

EMCJ

EMC Japan Corp.

TEST REPORT

ORDER No. : 98122350(D)

DATE : Dec. 8, 1998

CUSTOMER : Advanced Peripherals Technologies, Inc

EMC J a p a n C o r p o r a t i o n

EMC TEST REPORT

Test Order NO. : 98122350(D)

1. APPLICANT

Dec. 8, 1998

• Company name : Advanced Peripherals Technologies, Inc
• Address : 1031 Fujisawa Fujisawa-shi, Kanagawa
251-0052 Japan
Phone: 0466-28-3116

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

• Device Name : Dot Matrix Printer
• Model Number : T2130/9
• Serial Number : 3902688

3. SUMMARY OF TEST RESULTS

Emission test item	Basic standard	Result
RADIATED EMISSION MEASUREMENTS	FCC Part15 Subpart B Class B:1996	Complies
CONDUCTED POWER LINE MEASUREMENT	FCC Part15 Subpart B Class B:1996	Complies

4. DATE OF TEST

• Test Item received : Dec. 3, 1998
• Test Completed on : Dec. 4, 1998

• Test Performed by : T. Nomura Date : Dec. 4, 1998

• Test Report Made by : Y. Sugita Date : Dec. 8, 1998

• Test Report Approved by : [Signature] Date : Dec. 8, 1998

5. TEST PLACE

• Place : EMC Japan Corporation TSUKUI TEST SITE NO. 2
• Address : 1686-4 Nagatake, Tsukui-Machi
Kanagawa, 220-0204 Japan

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The results in this report apply only to the sample tested.

EQUIPMENT

No.	Equipment	Manufacturer	Model No.	Serial No.	Note
1	Dot Matrix Printer	TSE	T2130/9	3902688	EUT FCC ID:M36M96003
2	Personal Computer	IBM(JAPAN)	TYPE 8573-121	99-2501043	HOST PC FCC ID:ACJ9TG8573C
3	Auto Sheet Feeder	TSE	SF2130	——	EUT OPTION
4	RS-232C I/F	TSE	044828	——	EUT OPTION

USED CABLE

No.	Cable Name	Manufacturer	Length (m)	Bundled Length	Shield	Core	Note
a	I/F Cable	——	1.9 m	——	yes	none	PC $\longleftrightarrow$ EUT PARALLEL
b	Serial I/F Cable	——	2.0 m	0.5 m	none	none	
c	Power Cable (961125/3)	VOLEX(Asia) PTE, LTD	1.9 m	——	none	none	EUT
d	Power Cable (PS-2 P7 ϕ 386)	IBM	3.2 m	——	none	yes	HOST PC

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RADIATED EMISSION

FCC Part15 Subpart B Class B:1996

List of measurement equipment

ITEM	MANUFACTURER	MODEL	Serial No.
TEST RECEIVER	ROHDE SCHWARZ	ESV	892371/006
RF PRE AMP	HEWLETT PACKARD	8449B	3008A00791
SPECTRUM ANALIZER	HEWLETT PACKARD	8562B	2923A 00418
TEST RECEIVER	ROHDE SCHWARZ	ESH2	892237/016
SPECTRUM ANALIZER	HEWLETT PACKARD	8564E	3650A00686
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-PERI ANTENNA	SCHWARZBECK	UHALP9107	none
LISN	ROHDE SCHWARZ	ESH2-Z5	893606/003
LOOP ANTENNA	ROHDE SCHWARZ	HFH2-Z2	893. 103/003
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

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T e s t P l a n

DATE:Dec. 4, 1998	Condition: 10°C 65%
The size of EUT	(646(W) × 272(H) × 206(D)mm) 10.5 kg
Representative operating conditions of the EUT	PRINT MODE
Disposition	Table Top, above the ground plane 0.8m
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 Part15 Subpart B Class B:1996
Power Supply	A. C. 120V 60Hz

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FCC Part15 Subpart B Class B:1996

