

EXHIBIT 17**Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal**

Spurious emissions conducted to the transmit antenna terminal were investigated from the lowest RF frequency, 15 MHz, to the 10th harmonic of the carrier, 20 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 PCS-TDMA Dual Radio Module (PDRM) 44WR53, subject of a separate application under AS5CMP-30, in combination with the PCS-TDMA Multi Carrier Linear Amplifier (PMCLA) 44WA28, subject of this application under AS5CMP-31, output power level was set to provide +30.8 dBm (1.2 Watts) at the transmit antenna terminal. In compliance with Part 24.238(c), conducted spurious emission measurements were made at both the lower and the upper block edge for each PCS frequency block at the transmit antenna terminal as shown below.

PCS Frequency Block	PCS Channel No.	Carrier Center Frequency - MHz
A (le)	2	1930.08
A (ue)	498	1944.96
D (le)	502	1945.08
D (ue)	665	1949.97
B (le)	668	1950.06
B (ue)	1165	1964.97
E (le)	1168	1965.06
E (ue)	1332	1969.98
F (le)	1335	1970.07
F (ue)	1498	1974.96
C (le)	1502	1975.08
C (ue)	1998	1989.96

le = lower block edge frequency; and ue = upper block edge frequency

The limitation for each PCS frequency block edge is specified in Part 24.238(a) as: “the power of any emission shall be attenuated below the transmitter power (P in Watts) by at least $43 + 10 \log (P)$ dBc.” For the PMCLA output power at the antenna terminal, +30.8 dBm (1.2 W), the required spurious emission attenuation below the carrier is then 43.8 dBc. Part 24.238(b) requires that an instrumentation resolution bandwidth of 1 MHz be used for this test procedure. Three plots were made for each channel listed above: 15 MHz – 1 GHz, 1 – 5 GHz, and 5 GHz – 20 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.

RESULTS:

In each of the attached data plots, the instrumentation noise floor far exceeded the 43.8 dBc limitation by much greater than 20 dB. The PCS-TDMA Multi Carrier Linear Amplifier (PMCLA) 44WA28, subject of this application and AS5CMP-31, in combination with the PCS-TDMA Dual Radio Module (PDRM) 44WR53, subject of a separate application under AS5CMP-30, demonstrated full compliance with the requirements of Part 2.1051 and Part 24.238. A block diagram of the test set-up and all data plots are attached to this exhibit.

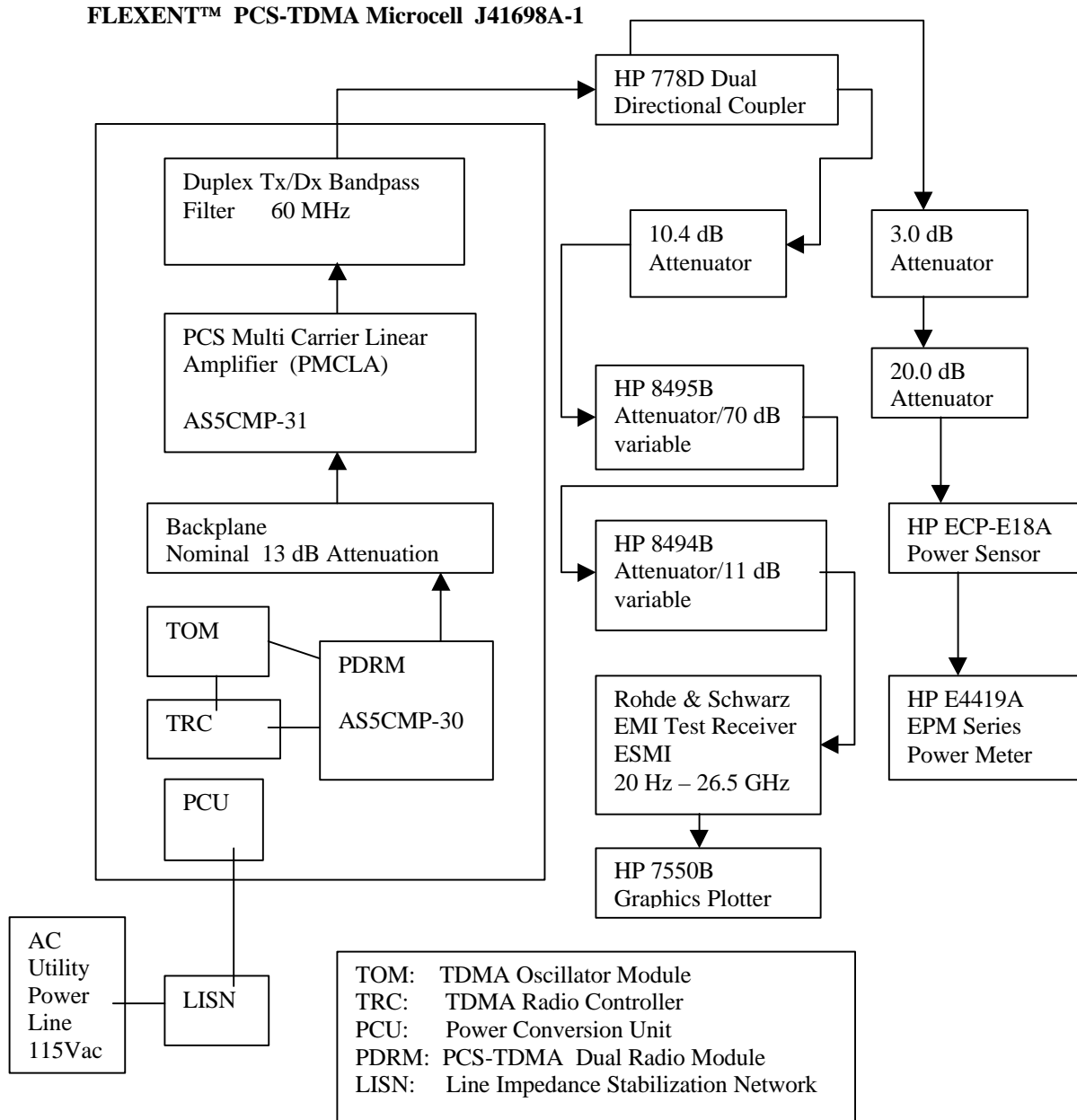
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Test Set-Up Block Diagram:



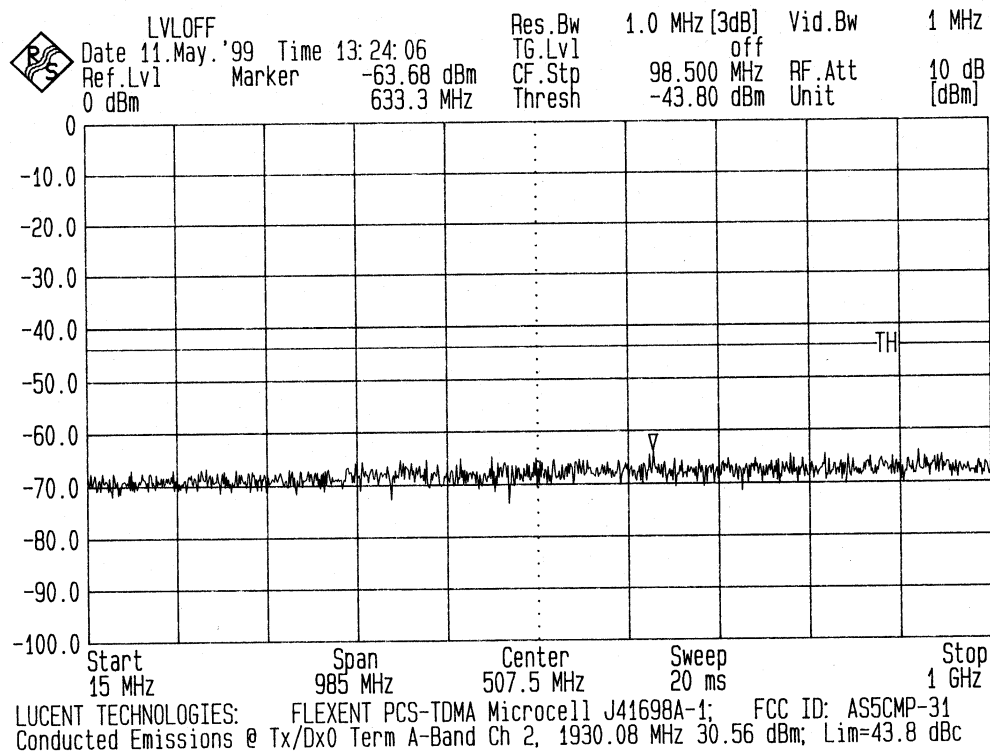
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS A-Block: Lower Edge Channel

Channel 2, 1930.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

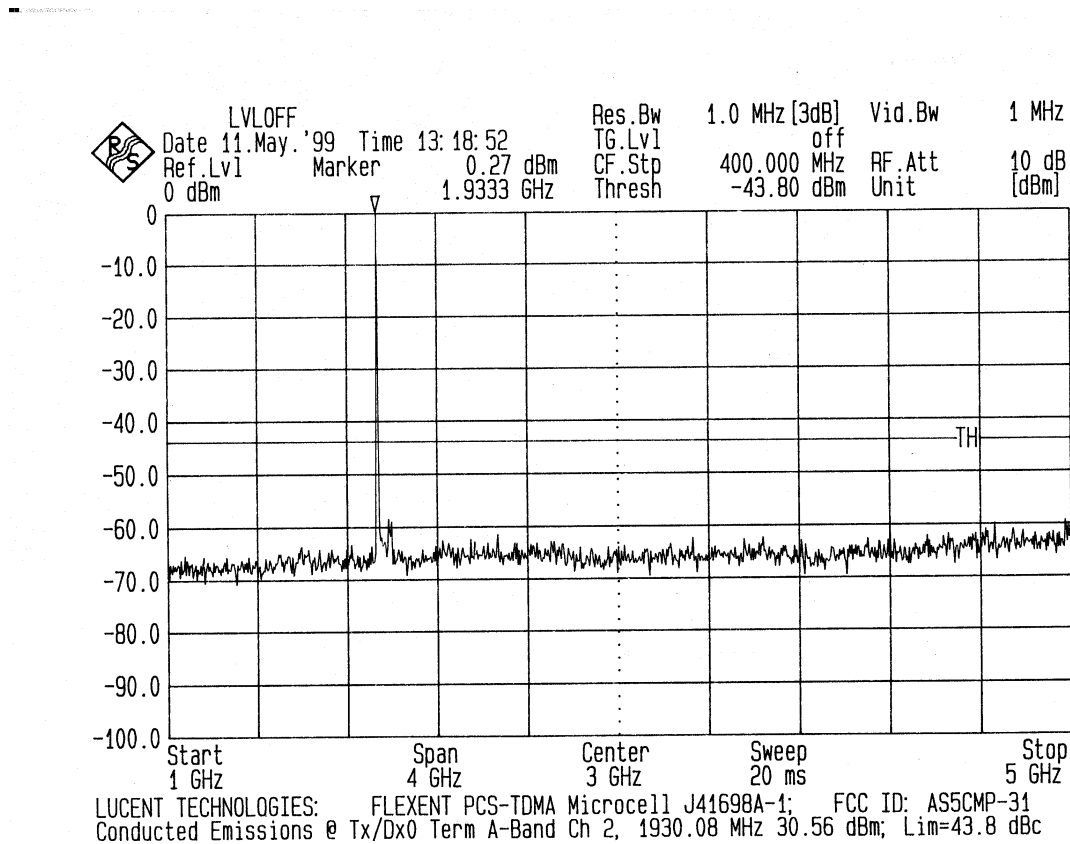
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS A-Block: Lower Edge Channel

