

**ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT  
INTENTIONAL RADIATOR CERTIFICATION TO  
FCC PART 15 SUBPART C REQUIREMENT**

of

**Tablet**

**FCC ID** : HV4FT0405U  
**Trade Name** : FT-0405-U  
**Model Number** : FT-0405-U  
**Serial Number** : N/A  
**Report Number** : 020424-ID  
**Date** : May 8, 2002

Prepared for :

**WACOM CO., LTD.**  
2-510-1, Toyonodai, Otone-machi, Kitasaitama-gun,  
Saitama 349-1148, Japan

Prepared by :



**C&C LABORATORY CO., LTD.**  
#B1, 1<sup>st</sup> Fl., Universal Center, No. 183, Sec. 1,  
Tatung Rd., Hsi Chih,  
Taipei Hsien, Taiwan, R.O.C.  
TEL: (02) 86422071  
FAX: (02) 86422256

**This report shall not be reproduced, except in full, without the written approval of  
C&C Laboratory, Co., Ltd.**



## Table of Content

Page

VERIFICATION OF COMPLIANCE.....	3
PRODUCT INFORMATION .....	4
SUPPORT EQUIPMENT .....	5
MEASUREMENT PROCEDURE .....	6
MEASUREMENT PROCEDURE – Sub. Part C .....	8
MEASUREMENT PROCEDURE – Sub. Part C .....	10
SUMMARY DATA.....	12
TEST FACILITY.....	21
TEST EQUIPMENT LIST.....	22
BLOCK DIAGRAM OF TEST SETUP .....	23
APPENDIX 1.....	24
PHOTOGRAPHS.....	24
(TEST SETUP OF LINE CONDUCTED EMISSION TEST).....	24
APPENDIX 2.....	26
PHOTOGRAPHS.....	26
(TEST SETUP OF RADIATED EMISSION TEST).....	26
APPENDIX 3.....	28
PHOTOGRAPHS OF EUT.....	28
APPENDIX 4.....	29
User Manual.....	29
APPENDIX 5.....	30
Schematics .....	30
APPENDIX 6.....	31
Block Diagram.....	31
APPENDIX 7.....	32
Operational Description .....	32
APPENDIX 8.....	33
Proposed FCC ID Label Format .....	33



## VERIFICATION OF COMPLIANCE

**Equipment Under Test:** Tablet  
**Trade Name:** FT-0405-U  
**Model Number:** FT-0405-U  
**Serial Number:** N/A  
**Applicant:** **WACOM CO., LTD.**  
2-510-1, Toyonodai, Otone-machi, Kitasaitama-gun,  
Saitama 349-1148, Japan  
**Manufacturer:** **Saitek Electronics (Shenzhen) Ltd.**  
139 Da Bao Rd., District 33 Bao An, Shenzhen, PRC  
**Type of Test:** FCC Rules and Regulations Part 15 Subpart C (2000)  
**Measurement Procedure:** ANSI C63.4: 1992  
**File Number:** 020424-D  
**Date of test:** April 16 ~ May 6, 2002  
**Deviation:** None  
**Condition of Test Sample:** Normal

The above equipment was tested by C&C Laboratory, Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15 Subpart C and the measurement procedure according to ANSI C63.4. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

A handwritten signature in cursive script that reads 'Steven Wang'.

---

**Steven Wang / RF Dept. Manager**



## PRODUCT INFORMATION

**Housing Type:** Plastic  
**EUT Power Rating:** DCV from USB Cable of Host PC  
**AC power during Test:** 120VAC/60Hz to Power Supply of Host PC  
**AC Power Cord Type:** Unshielded, 1.8m (Detachable) to Host PC  
**OSC/Clock Frequencies:** 600kHz  
**USB Cable Type:** Shielded, 1.5m (Non-detachable)  
**FCC ID:** HV4FT0405U

### I/O Port of EUT:

I/O Port Type	Q'TY	Tested with
1). USB Port	1	1



## SUPPORT EQUIPMENT

No.	Equipment	Model #	Serial #	FCC ID	Trade Name	Data Cable	Power Cord
1.	PC	EVO D300	6K1BKF83F0FV	FCC DoC	Compaq	N/A	Unshielded, 1.8m
2.	Monitor	CPD-G200	2715884	FCC DoC	SONY	Shielded, 1.8m with a core	Unshielded, 1.8m
3.	Printer	EPSON STYLUS C20SX	DW4E	N/A	EPSON	Shielded, 1.8m	Unshielded, 1.8m
4.	Modem	231AA	A08431083982	BFJ9D93108US	Hayes	Shielded, 1.8m	Unshielded, 1.8m
5.	PS/2 Keyboard	SK-2800C	B1C790BCPJ73JQ	GYUR79SK	Compaq	Shielded, 1.8m	N/A
6.	PS/2 Mouse	M-CAA43	PHB02400489	FCC DoC	Logitech	Shielded, 1.8m	N/A

**Note:** All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

**Grounding:** Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.



## **MEASUREMENT PROCEDURE (PRELIMINARY LINE CONDUCTED EMISSION TEST)**

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received AC power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5) All support equipment received power from a second LISN supplying power of 110VAC/60Hz, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode was scanned during the preliminary test:

**Mode:**

**1. USB Communication**

- 10) After the preliminary scan, we found the following test mode producing the highest emission level.