RADIATED EMISSION TEST RESULTS

COMPANY : APTi
 MODEL NAME : Dot Matrix Printer
 MODEL NO. : T2130/9
 POWER : A.C. 120V 60Hz
 TEMP : 10°C 65%
 DESCRIPTION : Sr. No. 3902688

REPORT NO. : 98122350(D)
 STANDARD : FCC PART 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : PRINT MODE
 ENGINEER : T. NOMURA

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	26.7	26.7	-7.1	19.6	19.6	40.0	20.4	20.4	NOISE LEVEL
2	57.760	49.5	44.1	-16.6	32.9	27.5	40.0	7.1	12.5	
3	60.270	46.1	42.1	-17.3	28.8	24.8	40.0	11.2	15.2	
4	72.820	45.1	42.1	-18.3	26.8	23.8	40.0	13.2	16.2	
5	87.900	45.1	44.1	-17.9	27.2	26.2	40.0	12.8	13.8	
6	97.950	47.1	47.3	-14.5	32.6	32.8	43.5	10.9	10.7	
7	113.020	47.2	48.6	-11.9	35.3	36.7	43.5	8.2	6.8	
8	120.560	48.4	43.5	-10.9	37.5	32.6	43.5	6.0	10.9	
9	200.000		41.8	-6.2		35.6	43.5		7.9	
10	223.520	38.5	38.9	-5.3	33.2	33.6	46.0	12.8	12.4	
11	326.480	33.2	37.1	-5.8	27.4	31.3	46.0	18.6	14.7	
12	389.260	38.1	37.8	-5.1	33.0	32.7	46.0	13.0	13.3	
13	460.000		38.7	-4.1		34.6	46.0		11.4	
14	1000.000	23.4	23.4	6.2	29.6	29.6	54.0	24.4	24.4	NOISE LEVEL