Channel 2, 1930.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

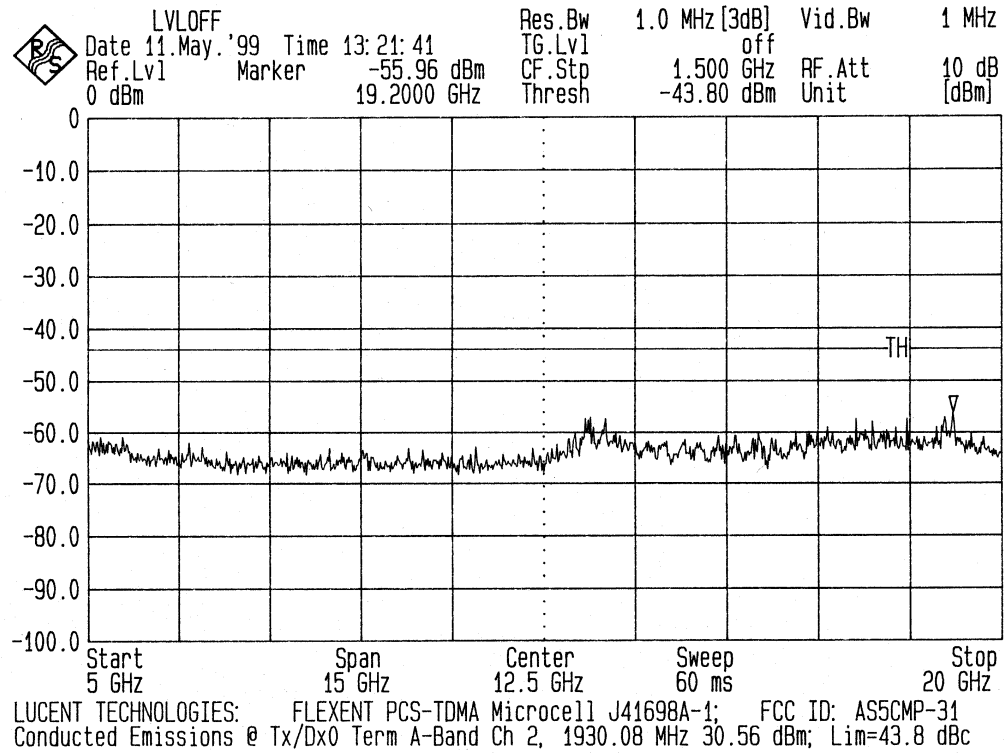
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS A-Block: Lower Edge Channel

Channel 2, 1930.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

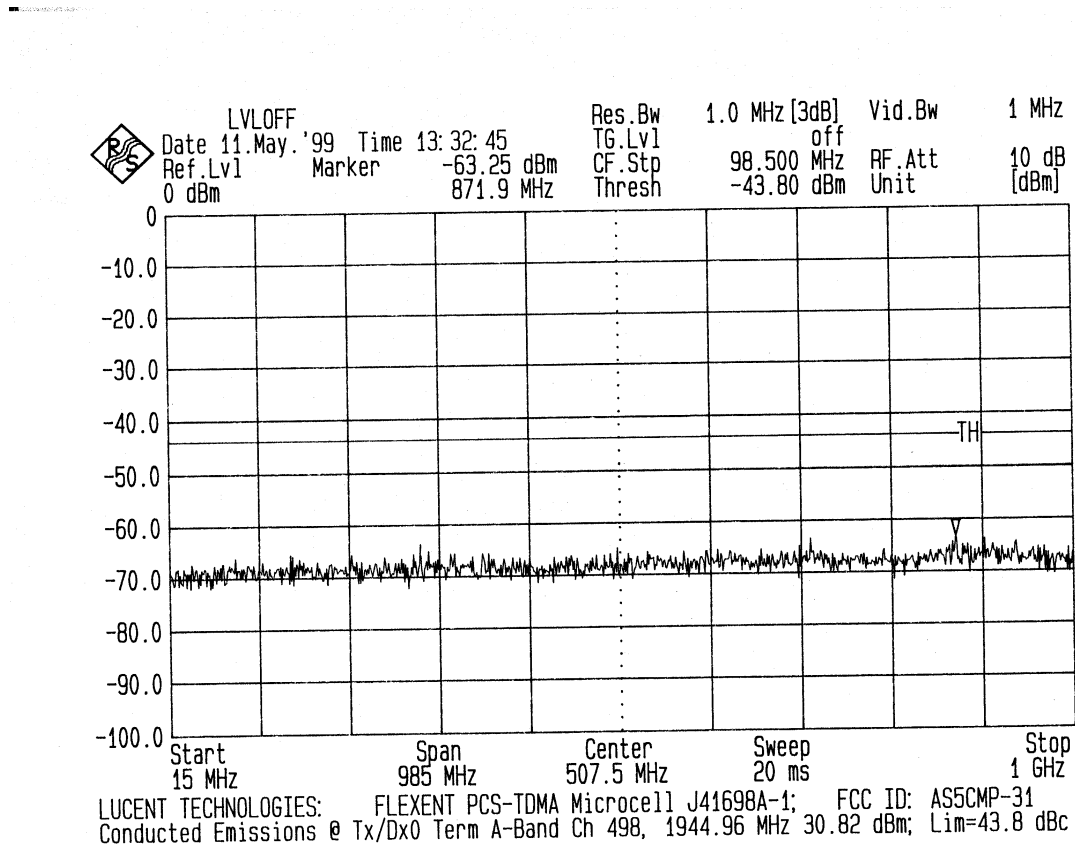
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS A-Block: Upper Edge Channel

Channel 498, 1944.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

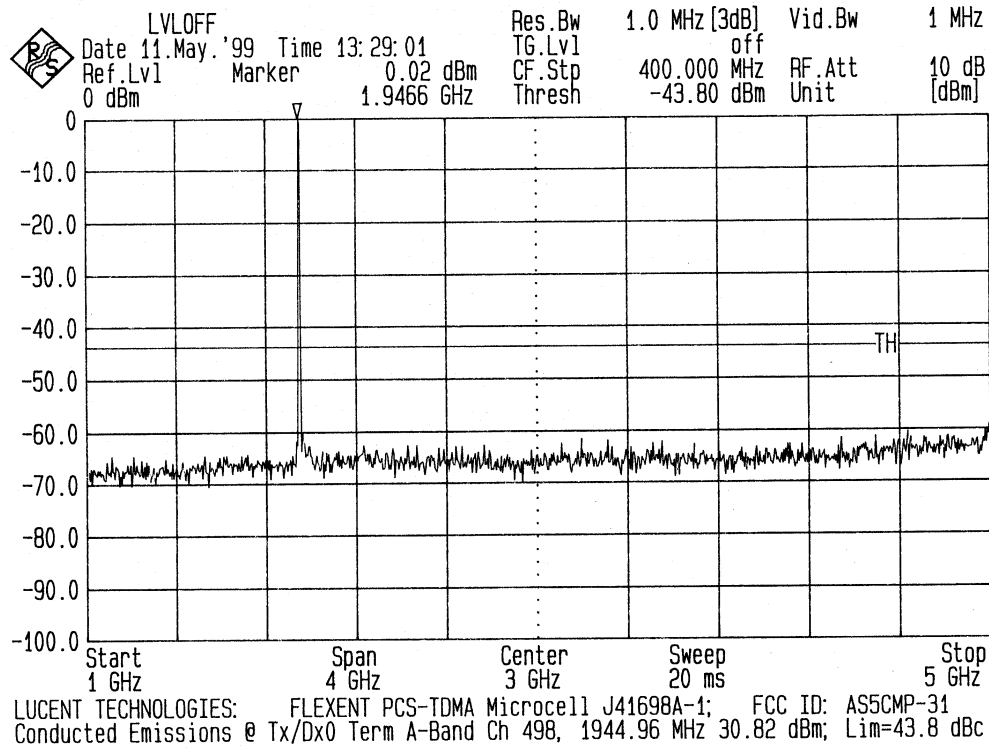
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS A-Block: Upper Edge Channel

Channel 498, 1944.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

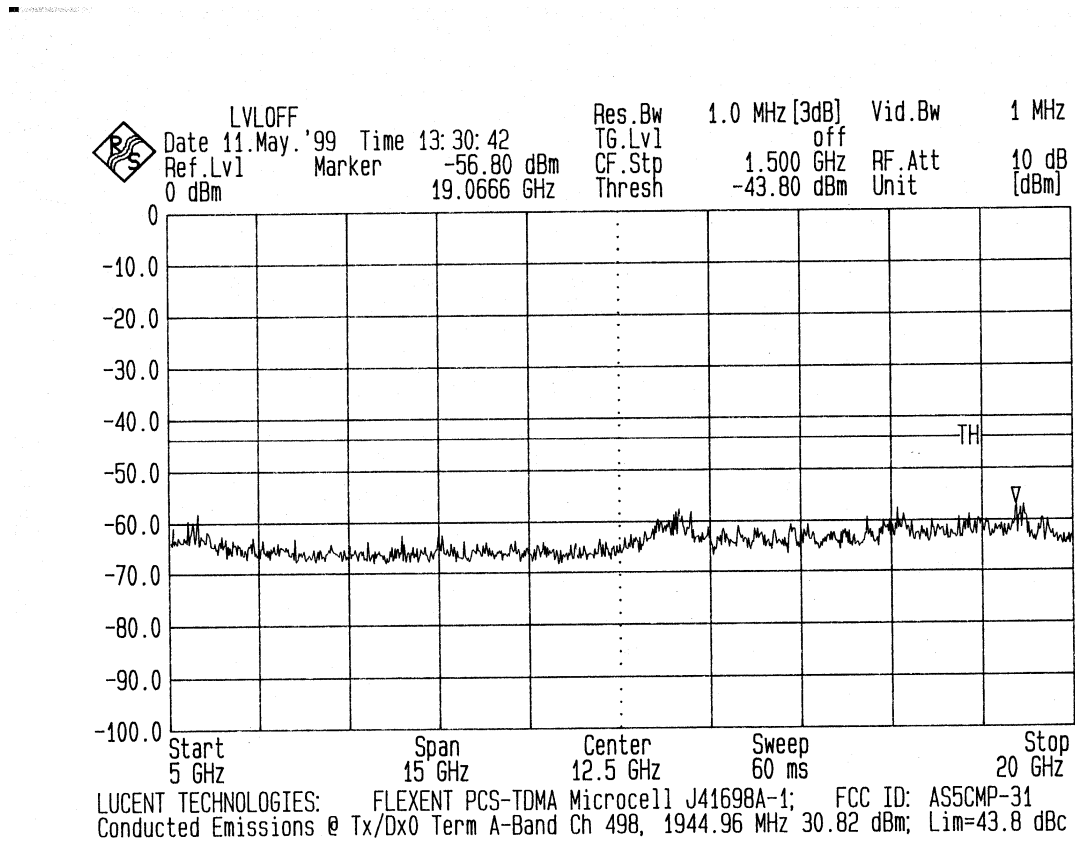
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS A-Block: Upper Edge Channel

Channel 498, 1944.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

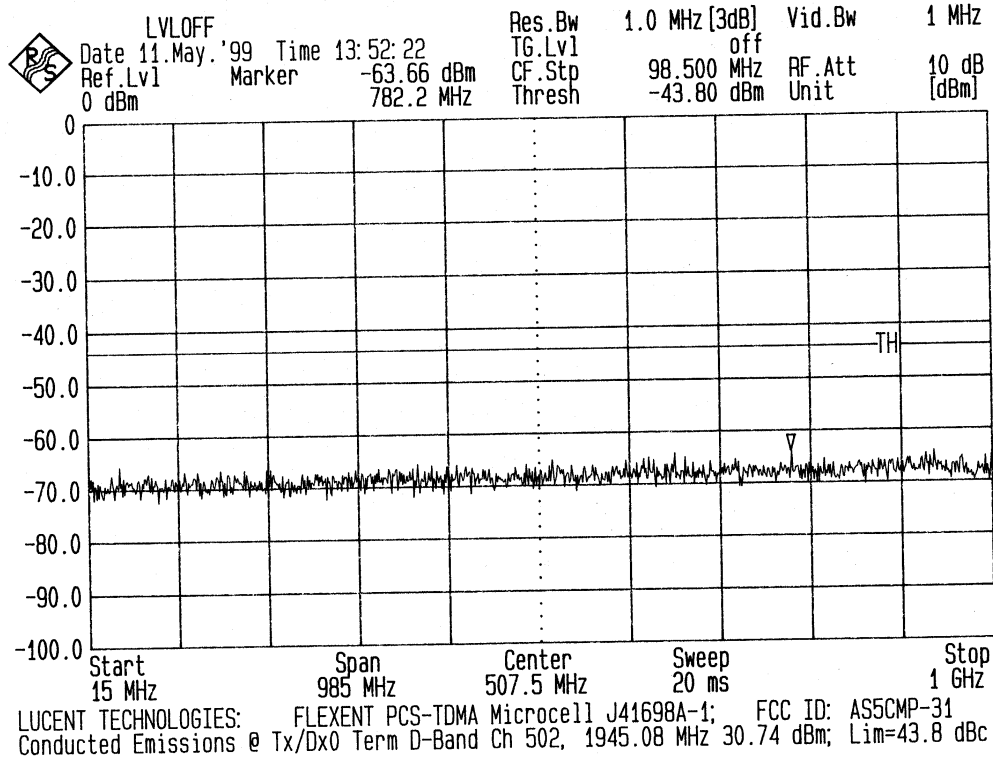
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS D-Block: Lower Edge Channel

