

## EXHIBIT 17

**Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal**

Spurious emissions conducted to the transmit terminal of the Cellular TDMA Dual Radio Module (CDRM) transceiver were investigated from the lowest RF frequency, 15 MHz, to the 10<sup>th</sup> harmonic of the carrier, 10 GHz, as required by Part 2.1057(a)(1). Part 2.1057(c) specifies that spurious emissions attenuated more than 20 dB below the required limitation do not need to be reported. A single TDMA carrier was modulated by a pseudo-random data bit stream for all 3 time slots, and the Cellular TDMA Dual Radio Module (CDRM) output power level set to approximately +15.5 dBm at its output terminal. Conducted spurious emission measurements were made at the backplane RF output terminal and at three frequencies corresponding to 1) the lowest settable Cellular Frequency Ch 991, 869.040 MHz; 2) the Mid-Cellular Band Frequency Ch 400, 882.000 MHz; and 3) the highest settable Cellular Frequency Ch 799, 893.970 MHz.

In compliance with Part 22.917(h), measurements were made with the instrumentation resolution bandwidth set to 30 kHz. The limitation for the Cellular Frequency Band is specified in Part 22.917(e) as: "The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P in Watts) ..... by at least  $43 + 10 \log (P)$  dBc." For the CDRM output power at +15.5 dBm (36 mW), the required emission attenuation below the carrier is then 28.5 dBc. Three plots were made for each channel listed above: 15 MHz – 1 GHz, 1 – 5 GHz, and 5 GHz – 10 GHz. A variable attenuator was used to adjust the carrier peak to the 0 dBm reticle line as a reference line to facilitate reading the *attenuation below the carrier* direct from the vertical display grid. Part 2.1051 also states that: "The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified."

**RESULTS:**

In each of the attached data plots, the instrumentation noise floor far exceeded the 28.5 dBc limitation by much greater than 20 dB, with no measurable spurious emissions. The Cellular TDMA Dual Radio Module (PDRM), 44WR54, transceiver demonstrated full compliance with the requirements of Part 2.1051 and Part 22.917. A block diagram of the test set-up and all data plots are attached to this exhibit.

APPLICANT: Lucent Technologies

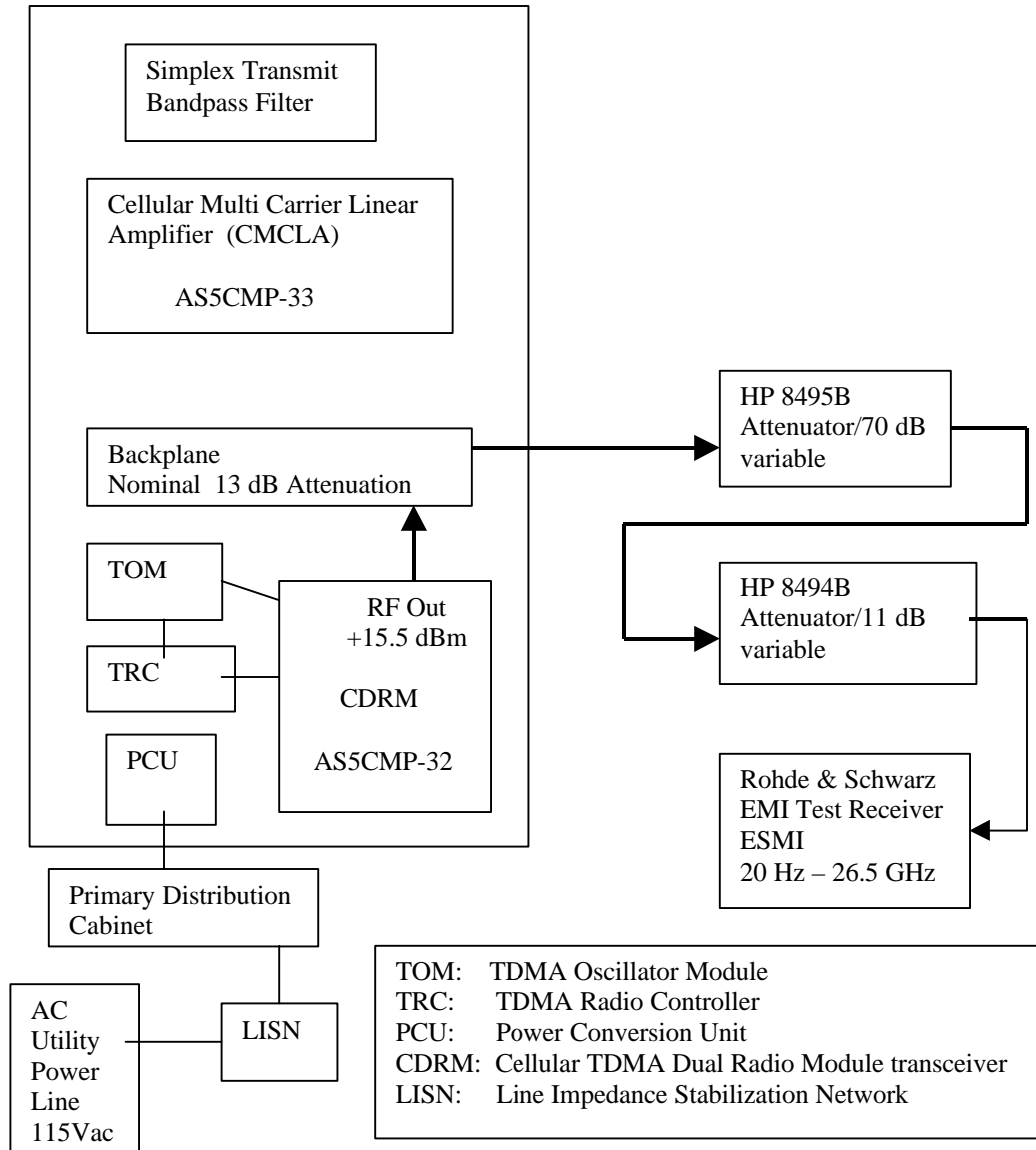
FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Test Set-Up Block Diagram

