Lab Code: 200707-0

FCC PART 18

TEST REPORT

For

Continental Conair Limited

35/F, Standard Chartered Tower, Millennium City 1, 388 Kwun Tong Road,
Kwun Tong, Kowloon, Hong Kong.

FCC ID: U43WIH400

Report Type:	Product Name:
Original Report	Commercial Induction Range

Test Engineer:	Andrew Shu
Report Number:	RSZ121127550-00
Report Date:	2012-12-04
Reviewed By:	Dick Zhang EMC Leader
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Continental Conair Limited*'s model: *WIH400 (FCC ID: U43WIH400)* (the "EUT") in this report was a *Commercial Induction Range,* which was measured approximately: 33.0 cm (L) x 42.0 cm (W) x 10.0 cm (H), the rated input voltage: AC 120V/60Hz. The highest operating frequency is 65 kHz.

**All measurement and test data in this report was gathered from production sample serial number: 1211022 (Assigned by BACL, Shenzhen). The EUT was received on 2012-11-27.*

Objective

This test report is prepared on behalf of *Continental Conair Limited* in accordance with Part 2-Subpart J and Part 18-Subparts A, B and C of the Federal Communication Commissions rules and regulations.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 18.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with MP-5, FCC Methods of Measurements of Radio Noise Emissions from ISM Equipment, February 1986. All measurement was performed at Bay Area Compliance Laboratories Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).

The current scope of accreditations can be found at http://ts.nist.gov/Standards/scopes/2007070.htm

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

EUT Exercise Software

No exercise software was used.

Special Accessories

No special accessory was used.

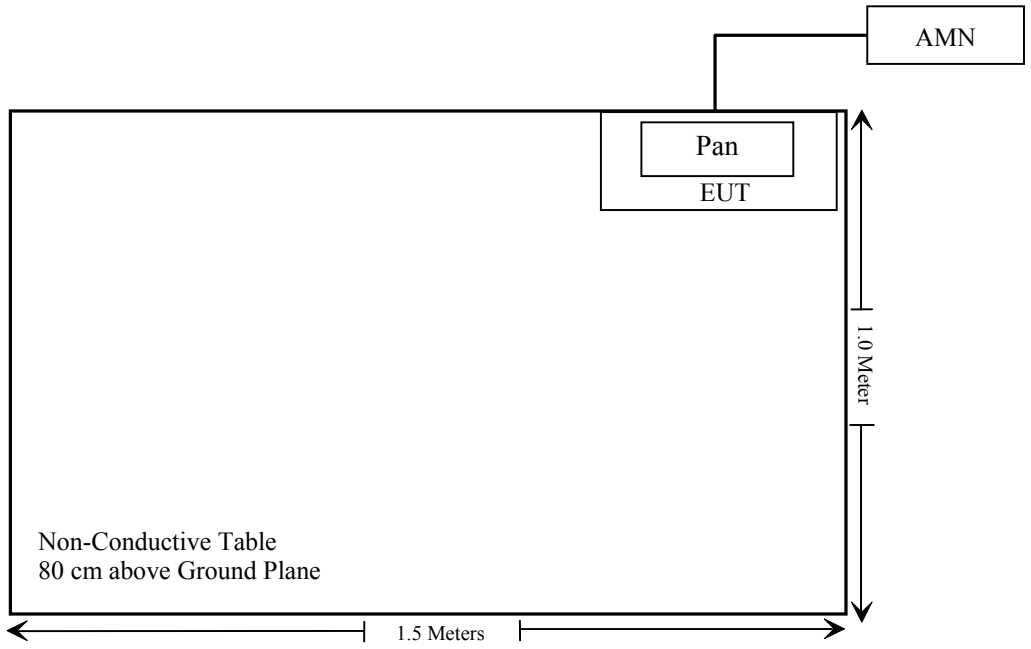
Equipment Modifications

No modification was made to the EUT tested.

External Cable

Cable Description	Length (m)	From Port	To
Unshielded Undetachable AC Power Cable	1.2	EUT	AMN

Block Diagram of Test Setup



SUMMARY OF TEST RESULT

FCC Rules	Description of Test	Results
§18.307	AC Line Conducted Emissions	Compliance
§18.305	Field Strength	Compliance

