



FCC TEST REPORT

REPORT NO.: RF90011605

MODEL NO.: MVW9C

RECEIVED: January 16, 2001

TESTED: January 18, 2001

APPLICANT: Falcon Machine Tools Co., Ltd.

ADDRESS: No. 264, Shing Kong Rd., He Mei,
Chang Hua, Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: 13-1, Lane 19, Wen Shan 3rd St., Kweishan,
Taoyuan Hsien, Taiwan, R.O.C.

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Accredited Laboratory

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ANNEX PHOTOGRAPHS OF EUT



1 CERTIFICATION

PRODUCT : Wireless Video Camera
BRAND NAME : Chevalier
MODEL NO : MVW9C
APPLICANT : Falcon Machine Tools Co., Ltd.
STANDARDS : 47 CFR Part 15, Subpart C (Section 15.249),
ANSI C63.4-1992
SITE REGISTRATION 90422 (FCC)
NO : IC 3789-5 (Canada IC)

We, **Advance Data Technology Corporation**, hereby certify that one sample MVW9C of the designation has been tested in our facility on January 18, 2001.

The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

Tested by	: <u>Steven Lu</u>	Date: <u>Jan. 19, 2001</u>
	Steven Lu	
Prepared by	: <u>Demi Chen</u>	Date: <u>Jan. 19, 2001</u>
	Demi Chen	
Approved by	: <u>Alan Lane</u>	Date: <u>Jan. 19, 2001</u>
	Dr. Alan Lane, Manager	

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
STANDARD PARAGRAPH	TEST REQUIREMENTS	RESULT	REMARK
15.107	AC Power Conducted Emissions Spec.: 48 dBuV	Yes	Minimum passing margin is -5.58dBuV At 0.61673 MHz
15.247(c)	Transmitter Radiated Emissions Spec.: Table 15.209	Yes	Minimum passing margin is -12.8 dBuV At 160.4 MHz
15.247(c)	Band Edge Measurement	Yes	N/A

NOTE:

The receiver portion of the EUT has been tested in ADT. The test result has been verified to comply with FCC Part 15, Subpart B, Class B – Computing Devices (FCC DoC). The engineering test report can be provided upon FCC requests.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless Video Camera
MODEL NO.	MVW9C
POWER SUPPLY	9VDC (from AC Adapter)
DATA CABLE	3.1m Nonshielded
I/O PORTS	A/V port
MODULATION TYPE	FSK
TRANSFER RATE	NA
FREQUENCY RANGE	2414.75MHz, 2432.75MHz, 2450.75MHz, 2468.75MHz
NUMBER OF CHANNEL	4
ANTENNA TYPE	Modified Dipole
ASSOCIATED DEVICES	NA
DESCRIPTION OF MODELS	The EUT is the transmitter part of Video Camera.

3.2 DESCRIPTION OF TEST MODES

Four channels are provided in this EUT.

Channel	Frequency
1	2414.75 MHz
2	2432.75MHz
3	2450.75 MHz
4	2468.75 MHz

Three channels, including lowest and highest channels are chosen for testing

Mode	Channel Frequency
Mode 1	Channel 1 (2414.75 MHz)
Mode 2	Channel 2 (2432.75 MHz)
Mode 3	Channel 4 (2468.75 MHz)

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless Video Camera, according to the specifications of the manufacturers, it must comply with the requirements of the following standards:

FCC CFR 47 Part 15, Subpart C. (15.249)

All tests have been performed and recorded as per the above standards.

3.4 DESCRIPTION OF SUPPORT UNITS

No	Product	Brand	Model No.	Serial No.	I/O Cable
1	TV MONITOR	PANASONIC	BT-1490Y	NA	Shielded
2	WIRELESS VIDEO CAMERA RECEIVER	FALCON	VSB-8	NA	NA

4 TEST PROCEDURES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Notes: 1.The lower limit shall apply at the transition frequencies.

2.The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

3.All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESHS30	828109/007	July 6, 2001
ROHDE & SCHWARZ Artificial Mains Network	ESH3-Z5	839135/006	July 9, 2001
ROHDE & SCHWARZ 4-wire ISN	ENY41	835154/007	Apr. 26, 2001
EMCO-L.I.S.N.	3825/2	9204-1964	July 9, 2001
Shielded Room	Site 2	ADT-C02	NA

Notes: 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.