**Mode:           1.**

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.



## MEASUREMENT PROCEDURE (FINAL LINE CONDUCTED EMISSION TEST)

- 1) EUT and support equipment was set up on the test bench as per step 10 of the preliminary test.
- 2) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Q.P. mode, then the emission signal was re-checked using an Average detector.
- 3) The test data of the worst case condition(s) was reported on the Summary Data page.

**Data Sample:**

Freq. MHz	Q.P. Raw dBuV	Average Raw dBuV	Q.P. Limit dBuV	Average Limit dBuV	Q.P. Margin dB	Average Margin dB	Note
x.xx	43.95	---	56	46	-12.05	-2.05	L 1

- Freq. = Emission frequency in MHz
- Raw dBuV = Uncorrected Analyzer/Receiver reading
- Limit dBuV = Limit stated in standard
- Margin dB = Reading in reference to limit
- Note = Current carrying line of reading
- “---“ = The emission level complied with the Average limits, with at least 2 dB margin, so no further recheck.

## LINE CONDUCTED EMISSION LIMIT

Frequency	Maximum RF Line Voltage	
	Q.P.	AVERAGE
150kHz-500kHz	66-56dBuV	56-46dBuV
500kHz-5MHz	56dBuV	46dBuV
5MHz-30MHz	60dBuV	50dBuV

Note: The lower limit shall apply at the transition frequency.



## **MEASUREMENT PROCEDURE – Sub. Part C (PRELIMINARY RADIATED EMISSION TEST – 30 ~ 1000MHz)**

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received AC power source from the outlet socket under the turntable. All support equipment received 110VAC/60Hz power from another socket under the turntable, if any.
- 5) The antenna was placed at 3 meter away from the EUT as stated in ANSI C63.4. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 7) The following test mode was scanned during the preliminary test:

**Mode:**

**1. USB Communication**

- 8) After the preliminary scan, we found the following test mode producing the highest emission level.

**Mode: 1.**

Then, the EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for reference of final testing.





## **MEASUREMENT PROCEDURE – Sub. Part C**

### **(FINAL RAIDATED EMISSION TEST – 30 ~ 1000MHz)**

- 1) EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.
- 2) The Analyzer / Receiver scanned from 30MHz to 1000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- 3) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.
- 4) The test data of the worst case condition(s) was reported on the Summary Data page.

## **RADIATED EMISSION LIMIT**

Frequency (MHz)	Distance (m)	dB $\mu$ V/m	$\mu$ V/m
30 ~ 88	3	40.0	100
88 ~ 216	3	43.5	150
216 ~ 960	3	46.0	200
> 960	3	54.0	500



## **MEASUREMENT PROCEDURE – Sub. Part C (PRELIMINARY RADIATED EMISSION TEST – 9kHz ~ 30MHz)**

- 1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) The EUT received AC power source from the outlet socket under the turntable. All support equipment received 110VAC/60Hz power from another socket under the turntable, if any.
- 5) The antenna was placed at 3 meter away from the EUT as stated in ANSI C63.4. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- 6) The radiated emission measurement of fundamental and spurious radiation under test was made at the distance of 3 m away from the device which was placed on wooden turntable 0.8 m height above the ground. The receiving loop antenna was rotated through 360 degrees. The center of loop antenna was set to 1 m above the ground. The wooden turntable was rotated 360 degrees to obtain the highest reading on the field strength meter.
- 7) The following test mode was scanned during the preliminary test:

**Mode:**

**1. USB Communication**

- 8) After the preliminary scan, we found the following test mode producing the highest emission level.

**Mode: 1.**

Then, the EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for reference of final testing.



## **MEASUREMENT PROCEDURE – Sub. Part C**

### **(FINAL RAIDATED EMISSION TEST – 9kHz ~ 30MHz)**

- 1) EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.
- 2) The radiated emission measurement of fundamental and spurious radiation under test was made at the distance of 3 m away from the device which was placed on wooden turntable 0.8 m height above the ground. The receiving loop antenna was rotated through 360 degrees. The center of loop antenna was set to 1 m above the ground. The wooden turntable was rotated 360 degrees to obtain the highest reading on the field strength meter.
- 3) Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.
- 4) The test data of the worst case condition(s) was reported on the Summary Data page.

