FCC ID: E5XKBHP119M10

EMC

TEST REPORT

REPORT NO. : F87070702
MODEL NO. : 7941
DATE OF TEST : July 8, 1998

PREPARED FOR: BEHAVIOR TECH COMPUTER CORP.

ADDRESS : 12F, 18, SEC. 1, CHANG AN E. RD.,
TAIPEI, TAIWAN, R.O.C.

PREPARED BY: ADVANCE DATA TECHNOLOGY CORPORATION

NVLAP®
Accredited Laboratory

12F, NO.1, SEC.4, NAN-KING EAST RD.,
TAIPEI, TAIWAN, R.O.C.

TABLE OF CONTENTS

1. CERTIFICATION

Issue Date: July 15, 1998

Product	:	KEYBOARD
Trade Name	:	BTC
Model No.	:	7941
Applicant	:	BEHAVIOR TECH COMPUTER CORP.
Standard	:	FCC Part 15, Subpart B, Class B ANSI C63.4-1992 CISPR 22: 1993 +A1+A2

We hereby certify that one sample of the designation has been tested in our facility on July 8, 1998. The test record, data evaluation and Equipment Under Test (EUT) configurations represent herein are true and accurate representation of the measurements of the sample's EMC characteristics under the conditions herein specified.

The test results show that the EUT as described in this report is in compliance with the Class B limits of conducted and radiated emission of applicable standards

PREPARED BY: Sharon Hsiung , DATE: 7/15/98
(Sharon Hsiung)

TESTED BY: Ken Liu , DATE: 7/15/98
(Ken Liu)

APPROVED BY: Mike Su , DATE: 7/15/98
(Mike Su)

ADVANCE DATA TECHNOLOGY CORPORATION

NVLAP®
Accredited Laboratory

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product	:	KEYBOARD
Model No.	:	7941
Power Supply	:	DC (from PC)
Data Cable	:	Shielded

Note: For more detailed features, please refer to Manufacturer's Specification or User's Manual.

2.2 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories are used to form representative test configuration during the tests.

No	Product	Brand	Model No.	FCC ID	I/O Cable
1	PERSONAL COMPUTER	HP	VL SERIES 4 5/100	B94VECTRA500T	Nonshielded Power (1.8m)
2	MONITOR	ADI	PD-959	FCC DoC	Shielded Signal (1.8m) Nonshielded Power (1.5m)
3	PRINTER	HP	2225C+	DSI6XU2225	Shielded Signal (1.2m)
4	MODEM	ACEEX	1414	IFAXDM1414	Shielded Signal (1.2m)
5	MOUSE	DEXIN	A2P800A	NIYA2P800A	Shielded Signal (1.4m)
6	VGA DISPLAY CARD	GORDIA	DSV3365	LUT-DSV3365	N/A

2.3 TEST METHODOLOGY AND CONFIGURATION

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4:1992. Radiated testing was performed at an antenna to EUT distance of 10 m on an open area test site. Please refer to the photos of test configuration in Item 5.

3. TEST INSTRUMENTS

3.1 TEST INSTRUMENTS (EMISSION)

RADIATED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
HP Spectrum Analyzer	8590L	3544A01042	April 29, 1999
HP Preamplifier	8447D	2944A08313	Sept. 18, 1998
ROHDE & SCHWARZ TEST RECEIVER	ESVS 30	841977/008	Oct. 5, 1998
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 28, 1998
CHASE BiLOG Antenna	CBL6111A	1647	July 3, 1999
EMCO Turn Table	1016	1722	N/A
EMCO Tower	1051	1825	N/A
Open Field Test Site	Site 4	ADT-R04	June 19, 1999

Note: 1. The measurement uncertainty is less than +/- 3dB, which is calculated as per NAMA's document NIS81.

2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to NML/ROC and NIST/USA.

CONDUCTED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ Test Receiver	ESH3	893495/006	July 23, 1998
ROHDE & SCHWARZ Spectrum Monitor	EZM	893787/013	July 24, 1998
ROHDE & SCHWARZ Artificial Mains Network	ESH3-Z5	839135/006	Aug. 1, 1998
EMCO-L.I.S.N.	3825/2	9204-1964	July 22, 1998
Shielded Room	Site 2	ADT-C02	N/A

Note: 1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMA's document NIS81.

