

Lucent Technologies
Bell Labs Innovations

**Federal Communications Commission
Office of Engineering and Technology
Equipment Authorization Division
Application Processing Branch
7435 Oakland Mills Road
Columbia, MD 21046**

Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

September 24, 2002

Dear Examiner:

In accordance with **Parts 2** and **24** of the Commission's Rules and Regulations, we are submitting herewith, statements and supporting data to show compliance with the requirements of the Commission for Product Certification of the **Lucent Technologies Corporation** UMTS CDMA Radio (PCS), henceforth **UCR**, **FCC ID: AS5ONEBTS-04**. The **UCR** is used in **Lucent Technologies Corp FLEXENT ® OneBTS** Land Station **PCS** systems using Code Division Multiple Access (CDMA) technology, for use in Domestic Personal Communication Services.

This application for the **UCR** under **FCC ID: AS5ONEBTS-04**, is for operation in the domestic Personal Communication Service band with a CDMA signal. The data summarized below is in the form presently used by the Commission's Radio Equipment List.

Manufacturer	Lucent Technologies, Inc.
Equipment Identification	AS5ONEBTS-04
Rules Part Number	24 (E)
Frequency Range	1930 -1990 MHz PCS Band
Output Power	-25 dBm (.003mW) to +10dBm (10mW) Varied by Software (Maximum RF Power output for single carrier, or composite RF power output for two or three carrier is 10 dBm)
Frequency Tolerance	+/- 0.05 ppm
Emission Designator	1M25F9W

The **UCR**, under **FCC ID: AS5ONEBTS-04** is designed to be operated and marketed with CDMA transmit equipment that was Product Certified in accordance with **Parts 2** and **24** of the Code. When utilized in normal **PCS** base station operation, the **UCR** will be operated with a **FCC** Product Certified power amplifier. The overall performance of the integrated equipment shall continue to be compliant with **FCC** requirements.

The **UCR** is designed to transmit one, two, or three contiguous 1.25 MHz CDMA channels. The **UCR**, at its output, is typically operated over the power range of -20 dBm to +5 dBm for each of the 1.25 MHz CDMA carriers in a single, dual, or three channels configuration. The total power is

limited to +10.0dBm per channel (+10 dBm total integrated power for 3 or 2 carriers) for each of the 1.25 MHz CDMA carriers in a single, dual, or three channels configuration and is the level for this application. The actual power level delivered by the **UCR** to transmit amplifier is under the software control of the Mobile Switching Center of the local Cellular/PCS system. The output of this unit in normal base station use, is always subjected to additional signal amplification and post amplification filtering as required for spurious control prior to connection to the (J4) antenna connector. The software control only allows for adjustment in power necessary to provide the rated maximum of the co-configured transmitter

The evaluation of the "Spurious emissions at antenna terminals" (Sec. 2.1051) were made with a **kLAM/AS5ONEBTS-02** and its associated filters. This **kLAM** was also used for the "Field strength of spurious radiated" (Sec. 2.1053) measurements. Wherever possible the test procedures defined in **47CFR Part's 2(J)** and **24(E)** were followed. Because of the "state of the art" nature of this equipment some of the characteristics cannot be tested using the requirements in **47CFR**, so for those characteristics **EIA/TIA-IS-97-D** was used to define the tests and evaluation criteria used in this application.

This application for **UCR/FCC ID:AS5ONEBTS-04**, is for the entire PCS band. Since the application encompasses the single, dual and three carrier configurations it presents the required test data for each of those operational configurations. The RF power, modulation, and bandwidth of the **UCR** transmit signal output are defined and controlled by software

The **UCR /AS5ONEBTS-04** is produced by Lucent Technologies Incorporated solely for incorporation into Lucent Technologies Inc. products.

These attached exhibits contain the technical data, and the required statements and documents for Product Certification. The technical contact at Lucent Technologies will comply with any request for additional information should the need arise.

Sincerely,

Dheena Moongilan
Distinguished Member of Technical Staff
Global Product Compliance Laboratory
phone: (732) 332-6003
email: moongilan@lucent.com

TABLE OF CONTENTS**COVER LETTER****Cover Letter****Letter for Confidential Treatment of Exhibits****ATTESTATION STATEMENT****Qualifications and Certifications****Manufacturers, Identification****Emissions, Frequency Range, Power Level****Section 2.911 (d)****Section 2.1033 (c) (1,2)****Section 2.1033 (c) (4-7)****USERS MANUAL****Users Manual****Section 2.1033 (c) (3)****PARTS LIST/TUNE-UP PROCEDURE****Tune-Up Procedure****Section 2.1033 (c) (9)****OPERATIONAL DESCRIPTION****Description of Modulation System****Section 2.1033 (c) (13)****ID LABEL/LOCATION INFORMATION****Drawing of FCC ID****Section 2.1033 (c) (11) and
2.925 (a) (1)****EXTERNAL PHOTOS****External Photos****Section 2.1033 (c) (12)****TEST REPORT****Measurement of DC Power****Listing of Required Measurements****Measurement of Radio Frequency Power Output****Measurement of Modulation Characteristics****Measurement of Occupied Bandwidth****Section 2.1033 (c) (8)****Section 2.1033 (c) (14)****Section 2.1046****Section 2.1047****Section 2.1049 and****Section 24.238 (b)****Section 2.1051****Section 2.1053****Section 2.1055****Section 2.1057****Measurement of Spurious Emissions at Antenna****Field Strength of Spurious Radiation****Measurement of Frequency Stability****Frequency Spectrum to be Investigated**

Global Product Compliance Laboratory
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

September 23, 2002

Subject: Confidential Treatment for User's Manual - FCC ID: AS5ONEBTS-04

Dear Examiner:

The 'UMTS CDMA Radio (PCS)' FCC ID AS5ONEBTS-04 will not be sold to the general public, but restricted to network operators. The 'User's Manual' is provided to the network operators under a non-disclosure agreement. The general public does not have access to User's Manual of 'UMTS CDMA Radio (PCS)'. The Internal photographs, Schematics, Circuit descriptions and Block Diagrams contain Lucent Technologies Proprietary information. Therefore I would like to request you to treat the following as confidential.

- (1) User's Manual
- (2) Internal photograph
- (3) Schematics, Circuit descriptions and Block Diagrams

Thanks.

Sincerely,

Dheena Moongilan
Distinguished Member of Technical Staff
Bldg. 11B, Room 184