

**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

June 12, 2000

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 Type Acceptance of the Lucent Technologies Inc. "Flexent GSM 1900 Transceiver" a single radio frequency unit, henceforth TRX19 as FCC ID: **AS5FLX-01**. This TRX19 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 TRX19s in a maximum configuration and three TRX19s in minimum configuration in a Flexent GSM indoor Macrocell Cabinet. The product configurations are listed separately under "Product Configurations". Each TRX19 is designed to provide 20 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 29 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-01
Rules Part Number	24(E)
Frequency Range	1930.4 – 1989.6 MHz
Output Power	0.002 to 29 Watts per carrier maximum varied by Software
Frequency Tolerance	+/- 0.05 ppm
Emission Designator	256KGXW

The TRX19 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 20 watts and the short term maximum power to 35.5 watts when measured at the (J4) antenna connector. This latter value is the level for this application. The actual power levels delivered by the TRX19s are under the software control of the Mobile Switching Center of the local Cellular system. The TRX19/AS5FLX-01 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,

Dheena Moongilan
Distinguished Member of Technical Staff
Global Product Compliance Laboratory
phone: (732) 332-6003
email: moongilan@lucent.com

PRODUCT CONFIGURATIONS

The TRX19s will be marketed and sold installed in a Flexent GSM indoor Macrocell Cabinet with the following product configurations:

4 X 4 X 4:

Flexent GSM 1900 Cabinet will contain:

- Twelve TRX19s and six transmit antenna ports
- Each antenna port will be connected with two TRX19s through a passive combiner.

3 X 3 X 3:

Flexent GSM indoor Macrocell Cabinet will contain:

- Nine TRX19s and six transmit antenna ports
- Three of the six antenna ports will be connected to two TRX19s each, through a passive combiner.
- Three of the six antenna ports will be connected to one TRX19 each, through a passive combiner. Other three combiner ports will be terminated with 50 ohm load. Empty locations will be fitted with BLANK Plates to maintain the air flow.

2 X 2 X 2:

Flexent GSM indoor Macrocell Cabinet will contain:

- Six TRX9s and six transmit antenna ports
- Each antenna port will be connected to TRX19 via Duplexer. (No combiners)

1 X 1 X 1:

Flexent GSM indoor Macrocell Cabinet will contain:

- Three TRX19s and six transmit antenna ports are used.
- Three Antenna ports will radiate the signal while the other 3 antenna ports will be used as Diversity antennas for the diversity receivers.

Other Configurations:

Flexent GSM indoor Macrocell cabinet may contain

- Mixture of configurations listed above.
- In some configurations the cabinet may contain 1 to 12 TRX19s. Some possible configurations are listed below:

1 X 1 X 0, 2 X 2 X 0, 3 X 3 X 0, 4 X 4 X 0, 1 X 0 X 0, 2 X 0 X 0, 3 X 0 X 0, 4 X 0 X 0,
0 X 2 X 1, or 4 X 2 X 2

Global Product Compliance Laboratory
101 Crawfords Corner Road
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**Subject: Confidential Treatment for User's Manual, Internal Photos and Schematic -
FCC ID: AS5FLX-01**

Dear Examiner:

The 'Flexent GSM 1900 Transceiver' FCC ID AS5FLX-01 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 GSM 1900 transceiver. 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 and Block Diagrams

Thanks.

Sincerely,

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

June 12, 2000

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