## FLEXENT™ Cellular TDMA Microcell J41698B-1



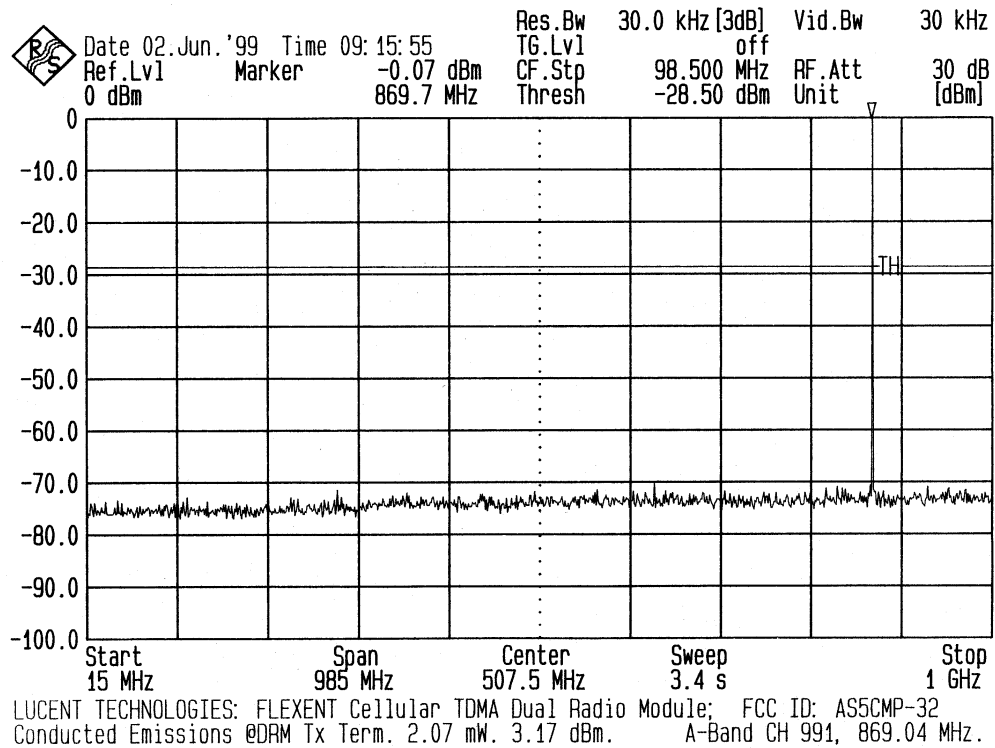
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular A-Band: Lowest Edge Channel