2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to NML/ROC and NIST/USA.

4. TEST RESULTS (EMISSION)

4.1 RADIO DISTURBANCE

Frequency Range	:	0.15 - 30 MHz (Conducted Emission)
		30 - 1000 MHz (Radiated Emission)
Input Voltage	:	120 Vac, 60 Hz
Temperature	:	28 ℃
Humidity	:	41 %
Atmospheric Pressure	:	997 mbar

TEST RESULT	Remarks
PASS	Minimum passing margin of conducted emission: -20.6 dB at 0.237 MHz Minimum passing margin of radiated emission: -4.5 dB at 198.96 MHz

4.1.1 EUT OPERATION CONDITION

1. Turn on the power of all equipments.
2. PC reads a test program to enable all functions.
3. PC sends "H" messages to monitor and monitor display "H" patterns on screen.
4. PC sends "H" messages to modem.
5. PC sends "H" messages to printer, and the printer prints them on paper.
6. Repeat steps 3-6.

4.1.2 TEST DATA OF CONDUCTED EMISSION

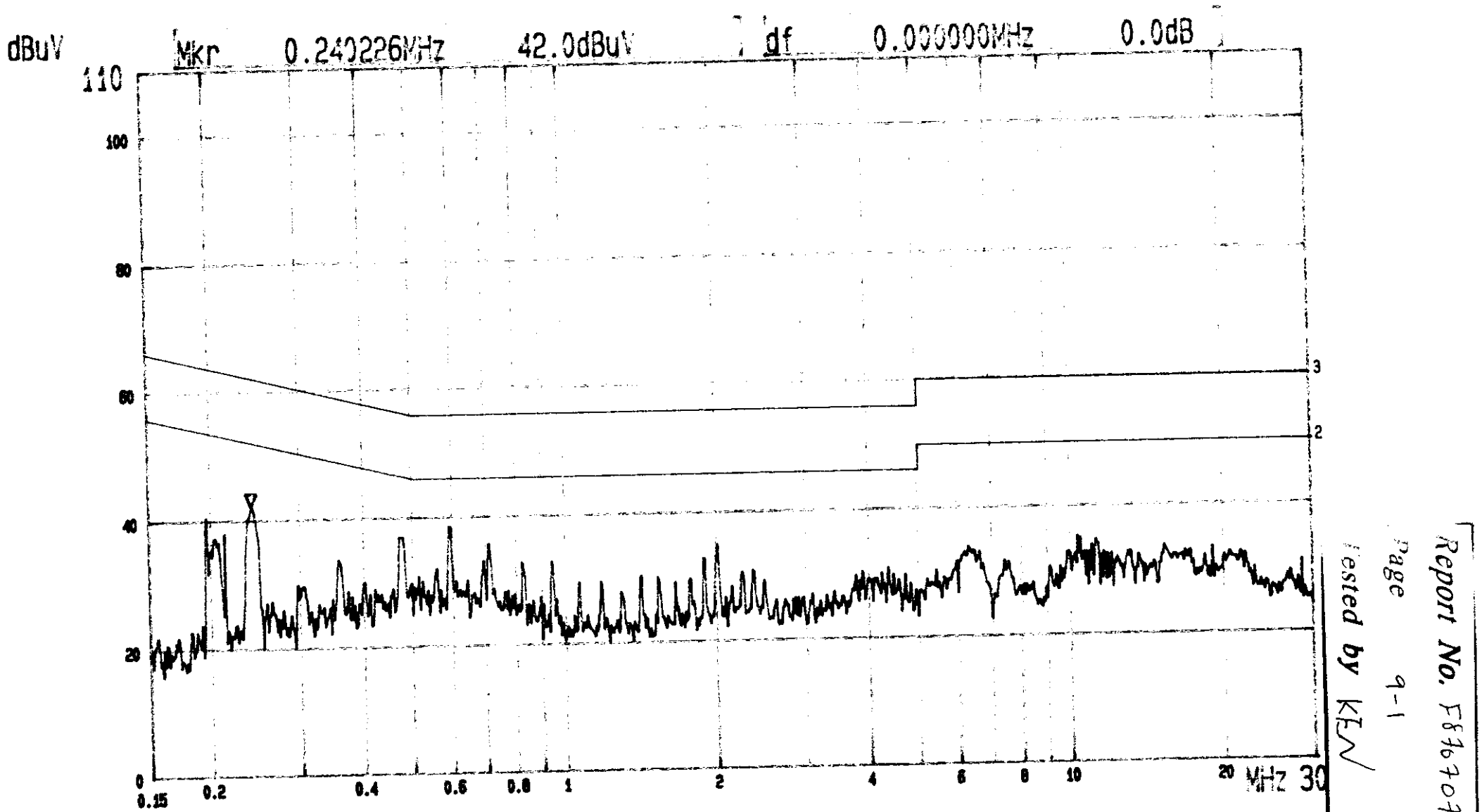
EUT: **KEYBOARD** MODEL: **7941**

6 dB Bandwidth: 10 kHz

TEST PERSONNEL: KEN

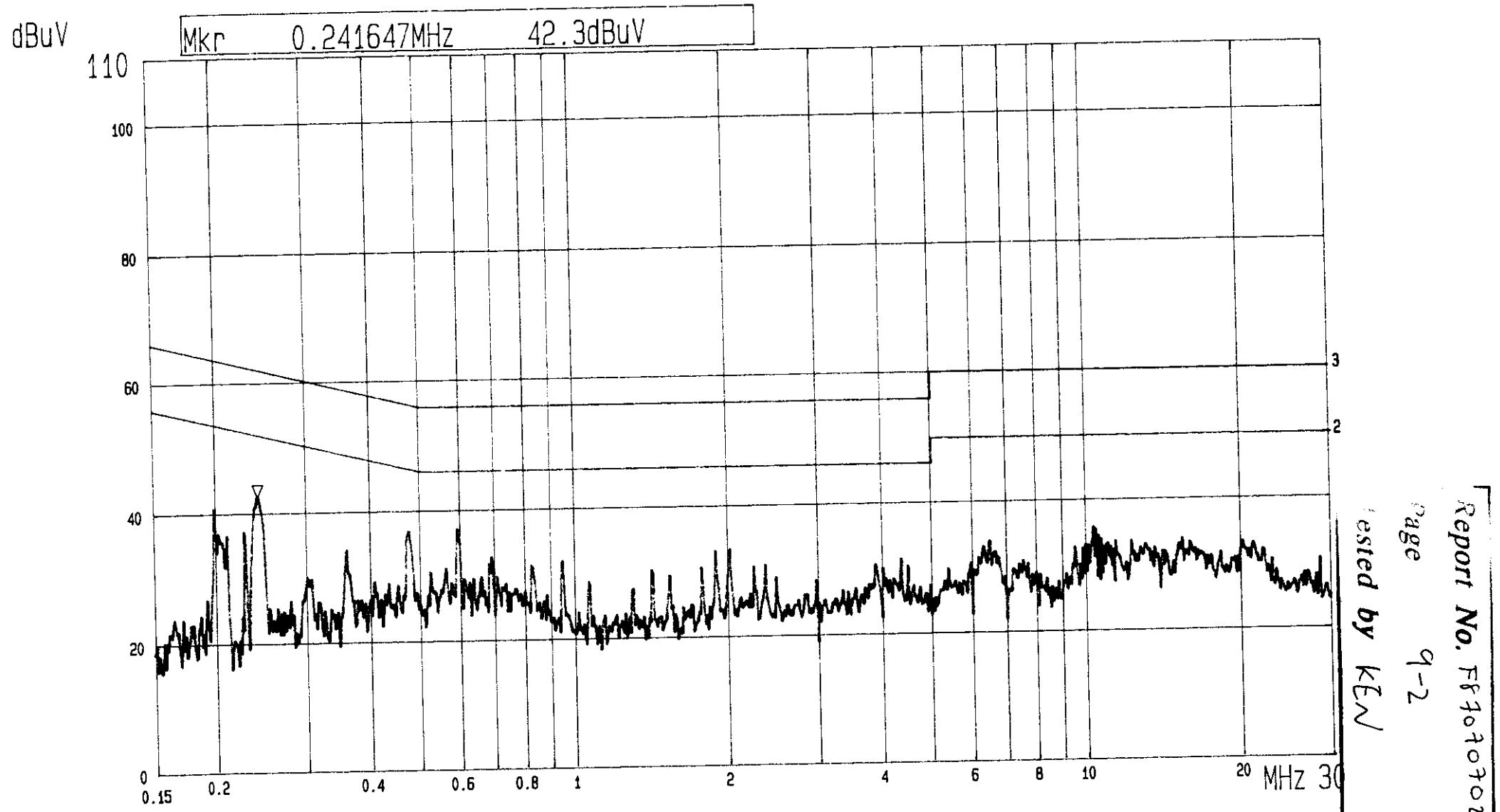
Freq.	L Level		N Level		Limit		Margin [dB (μV)]			
[MHz]	[dB (μV)]		[dB (μV)]		[dB (μV)]		L		N	
	QP	AV	QP	AV	QP	AV	QP	AV	QP	AV
0.184	39.40	-	34.80	-	64.30	54.30	-24.9	-	-29.5	-
0.237	41.60	-	41.00	-	62.20	52.20	-20.6	-	-21.2	-
0.589	25.40	-	28.20	-	56.00	46.00	-30.6	-	-27.8	-
2.025	19.80	-	23.20	-	56.00	46.00	-36.2	-	-32.8	-
6.611	27.90	-	27.90	-	60.00	50.00	-32.1	-	-32.1	-
13.160	29.60	-	29.80	-	60.00	50.000	-30.4	-	-30.2	-

