FCC TEST REPORT

FCC ID NO. : WAGACCEL-7350

Applicant : Kong Yue Electronics & Information Industry LTD.

18 Kong Yue Industrial Park, Jinguzhou Zone, Xinhui District, Jiangmen

City, Guangdong, China

Equipment Under Test (EUT):

Product Name : Dot-matrix Printer

Model No. : ACCEL-7350

Standards : FCC Part 15 rules

Date of Test : May 08, 2008

Test Engineer : Tiger Su

Reviewed By: Thelo 24 on

PERPARED BY:

Waltek Services (Shenzhen) Co., Ltd.

8C, West Tower, Aidi Building, No.5003 Binhe Rd, Futian District, Shenzhen518045, Guangdong, China.

Tel: 86-755-83551033

Fax: 86-755-83552400

2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15 : 2003	ANSI C63.4: 2003	Class B	PASS
Conducted Emission (150KHz to 30MHz)	FCC PART 15 : 2003	ANSI C63.4: 2003	Class B	PASS

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4 General Information

4.1 Client Information

Applicant: Kong Yue Electronics & Information Industry LTD.

Address of Applicant: 18 Kong Yue Industrial Park, Jinguzhou Zone, Xinhui District,

FCC ID: WAGACCEL-7350

Jiangmen City, Guangdong, China

Manufacturer: Kong Yue Electronics & Information Industry LTD.

Address of Manufacturer: 18 Kong Yue Industrial Park, Jinguzhou Zone, Xinhui District,

Jiangmen City, Guangdong, China

4.2 General Description of E.U.T.

Product Name: Dot-matrix Printer

Model No.: ACCEL-7350

4.3 Details of E.U.T.

Power Supply: AC 120V/60Hz

4.4 Description of Support Units

Compliance test was performed test in ON mode.

The customer requested FCC tests for a Dot-matrix Printer

FCC ID: WAGACCEL-7350

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• FCC – Registration No.: 101879

Compliance Certification Services Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

4.6 Test Location

All Emissions tests were performed at:-

Compliance Certification Services Inc., at No. 5 Jinjiao Industrial Park, No 35 Jukeng RD, dashuikeng Village, Guanlan Town, Baoan District, Shenzhen China

5 Equipment Used during Test

Conducted Emission Test Site A (10m chamber)					
Name of Equipment	Manufacturer Model		Serial Number	Calibration Due	
EMI Test Receiver	R&S	ESI26	100068	04/29/2008	
EMC Analyzer	Agilent	E7402A	US41160329	02/05/2009	
LISN	FCC	FCC-LISN-50-50-2- M	01067	N.C.R.	
LISN (EUT)	FCC	FCC-LISN-50-50-2- M-H	01068	04/29/2008	
FOUR BALANCED TELECOM PAIRS ISN	FCC	FCC-TLISN-T8-02	20165	04/12/2008	
4-WIRE ISN	R&S	ENY41	830663/024	07/28/2008	
Double 2-Wire ISN	R&S	ENY22	830661/027	07/28/2008	
TRANSMIT LIMITER	SCHAFFNER	CFL9206	1710	04/12/2008	
EMI Monitor control box	FCC	0-SVDC	N/A	N/A	

Test Site A (10m chamber)					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due	
EMI Test Receiver	R&S	ESI26	100068	04/29/2008	
EMC Analyzer	Agilent	E7402A	US41160329	02/05/2009	
Bilog Antenna	Sunol	JB1	A062604	11/18/2008	
Pre-Amplifier	Anritsu	MH648A	M64192	12/22/2008	
DECOUPLING NETWORK	FCC	F-201-DCN-5-6M M	23	05/15/2008	
System Controller	Sunol	SC99V	121501-1	N/A	
Turn Table	Sunol	FM3022HS	N/A	N/A	
Antenna Mast	Sunol	TWR 99-4	121501-3	N/A	
Site NSA	CCS Lab.	N/A	N/A	02/16/2009	

2. (1. O.) The Campianon Frequency						
3M Semi Anechoic Chamber (977)						
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due		
Spectrum Analyzer	Agilent	E4446A	MY44020154	08/28/2008		
Spectrum Analyzer	Agilent	E4446A	US44300398	01/20/2009		
EMI Test Receiver	R&S	ESPI3	101026	04/29/2008		
Pre-Amplfier	MINI	ZFL-1000VH2	d041703	12/13/2008		
Pre-Amplfier	Miteq	NSP4000-NF	870731	01/28/2009		
Bilog Antenna	Sunol	JB1	A110204-2	11/20/2008		
Horn-antenna	SCHWARZBECK	BBHA9120D	D:266	05/09/2008		
Turn Table	СТ	CT123	4165	N.C.R		
Antenna Tower	СТ	CTERG23	3256	N.C.R		
Controller	СТ	CT100	95637	N.C.R		
Site NSA	ccs	N/A	N/A	04/06/2008		

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5.1 Conduction Emissions, 0.15MHz to 30MHz