## **RADIATED EMISSION LIMIT**

Frequency (MHz)	Distance (m)	dB $\mu$ V/m	$\mu$ V/m
0.009 ~ 0.490	3	88.5 ~ 53.8	2400/F(kHz) + 40
0.490 ~ 1.705	3	53.8 ~ 43.0	2400/F(kHz) + 20
1.705 ~ 30	3	29.5	30



## SUMMARY DATA (LINE CONDUCTED TEST)

**Model Number:** FT-0405-U

**Location:** Site # 4

**Tested by:** George Liao

**Test Mode:** Mode 1

**Test Results:** Passed

**Temperature:** 25

**Humidity:** 70%RH

(The chart below shows the highest readings taken from the final data)

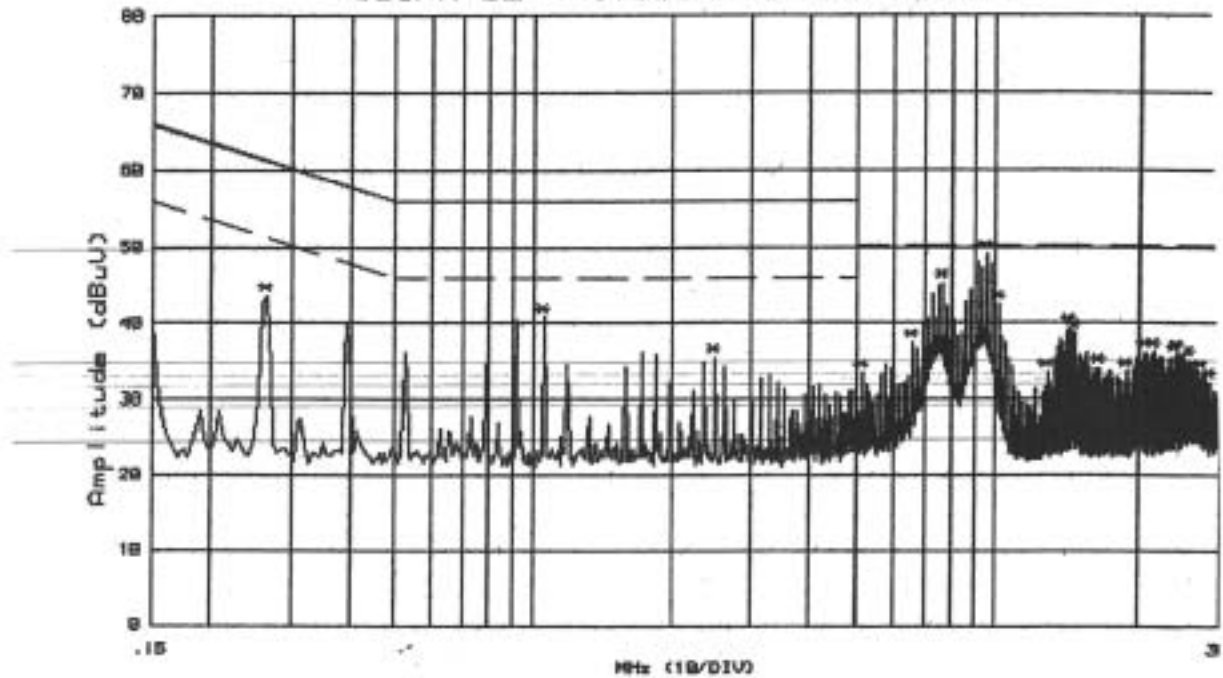
FREQ MHz	Q.P. RAW dBuV	AVG RAW dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
1.708	41.10	---	56.00	46.00	-14.90	---	L1
3.682	40.60	---	56.00	46.00	-15.40	---	L1
4.468	41.50	---	56.00	46.00	-14.50	---	L1
7.712	43.40	---	60.00	50.00	-16.60	---	L1
9.590	19.30	---	60.00	50.00	-40.70	---	L1
10.158	40.10	---	60.00	50.00	-19.90	---	L1
0.265	41.30	---	61.30	51.30	-20.00	---	L2
1.048	38.40	---	56.00	46.00	-17.60	---	L2
2.502	33.20	---	56.00	46.00	-22.80	---	L2
7.708	42.10	---	60.00	50.00	-17.90	---	L2
9.588	45.50	---	60.00	50.00	-14.50	---	L2
10.162	40.50	---	60.00	50.00	-19.50	---	L2

