

Assessment of Compliance

of

Direct Sequence Spread Spectrum System

In Accordance with

FCC Parts 15.247, 15.205, 15.207, 15.209

**Cordless Phone, 5.8 GHz
TRU5885(xx)/UC789BH**

UNIDEN America Corporation



July 2002

APREL Project No.: UESB-TRU5885-cordless phone-3907

Engineering Report

Subject: Assessment of Compliance in accordance with the
FCC Rules & Regulations Part 15.247, 15.205, 15.207
15.209: Direct Sequence Spread Spectrum System

FCC ID: AMWUC789

Equipment: Cordless Phone, 5.8 GHz

Model: TRU5885(xx)/UC789BH

Client: Uniden America Corp.
216 John St., PO Box: 580
Lake City, SC 29560
USA.

Project #: UESB-TRU5885-CORDLESS PHONE-3907

Prepared By: APREL Laboratories,
Regulatory Compliance Division
51 Spectrum Way
Nepean, Ontario
K2R 1E6

Approved by:

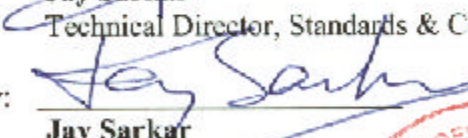

Jay Sarkar

Technical Director, Standards & Certification

Date:

July 18, 2002

Submitted by:

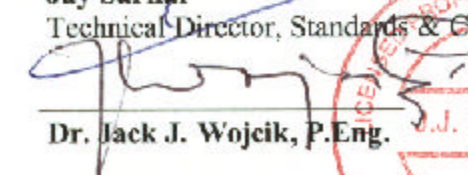

Jay Sarkar

Technical Director, Standards & Certification

Date:

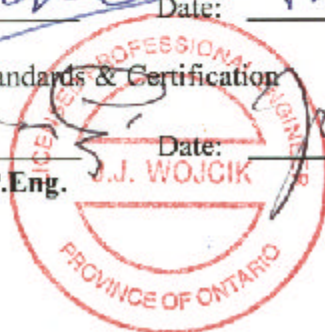
July 18, 2002

Released by:


Dr. Jack J. Wojcik, P.Eng.

Date:

July 19, 2002



CERTIFICATE OF COMPLIANCE

<u>Applicant name and address</u>	<u>Date and Location of Testing</u>
Uniden America Corp. 216 John St., PO Box: 580 Lake City, SC 29560 USA.	Date of Test: July 2002 Project No. : UESB-TRU5885-cordless phone-3907 Test Location: APREL Laboratories, Nepean, ON CANADA

FCC ID: AMWUC789

APPLICANT: Uniden America Corp.

Equipment Type:	Cordless Phone
Model(s):	Base:TRU5885(xx), Handset: UC789BH
FCC Rule Parts:	§ 15.247; 15.205, 15.207, 15.209
Classification:	Spread Spectrum Transceiver (DSS)
Method/System:	Direct Sequence System (DSS)
Max. RF Power:	Base 0.132 W(EIRP); Handset 0.118 W(EIRP)
RF Band:	5.8 GHz

This equipment has been shown to be capable of compliance with applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C-63-4.

I attest to the accuracy of the data. All measurements reported were carried out under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the compliance of these measurements and vouch for the qualifications of the persons taking them. This relates only to the sample tested.

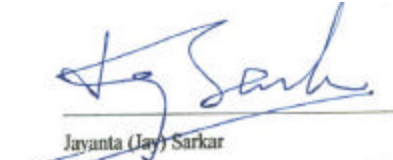

Jayanta (Jay) Sarkar
Technical Director, Standards & Certification



Table of Contents

Engineering Summary	5
Summary of Test Data	5
Introduction	6
Product Information	7
FCC Submission Information	8
Sections: Description of Tests	
a. Power Lines Conducted Emissions	11
b. Direct Sequence Bandwidth	34
c. Maximum Peak Power Output	50
d. Power Density	67
e. Antenna Requirements	89
f. Radiated Spurious Emissions & Restricted Bands	91

Test Equipment List: See Appendix A

FCC ID: AMWUC789
Applicant: Uniden America Corp.
Equipment: Cordless Phone (Direct Sequence Spread Spectrum System)
Models: TRU5885(xx)/UC789BH
Standard: FCC Rules and Regulations Parts 15.247, 15.205, 15.207, 15.209

ENGINEERING SUMMARY

This report contains the measurement results of the engineering evaluation performed on a **Uniden Cordless Phone, henceforth referred to as the Device Under Investigation (DUI)**. The measurements were carried out in accordance with the FCC Rules and Regulations Parts 15.247, 15.205, 15.207, 15.209. The product was evaluated when it was set at the maximum power.