Channel 991, 869.040 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 1 of 3

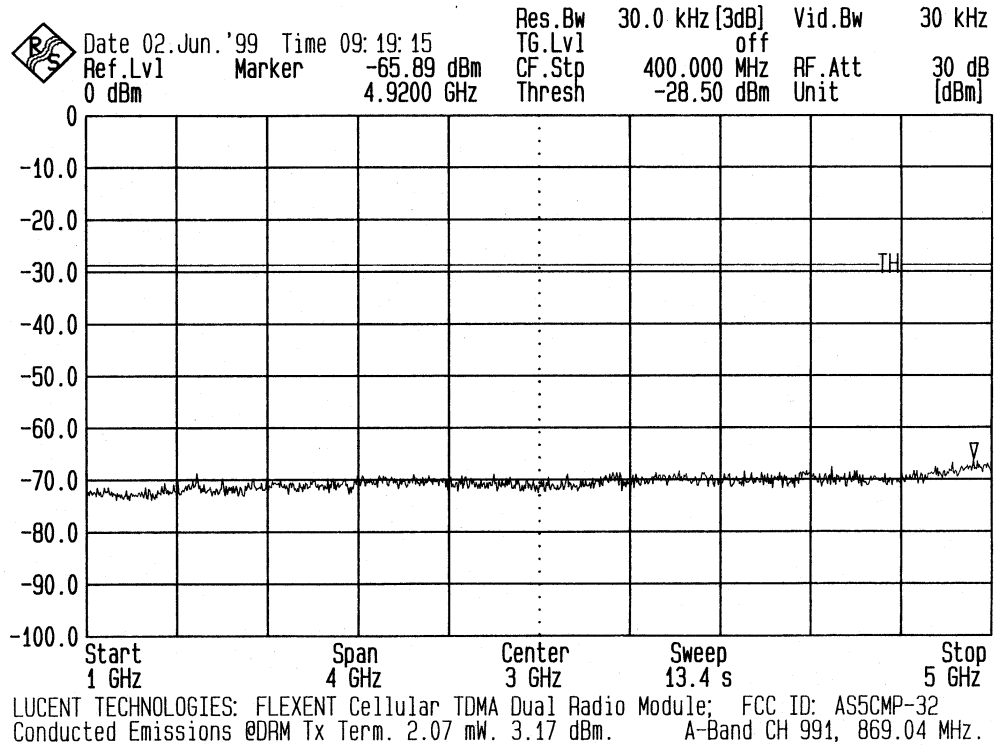
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular A-Band: Lowest Edge Channel

Channel 991, 869.040 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 2 of 3

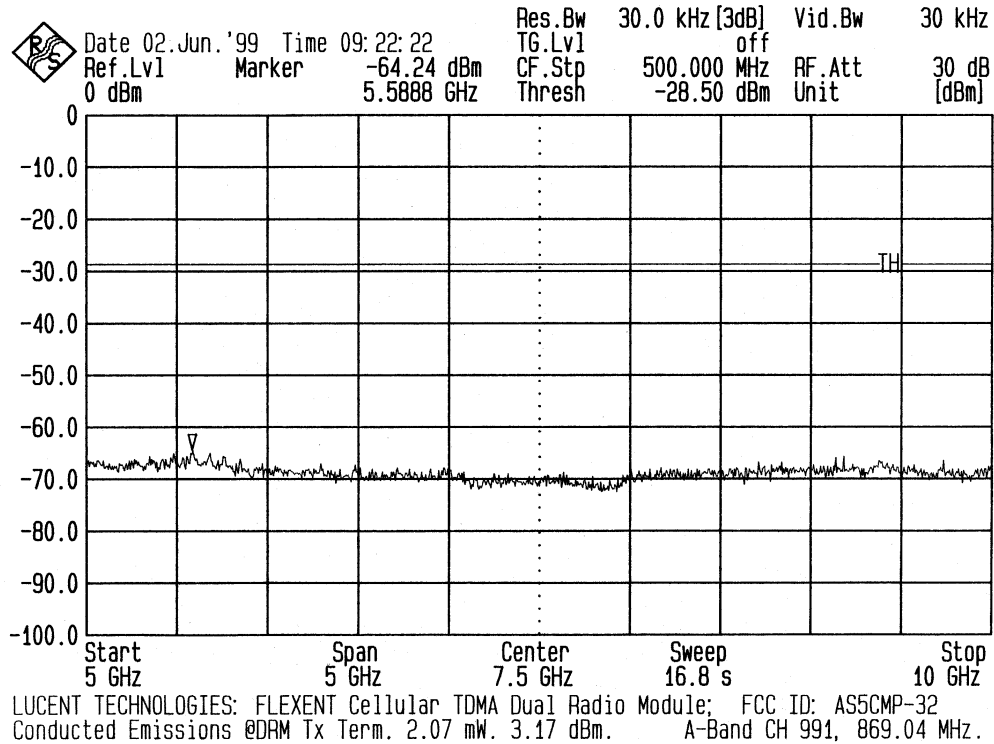
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular A-Band: Lowest Edge Channel