L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

**\*\*NOTE: “---” denotes the emission level was or more than 2dB below the Average limit, so no re-check anymore.**



C&C Lab. Co. Shielded Room4  
 CISPR 22 - Class B QP/AU Limit



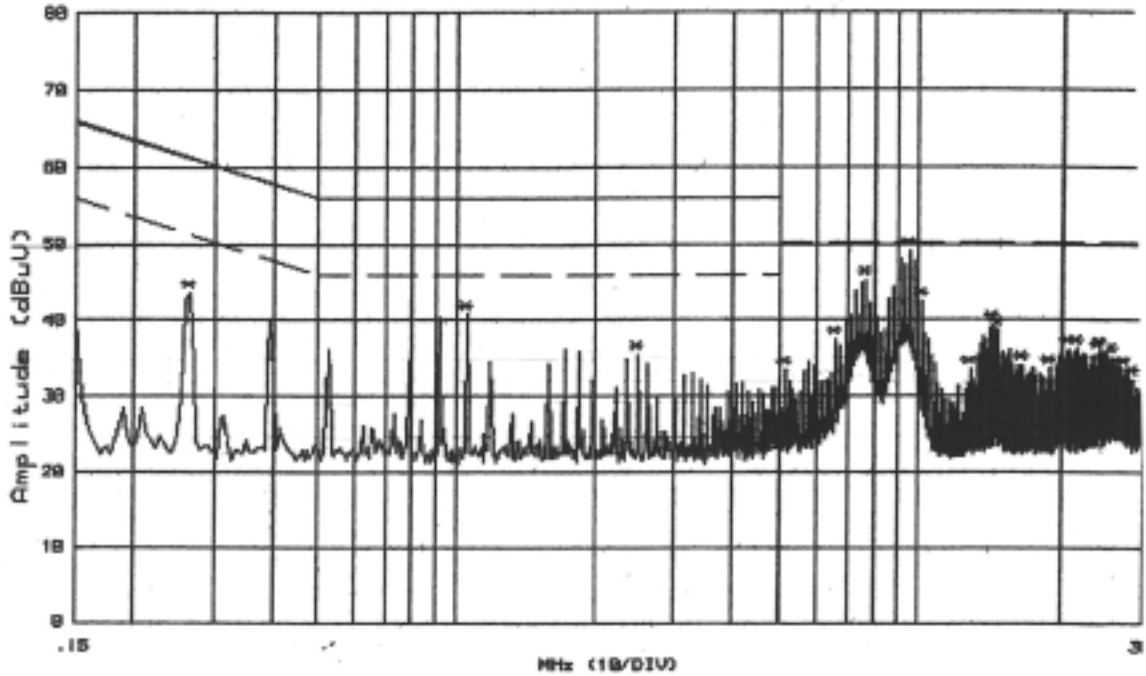
Customer: PENPOWER                      File#: 1922                      Date :16 Apr 2002 13:02:20  
 Model : FT-0405-U                      Humd.:70 (%)                      Temp. :25 (C)  
 Mode :                                      Port :L2                              Tested by:George LIAO  
 Reading :Peak(R&S Receiver)  
 Remark :

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1	.265	33.5	10.1	43.6	61.3	-17.7	
2	1.050	31.0	9.8	40.8	56.0	-15.2	
3	2.500	25.6	9.8	35.4	56.0	-20.6	
4	5.130	23.6	9.8	33.4	60.0	-26.6	
5	6.580	27.7	9.8	37.5	60.0	-22.5	
6	7.710	35.5	9.8	45.3	60.0	-14.7	
7	9.590	39.3	9.8	49.1	60.0	-10.9	
8	10.160	32.6	9.9	42.5	60.0	-17.5	
9	12.890	23.6	9.9	33.5	60.0	-26.5	
10	14.340	29.5	9.9	39.4	60.0	-20.6	
11	14.730	28.8	9.9	38.7	60.0	-21.3	
12	16.570	24.1	10.0	34.1	60.0	-25.9	
13	18.810	23.6	10.0	33.6	60.0	-26.4	
14	20.650	26.3	10.0	36.3	60.0	-23.8	
15	21.440	26.3	10.0	36.3	60.0	-23.7	
16	23.810	25.7	10.0	35.7	60.0	-24.3	
17	24.070	26.1	10.0	36.1	60.0	-23.9	
18	25.780	25.1	10.1	35.2	60.0	-24.8	
19	27.230	23.4	10.1	33.5	60.0	-26.5	
20	28.540	22.1	10.1	32.2	60.0	-27.8	

End of file : 1922



C&C Lab. Co. Shielded Room4  
 CISPR 22 - Class B QP/AU Limit



Customer: PENPOWER  
 Model : FT-0405-U  
 Mode :  
 Reading : Peak (R&S Receiver)  
 Remark :  
 File#: 1922  
 Humd.: 70 (%)  
 Port : L2  
 Date : 16 Apr 2002 13:02:20  
 Temp. : 25 (C)  
 Tested by: George LIAO