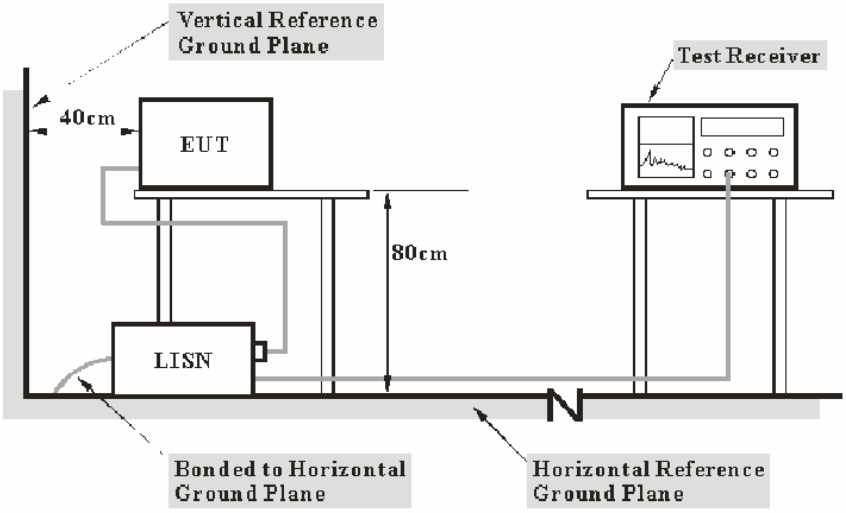
FCC §18.307 - AC LINE CONDUCTED EMISSIONS

Applicable Standard

Conduction limits. For the following equipment, when designed to be connected to the public utility (AC) power line the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies shall not exceed the limits in the following tables. Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal using a 50 µH/50 ohms line impedance stabilization network (LISN).

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.009–0.05	110	-
0.05–0.15	90–80*	-
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

EUT 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.

The setup of EUT is according with MP-5: 1986 measurement procedure. Specification used was with the FCC Part 18 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The EUT was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 9 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
9 kHz – 150 kHz	200 Hz
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the EUT was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-Peak detection and Average detection mode.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCS30	100176	2012-11-24	2013-11-23
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2012-08-22	2013-08-21
Rohde & Schwarz	Pulse limiter	ESH3Z2	DE25985	2012-07-08	2013-07-07
BACL	CE Test software	BACL-CE	V1.0	-	-

*** Statement of Traceability:** Bay Area Compliance Laboratory Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Institute of Metrology (NIM)

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 18, with the worst margin reading of:

7.35 dB at **0.870** MHz in the **Neutral** conducted mode

Refer to CISPR16-4-2:2011 and CISPR 16-4-1:2009, the measured level is in compliance with the limit if

$$L_m + U_{(Lm)} \leq L_{lim} + U_{cispr}$$
$$\text{or } U_{(Lm)} \leq Margin + U_{cispr}$$

The measurement result of EUT is below the limit level by a margin 7.35 dB and
$U_{(Lm)}$(2.4 dB)≤*Margin*(7.35 dB) +U_{cispr}(3.4 dB),
so the EUT complies with the limit of the FCC Part 18.307 Class B.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	100.0 kPa

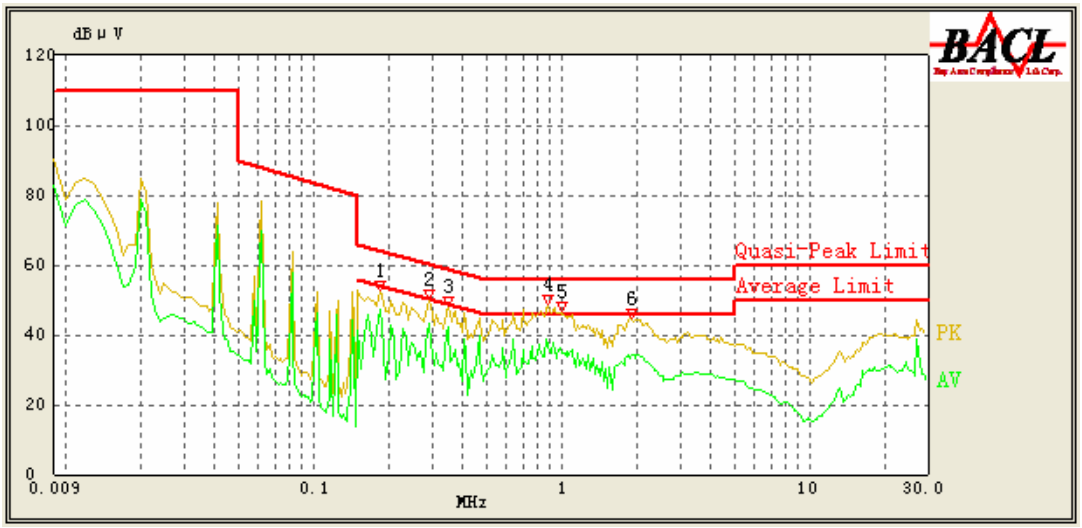
Testing was performed by Andrew Shu on 2012-11-29.