Channel 502, 1945.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

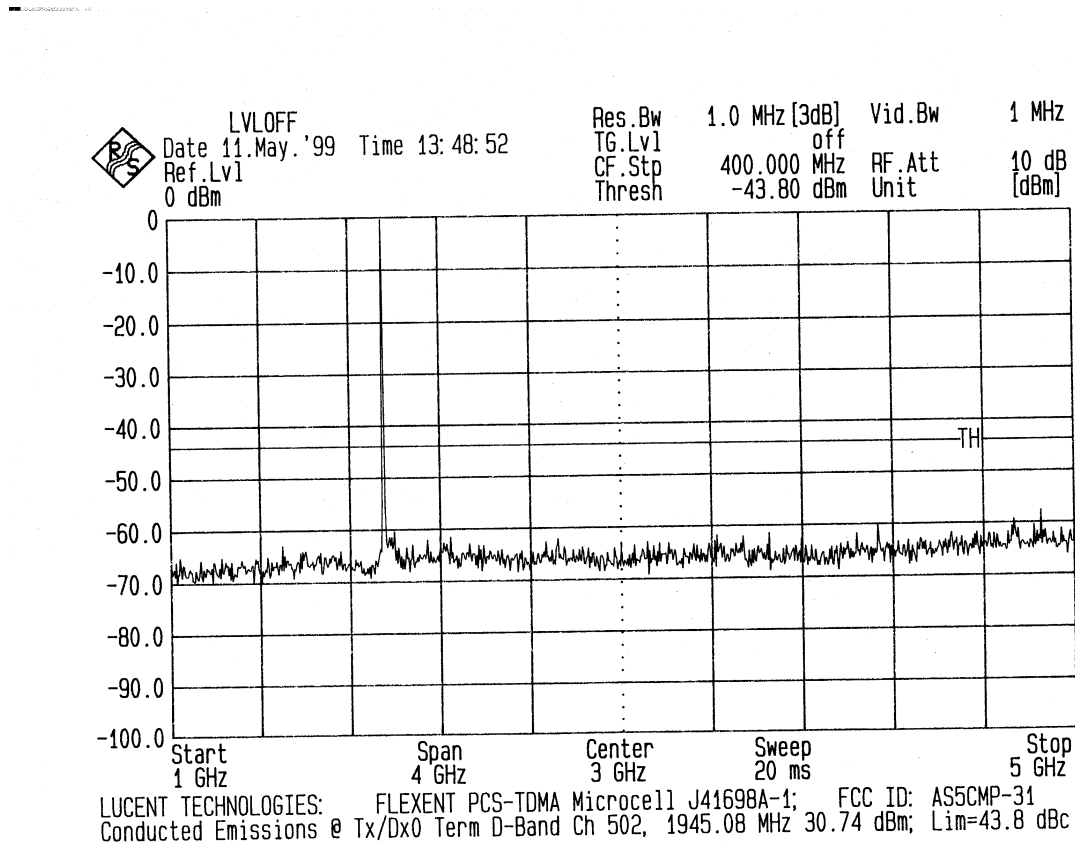
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS D-Block: Lower Edge Channel

Channel 502, 1945.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

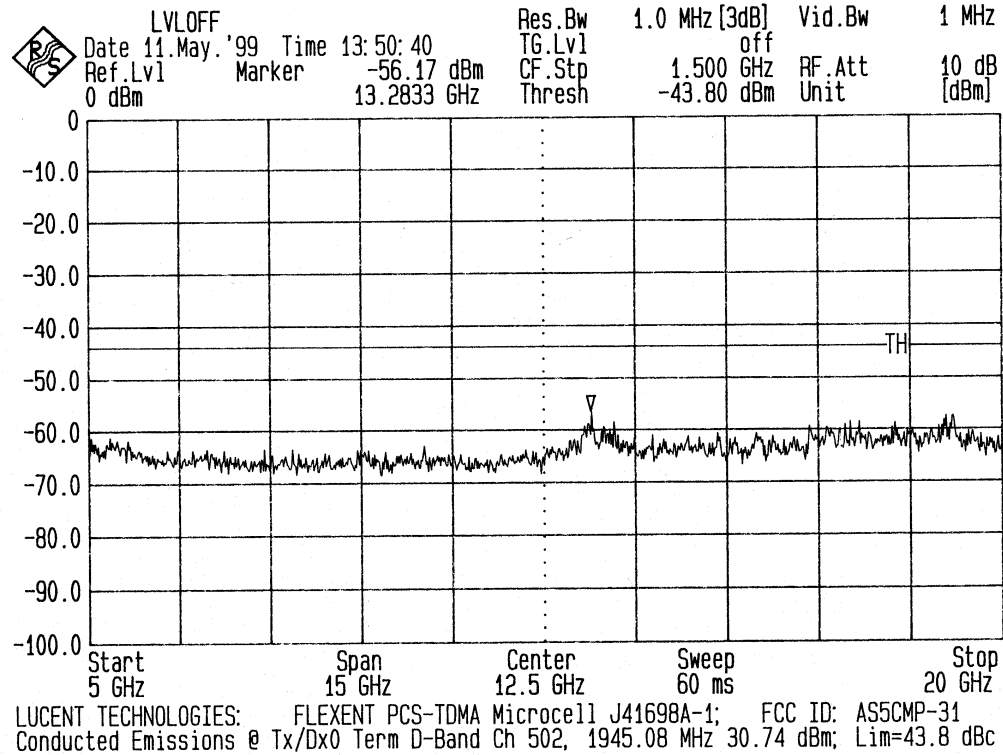
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS D-Block: Lower Edge Channel

Channel 502, 1945.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

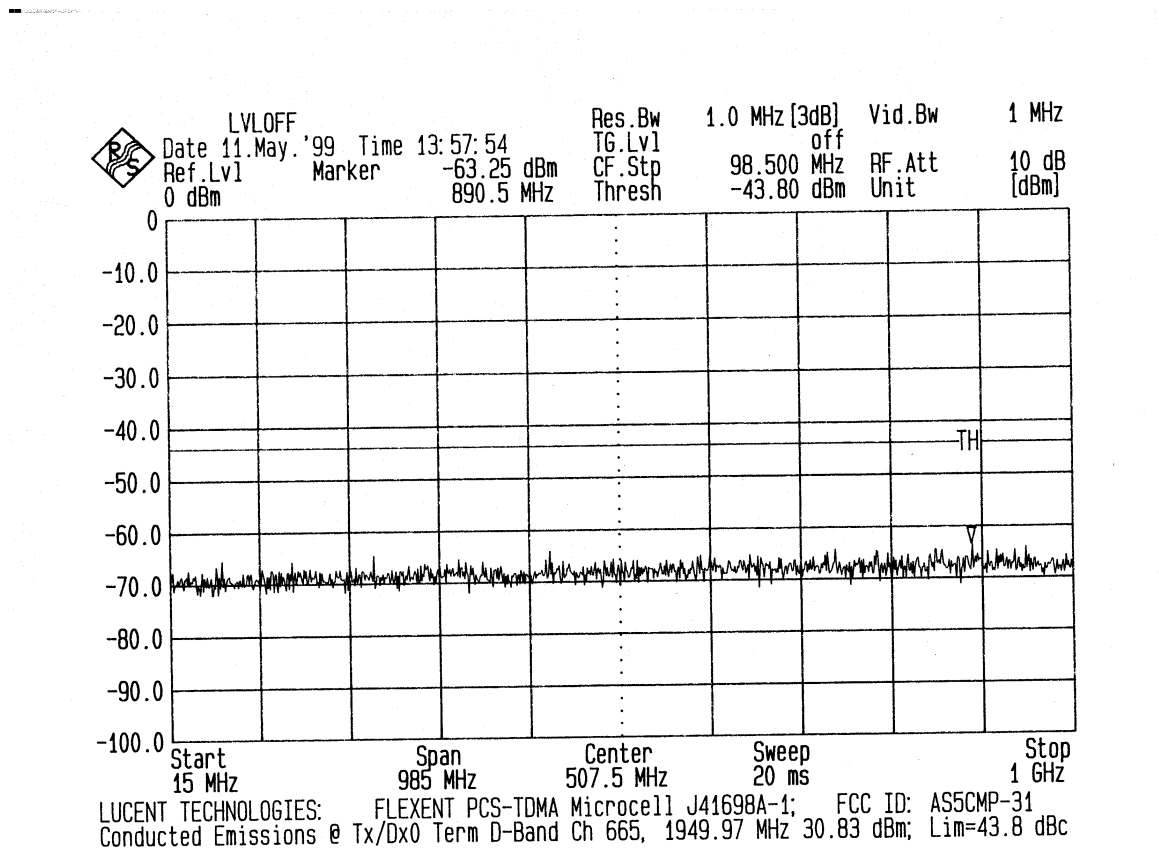
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS D-Block: Upper Edge Channel
 Channel 665, 1949.97 MHz
 PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal
 Plot 1 of 3

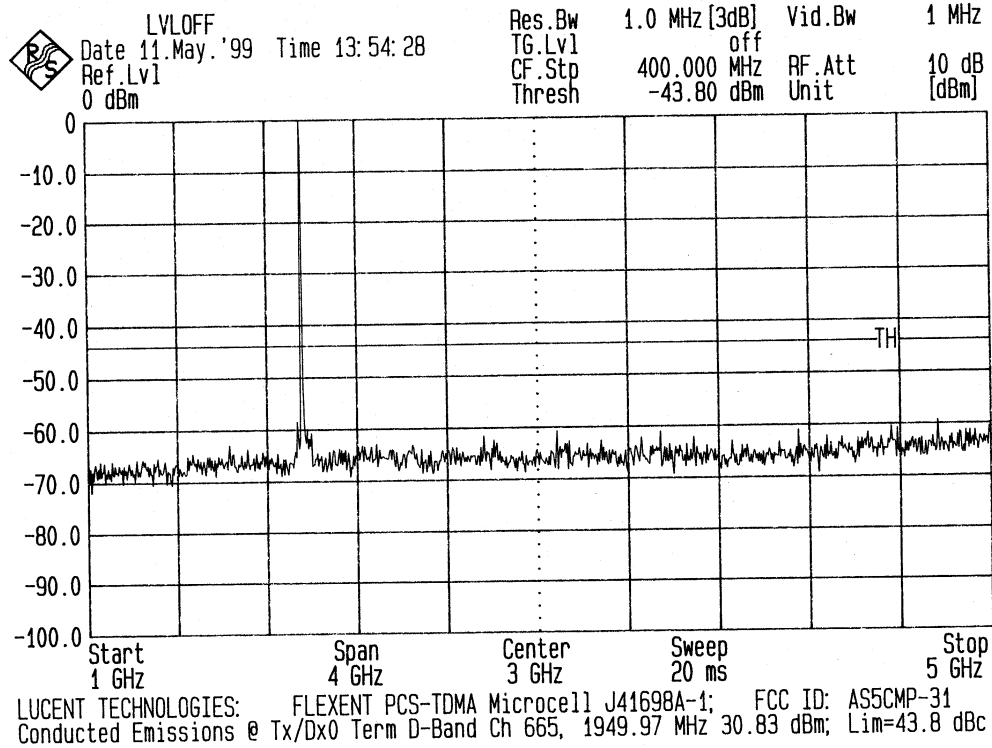
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS D-Block: Upper Edge Channel

Channel 665, 1949.97 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

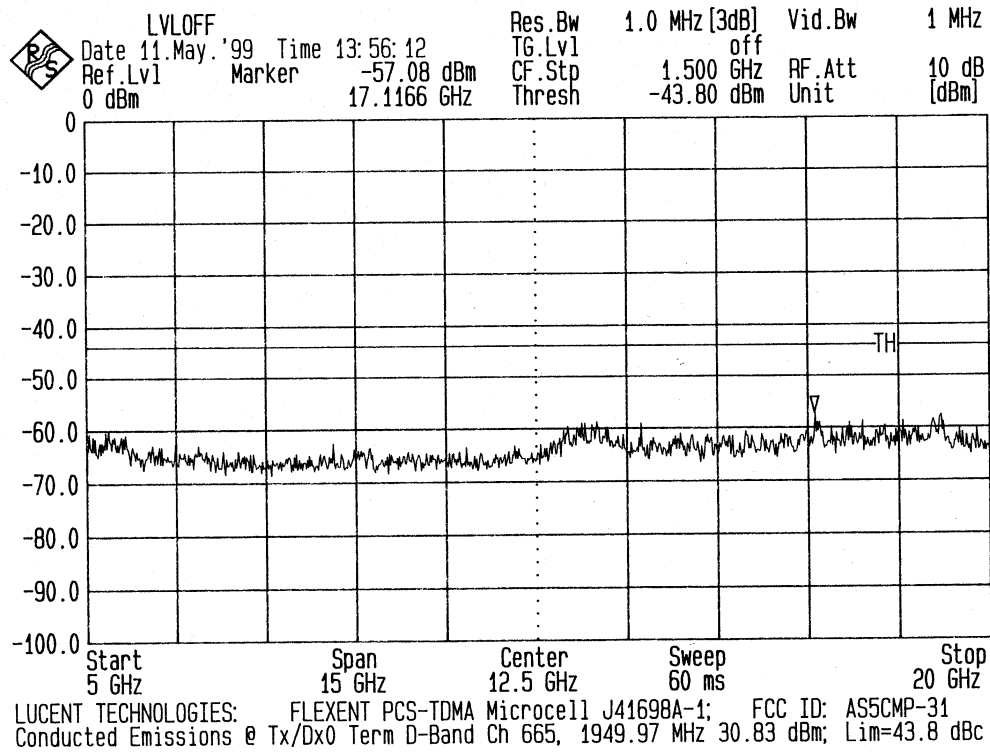
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS D-Block: Upper Edge Channel