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1	.265	33.5	10.1	43.6	61.3	-17.7	
2	1.050	31.0	9.8	40.8	56.0	-15.2	
3	2.500	25.6	9.8	35.4	56.0	-20.6	
4	5.130	23.6	9.8	33.4	60.0	-26.6	
5	6.580	27.7	9.8	37.5	60.0	-22.5	
6	7.710	35.5	9.8	45.3	60.0	-14.7	
7	9.590	39.3	9.8	49.1	60.0	-10.9	
8	10.160	32.6	9.9	42.5	60.0	-17.5	
9	12.890	23.6	9.9	33.5	60.0	-26.5	
10	14.340	29.5	9.9	39.4	60.0	-20.6	
11	14.730	28.8	9.9	38.7	60.0	-21.3	
12	16.570	24.1	10.0	34.1	60.0	-25.9	
13	18.810	23.6	10.0	33.6	60.0	-26.4	
14	20.650	26.3	10.0	36.3	60.0	-23.8	
15	21.440	26.3	10.0	36.3	60.0	-23.7	
16	23.810	25.7	10.0	35.7	60.0	-24.3	
17	24.070	26.1	10.0	36.1	60.0	-23.9	
18	25.780	25.1	10.1	35.2	60.0	-24.8	
19	27.230	23.4	10.1	33.5	60.0	-26.5	
20	28.540	22.1	10.1	32.2	60.0	-27.8	

End of file : 1922



## SUMMARY DATA

### (RADIATED EMISSION TEST – 30MHz ~ 1000MHz)

**Model Number:** FT-0405-U

**Location:** Site # 3

**Tested by:** Roger Hung

**Polar:** Vertical--3m

**Test Mode:** Mode 1

**Test Results:** Passed

**Detector Function:** Quasi-Peak

**Temperature:** 28

**Humidity:** 62%RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data ( dBuV/m )	Corr. Factor (dB)	Emiss. Level ( dBuV/m )	Limits	Margin (dB)
108.36	18.84	13.06	31.90	43.50	-11.60
160.41	20.79	11.41	32.20	43.50	-11.30
170.28	20.82	12.18	33.00	43.50	-10.50
185.47	17.93	13.47	31.40	43.50	-12.10
300.21	20.91	16.69	37.60	46.00	-8.40
600.58	14.04	25.36	39.40	46.00	-6.60







## SUMMARY DATA

### (RADIATED EMISSION TEST – 30MHz ~ 1000MHz)

**Model Number:** FT-0405-U

**Location:** Site # 3

**Tested by:** Roger Hung

**Polar:** Horizontal--3m

**Test Mode:** Mode 1

**Test Results:** Passed

**Detector Function:** Quasi-Peak

**Temperature:** 26

**Humidity:** 67%RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data ( dBuV/m )	Corr. Factor (dB)	Emiss. Level ( dBuV/m )	Limits	Margin (dB)
150.53	18.86	11.14	30.0	43.50	-13.5
185.16	17.16	13.44	30.6	43.50	-12.90
300.50	19.71	16.69	36.4	46.00	-9.60
600.13	12.83	25.37	38.2	46.00	-7.80
680.30	14.78	25.42	40.2	46.00	-5.8
900.23	13.65	28.15	41.8	46.00	-4.20