Channel 991, 869.040 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 3 of 3

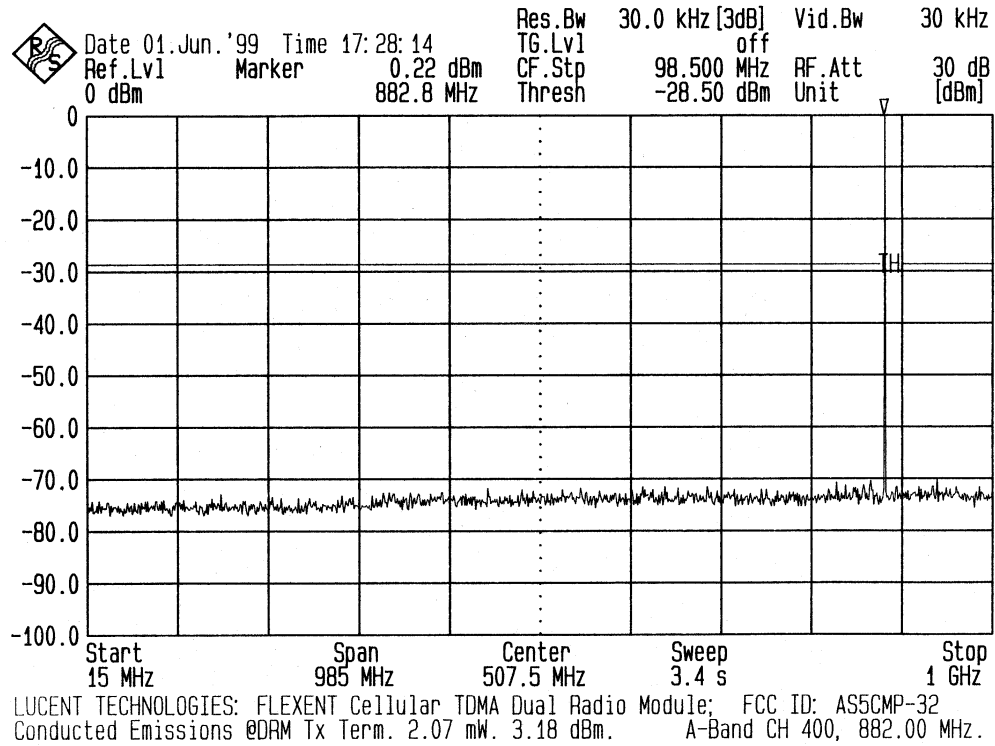
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular A-Band: Mid Cellular Frequency Band

Channel 400, 882.000 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 1 of 3