Channel 665, 1949.97 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

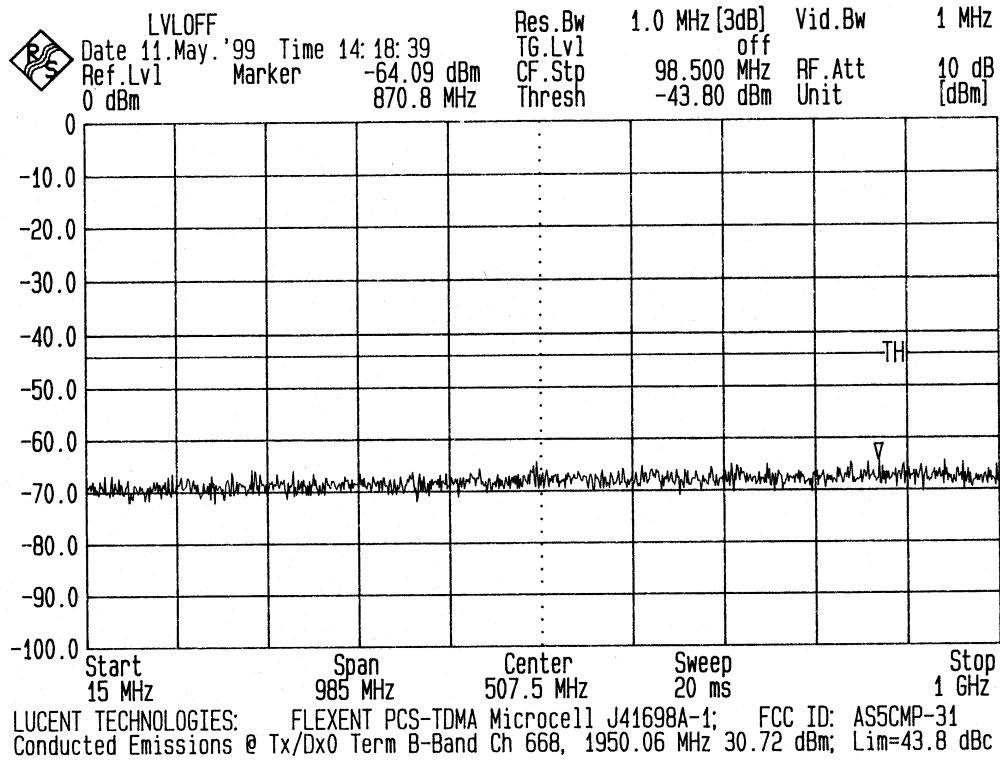
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS B-Block: Lower Edge Channel

Channel 668, 1950.06 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

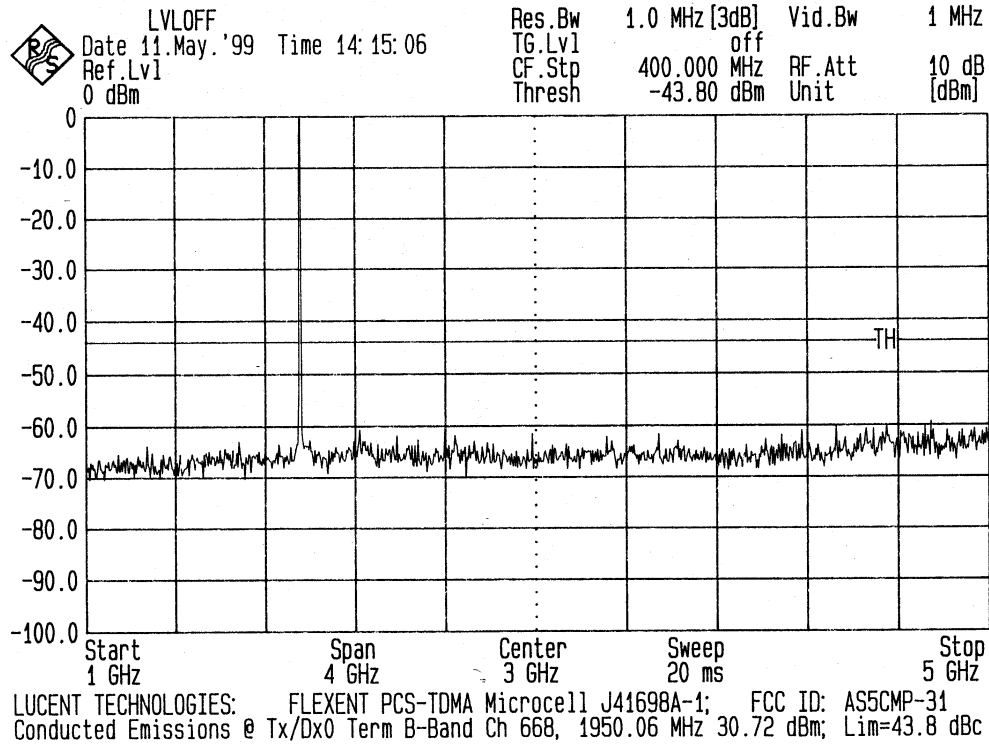
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS B-Block: Lower Edge Channel

Channel 668, 1950.06 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

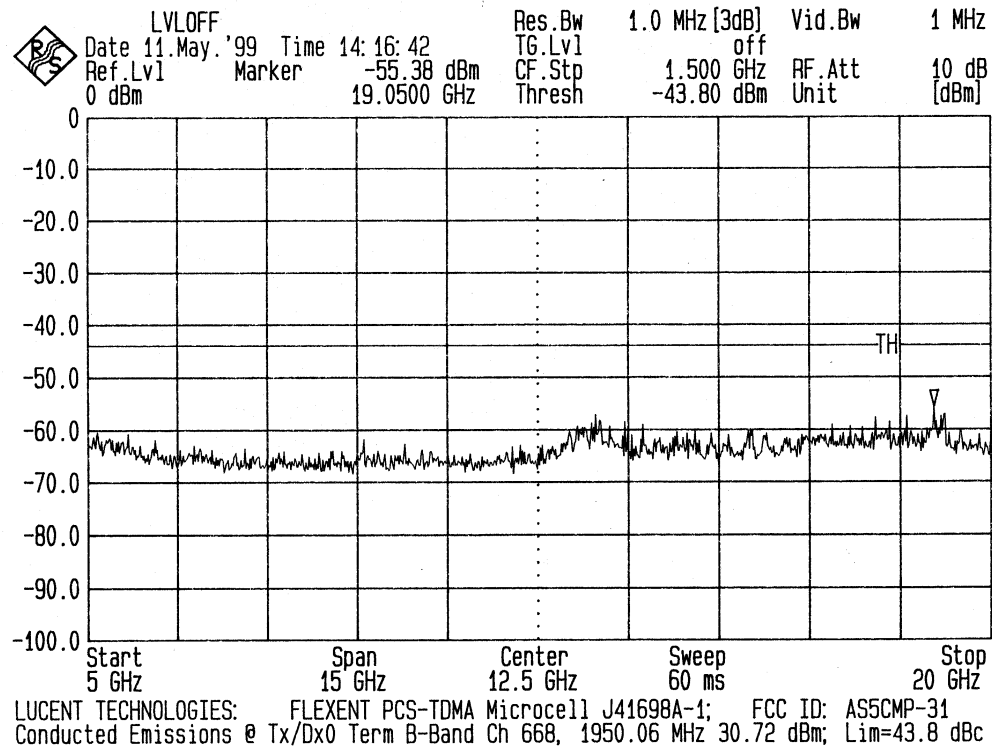
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS B-Block: Lower Edge Channel

Channel 668, 1950.06 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

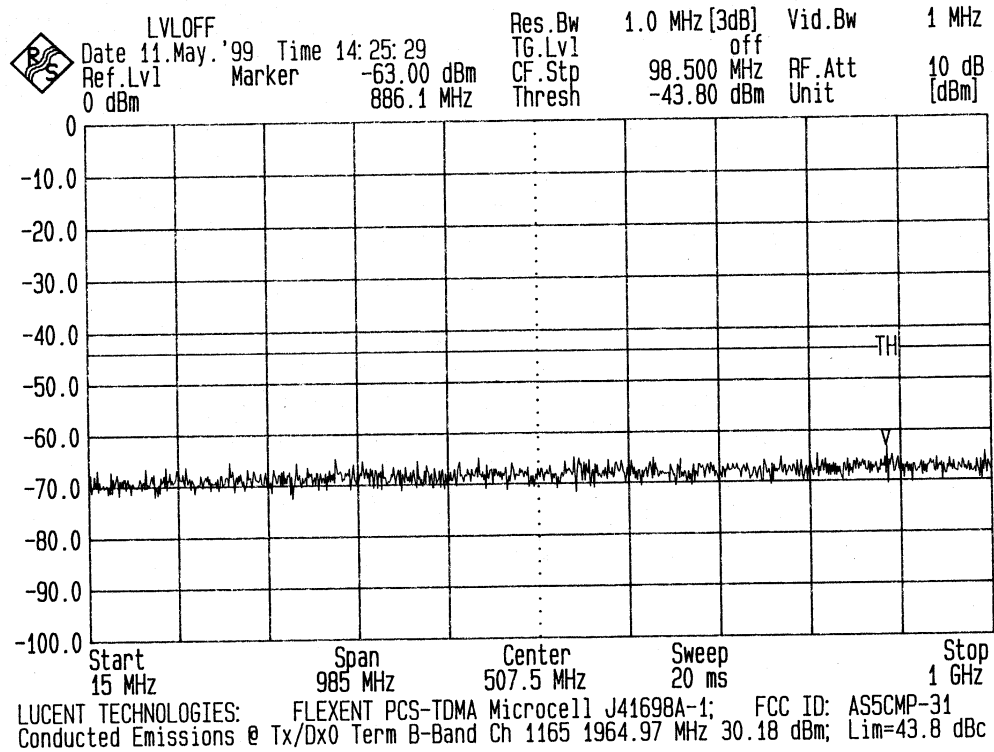
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS B-Block: Upper Edge Channel

Channel 1165, 1964.97 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

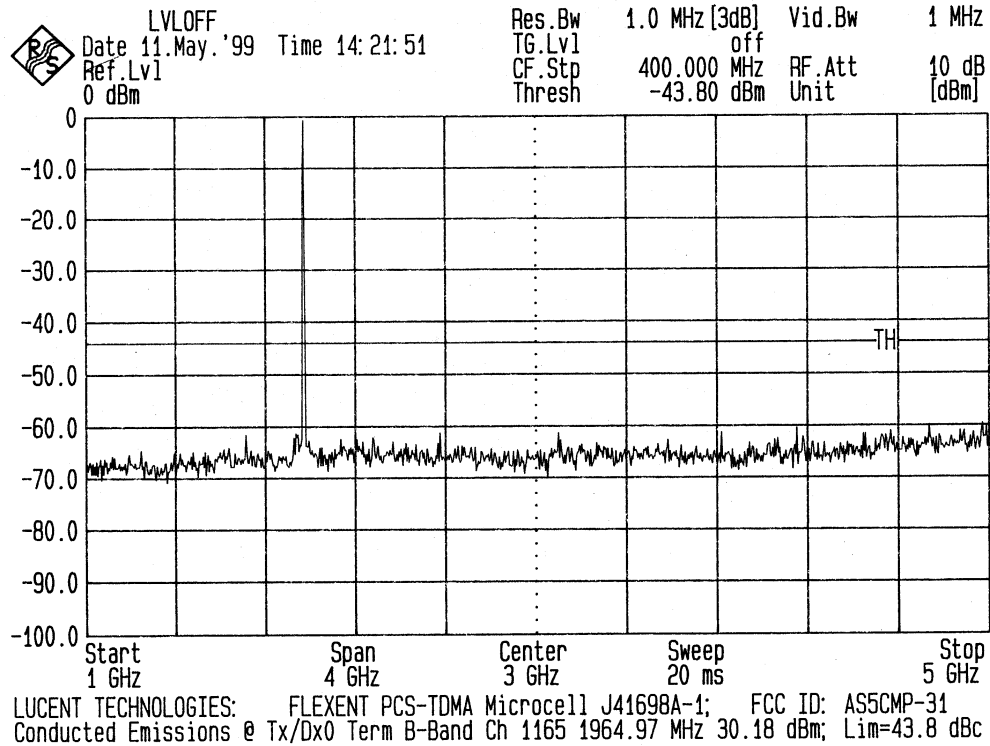
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS B-Block: Upper Edge Channel