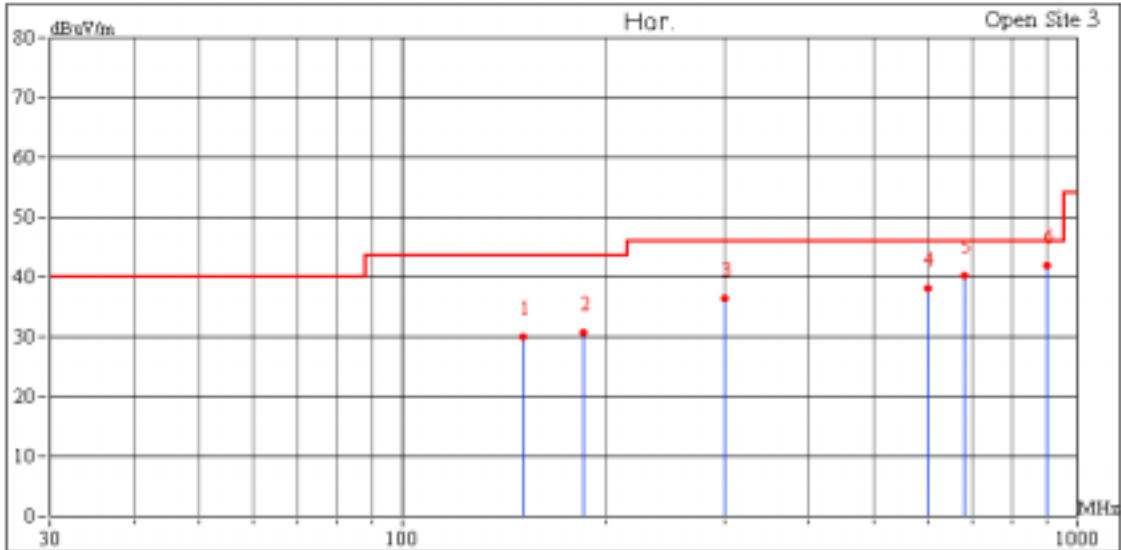


# C&C LABORATORY CO., LTD.

Custom Name: WACOM CO.,LTD  
 Model Name: FT-0405-U

Test Mode: COMMUNICATION HORIZONTAL  
 Engineer Name: ROGER

Date: 2002/5/6



	Frequency(MHz)	Amplitude(dBuV/m)	Margin(dB)	Limit(dBuV/m)	Read Amplitude(dBuV)	Factor(dB)	
1	150.5300	30.00	-13.50	43.50	18.86	11.14	QP
2	185.1600	30.60	-12.90	43.50	17.16	13.44	QP
3	300.5000	36.40	-9.60	46.00	19.71	16.69	QP
4	600.1300	38.20	-7.80	46.00	12.83	25.37	QP
5	680.3000	40.20	-5.80	46.00	14.78	25.42	QP
6	900.2300	41.80	-4.20	46.00	13.65	28.15	QP

Comments:



## SUMMARY DATA

### (RADIATED EMISSION TEST – 9kHz ~ 30MHz)

**Model Number:** FT-0405-U

**Location:** Site # 3

**Tested by:** Roger Hung

**Polar:** Vertical--3m

**Test Mode:** Mode 1

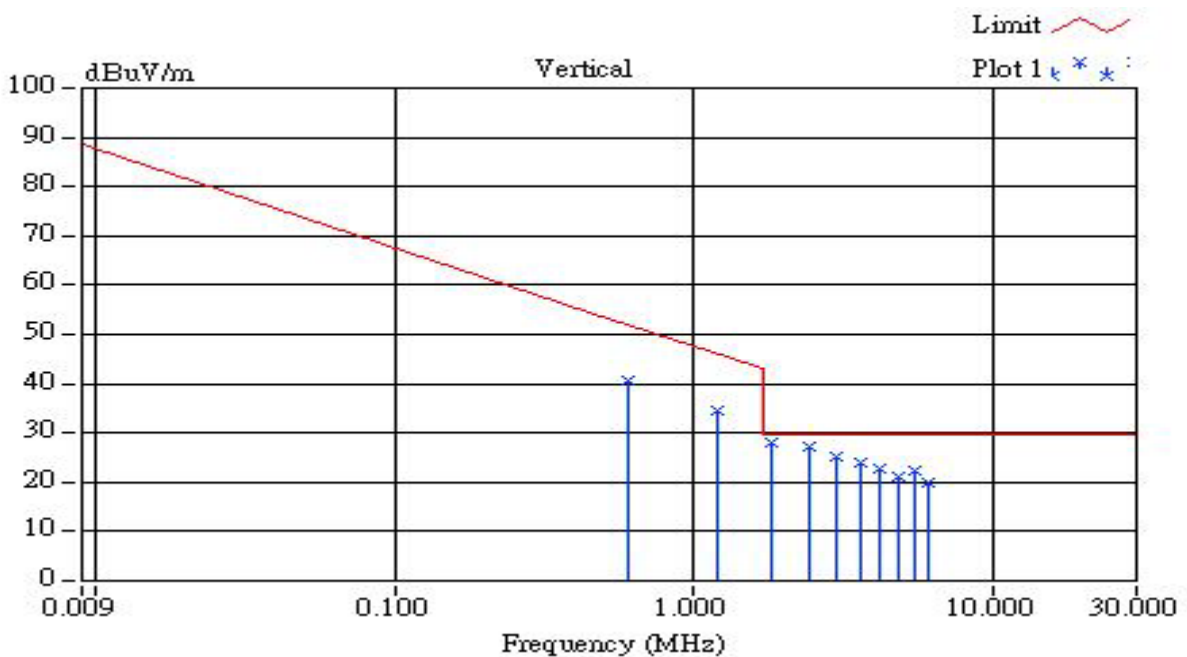
**Test Results:** Passed

**Detector Function:** Quasi-Peak

**Temperature:** 25

**Humidity:** 65%RH

Freq.	Reading	Cable Loss	Amp Gain	Ant Factor	Total Factor	Result	Limit	Margin	Pol
KHz	dBuV	dB	dB	dB	dB	dBuV/m	dB	dB	(H/V)
600.00	29.41	0.12	0	11.2	11.32	40.73	52.04	-11.31	V
1200.00	22.93	0.12	0	11.6	11.72	34.65	46.02	-11.37	V
1800.00	16.32	0.12	0	11.6	11.72	28.04	29.50	-1.46	V
2400.00	15.67	0.12	0	11.6	11.72	27.39	29.50	-2.11	V
3000.00	13.60	0.12	0	11.6	11.72	25.32	29.50	-4.18	V
3600.00	12.13	0.12	0	11.6	11.72	23.85	29.50	-5.65	V
4200.00	11.12	0.12	0	11.5	11.62	22.74	29.50	-6.76	V
4800.00	9.70	0.12	0	11.5	11.62	21.32	29.50	-8.18	V
5400.00	10.92	0.12	0	11.5	11.62	22.54	29.50	-6.96	V
6000.00	8.11	0.12	0	11.5	11.62	19.73	29.50	-9.77	V