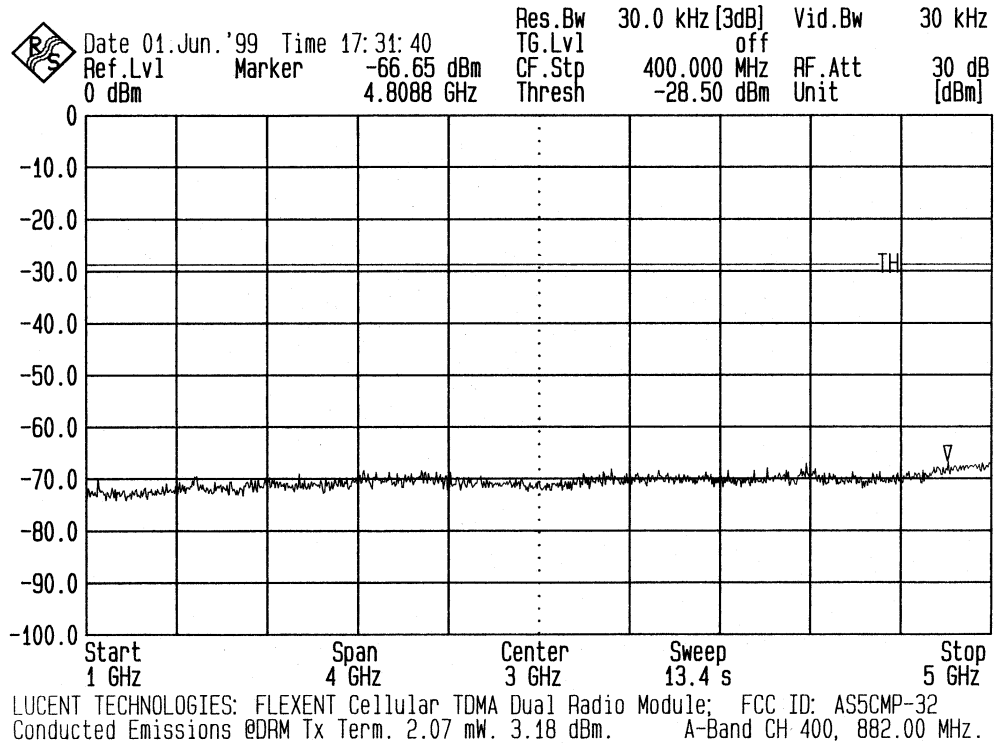
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular A-Band: Mid Cellular Frequency Band

Channel 400, 882.000 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 2 of 3

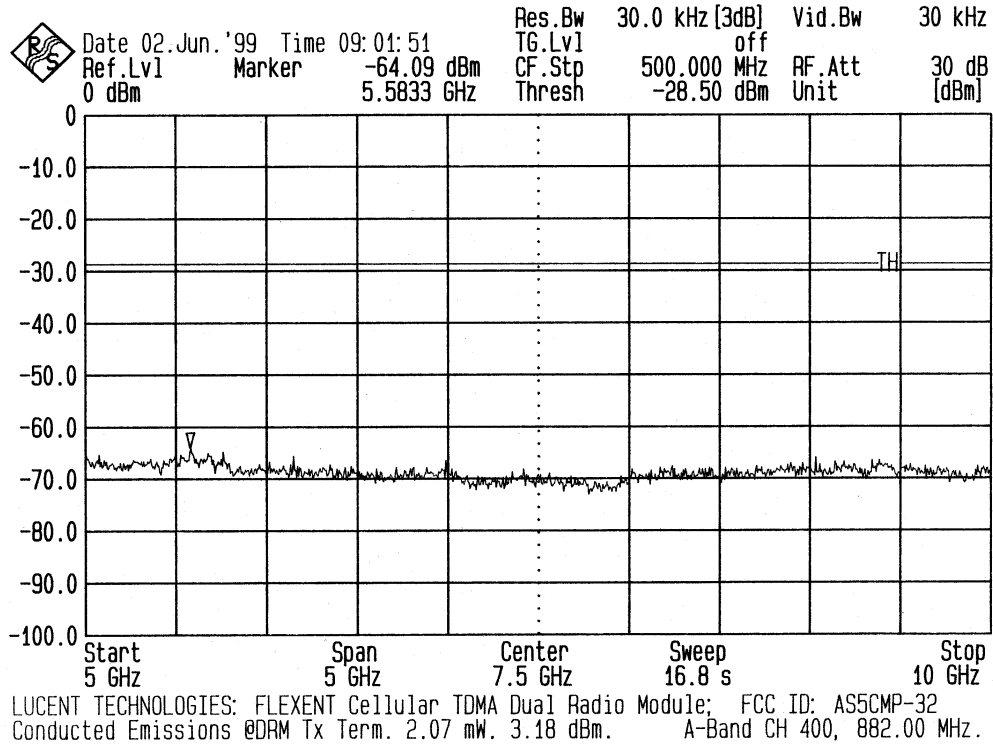
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