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No. 2 TEST SITE

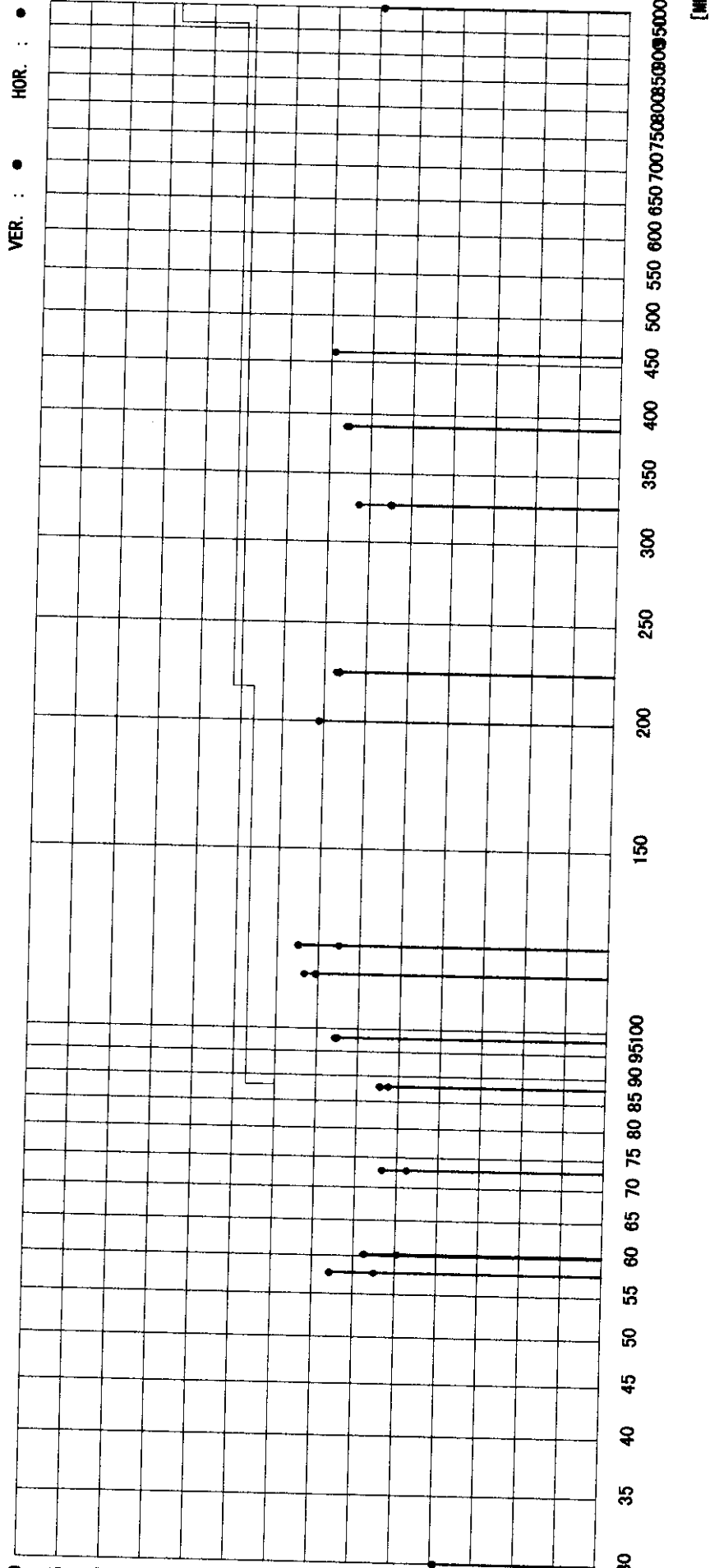
1998/12/04

COMPANY : APTi
 MODEL NAME : Dot Matrix Printer
 MODEL NO. : T2130/9
 POWER : A.C. 120V 60Hz
 TEMP : 10°C 65%
 DESCRIPTION : Sr. No. 3902688

REPORT NO. : 98122350 (D)
 STANDARD : FCC PART 15
 CLASS : B
 DISTANCE : 3m
 TEST MODE : PRINT MODE
 ENGINEER : T. NOMURA

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

uV/m]



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CONDUCTED POWER LINE

FCC Part15 Subpart B Class B:1996

L i s t o f m e a s u r e m e n t e q u i p m e n t

ITEM	MANUFACTURER	MODEL	Serial No.
TEST RECEIVER	ROHDE SCHWARZ	ESH2	892237/016
SPECTRUM ANALIZER	HEWLETT PACKARD	8562B	2923A 00418
LISN	ROHDE SCHWARZ	ESH3-Z6 ESH3-Z6	844950/0024 837172/017

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T e s t P l a n

DATE:Dec. 4, 1998	Condition: 12℃ 55%
The size of EUT	(646(W) × 272(H) × 206(D)mm) 10.5 kg
Representative operating conditions of the EUT	PRINT MODE
Disposition	Table Top, above the ground plane 0.8m
The type of test facility	Shield Room
Test frequency	450kHz-30MHz
The performance criteria which are acceptable	EUT Complies with Limits of FCC Part15 Subpart B Class B:1996
Power Supply	A. C. 120V 60Hz

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FCC Part15 Subpart B Class B:1996

CONDUCTED POWER LINE TEST RESULTS

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Report No. : 98122350(D)

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 : Dot Matrix Printer

Model : T2130/9

Serial No. : 3902688

Test Mode : PRINT MODE

Description : A.C.120V 60Hz

Temp. : 22°C

*** Remarks ***

FCC ID:M36M96003

Frequency (MHz)	RFI Voltage (dBuV)		Limit (dBuV)	Margin (dBuV)
	N	L1		
0.450	38.1	38.8	48.0	9.2
0.473	37.4	38.4	48.0	9.6
10.794	31.5	31.6	48.0	16.4
18.040	29.9	29.8	48.0	18.1
24.054	36.4	35.7	48.0	11.6
28.796	28.7	27.8	48.0	19.3
30.000	23.7	23.0	48.0	24.3

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. : 98122350 (D)