## SUMMARY DATA

### (RADIATED EMISSION TEST – 9kHz ~ 30MHz)

**Model Number:** FT-0405-U **Location:** Site # 3

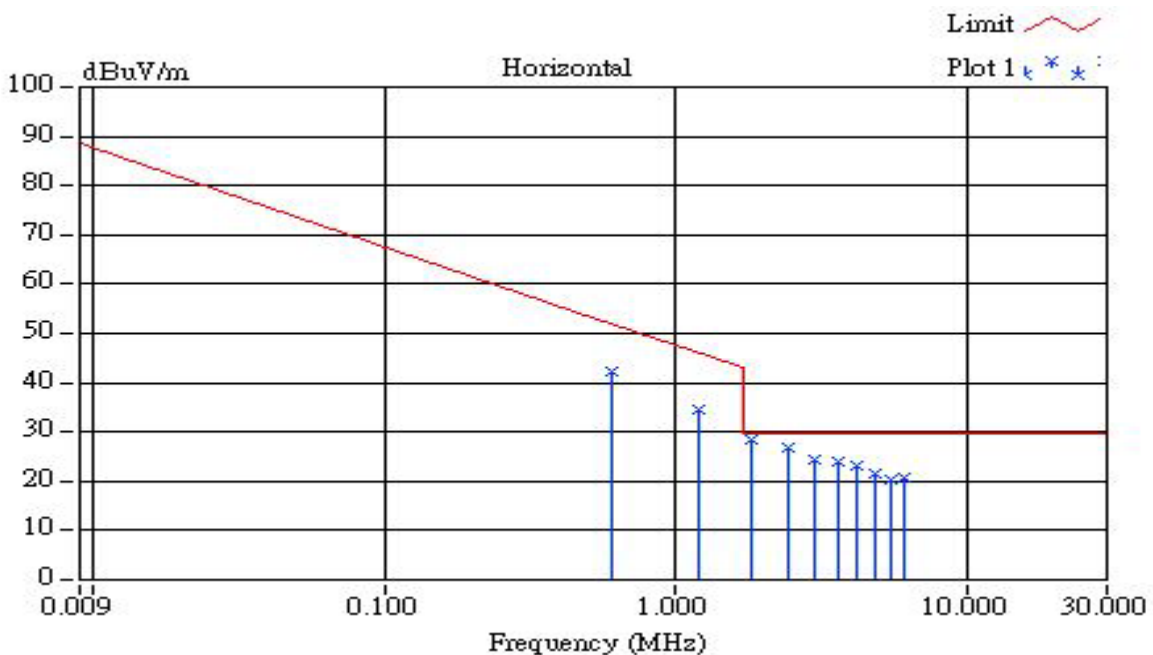
**Tested by:** Roger Hung **Polar:** Vertical--3m

**Test Mode:** Model 1 **Test Results:** Passed

**Detector Function:** Quasi-Peak

**Temperature:** 25 **Humidity:** 65%RH

Freq.	Reading	Cable Loss	Amp Gain	Ant Factor	Total Factor	Result	Limit	Margin	Pol
KHz	dBuV	dB	dB	dB	dB	dBuV/m	dB	dB	(H/V)
600.00	31.05	0.12	0	11.2	11.32	42.37	52.04	-9.67	H
1200.00	22.71	0.12	0	11.6	11.72	34.43	46.02	-11.59	H
1800.00	16.81	0.12	0	11.6	11.72	28.53	29.50	-0.97	H
2400.00	15.22	0.12	0	11.6	11.72	26.94	29.50	-2.56	H
3000.00	12.71	0.12	0	11.6	11.72	24.43	29.50	-5.07	H
3600.00	12.37	0.12	0	11.6	11.72	24.09	29.50	-5.41	H
4200.00	11.55	0.12	0	11.5	11.62	23.17	29.50	-6.33	H
4800.00	9.93	0.12	0	11.5	11.62	21.55	29.50	-7.95	H
5400.00	8.78	0.12	0	11.5	11.62	20.40	29.50	-9.10	H
6000.00	8.94	0.12	0	11.5	11.62	20.56	29.50	-8.94	H