Channel 1165, 1964.97 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

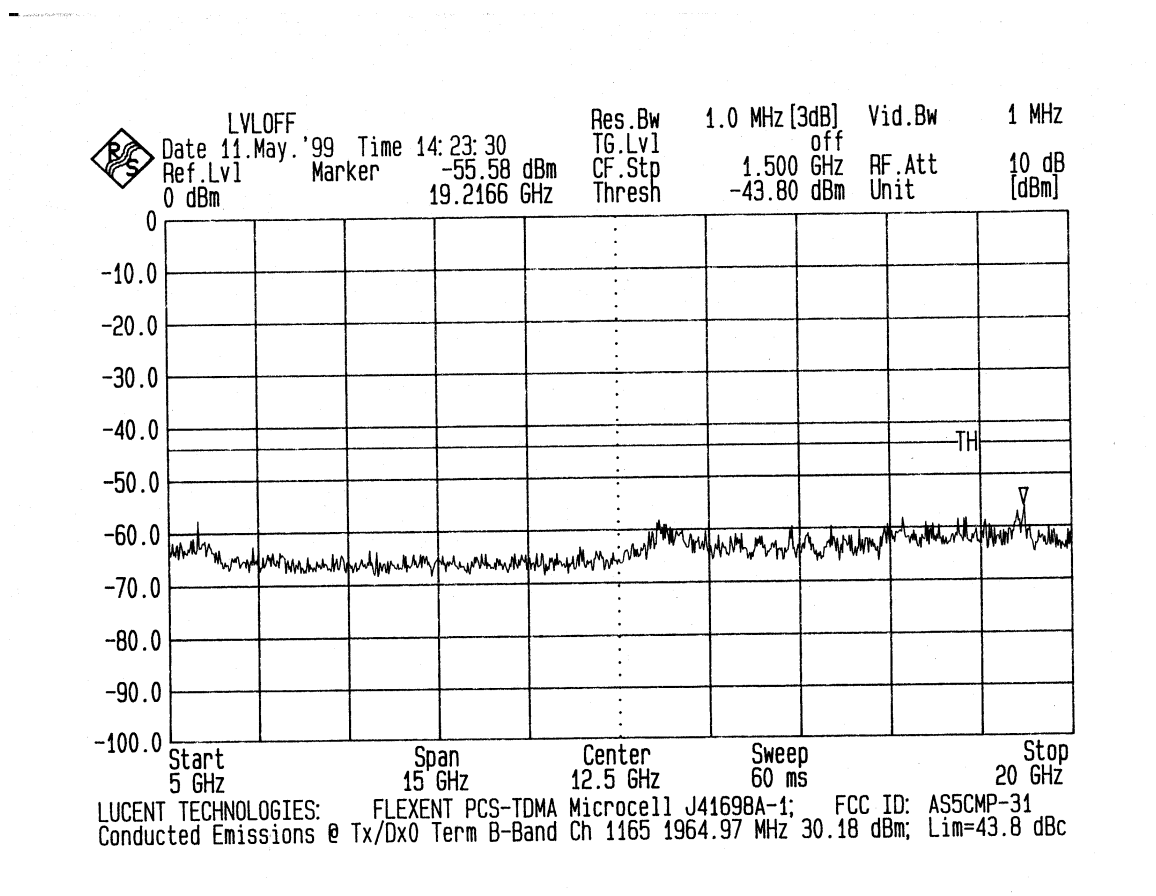
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS B-Block: Upper Edge Channel

Channel 1165, 1964.97 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

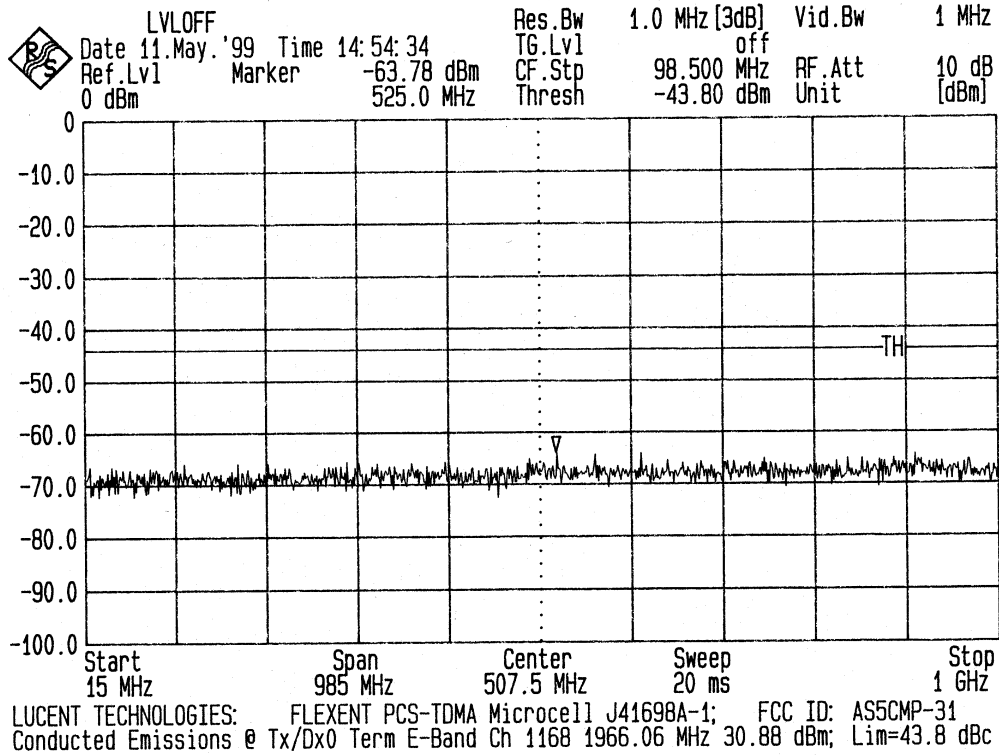
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS E-Block: Lower Edge Channel

Channel 1168, 1965.06 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

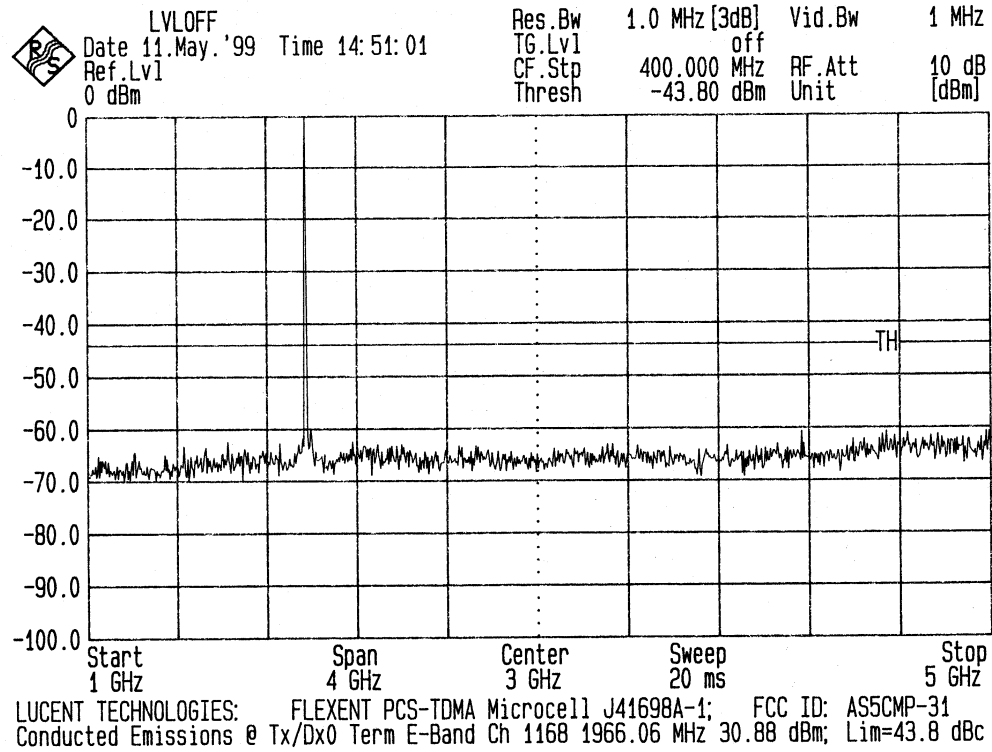
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS E-Block: Lower Edge Channel

Channel 1168, 1965.06 MHz

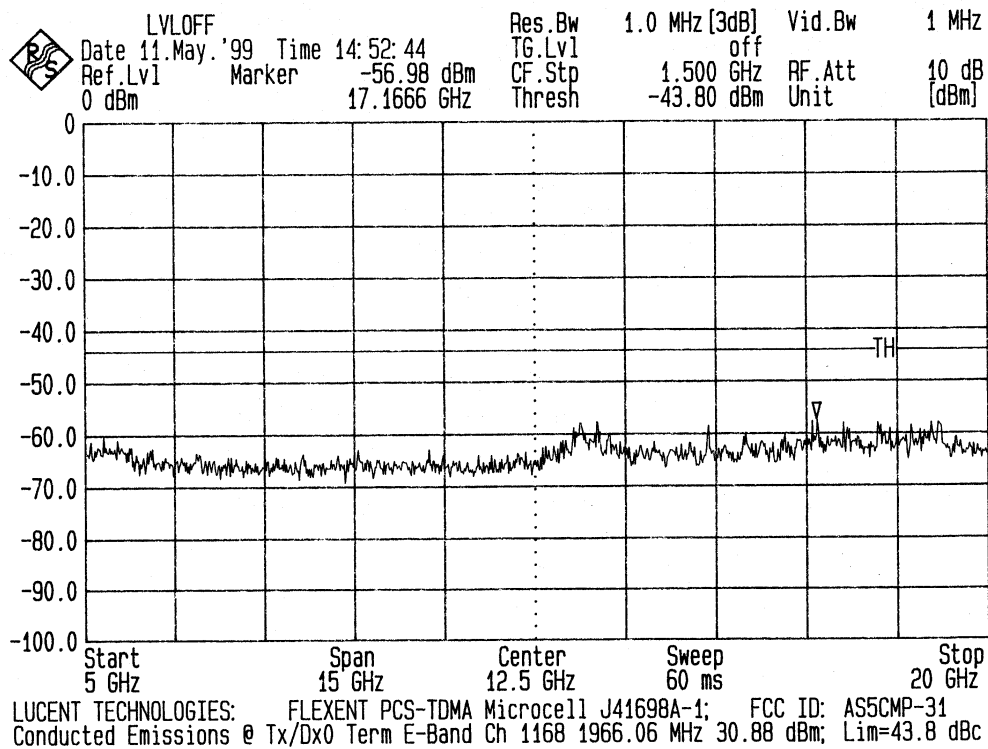
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS E-Block: Lower Edge Channel
Channel 1168, 1965.06 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal
Plot 3 of 3

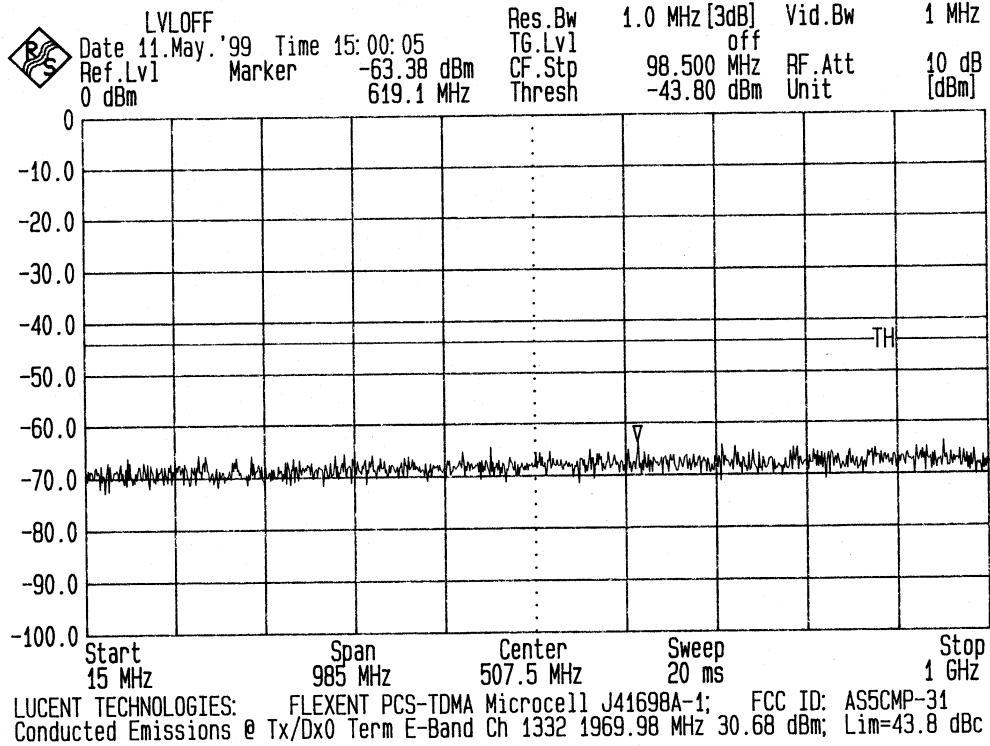
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS E-Block: Upper Edge Channel