The Uniden Cordless Phone is a Direct Sequence Spread Spectrum System operating at 5.8 GHz band. The unit was set at continuous mode.

Both base and handset were evaluated and the measurement results for both are presented in this report.

The base and the handset are equipped with permanently attached (non-detachable) antennas, as such, all measurements were performed as radiated with appropriate correction.

The results presented in this report relate only to the sample tested.

Uniden has informed us that the test data of Process Gain will be submitted to the FCC directly by Uniden.

Compliance Summary

Test Description	Page No.	Compliance Summary Pass/Fail
Power lines Conducted Emissions Ref Paragraph FCC Part 15.207	11	Pass
Direct Sequence Bandwidth Ref Paragraph FCC Part 15.247 (a) (2)	34	Pass
Maximum Peak Output Power Ref Paragraph FCC Part 15.247 (b)	50	Pass
Peak Power Spectral Density Ref Paragraph FCC Part 15.207	67	Pass
Antenna Requirements Ref Paragraph FCC Part 15.203	89	Pass
Radiated Emissions Spurious Ref Paragraph FCC Part 15.247	91	Pass
Restricted Bands Ref Paragraph FCC Part 15.205	91	Pass

INTRODUCTION

General

This report describes the results of the Compliance test under FCC Part 15.247, 15.205, 15.207, 15.209 conducted on a Uniden Cordless Phone

Measurement Facility

The evaluation for compliance was performed for Uniden Technologies Pty Ltd. by APREL Laboratories at APREL's EMI facility located in Nepean, Ontario, Canada. The laboratory operates an (3m and 10m) Open Area Test Site (OATS). The measurement facility is calibrated in accordance with ANSI C63.4-1992.

A description of the measurement facility in accordance with the radiated and AC line conducted test site criteria per ANSI C63.4-1992 is on file with the Federal Communications Commission and is in compliance with the requirements of Section 2.948 of the Commissions rules and regulations. **APREL's registration number is: 90416**

APREL is accredited by Standard Council of Canada. APREL is also accredited by Industry Canada and recognised by the Federal Communications Commissions (FCC).

Standard

The evaluation and analysis were conducted in accordance with FCC Rules and Regulations Parts 15.247, 15.205, 15.207, 15.209.

Report: This report was written by Jay Sarkar, Technical Director, Standards and Certification.

Test Equipment

The test equipment used during the evaluation is listed in Appendix A with calibration due dates.

Environmental Conditions

- Temperature: 25 °C ± 2
- Relative Humidity: 30 - 50 %
- Air Pressure: 101 kPa ± 3

Product Information

Equipment Description

The Device Under Investigation (DUI) is the Uniden Cordless Phone Direct Sequence Spread Spectrum System.

Frequency Range:	5742.980 MHz - 5834.780 MHz
Channels:	35
Channel Separation:	2.7 MHz
Spread Spectrum Method:	Direct Sequence
Max RF Power Output:	Base 131.8 mW, 21.2 dBm (EIRP) Handset 117.5 mW, 20.70 dBm (EIRP)
Antenna Gain:	Base 4.0 dBi, Handset 4.0 dBi
Ports/Connector(s):	N/A

FCC SUBMISSION INFORMATION

FCC ID: AMWUC789

Equipment, (Type): **Cordless Phone (Direct Sequence Spread Spectrum System) 5.8 GHz RF Band**
As marketed

Model: Base: **TRU5885(xx)**, Handset: **UC789BH**

For: Certification

Complies to: FCC Rules Part 15.247, 15.205, 15.207, 15.209

Applicant: **Uniden America Corp.**
216 John St., PO Box: 580
Lake City, SC 29560
USA

Evaluated by: **APREL Laboratories**
51 Spectrum Way
Nepean, Ontario
Canada K2R 1E6

Test Description

And

Measurement Results

**Cordless Telephone, 5.8 GHz
TRU5885(XX)/UC789BH**

UNIDEN AMERICAN CORPORATION