## TEST FACILITY

- Location:** No. 81-1, 210 Lane, Pa-de 2<sup>nd</sup> Road, Lu-Chu Hsiang, Taoyuan, Taiwan, R. O. C.
- Description:** There are four 3/10m open area test sites and three line conducted labs for final test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4 and CISPR 22/EN 55022 requirements.
- Site Filing:** A site description is on file with the Federal Communications Commission, 7435 Oakland Mills Road, Columbia, MD 21046.
- Registration also was made with Voluntary Control Council for Interference (VCCI).
- Site Accreditation:** Accredited by NEMKO (Authorization #: ELA 124) for EMC & A2LA (Certificate #: 824.01) for Emission
- Also accredited by BSMI for the product category of Information Technology Equipment.
- Instrument Tolerance:** All measuring equipment is in accord with ANSI C63.4 and CISPR 22 requirements that meet industry regulatory agency and accreditation agency requirement.
- Ground Plane:** Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.
- Site#3 & # 4Line Conducted Test Site:** At Shielding Room



## TEST EQUIPMENT LIST

**Instrumentation:** The following list contains equipment used at C & C Laboratory, Co., Ltd. for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2-1988 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10kHz to 1.0 GHz or above.

**Equipment used during the tests:**

<b>Open Area Test Site # 3 (30MHz ~ 1000MHz)</b>					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Spectrum Analyzer	ADVANTEST	R3261A	N/A	03/19/2002	03/18/2003
EMI Test Receiver	R&S	ESVS20	838804/004	01/05/2002	01/04/2003
Pre-Amplifier	HP	8447D	2944A09173	03/04/2002	03/03/2003
Precision Dipole	SCHWAZBECK	VHAP	998/999	05/17/2001	05/16/2002
Precision Dipole	SCHWAZBECK	UHAP	981/982	05/17/2001	05/16/2002
Bilog Antenna	SCHWAZBECK	VULB9163	128	02/02/2002	02/01/2003
Turn Table	EMCO	2081-1.21	9709-1885	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2060	N.C.R	N.C.R
Controller	EMCO	2090	9709-1256	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	M53867	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	11/17/2001	11/16/2002

<b>966 Chamer ( 0.0009MHz ~ 30MHz)</b>					
Spectrum Analyzer	R&S	FSEB 7	2858291011	11/09/2001	11/08/2002
Loop Antenna	EMCO	6502	2356	04/19/2002	04/18/2003

**Conducted Emission Test Site:** # 4

<b>Conducted Emission Test Site # 4</b>					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL. DUE
EMI Test Receiver	R&S	ESHS10	843743/015	12/19/2001	12/18/2002
LISN	R&S	ENV 4200	8303261016	02/08/2002	02/07/2003
LISN	EMCO	3825/2	9003/1382	02/18/2002	02/17/2003

The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.



## BLOCK DIAGRAM OF TEST SETUP

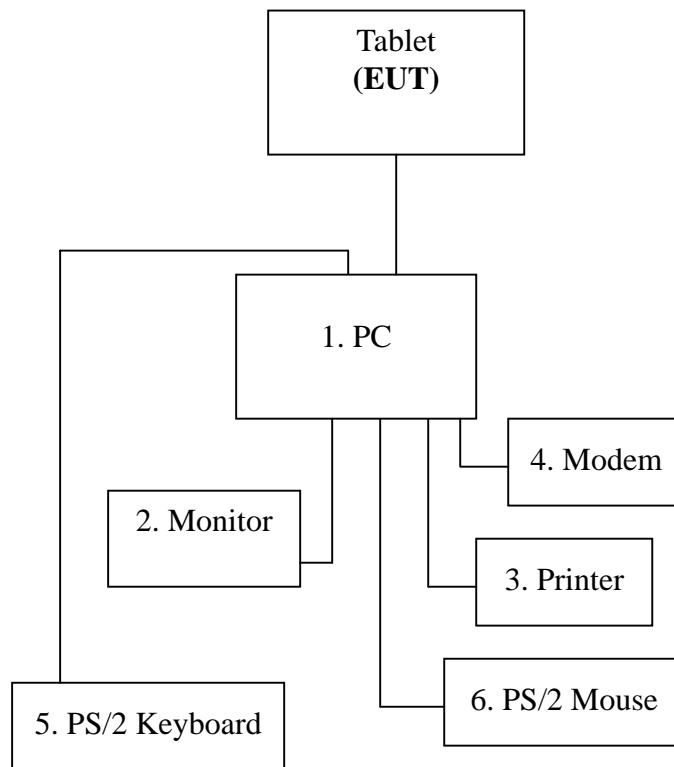
### System Diagram of Connections between EUT and Simulators

**EUT:** Tablet

**Trade Name:** FT-0405-U

**Model Number:** FT-0405-U

**AC Power Cord:** Unshielded, 1.8m to Host PC





## **APPENDIX 3**

### **PHOTOGRAPHS OF EUT**





## **APPENDIX 4**

### **User Manual**



## **APPENDIX 5**

### **Schematics**



## **APPENDIX 6**

### **Block Diagram**



## **APPENDIX 7**

### **Operational Description**



## **APPENDIX 8**

### **Proposed FCC ID Label Format**