## Cellular A-Band: Mid Cellular Frequency Band

Channel 400, 882.000 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal  
Plot 3 of 3



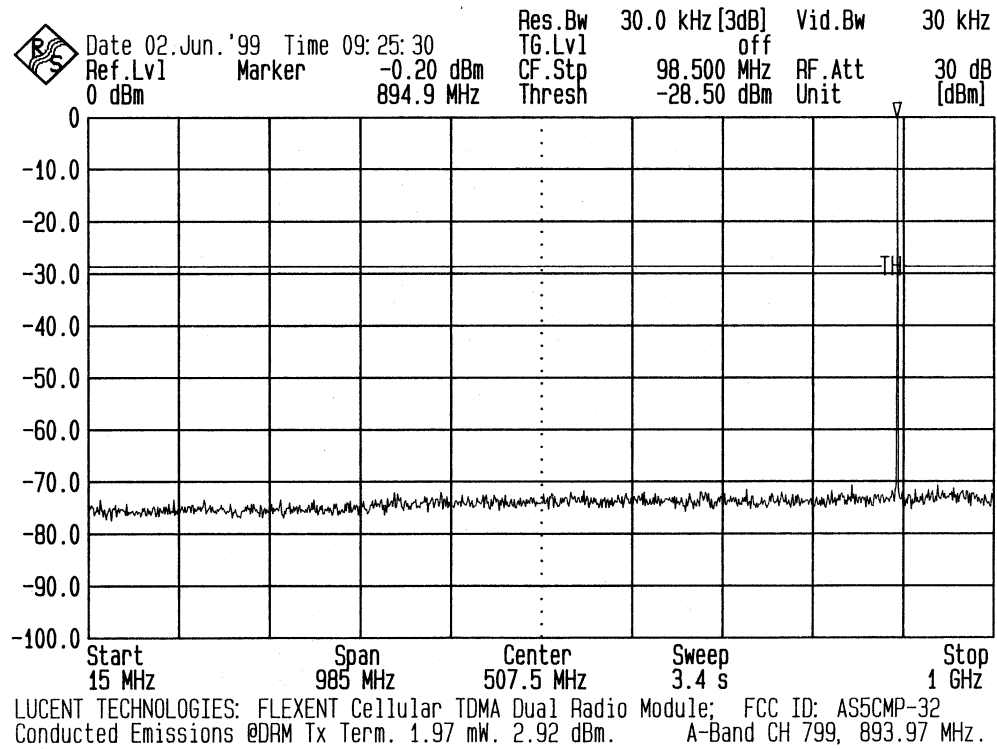
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular B-Band: Highest Edge Channel

Channel 799, 893.970 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 1 of 3

