

Lucent Technologies
Bell Labs Innovations



**Federal Communications Commission
Office of Engineering and Technology
Equipment Authorization Division,
Application Processing Branch**

Lucent Technologies Inc.
67 Whippany Road
Whippany, NJ 07981

April 12, 1999

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 a Class II change of the Lucent Technologies Corp. Individual Carrier Linear Amplifier, henceforth **ICLA, FCC ID: AS5CMP-27**. This ICLA is used in Lucent Technologies Corp **FLEXENT**® Land Station Cellular system using Code Division Multiple Access (CDMA) technology, for use in Domestic Public Cellular Telecommunication Service.

The ICLA was authorized, 9 April 1999 under **FCC ID: AS5CMP-27**, for operation in PCS Blocks A, B and E. This application is submitted to add operation for the remaining PCS Blocks C, D, and F.

The ICLA is a 16 Watt CW amplifier designed to provide 8 watts long term average at the antenna connection port. Under the dynamics conditions of CDMA service and active power control the short term maximum of 12 watts will be available at the antenna port and this is the value used for this filing.

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

Manufacturer	Lucent Technologies, Inc.
Equipment Identification	AS5CMP-27
Rules Part Number	24 (E)
Frequency Range	1931.25 – 1988.75 MHz All PCS Blocks
Output Power	0.012 to 12.0 Watts Varied By Software
Frequency Tolerance	+/- 0.5 ppm
Emission Designator	1M23G9W

The unit is called the PCS Individual Channel CDMA Amplifier Module. It 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. Because of the "state of the art" nature of this equipment, some of the characteristics cannot be tested using the requirements in CFR 47. For those characteristics ANSI J-STD-008 were used to define the tests and evaluation criteria used in this application. The ICLA rating at the amplifier output has a listed power output of 0.016 to 16.0 watts. Losses internal to the cabinet and conservative operation will limit the long term average output power to 8.0 watts and the short term maximum power to 12.0 watts when measured at the (J4) antenna connector. This latter value is the level for this application. The actual power levels delivered by the ICLA are under the software control of the Mobile Switching Center of the local cellular system. The software control only allows for adjustment in power up to the 12.0 Watt maximum. This filing to operate the **ICLA/ AS5CMP-27** is based upon signals supplied to the ICLA by a Lucent Technology Inc. CDMA Baseband Radio 1900 (**CBR-1900** henceforth **CBR**), **FCC ID: AS5CMP-26**, granted 23 March 1999 for all PCS Blocks.

This application for **AS5CMP-27**, is for PCS Blocks "C", "D", and "F". The amplifier was capable of operation in all PCS Blocks but production Transmit filters for PCS Blocks, "C", "D", and "F" were only made available recently. This Class II change when processed, completes the application for the complete PCS Band.

The **ICLA/ AS5CMP-27** is produced under subcontract to Lucent Technology specifications solely for incorporation into Lucent Technology Inc. products. The **CBR/ AS5CMP-26** is a Lucent Technology Inc. designed and manufactured products.

Enclosed in this electronically transmitted online package is a copy of 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 Product Certification. The technical contact at Lucent Technologies, Bell Laboratories, will comply with any request for additional information should the need arise.

Sincerely,

R.J.Pillmeier
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Cell Test and Field Support
Phone: 973-386-3837
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Att
FCC Form 731 w/ Attachments

Technical Contact
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Exhibit 1

July 15, 1998

SECTION 2.911 (d) QUALIFICATION OF ENGINEERS

Walter Steven Majkowski is a Member of Technical Staff at Lucent Technologies Bell Laboratories. He holds a BSEE from New Jersey Institute of Technology and was trained in the FCC testing procedures. Mr. Majkowski is a NARTE certified (NCE) EMC engineer, Certificate number EMC-001859-NE, and has at least twenty years of EMC design and testing experience.

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Exhibit 1 *continued*

SECTION 2.911 (d) CERTIFICATION OF TECHNICAL TEST DATA

I hereby certify that the enclosed technical test data are the results of tests performed or supervised by me.

Walter Steven Majkowski NCE
Member Technical Staff
Whippany Compliance Laboratory
Lucent Technologies Inc.