Remarks: 1. "*": Undetectable
2. Q.P. and AV. are abbreviations of quasi-peak and average individually.
3. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
4. The emission level of other frequencies were very low against the limit.



Report No. F8870702
Page 9-1
Tested by KEW

I--- Date 08.JUL.'98 Time 13:37:02
FCC CISPR 22 CLASS B CONDUCTION TEST (PEAK VALUE) ADT CORP
MODEL : 7941 LISN: L



Report No. FF707702
Page 9-2
Tested by KEN

|--- Date 08.JUL.'98 Time 13:45:14
FCC CISPR 22 CLASS B CONDUCTION TEST (PEAK VALUE)
MODEL : 7941

ADT CORP
LISN: N

4.1.3 TEST DATA OF RADIATED EMISSION

EUT: **KEYBOARD** MODEL: **7941**

ANTENNA: CHASE BILOG CBL6111A POLARITY: Horizontal

DETECTOR FUNCTION: Quasi-peak 6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz MEASURED DISTANCE: 10 M

TEST PERSONNEL: KEN

Frequency (MHz)	Correction Factor (dB/m)	Reading Data (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
63.21	7.5	9.6	17.1	30.0	-12.9
70.06	7.6	6.9	14.5	30.0	-15.5
128.89	14.4	4.9	19.3	30.0	-10.7
157.56	11.8	6.1	17.9	30.0	-12.1
198.96	11.5	14.0	25.5	30.0	-4.5
216.02	12.4	5.0	17.4	30.0	-12.6

REMARKS :
1. Emission level (dBuV/m) = Correction Factor(dB/m) +Meter Reading (dBuV).
2. Correction Factor(dB/m) = Ant. Factor(dB/m)+Cable loss(dB)
3. The other emission levels were very low against the limit.

FCC ID: E5XKBHP119M10

TEST DATA OF RADIATED EMISSION

EUT: **KEYBOARD** MODEL: **7941**

ANTENNA: CHASE BILOG CBL6111A POLARITY: Vertical

DETECTOR FUNCTION: Quasi-peak 6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz MEASURED DISTANCE: 10 M

TEST PERSONNEL: KEN

Frequency (MHz)	Correction Factor (dB/m)	Reading Data dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
63.57	7.2	8.7	15.9	30.0	-14.1
70.06	8.1	5.9	14.0	30.0	-16.0
128.89	11.9	7.0	18.9	30.0	-11.1
157.56	11.7	6.3	18.0	30.0	-12.0
198.96	11.1	13.6	24.7	30.0	-5.3
216.02	12.6	6.2	18.8	30.0	-11.2

REMARKS :
1. Emission level (dBuV/m) = Correction Factor(dB/m) +Meter Reading (dBuV).
2. Correction Factor(dB/m) = Ant. Factor(dB/m)+Cable loss(dB)
3. The other emission levels were very low against the limit.