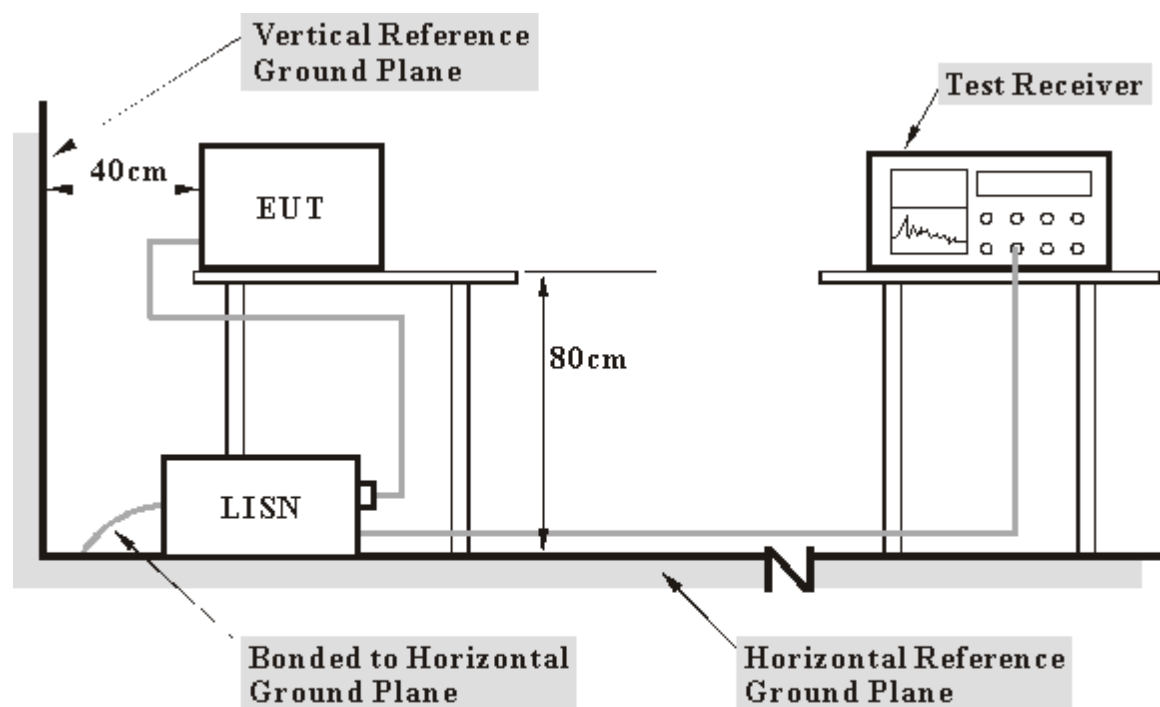
2.The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to NML/ROC and NIST/USA.



4.1.3 TEST PROCEDURES

1. Place the EUT at 0.4 meter away from the conduction wall of the shielded room.
2. Connect the EUT to the power mains through a Line Impedance Stabilization Network (LISN).
3. Connect the other support units to the other LISN too.
4. Make sure the 50Ω / $50\mu\text{H}$ coupling impedance is provided to the measurement instrument by the LISNs.
5. Measure the maximum conducted interference on both lines of the power mains connects to the EUT, within frequency range 450KHz ~ 30MHz.
6. The emission level under limit by 10dB is not needed to be reported.