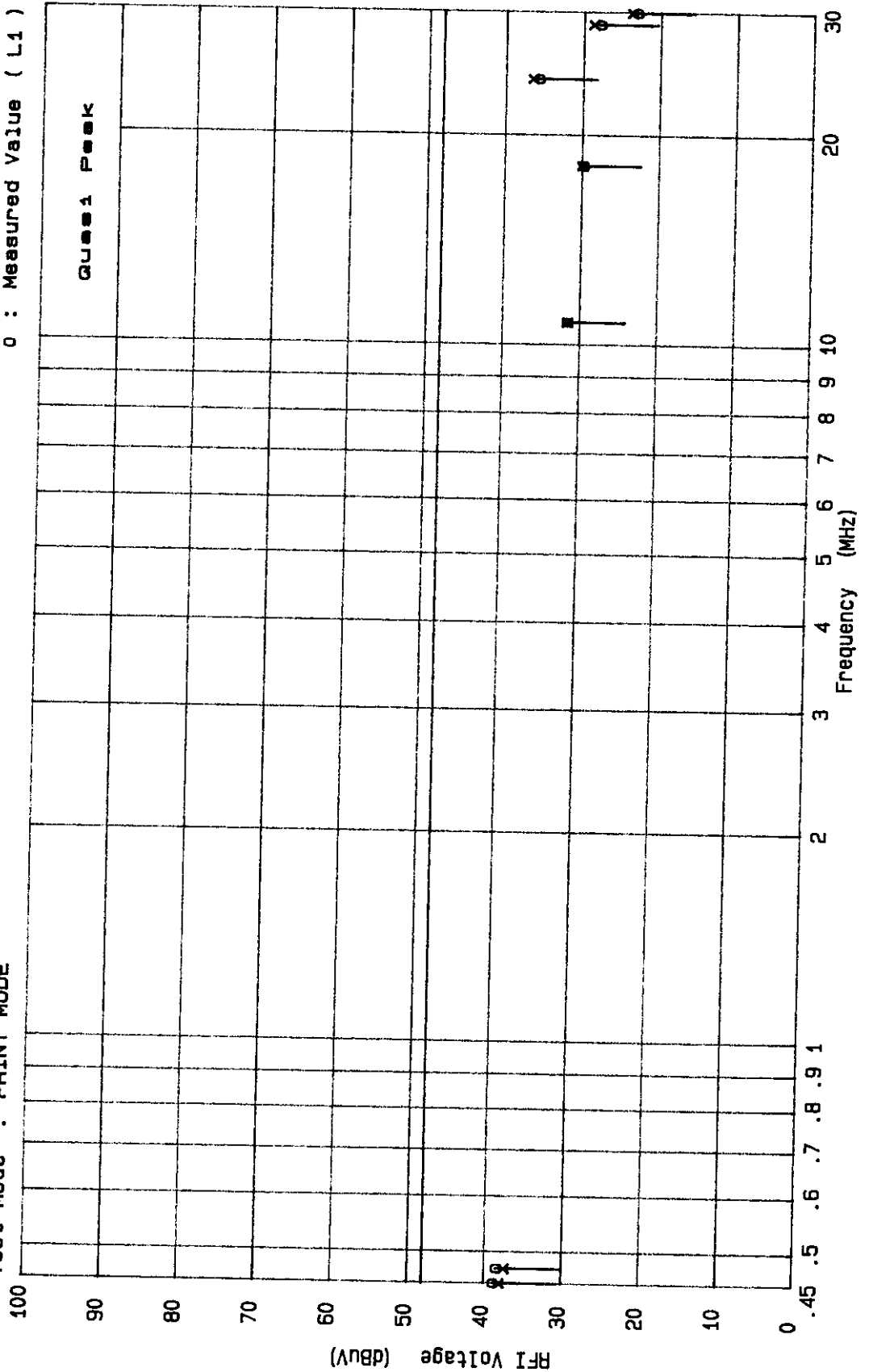
EUT : Dot Matrix Printer

Model : T2130/9

Serial No. : 3902688

Test Mode : PRINT MODE

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



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