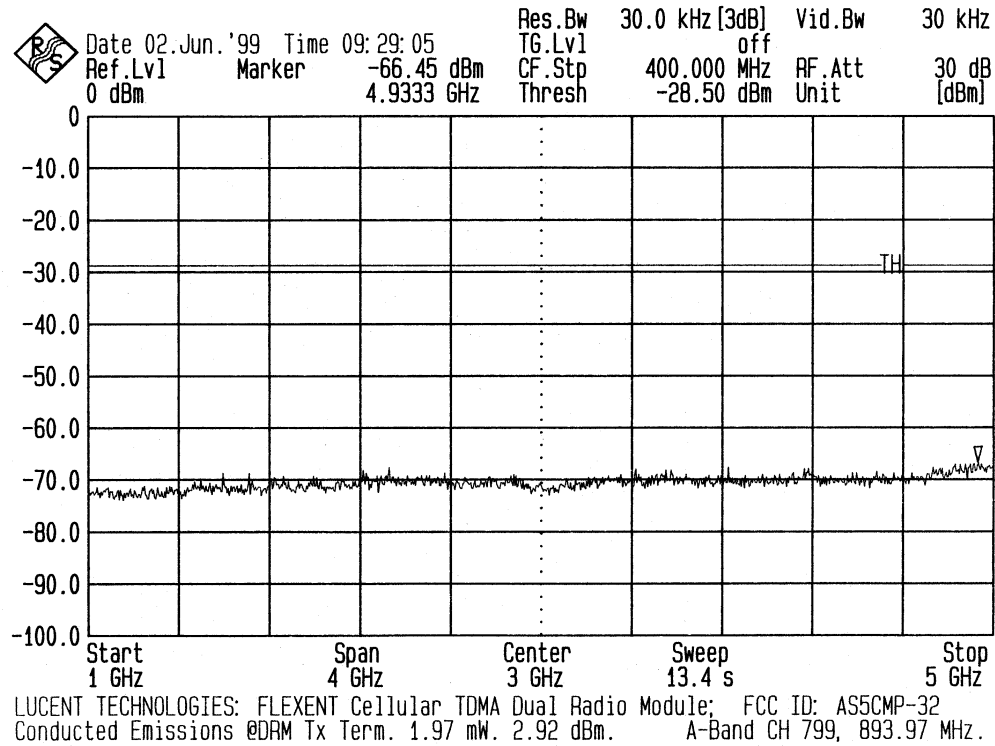
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular B-Band: Highest Edge Channel

Channel 799, 893.970 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 2 of 3

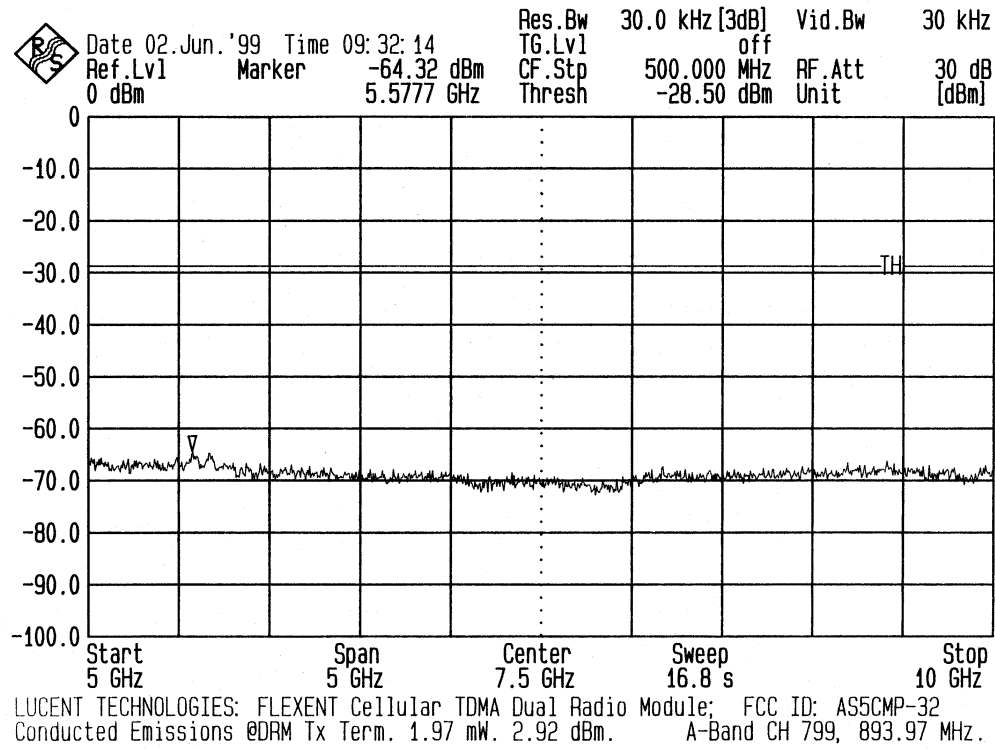
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-32

## EXHIBIT 17

## Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

## Data Plots of Conducted Spurious Emissions:



Cellular B-Band: Highest Edge Channel

Channel 799, 893.970 MHz

Cellular TDMA Dual Radio Module transceiver output at the backplane terminal

Plot 3 of 3