Channel 1332, 1969.98 MHz

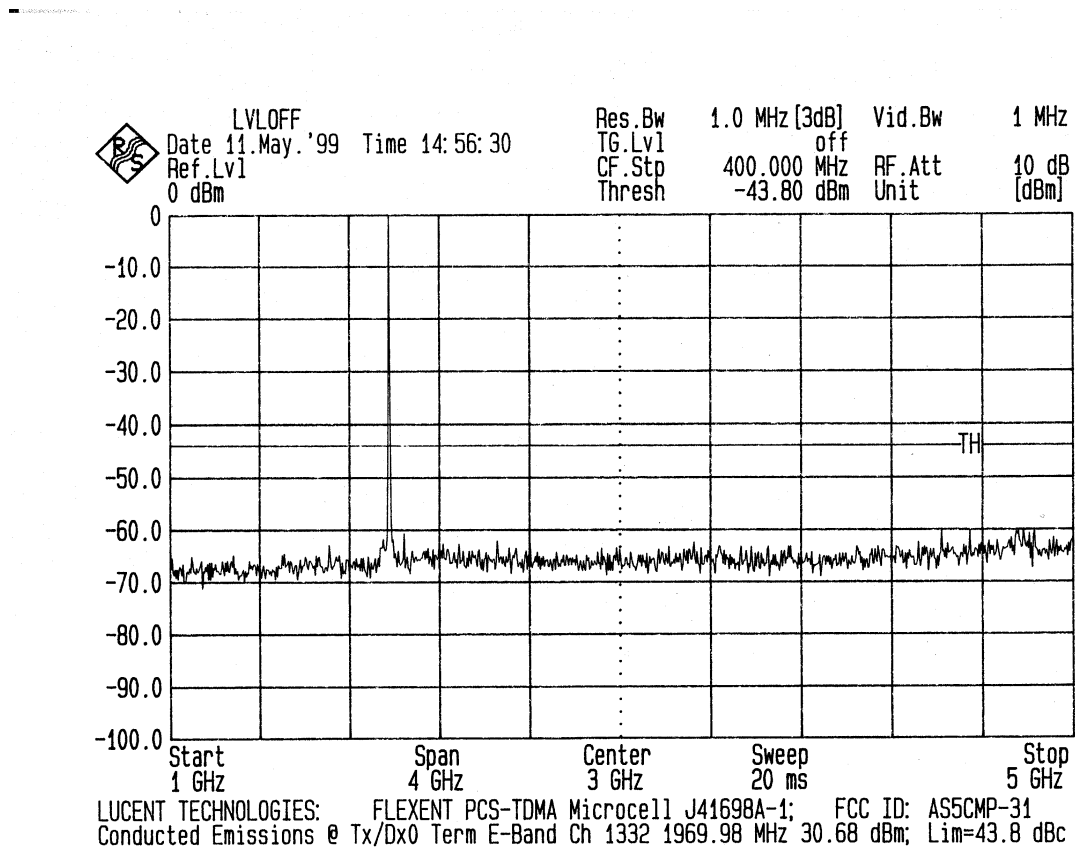
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS E-Block: Upper Edge Channel
Channel 1332, 1969.98 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal
Plot 2 of 3

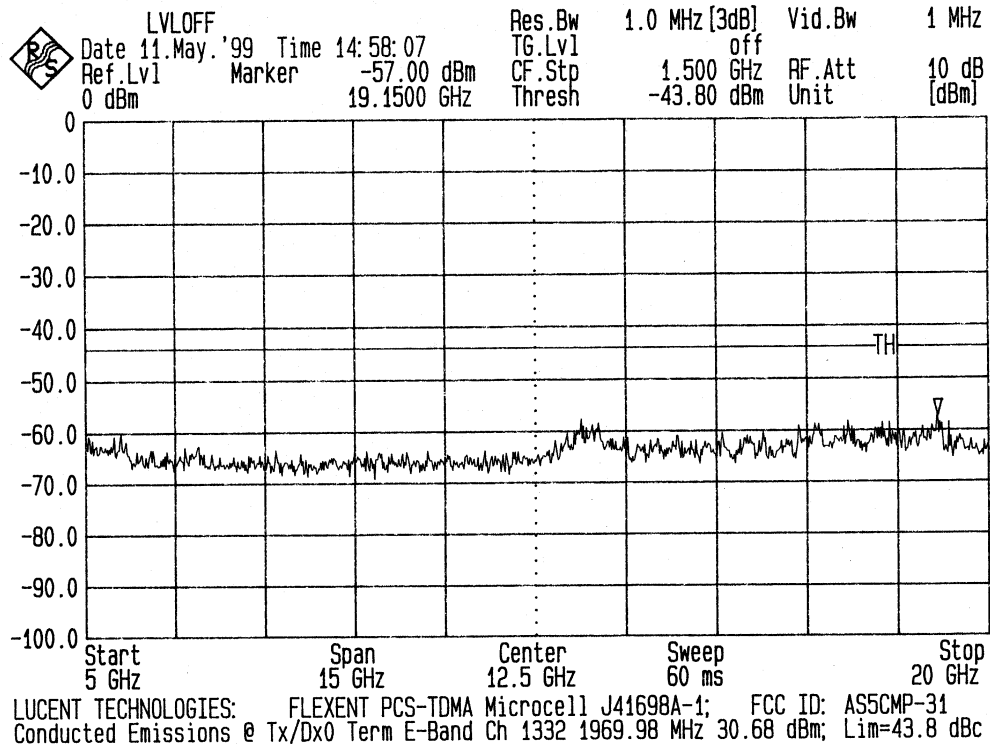
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS E-Block: Upper Edge Channel

Channel 1332, 1969.98 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

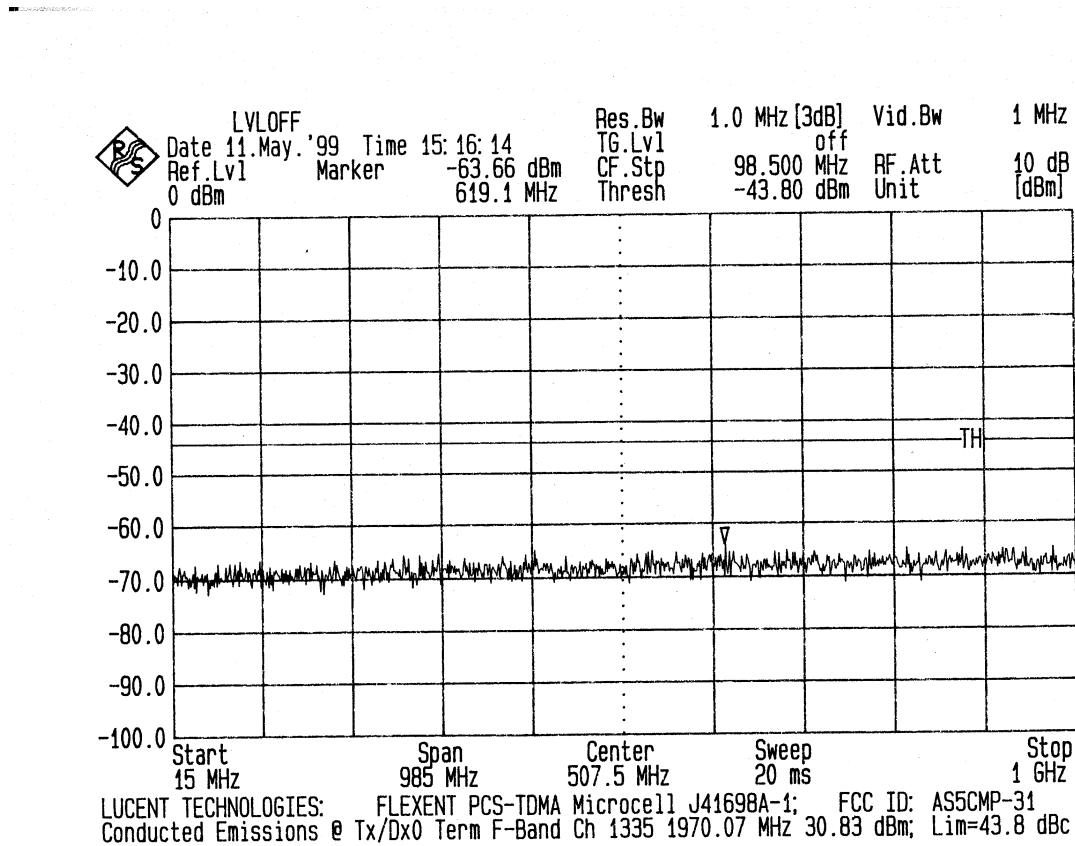
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS F-Block: Lower Edge Channel

Channel 1335, 1970.07 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

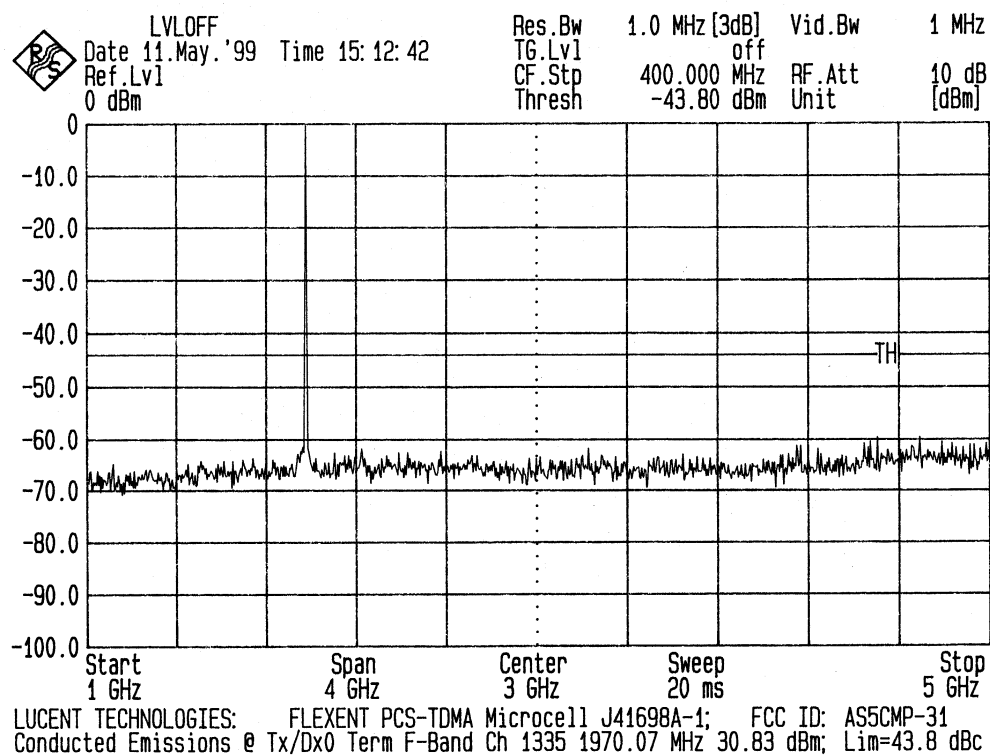
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS F-Block: Lower Edge Channel

