

Lucent Technologies, Inc. 6250 E. Broad Street Columbus, OH 43213

July 17, 2001

Timco Engineering Inc.
Telecommunication Certification Bodies
849 NW State Road 45
Newberry, Florida 32669

Subject: Application for Certification of FCC ID: AS5CMP-40

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 the certification of the Lucent Technologies Single Board Enhanced Digital Radio Unit, henceforth SBEDRU, under FCC ID AS5CMP-40, for operation in the domestic public cellular A and B bands.

The AS5CMP-40 SBEDRU is a cellular transceiver used in Lucent Technologies AUTOPLEX[®] Land Station 1000 System for use in the domestic telecommunications services. It utilizes the Time Domain Multiple Access (TDMA) technology with the standard $\pi/4$ DQPSK (Differentially Encoded Quadrature Phase Shift Keying) modulation for 3 time slots.

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

Manufacturer Lucent Technologies, Columbus, Ohio

Equipment Identification AS5CMP-40

Rules Part Number Part 22, Subpart H – Cellular Radiotelephone service Frequency Range Transmit: 869 – 894 MHz, Receive: 824 – 849 MHz

Output Power +14.5 dBm to -22 dBm per carrier

Frequency Tolerance $\pm 1.5 \text{ ppm}$ Emission Designator DXW

This unit is designed to be used with other FCC granted TDMA transmit and amplification devices. It will be used in both cellular and PCS operations. When used in normal cellular base station operation, it will be used with a FCC certified output power amplifier. When used in PCS applications, there will be no modifications in this transceiver. The output of this unit will be applied to a FCC authorized upbander-amplifier which will upconvert the cellular signal produced by the SBEDRU to a PCS frequency and then amplify it for use in the domestic PCS service.

The AS5CMP-40 SBEDRU transceiver is a new design of the double-board Enhanced Digital Radio Unit (EDRU) which was previously granted under FCC ID AS5CMP-17. The SBEDRU's design was based on the EDRU digital circuitry and the single channel RF circuitry of the Flexent Dual Radio Module (DRM) granted under FCC ID: AS5CMP-32. It combined both of its digital and RF circuitry on a single board. The AS5CMP-40 SBEDRU transceiver is fully compatible with the Lucent Technologies AUTOPLEX® 1000 system that currently uses EDRUs. It was designed in accordance with the guidelines of the latest TIA/EIA/IS-136-A standard.

The SBEDRU was primarily evaluated in the Lucent Technologies AUTOPLEX® 1000 Series II Cellular line-up which consisted of a Radio Channel Frame (RCF) and an Antenna Interface Frame (AIF).

Enclosed in this application package are a copy of Timco's TCB Application Form 731, a letter of Request for Confidentiality and the required exhibits. These exhibits contain the technical data, and the required statements and documents for equipment certification. The technical contact at Lucent Technologies Bell Laboratories will comply with any request for additional information should the need arise.

The fees are submitted as required for radio equipment certification filing.

Sincerely,

P.J\Hollern

Technical Manager

FCC Compliance Test Group, Columbus, OH