Test Mode: Running

AC 120V/60 Hz, Line:

Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.985	37.96	10.17	46.00	8.04	Ave.
0.290	43.54	10.26	52.00	8.46	Ave.
0.870	37.22	10.19	46.00	8.78	Ave.
0.405	39.76	10.26	48.71	8.95	Ave.
0.695	35.96	10.22	46.00	10.04	Ave.
1.915	33.85	10.20	46.00	12.15	Ave.
0.880	43.65	10.19	56.00	12.35	QP
0.695	42.34	10.22	56.00	13.66	QP
0.985	41.74	10.17	56.00	14.26	QP
0.290	46.60	10.26	62.00	15.40	QP
0.405	42.39	10.26	58.71	16.32	QP
1.920	39.02	10.20	56.00	16.98	QP

AC 120V/ 60 Hz, Neutral:



Frequency (MHz)	Corrected Amplitude (dBµV)	Correction Factor (dB)	Limit (dBµV)	Margin (dB)	Detector (PK/Ave./QP)
0.870	38.65	10.19	46.00	7.35	Ave.
0.185	47.03	10.24	55.00	7.97	Ave.
0.350	42.18	10.25	50.29	8.11	Ave.
0.290	43.37	10.25	52.00	8.63	Ave.
0.875	44.61	10.19	56.00	11.39	QP
0.995	34.54	10.17	46.00	11.46	Ave.
1.915	34.19	10.20	46.00	11.81	Ave.
0.995	43.16	10.17	56.00	12.84	QP
0.290	47.26	10.25	62.00	14.74	QP
0.185	49.67	10.24	65.00	15.33	QP
0.350	44.49	10.25	60.29	15.80	QP
1.915	39.22	10.20	56.00	16.78	QP

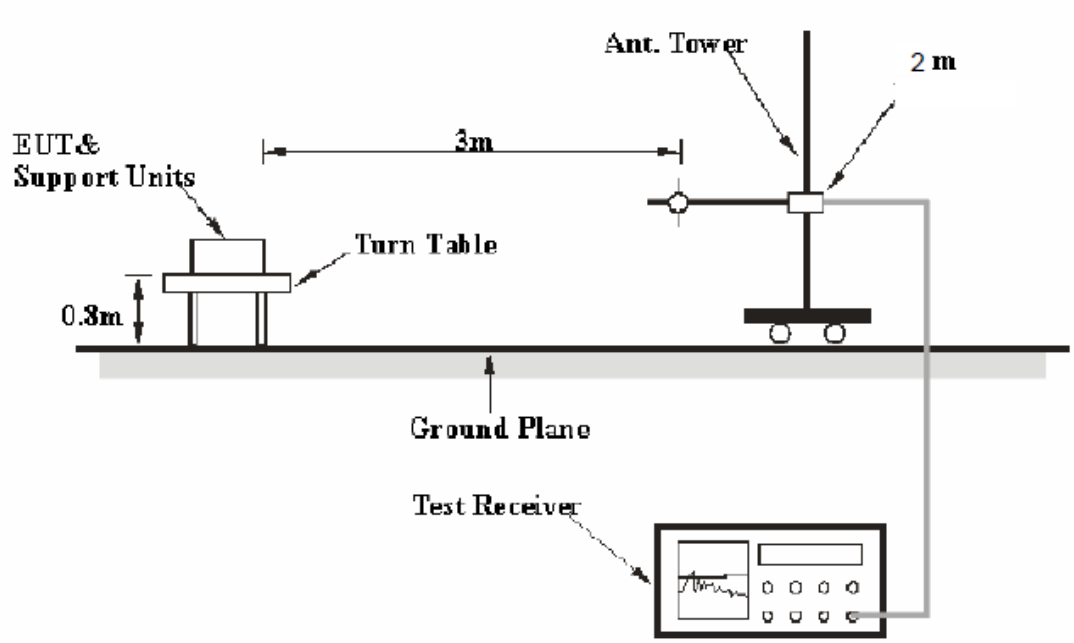
Note:
1) Corrected Amplitude = Reading + Correction Factor
2) Correction Factor =LISN/ISN VDF (Voltage Division Factor) + Cable Loss + Pulse Limiter Attenuation
The corrected factor has been input into the transducer of the test software.
3) Margin = Limit – Corrected Amplitude

FCC §18.305 – FIELD STRENGTH

Applicable Standard

FCC §18.305

EUT Setup



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the FCC MP - 5.

The EUT was connected to 120 VAC/60 Hz power source.

EMI Test Receiver Setup and Spectrum Analyzer Setup

The system was investigated from 9 kHz to 30 MHz.