Channel 1335, 1970.07 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

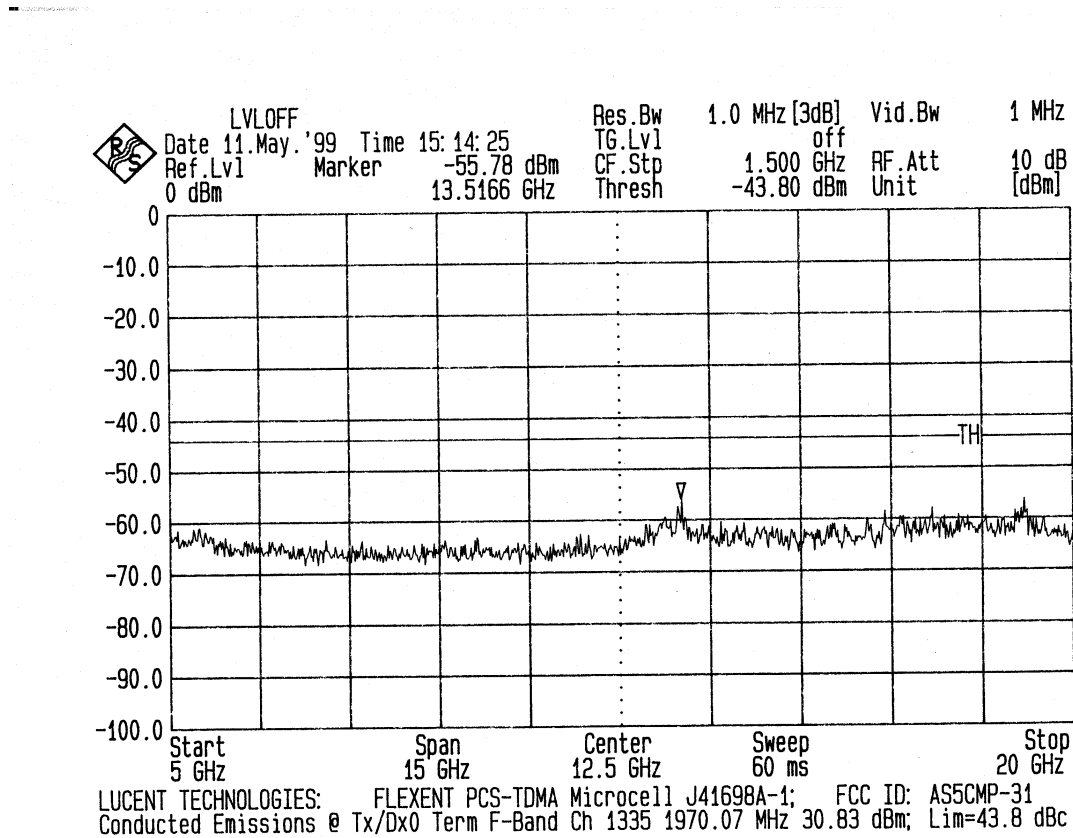
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS F-Block: Lower Edge Channel

Channel 1335, 1970.07 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

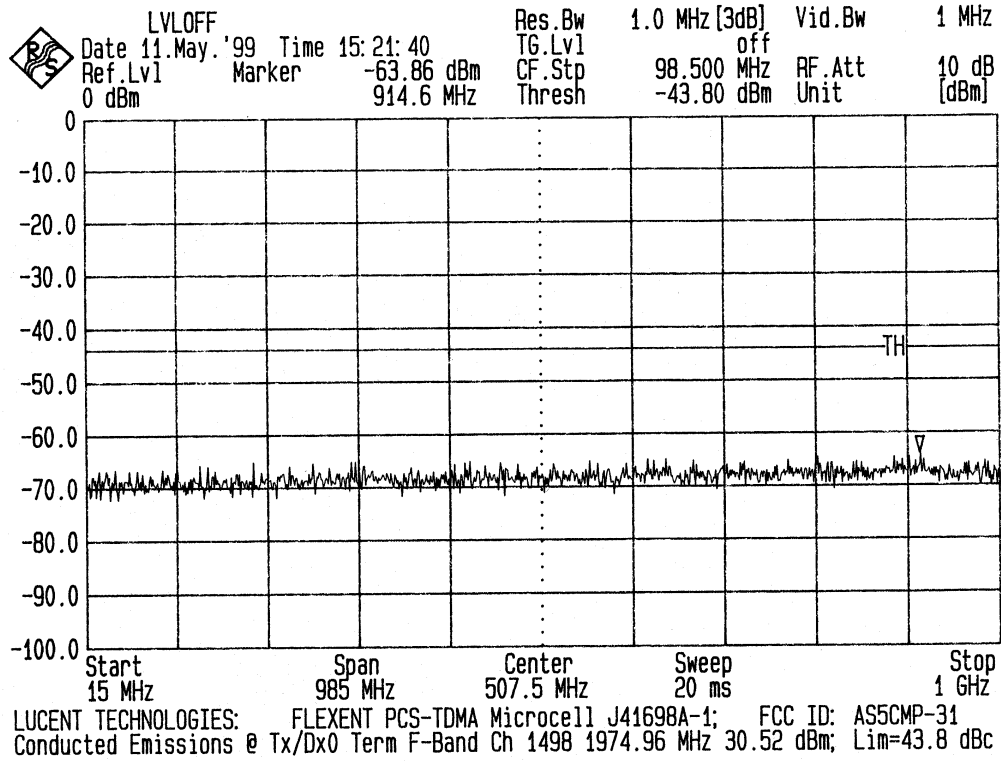
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS F-Block: Upper Edge Channel

Channel 1498, 1974.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

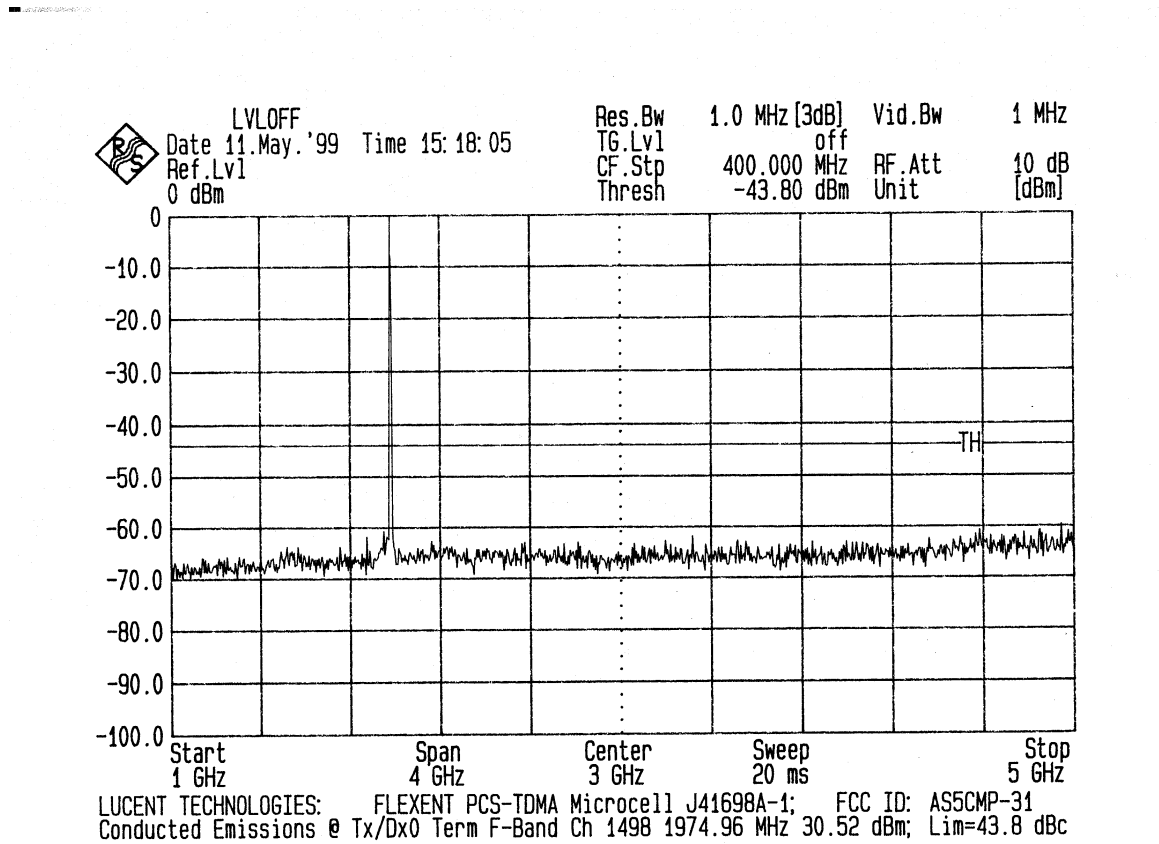
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS F-Block: Upper Edge Channel

Channel 1498, 1974.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

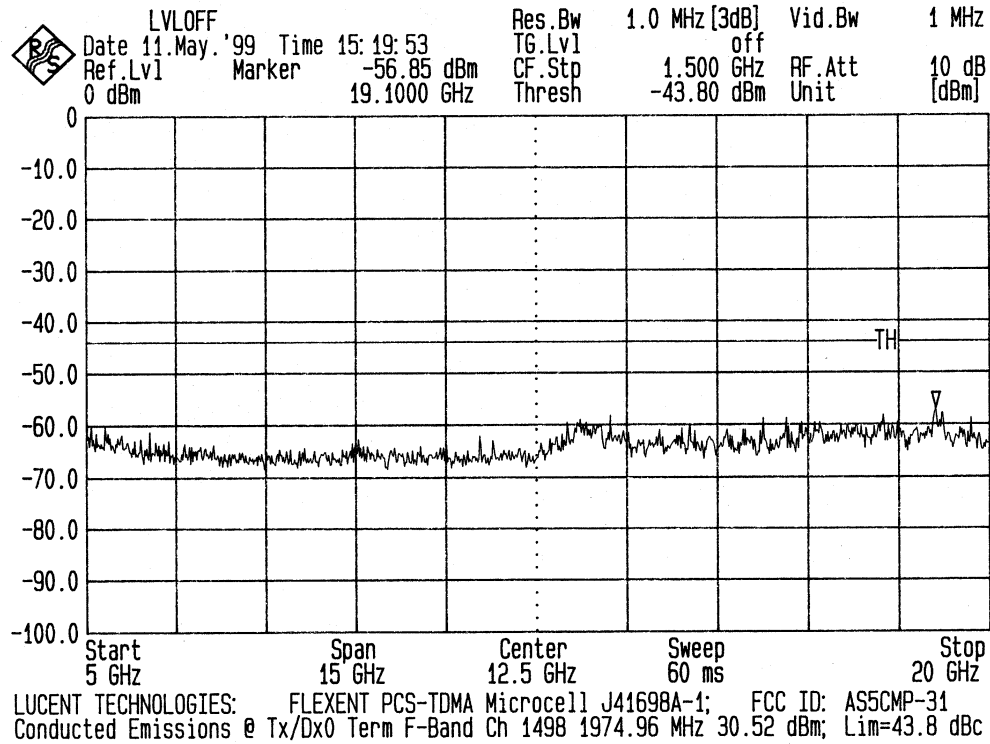
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS F-Block: Upper Edge Channel

Channel 1498, 1974.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

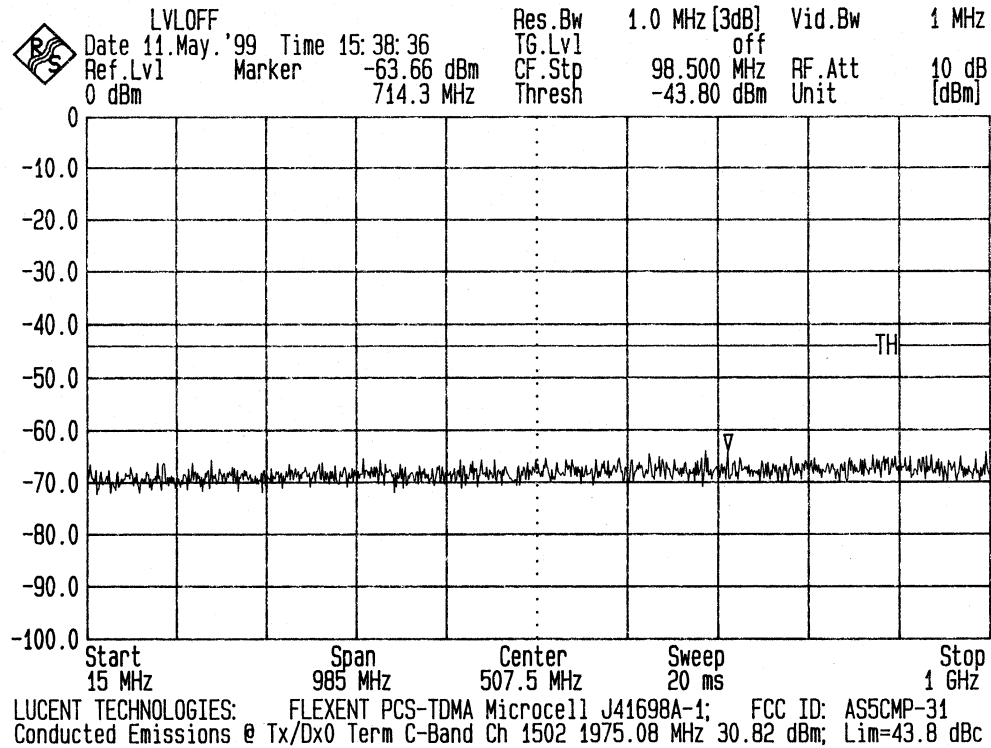
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS C-Block: Lower Edge Channel