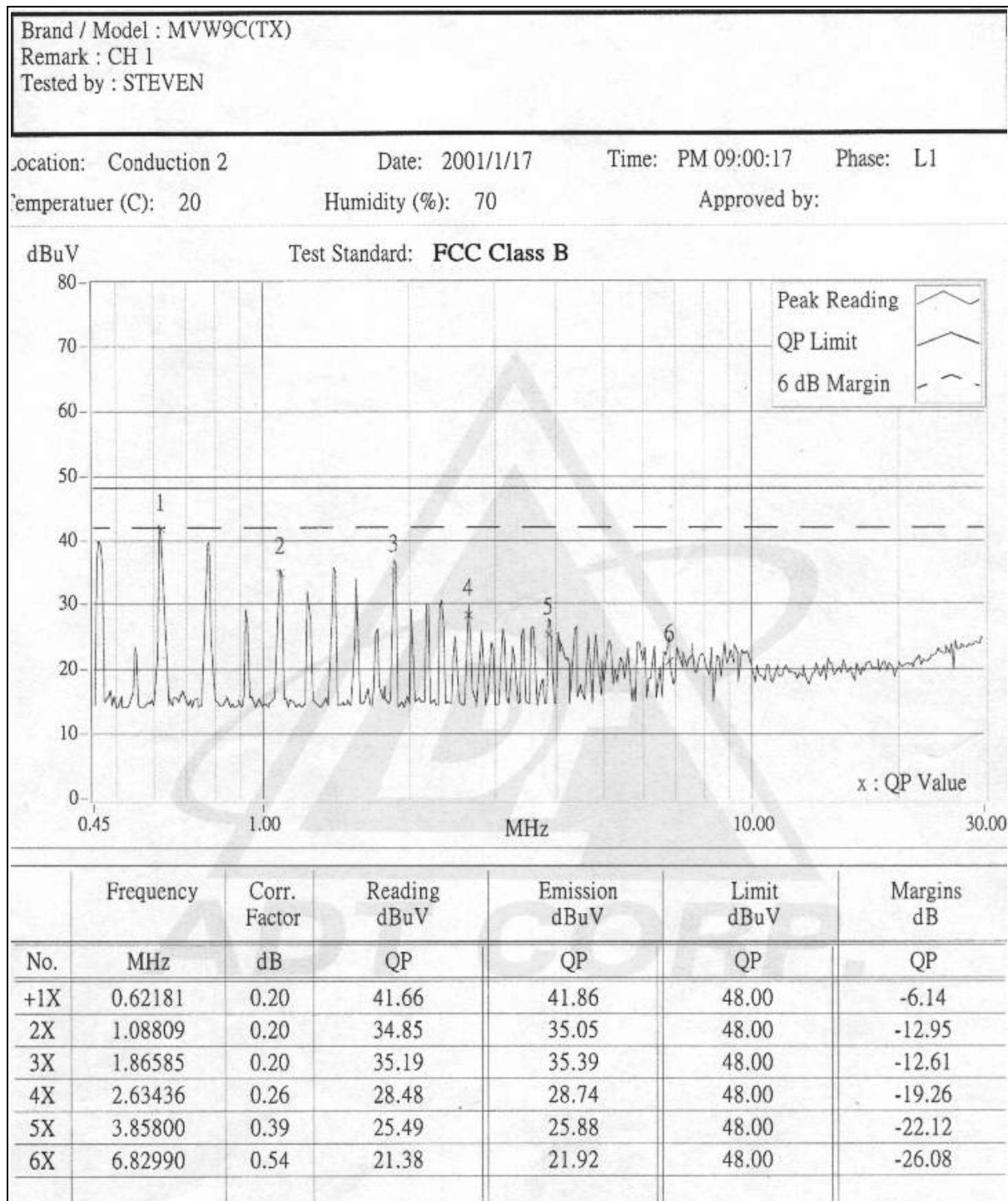
4.1.4 TEST SETUP



- Note:** 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related Item in this test report (**Photographs of the Test Configuration**).

