

**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

February 5, 2001

Federal Communications Commission  
Office of Engineering and Technology  
Authorization and Evaluation Division  
Equipment Authorization Branch  
7435 Oakland Mills Road  
Columbia, Maryland 21046

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 Certification of the Lucent Technologies Inc. Predistortion CDMA Baseband Radio (1900), henceforth PCBR as FCC ID: **AS5CMP-41**. This PCBR shall be used in Lucent Technologies Inc. FLEXENT® Land Station Personal Communication Service (PCS) system using Code Division Multiple Access (CDMA) technology, for use in Domestic Public PCS Telecommunication Service. The present PCS system will use single PCBR installed in a Radio Frequency Unit (RFU) cabinet. Each PCBR is designed to provide 0.025 Watts at the amplifier port connection.

The data summarized below is in the form presently used by the Commission's Radio Equipment List.

<b>Manufacturer</b>	<b>Lucent Technologies Inc.</b>
<b>Product</b>	<b>Predistortion CDMA Baseband Radio (1900)</b>
<b>Equipment Identification</b>	<b>AS5CMP-41</b>
<b>Rules Part Number</b>	<b>24(E)</b>
<b>Frequency Range</b>	<b>1930 – 1990 MHz</b>
<b>Output Power</b>	<b>.0002 to 0.025 Watts (-8 dBm to 14 dBm) Varied by Software</b>
<b>Frequency Tolerance</b>	<b>+/- 0.05 ppm</b>
<b>Emission Designator</b>	<b>1M23G9W</b>

The FLEXENT PCS Radio Frequency Unit (RFU) Cabinet uses PCBR 1900. The PCBR is designed to the limitations specified in Part 24 subpart E. Whenever possible, the test procedures defined in CFR 47 Parts 2 and 24(E) were followed. Some of the characteristics cannot be tested using the requirements in CFR 47, for those characteristics, TIA/EIA-97-C was used as evaluation criteria in this application. The PCBR has a maximum RF power output of 14 dBm and the power level for this application also is 14 dBm. In FLEXENT PCS Radio Frequency Unit (RFU) Cabinet the PCBR output signal is amplified by the Power Amplifier an Individual Carrier Linear Amplifier (ICLA) FCC ID: **AS5CMP-42** and filtered by a transmit filter for specific PCS bands. The Power Amplifier is being co-filed with the PCBR. The typical output level necessary for the PCBR for maximum output from the Power Amplifier is 8.5 dBm. The actual power level delivered from the PCBR to Power Amplifier is under software control. The software control allows not only for adjustment in power up to 14 dBm (maximum) but also provides a typical calibration of output level to within  $\pm 0.1$  dB across the PCS band.

The operation of **AS5CMP-41** (PCBR) is based on the time and frequency reference signals supplied to PCBR by Time and Frequency Unit (TFU). The FCC is required performance of the TFU over temperature and line voltage is contained in this application as well.

Filed herewith is FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices) and the required exhibits. These exhibits contain the technical data, and the required statements and documents for equipment certification. The Global Product Compliance Laboratory, of Lucent Technologies Inc., Bell Laboratories, 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

February 5, 2001

**TABLE OF CONTENTS**

	<b>COVER LETTER</b>
	Cover Letter
	Table of Content
	Letter for Confidential Treatment of Exhibits
	<b>ATTESTATION STATEMENT</b>
	Qualifications and Certifications
Section 2.911 (d)	Manufacturers, Identification
Section 2.1033 (c) (1,2)	Emissions, Frequency Range, Power Level
Section 2.1033 (c) (4-7)	
	<b>USERS MANUAL</b>
Section 2.1033 (c) (3)	Users Manual
	<b>PARTS LIST/TUNE-UP PROCEDURE</b>
Section 2.1033 (c) (9)	Tune-Up Procedure
	<b>OPERATIONAL DESCRIPTION</b>
Section 2.1033 (c) (13)	Description of Modulation System
	<b>SCHEMATICS</b>
Section 2.1033 (c) (10)	Schematic
	<b>Block Diagrams</b>
Section 2.1043 (b) (2)	
	<b>ID LABEL/LOCATION INFORMATION</b>
Section 2.1033 (c) (11) and 2.925 (a) (1)	Drawing of FCC ID
	<b>EXTERNAL PHOTOS</b>
Section 2.1033 (c) (12)	External Photos
	<b>INTERNAL PHOTOS</b>
Section 2.1033 (c) (12)	Internal Photos
	<b>TEST REPORT</b>
Section 2.1033 (c) (8)	Measurement of DC Power
Section 2.1033 (c) (14)	Listing of Required Measurements
Section 2.1046	Measurement of Radio Frequency Power Output
Section 2.1047	Measurement of Modulation Characteristics
Section 2.1049	Measurement of Occupied Bandwidth
	<b>Measurement of Spurious Emissions at Antenna</b>
Section 2.1051	Field Strength of Spurious Radiation
Section 2.1053	Measurement of Frequency Stability
Section 2.1055	Frequency Spectrum to be Investigated
Section 2.1057	Test Instruments Used for Test

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

February 5, 2001

**Subject: Confidential Treatment for User's Manual, Internal Photos and Schematic -  
FCC ID: AS5CMP-41**

**Dear Examiner:**

The 'Flexent PCS Radio Frequency Unit (RFU) Cabinet containing FCC ID AS5CMP-41, and FCC ID AS5CMP-42 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 Lucent Technologies holds the proprietary rights of equipment construction. The general public does not have access to either User's Manual, or Internal Construction of Flexent RFU. The schematics 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 photos
- (3) Schematics, Circuit descriptions and Block Diagrams

Thanks.

Sincerely,

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