

Lucent Technologies
Bell Labs Innovations



Lucent Technologies Inc.
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June 14, 1999

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

Re: Application for Certification of FCC ID: AS5CMP-32

Dear Examiner:

In accordance with Parts 2 and 22 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 FLEXENT™ Cellular Dual Radio Module (CDRM), Part No. 44WR54, under FCC ID: AS5CMP-32. The CDRM transceiver utilizes Time Domain Multiple Access (TDMA) technology, using the standard $\pi/4$ DQPSK modulation for 3 time slots. The CDRM can transmit 1 or 2 carriers; each carrier can be tuned independently across the Cellular Frequency Band 869.04 - 893.97 MHz with individual power level control, under external software control. This transceiver was designed to operate in the FLEXENT™ Cellular TDMA Microcell J41698B-1 base station equipment frame, in combination with the Cellular Multi Carrier Linear Amplifier (CMCLA), Part No. 44WA29, which will be filed separately under AS5CMP-33, and with Simplex A-Band and B-Band transmit bandpass filters.

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

Manufacturer	Lucent Technologies, Columbus, Ohio
Equipment Identification	AS5CMP-32
Rules Part Number	Part 22, Subpart H – Cellular Radiotelephone Service
Frequency Range	Transmit 869.04 - 893.97 MHz Receive 824.04 - 848.97 MHz
Output Power	+ 15.5 dBm (36 mW) per carrier maximum to – 41.0 dBm per carrier minimum
Frequency Tolerance	± 1.5 ppm
Emission Designator	40K0GXW

The CDRM transceiver, under AS5CMP-32, was designed in accordance with the guidelines of TIA/EIA/IS-136.2-A (October 1996): TDMA Cellular/PCS – Radio Interface – Mobile Station – Base Station Compatibility – Traffic Channels and FSK Control Channel; and TIA/EIA/IS-138-A (July 1996): TDMA Cellular/PCS – Radio Interface – Minimum Performance Standards for Base Stations.

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices) and the required measurement data and exhibits. These exhibits contain the technical requirements, and the required statements and documents for equipment authorization. The technical contact at Lucent Technologies will comply with any request for additional information should the need arise.

Lucent Technologies has requested that the following exhibits be **considered confidential**:

Exhibit 4 FLEXENT™ TDMA Microcell: Operation, Administration, and Maintenance Manual

Exhibit 6 Schematic Diagrams

Exhibit 7 Description of Circuitry for Determining and Stabilizing Frequency

Exhibit 9 Description of Circuitry for Limiting Modulation and Limiting Power

The letter of request is attached and the required fees are submitted as required for electronic filing.

Sincerely,

R. J. Pillmeier
Technical Manager
Certification Test Group

Att.
Transmitter Certification Report