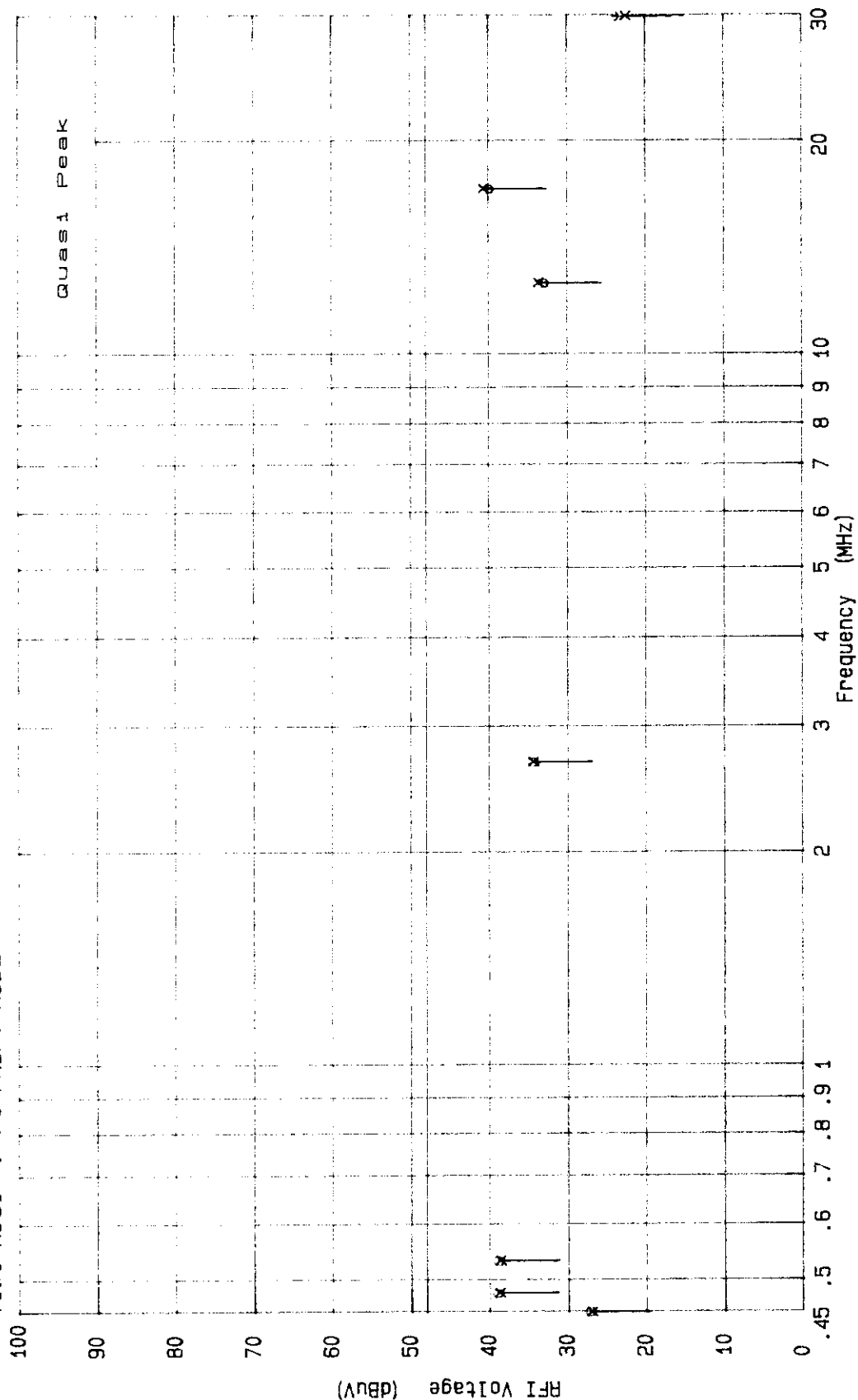
EUT : Facsimile

Model : TF471

Serial No. : 97120006

Test Mode : PC PRINT MODE

— : Limit Line
 x : Measured Value (N)
 : Measured Value (L1)





Report No. : 98051031

EMC Japan Corp.

Results of Conducted Power Line Measurements. : Quasi Peak

Measuring Method : FCC 15 Sub.B Class B:1996.

N / L1 : Measured Value

EUT : Facsimile

Model : TF471

Serial No. : 97120006

Test Mode : PC SCAN MODE

Description : A.C.120V / 1.8A

Temp. : 24 °C

*** Remarks ***

Frequency (MHz)	RF Voltage (dBuV)		Limit (dBuV)	Margin (dBuV)
	N	L1		
0.450	15.7	15.7	-48.0	32.3
0.496	38.6	39.4	-48.0	8.6
0.753	36.1	36.2	-48.0	11.8
1.119	29.9	30.1	-48.0	17.9
12.067	30.1	29.8	-48.0	17.9
16.788	36.5	36.1	-48.0	11.5
30.000	24.6	26.1	-48.0	27.9

Conclusion : EUT Complies With Limits
of FCC 15 Sub.B Class B:1996.

Results of Conducted Power Line Measurements.

Measuring Method : FCC 15 Sub.B Class B: 1996.

Report No. : 98051083

EUT : Facsimile

Model : TF471

Serial No. : 97120006

Test Mode : PC SCAN MODE

--- : Limit Line
x : Measured Value (N)
o : Measured Value (L1)