Test Requirement: FCC Part 15

Test Method: ANSI C63.4: 2003 Test Date: May 08, 2008

Frequency Range: 150kHz to 30MHz

Class/Severity: B

Limit: $66-56 \text{ dB}\mu\text{V/m}$ between 0.15MHz & 0.5MHz

 $56~dB\mu V/m$ between 0.5MHz & 5MHz $60~dB\mu V/m$ between 5MHz & 30MHz

Detector: Peak for pre-scan (9kHz Resolution Bandwidth)

Quasi-Peak & Average if maximised peak within 6dB of Average

Limit

5.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1012 mbar

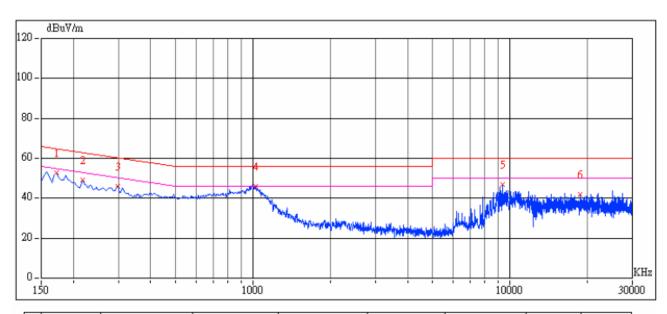
EUT Operation:

Compliance test was performed in ON mode.

The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

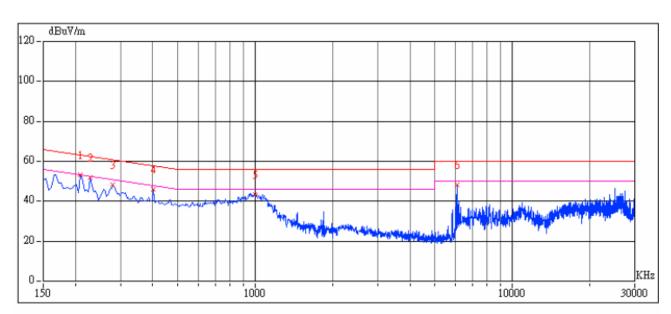
5.1.2 Measurement Result

Live Line



	Freq(KHz)	Peak Amptd(dBuV)	QP Amptd(dBuV)	Avg Amptd(dBuV)	QP Limit(dBuV)	Avg Limit(dBuV)	Margin(dB)	Factor(dB)
1	172.2445	64.65	44.74	37.28	65.36	55.36	-18.09	4.08
2	216.7335	63.92	46.50	32.46	64.09	54.09	-17.60	3.84
3	298.2966	54.57	39.30	33.16	61.76	51.76	-18.60	3.39
4	1024.9499	52.41	40.75	34.10	56.00	46.00	-11.90	3.57
5	9398.7976	40.76	35.00	32.11	60.00	50.00	-17.89	4.48
6	18793.5872	44.26	33.89	30.49	60.00	50.00	-19.51	2.53
П								
П								
П								

Neutral Line



	Freq(KHz)	Peak Amptd(dBuV)	QP Amptd(dBuV)	Avg Amptd(dBuV)	QP Limit(dBuV)	Avg Limit(dBuV)	Margin(dB)	Factor(dB)
1	209.3186	55.39	45.50	41.54	64.31	54.31	-12.76	3.97
2	227.8557	53.00	42.02	36.05	63.78	53.78	-17.73	3.78
3	279.7595	49.65	40.28	37.92	62.29	52.29	-14.37	3.23
4	402.1042	44.80	38.60	33.36	58.80	48.80	-15.43	1.93
5	1002.7054	46.11	40.02	35.96	56.00	46.00	-10.04	2.60
6	6096.1924	49.06	32.39	30.72	60.00	50.00	-19.28	3.51

FCC ID: WAGACCEL-7350

5.2 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part 15

Test Method: ANSI C63.4: 2003

Test Date: May 08, 2008

Frequency Range: 30MHz to 1GHz

Measurement Distance: 3m

Class: Class B

Detector: Peak for pre-scan (120kHz resolution bandwidth)

Quasi-Peak if maximised peak within 6dB of limit

5.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1012 mbar

EUT Operation:

Compliance test was performed in ON mode.

5.2.2 EUT Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4: 2003.

5.2.3 Spectrum Analyzer Setup

According to FCC Part 15 Class B Rules, the system was tested to 1000 MHz.

Start Frequency	30 MHz
Stop Frequency	5000 MHz
Sweep Speed Auto	
IF Bandwidth	1 MHz
Video Bandwidth	1 MHz
Quasi-Peak Adapter Bandwidth	120 kHz
Quasi-Peak Adapter Mode	Normal
Resolution Bandwidth	1MHz

5.2.4 Test procedure

For the radiated emissions test, since the EUT does have not a power source, there was no connection to AC outlets.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT is compliant with all installation combinations.

All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB μ V of specification limits), and are distinguished with a " \mathbf{Qp} " in the data table.