4.1.5 TEST RESULTS



Brand / Model : MVW9C(TX)
 Remark : CH 1
 Tested by : STEVEN

Location: Conduction 2

Date: 2001/1/17

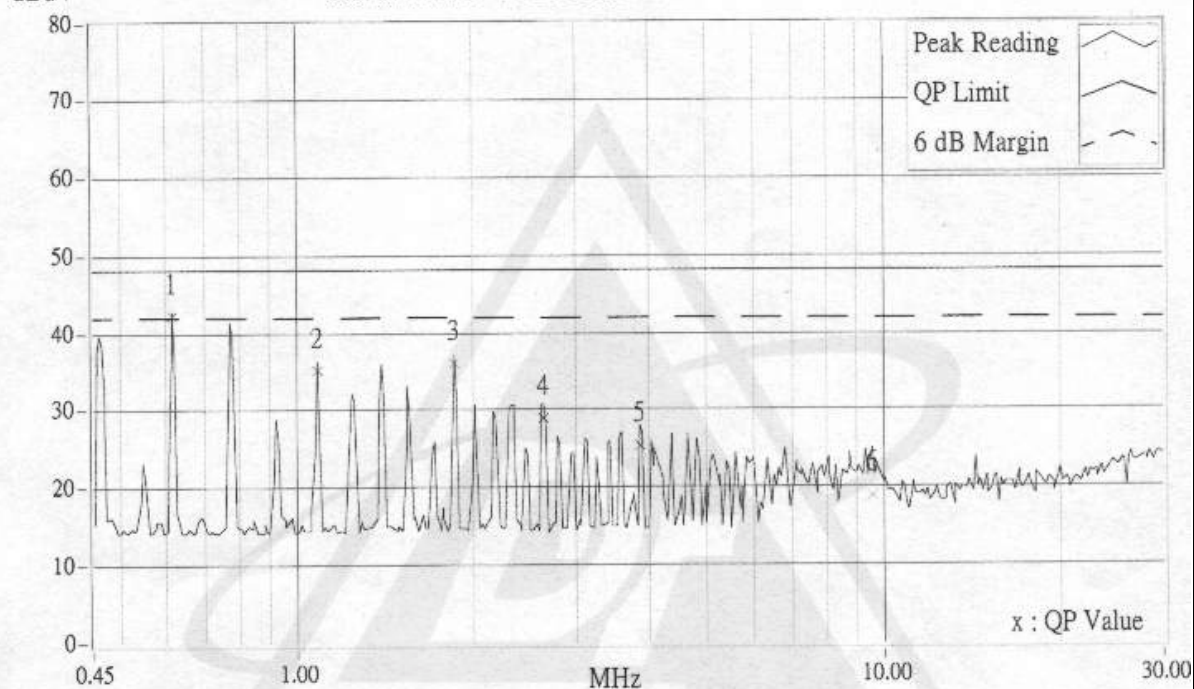
Time: PM 09:03:38 Phase: N

Temperature (C): 20

Humidity (%): 70

Approved by:

dBuV Test Standard: FCC Class B



	Frequency	Corr. Factor	Reading dBuV	Emission dBuV	Limit dBuV	Margins dB
No.	MHz	dB	QP	QP	QP	QP
+1X	0.61673	0.20	42.22	42.42	48.00	-5.58
2X	1.08092	0.20	35.07	35.27	48.00	-12.73
3X	1.85446	0.20	35.95	36.15	48.00	-11.85
4X	2.62454	0.26	28.92	29.18	48.00	-18.82
5X	3.85073	0.39	25.51	25.90	48.00	-22.10
6X	9.57973	0.59	18.87	19.46	48.00	-28.54

Brand / Model : MVW9C(TX)