Channel 1502, 1975.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

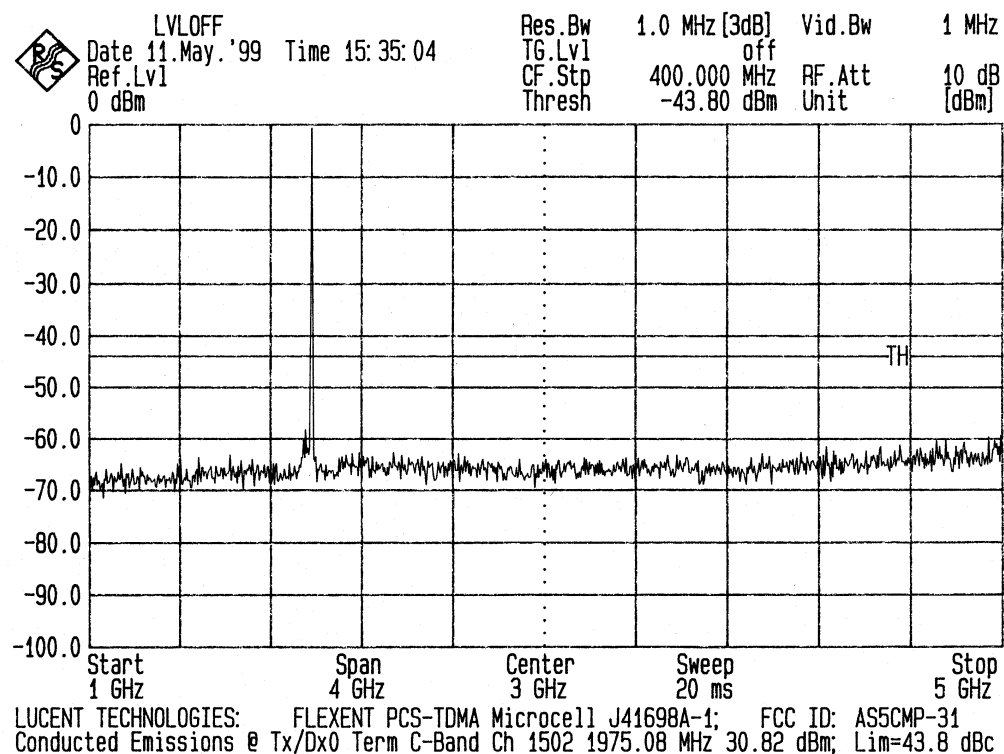
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS C-Block: Lower Edge Channel

Channel 1502, 1975.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

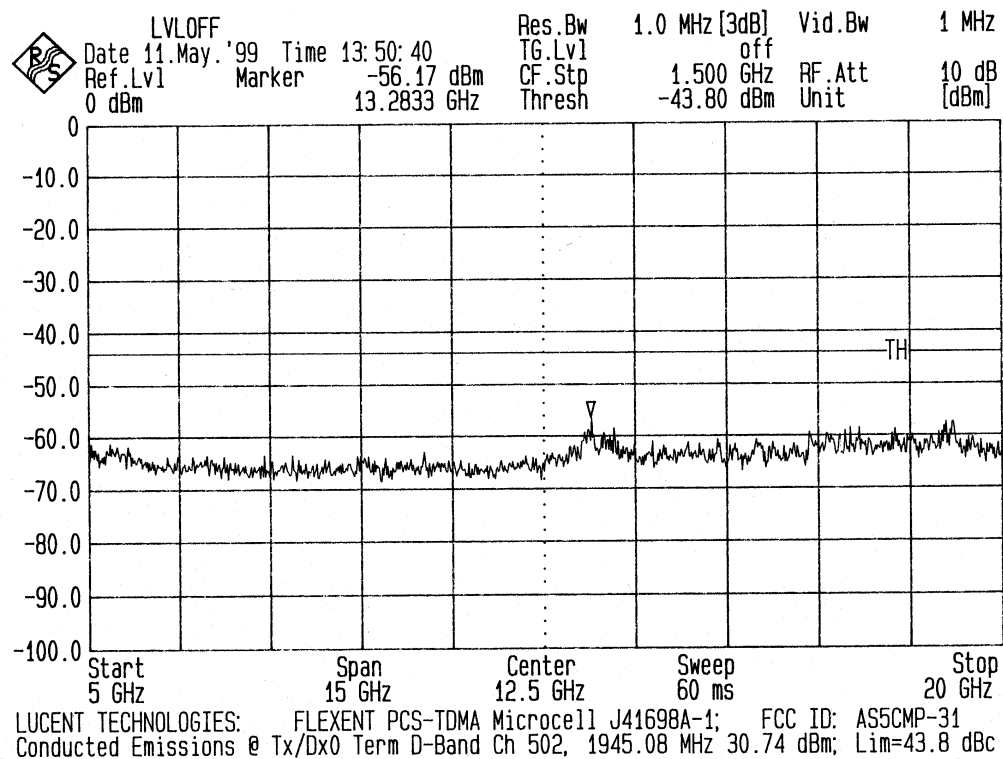
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS C-Block: Lower Edge Channel

Channel 1502, 1975.08 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3

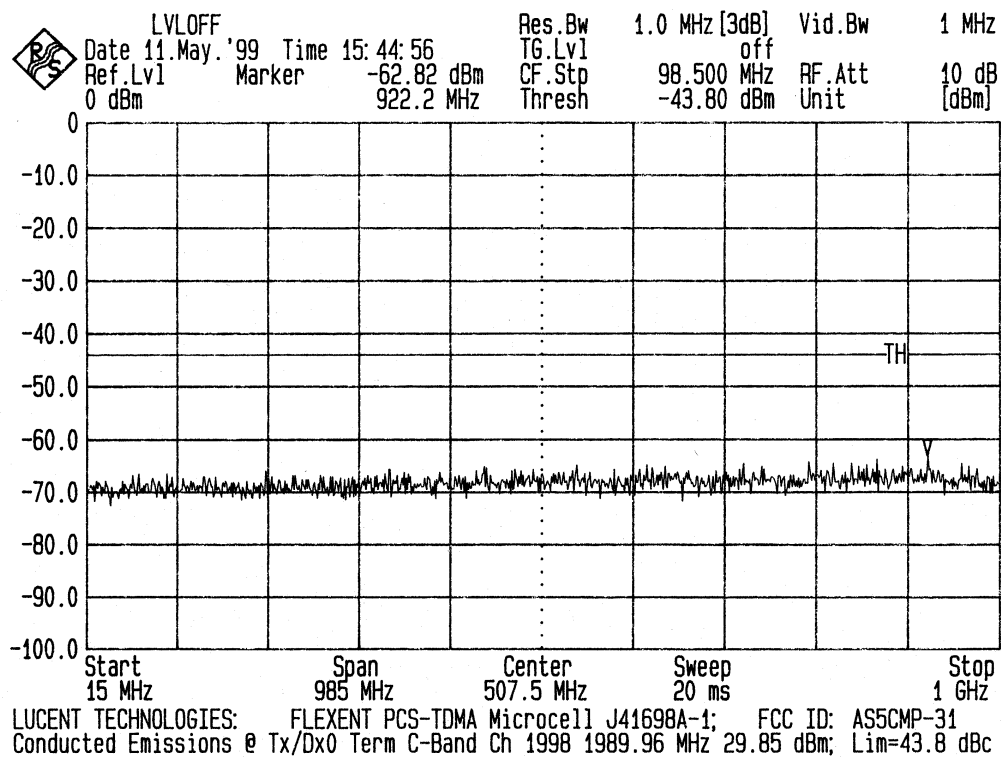
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS C-Block: Upper Edge Channel

Channel 1998, 1989.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 1 of 3

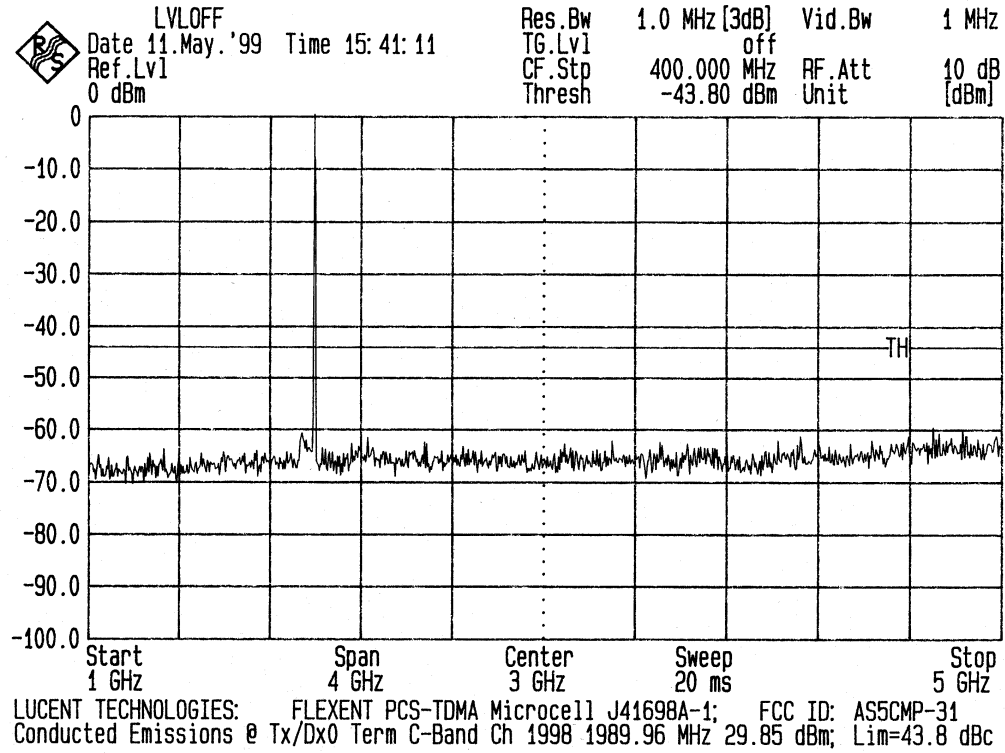
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS C-Block: Upper Edge Channel

Channel 1998, 1989.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 2 of 3

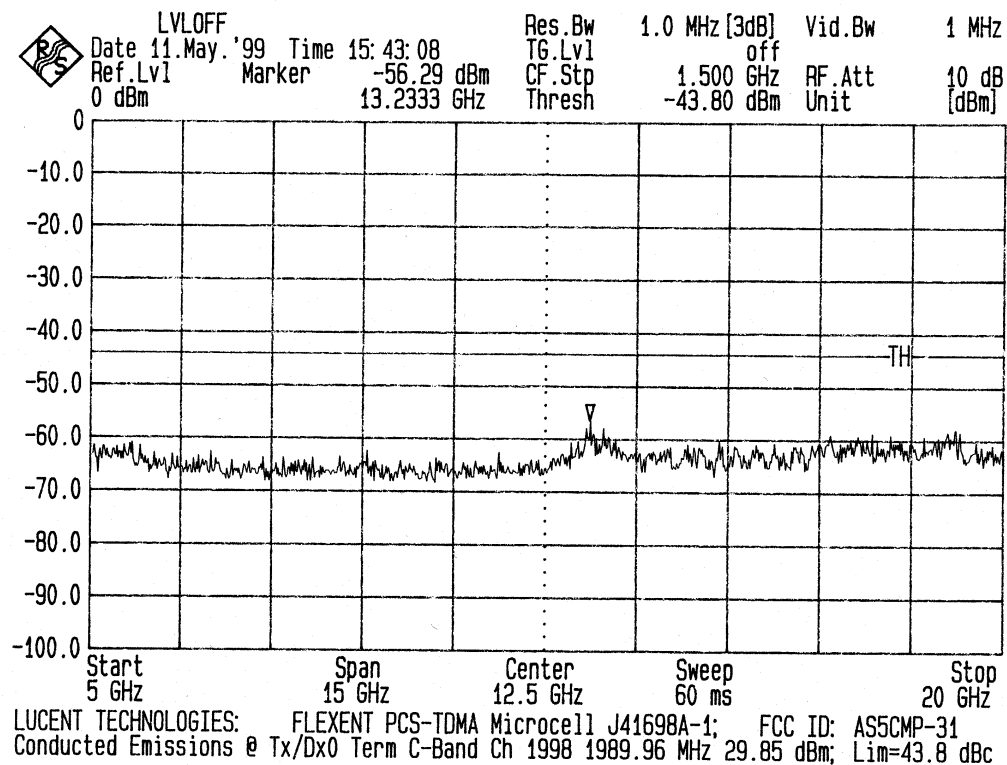
APPLICANT: Lucent Technologies

FCC ID: AS5CMP-31

EXHIBIT 17

Section 2.1051 Measurements Required: Spurious Emissions at Antenna Terminal

Data Plots of Conducted Spurious Emissions:



PCS C-Block: Upper Edge Channel

Channel 1998, 1989.96 MHz

PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

Plot 3 of 3