

FCC PART 15 Subpart C  
EMI MEASUREMENT AND TEST REPORT  
FOR  
**UNICAL ENTERPRISES, INC.**  
16960 Gale Avenue  
City of Industry, CA 91745

**FCC ID: LZX39237**

November 9, 1999

|                                                                                     |                                                                                                                       |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>This Report Concerns:</b><br><input checked="" type="checkbox"/> Original Report | <b>Equipment Type:</b><br>900 MHz Cordless Phone –<br>Household Appliances                                            |
| <b>Test Engineer:</b>                                                               | Sayed K.                                                                                                              |
| <b>Test Date:</b>                                                                   | November 4, 1999                                                                                                      |
| <b>Reviewed By:</b>                                                                 | John Y. Chan – Engineering Manager                                                                                    |
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## 1 - GENERAL INFORMATION

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### 1.1 Product Description for Equipment Under Test (EUT)

The *Unical Enterprises, Inc.*, model 39237 or the "EUT" as referred to in this report is a 900 MHz Analog w/Call Waiting Caller ID Cordless phone measuring 8.50"L x 4.50"W x 3.50"H. It has following features:

- 900 MHz Operation.
- 40 Channel Autoscan.
- 40 Number Memory.
- Noise Compander.
- Digital Security Coding.
- 65536 Random Security Codes.
- Handset Page/Locator.
- Handset Hi/Lo Volume Control.
- Out-of-Range Warning.
- In-Use LED and the Battery Low Indicator
- Headphone Jack.
- Flash.
- Charge Indicators.
- Last Number Redial
- Power Save.
- Auto Answer/Auto Standby.
- Battery Quick Charge.
- Mixed Mode Dialing, Tone/Pulse Dialing.
- Ringer On/Off Switch.
- Desk/Wall Use.
- Hearing Aid Compatible.
- Belt Clip.

## **1.2 Purpose**

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the 900 MHz 40 Channel Cordless Phone, Model is 39237. The EMI measurements were performed according to the measurement procedure described in ANSI C63.6: 1992. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the specification limits defined by FCC Title 47, Part 15, Subpart C, section 15.205, 15.207, and 15.249.

## **1.3 Related Submittal(s)/Grant(s)**

No Related Submittals

## **1.4 Test Methodology**

All measurements contained in this report were conducted with ANSI C63.4 –1992, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz. All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratory, Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

## **1.5 Test Facility**

The Open Area Test site used by Bay Area Compliance Laboratory Corporation to collect radiated and conducted emission measurement data is located in the back parking lot of the building at 230 Commercial Street, Suite 2, Sunnyvale, California, USA.

Test sites at Bay Area Compliance Laboratory Corporation has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports has been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 11 and December 10, 1997 and Article 8 of the VCCI regulations on December 25, 1997. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-1992.

The Federal Communications Commission and Voluntary Control Council for Interference has the reports on file and is listed under FCC file 31040/SIT 1300F2 and VCCI Registration No.: C-674 and R-657. The test sites has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratory Corporation is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (NVLAP). The scope of the accreditation covers the FCC Method - 47 CFR Part 15 - Digital Devices, IEC/CISPR 22: 1993, and AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment test methods under NVLAP Lab Code 200167-0.

**1.6 Test Equipment List**

| <b>Manufacturer</b> | <b>Description</b>   | <b>Model</b>     | <b>Serial Number</b> | <b>Cal. Due Data</b> |
|---------------------|----------------------|------------------|----------------------|----------------------|
| HP                  | Spectrum Analyzer    | 8566B            | 2610A02165           | 12/6/2000            |
| HP                  | Spectrum Analyzer    | 8593B            | 2919A00242           | 12/20/2000           |
| HP                  | Amplifier            | 8349B            | 2644A02662           | 12/20/2000           |
| HP                  | Quasi-Peak Adapter   | 85650A           | 917059               | 12/6/2000            |
| HP                  | Amplifier            | 8447E            | 1937A01046           | 12/6/2000            |
| A.H. System         | Horn Antenna         | SAS0200/571      | 261                  | 12/27/2000           |
| Com-Power           | Log Periodic Antenna | AL-100           | 16005                | 11/2/2000            |
| Com-Power           | Biconical Antenna    | AB-100           | 14012                | 11/2/2000            |
| Solar Electronics   | LISN                 | 8012-50-R-24-BNC | 968447               | 12/28/2000           |
| Com-Power           | LISN                 | LI-200           | 12208                | 12/20/2000           |
| Com-Power           | LISN                 | LI-200           | 12005                | 12/20/2000           |
| BACL                | Data Entry Software  | DES1             | 0001                 | 12/20/2000           |

**1.7 Equipment Under Test (EUT)**

| <b>Manufacturer</b>      | <b>Description</b> | <b>Model</b> | <b>Serial Number</b> | <b>FCC ID</b> |
|--------------------------|--------------------|--------------|----------------------|---------------|
| Unical Enterprises, Inc. | Cordless Phone     | 39237        | None                 | LZX39237      |

## 2 - Conducted and Radiated Setup Photographs

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### 2.1 EUT Base Conducted Emission Photograph – Front View



## 2.2 EUT Base Conducted Emission Photograph – Side View



### 2.3 EUT Base Radiated Emission Photograph – Front View





## 2.4 EUT Base Radiated Emission Photograph – Rear View



## 2.5 EUT Handset Radiated Emission Photograph – Front View



## 2.6 EUT Handset Radiated Emission Photograph – Rear View