Remark : CH 2

Tested by : STEVEN

Location: Conduction 2

Date: 2001/1/17

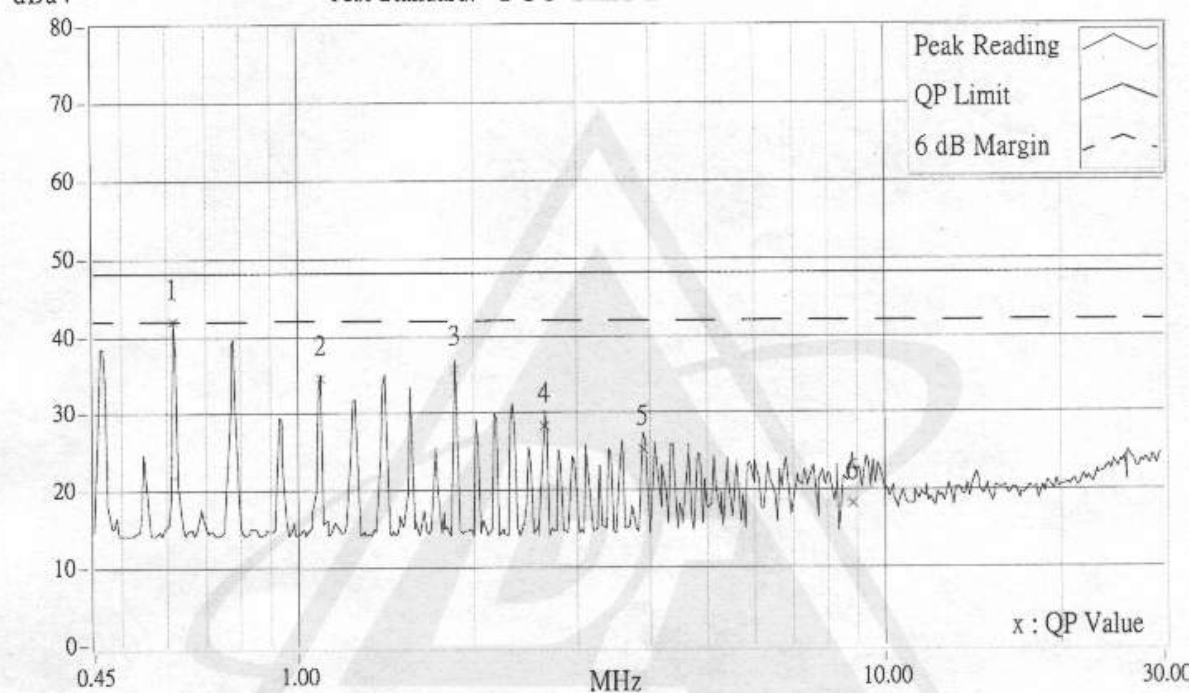
Time: PM 08:57:11 Phase: L1

Temperature (C): 20

Humidity (%): 70

Approved by:

dBuV Test Standard: FCC Class B



	Frequency	Corr. Factor	Reading dBuV	Emission dBuV	Limit dBuV	Margins dB
No.	MHz	dB	QP	QP	QP	QP
+1X	0.61800	0.20	41.90	42.10	48.00	-5.90
2X	1.08992	0.20	34.53	34.73	48.00	-13.27
3X	1.85700	0.20	35.65	35.85	48.00	-12.15
4X	2.63877	0.26	28.46	28.72	48.00	-19.28
5X	3.86446	0.39	25.51	25.90	48.00	-22.10
6X	8.84336	0.64	18.44	19.08	48.00	-28.92

Brand / Model : MVW9C(TX)
 Remark : CH 2
 Tested by : STEVEN

Location: Conduction 2

Date: 2001/1/17

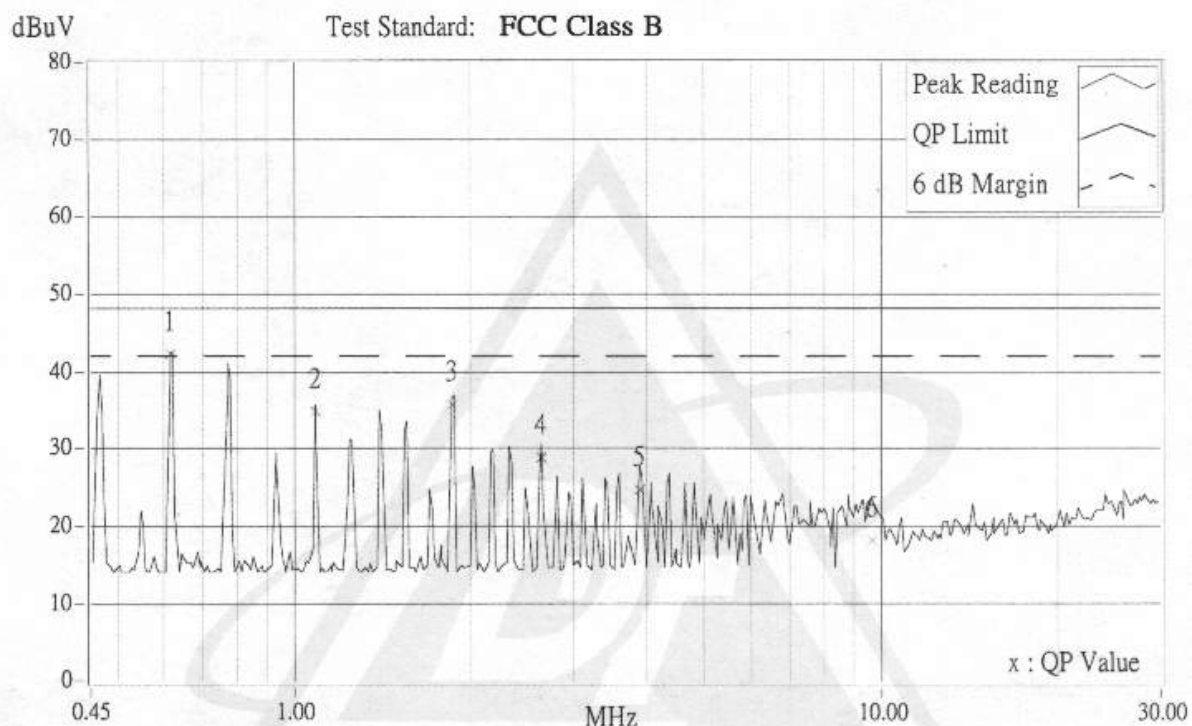
Time: PM 08:53:43

Phase: N

Temperature (C): 20

Humidity (%): 70

Approved by:



	Frequency	Corr. Factor	Reading dBuV	Emission dBuV	Limit dBuV	Margins dB
No.	MHz	dB	QP	QP	QP	QP
+1X	0.61723	0.20	42.08	42.28	48.00	-5.72
2X	1.08579	0.20	34.97	35.17	48.00	-12.83
3X	1.85400	0.20	35.85	36.05	48.00	-11.95
4X	2.62673	0.26	28.90	29.16	48.00	-18.84
5X	3.87992	0.39	24.71	25.10	48.00	-22.90
6	9.64400	0.59	18.20	18.79	48.00	-29.21

Brand / Model : MVW9C(TX)
 Remark : CH 4
 Tested by : STEVEN

Location: Conduction 2

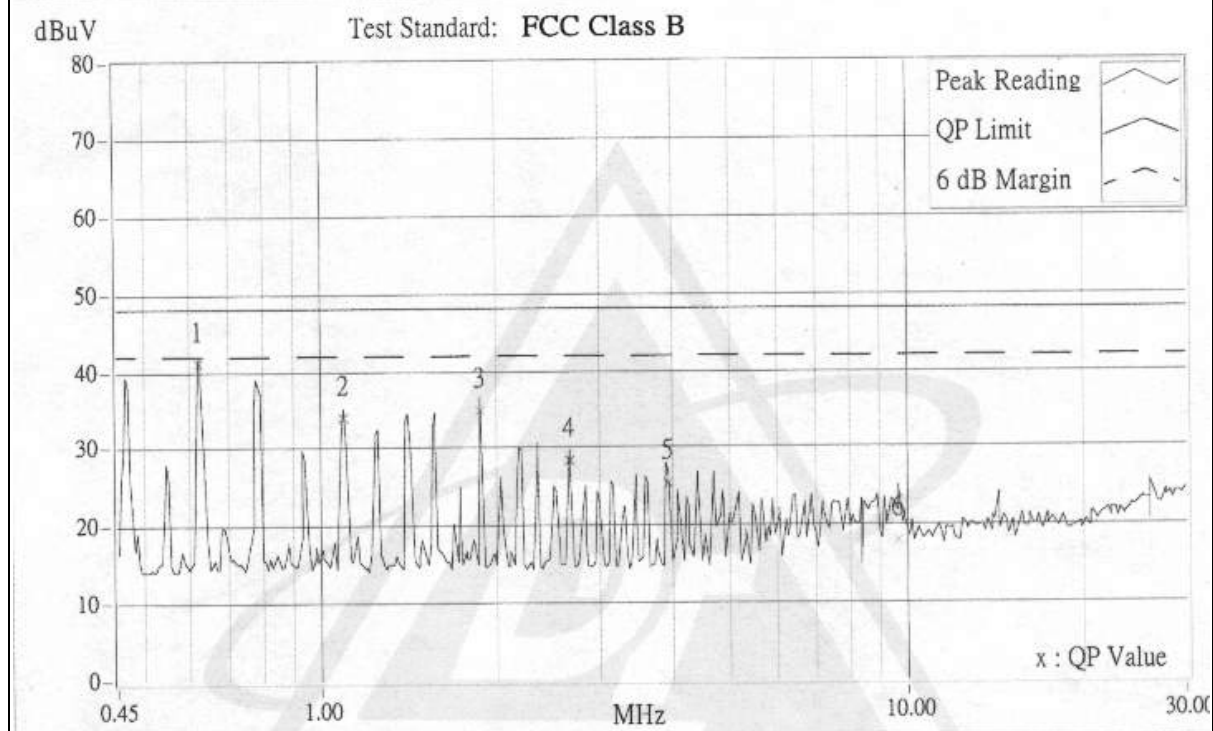
Date: 2001/1/17

Time: PM 08:46:48 Phase: L1

Temperatuer (C): 20

Humidity (%): 70

Approved by:



	Frequency	Corr. Factor	Reading dBuV	Emission dBuV	Limit dBuV	Margins dB
No.	MHz	dB	QP	QP	QP	QP
+1X	0.62212	0.20	41.06	41.26	48.00	-6.74
2X	1.09246	0.20	33.89	34.09	48.00	-13.91
3X	1.87456	0.20	34.91	35.11	48.00	-12.89
4X	2.65454	0.27	28.28	28.55	48.00	-19.45
5X	3.89865	0.39	25.45	25.84	48.00	-22.16
6X	9.69317	0.68	17.88	18.56	48.00	-29.44

Brand / Model : MVW9C(TX)
 Remark : CH 4
 Tested by : STEVEN

Location: Conduction 2

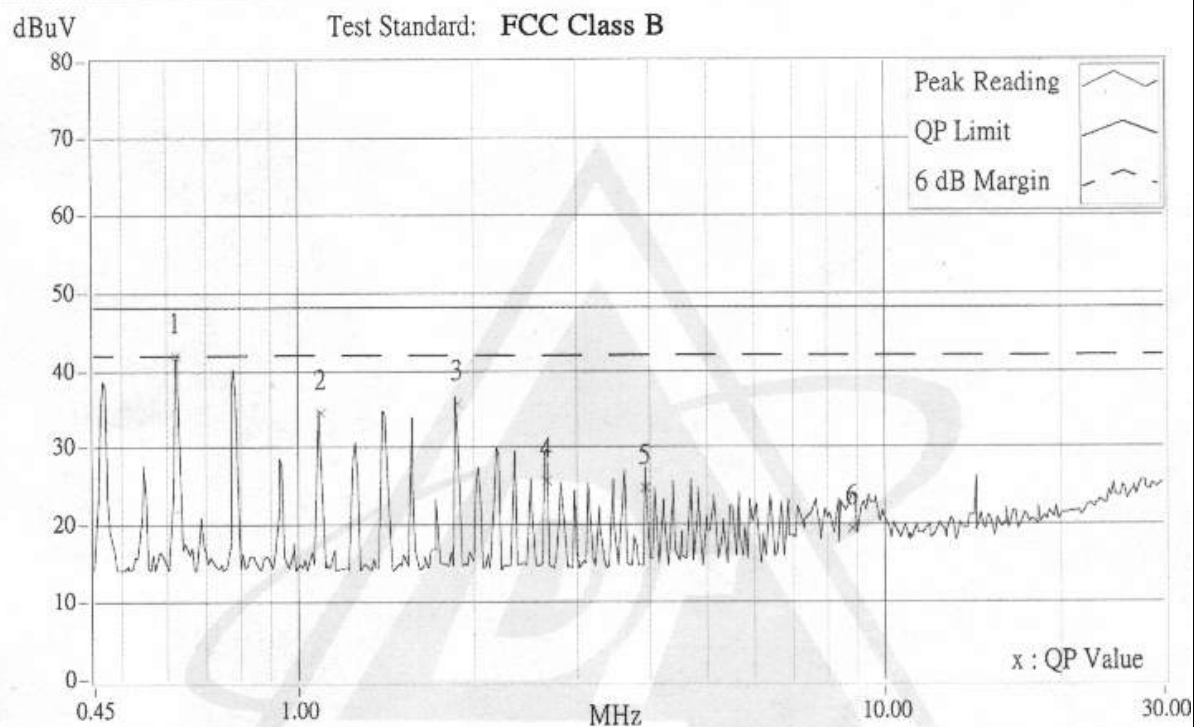
Date: 2001/1/17

Time: PM 08:50:31 Phase: N

Temperature (C): 20

Humidity (%): 70

Approved by:



	Frequency	Corr. Factor	Reading dBuV	Emission dBuV	Limit dBuV	Margins dB
No.	MHz	dB	QP	QP	QP	QP
+1X	0.62146	0.20	42.04	42.24	48.00	-5.76
2X	1.08941	0.20	34.43	34.63	48.00	-13.37
3X	1.86809	0.20	35.65	35.85	48.00	-12.15
4X	2.66400	0.27	25.54	25.81	48.00	-22.19
5X	3.90127	0.39	24.91	25.30	48.00	-22.70
6X	8.86400	0.56	19.34	19.90	48.00	-28.10