The EUT was under normal mode during the final qualification test and the configuration was used to represent the worst case results.

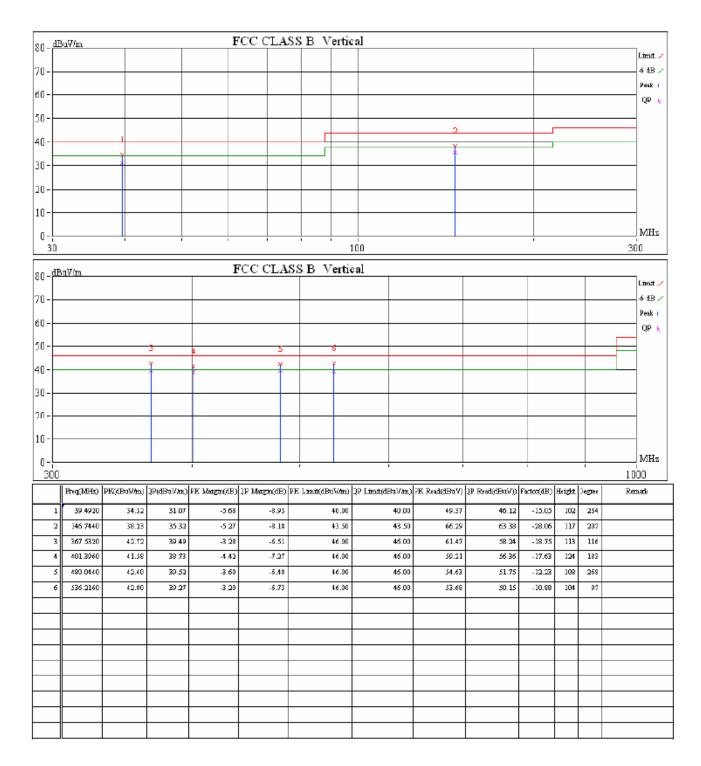
ANSI STANDARD C63.4-2003 12.1.1.2 OTHER TYPES OF RECEIVERS: A typical signal or an unmodulated CW signal at the operating frequency of the EUT shall be supplied to the EUT for all measurements. Such a signal may be supplied by either a signal generator and an antenna in close proximity to the EUT or directly conducted into the antenna terminals of the EUT. The signal level shall be sufficient to the local oscillator of the EUT.

5.2.5 Summary of Test Results

According to the data in section 5.2.6, the EUT <u>complied with the FCC Part 15 Class B</u> standards.

The test results: PASS.

5.2.6 Radiatied Emissions Test Data



5.3 Photographs - Test Setup

5.3.1 Conduction Emissions Test Setup



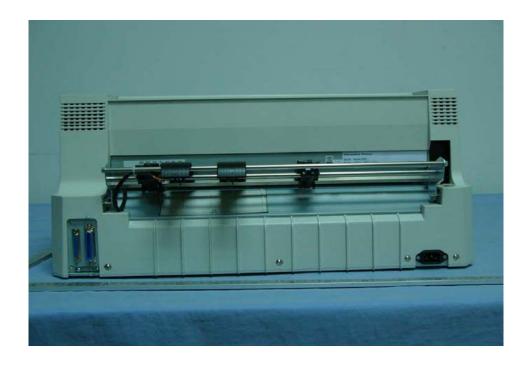
5.3.2 Radiated Emissions Test Setup



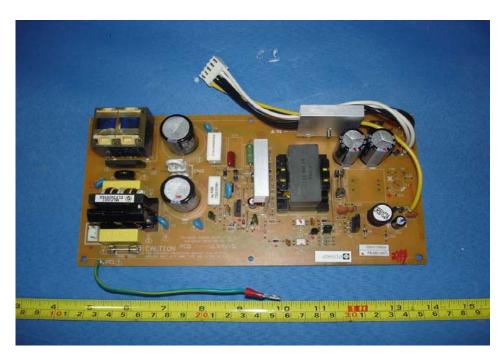
5.3.3 EUT - Front View



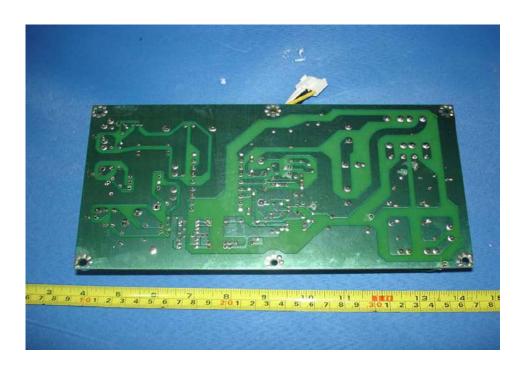
5.3.4 EUT - Back View



5.3.5 PCB- Front View



5.3.6 PCB- Back View



6 FCC ID Label

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)this device may not cause harmful interference,and (2) this device must accept any interference received, including interference that may cause undesired operation.

The Label must not be a stick-on paper. The Label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Proposed Label Location on EUT
EUT Top View/ proposed FCC Mark Location

