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



European Compliance Laboratory (ECL) Thurn-& Taxisstr. 10, D-90411 Nuemberg, Germany

## 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 Type Acceptance of the Lucent Technologies Inc. 'Flexent GSM 1900 Transceiver' a single radio frequency unit, henceforth TRXHP19 as FCC ID: **AS5FLX-02.** 

This TRXHP19 shall be used in Lucent Technologies Inc. Land Station Personal Communication Service (PCS) system using Global System for Mobil Communication (GSM) technology, for use in Domestic Public PCS Telecommunication Service. The present PCS system will use twelve TRXHP19s in a maximum configuration and three TRXHP19s in minimum configuration in a Flexent GSM Macrocell Cabinet. The product configurations are listed separately under "Product Configurations".

Each TRXHP19 is designed to provide 70 watts long term average at the antenna connection port. Under the dynamics conditions of GSM service and active power control the short term maximum of 80 watts will be available at the antenna port and this value is used for this filing.

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

Manufacturer Lucent Technologies Inc.

Product Flexent GSM 1900 Transceiver

**Equipment Identification** AS5FLX-02

Rules Part Number 24(E) Frequency Range 1930.4 – 1989.6 MHz

Output Power 0.002 to 80 Watts per carrier maximum varied by Software

Frequency Tolerance +/- 0.05 ppm Emission Designator 256KGXW

## **Lucent Technologies**

Bell Labs Innovations

The TRXHP19 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-007 and Draft GSM 05.05 V8.0.0 (1999-07) "European Standard (Telecommunication Series) Digital Cellular Telecommunication System (Phase 2+); Radio Transmission and Reception" were used to define the tests and evaluation criteria used in this application.

Losses internal to the cabinet and conservative operation will limit the long term average output power to 70 watts and the short term maximum power to 80 watts when measured at the (J4) antenna connector. This latter value is the level for this application. The actual power levels delivered by the TRXHP19s are under the software control of the Mobile Switching Center of the local Cellular system. The TRXHP19/AS5FLX-02 is a Lucent Technologies Inc., designed and manufactured product. Submitted 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 authorization. The technical contact at Lucent Technologies Inc., Bell Laboratories, will comply with any request for additional information should the need arise.

Sincerely,