During the radiated emission test, the EMI test receiver and Spectrum Analyzer were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
9 kHz – 150 kHz	200 Hz	1 kHz	200 Hz	QP
150 kHz – 30 MHz	9 kHz	30 kHz	9 kHz	QP

Test Procedure

During the conducted emission test, the EUT was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the average detection mode.

Corrected Amplitude Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Reading + Antenna Factor + Cable Loss

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7 dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-LINDGREN	Passive Loop Antenna	6512	00029604	2011-11-30	2012-11-29
Rohde & Schwarz	EMI Test Receiver	ESCI	101122	2012-08-08	2013-08-07
R&S	Auto test Software	EMC32	V6.30	-	-

*** Statement of Traceability:** Bay Area Compliance Laboratory Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to National Institute of Metrology (NIM)

Test Data

Environmental Conditions

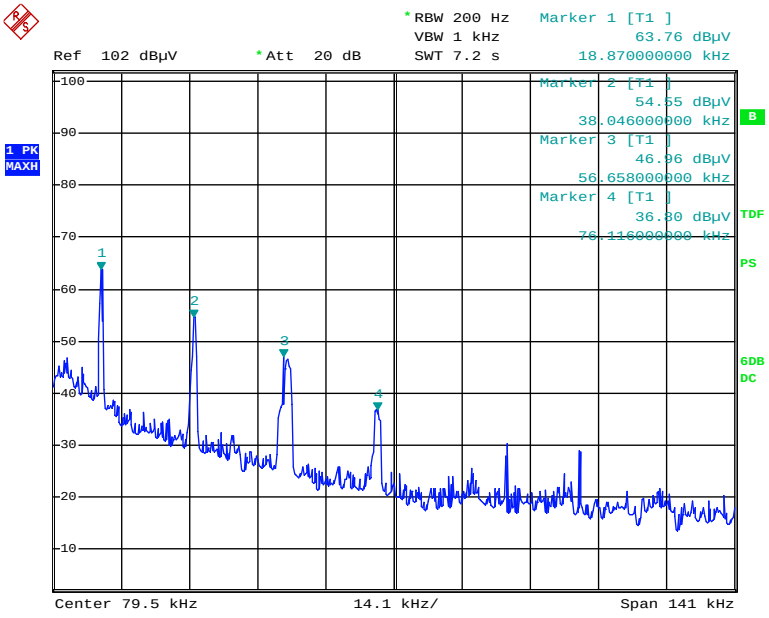
Temperature:	25 °C
Relative Humidity:	50 %
ATM Pressure:	100.0 kPa

The testing was performed by Andrew Shu on 2012-11-29.

Test Mode: Running

Frequency (MHz)	Corrected Amplitude (dBµV/m)	Detector (PK/QP/Ave.)	Direction (Degree)	Height (m)	Correction Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
0.019	63.76	QP	93	2	83.10	83.51	19.75
0.038	54.55	QP	168	2	75.64	83.51	28.96
0.056	46.96	QP	248	2	70.94	83.51	36.55
0.076	36.80	QP	307	2	68.07	83.51	46.71
0.118	28.37	QP	68	2	64.83	83.51	55.14
0.150	22.84	QP	59	2	63.28	83.51	60.67

9 kHz-150 kHz



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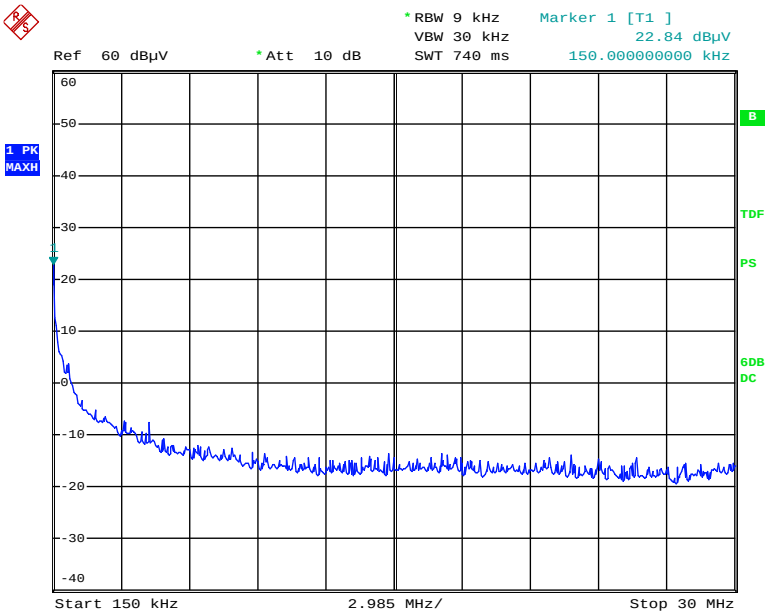
150 kHz-30 MHz



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