APPLICANT: Lucent Technologies **FCC ID: AS5CMP-30**

EXHIBIT 16

Section 2.1049 Measurements Required: Occupied Bandwidth

In compliance with Section 2.1049(h), 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), occupied bandwidth measurements were made at both the lower and the upper block edge for each PCS frequency block as shown below. Measurements were made both at the antenna terminal and at the input to the PMCLA to demonstrate that the amplifier does influence and does alter the occupied bandwidth.

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 occupied bandwidth limitations and emission mask for a 30 kHz TDMA carrier, i.e., digital transceiver, is specified in Part 22.917(d)(1-3) as:

Displacement from the Carrier Center Frequency	Required Attenuation Below the Carrier
Greater than 20 kHz up to 45 kHz	At least 26 dBc
Greater than 45 kHz up to 90 kHz	At least 45 dBc
Greater than 90 kHz up to 1st harmonic	At least 60 dBc Or 43 + 10 log (Carrier Power in Watts) dBc Or whichever is the lesser attenuation

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 block edge emission attenuation is then 43.8 dBc. Part 24.238(b) specifies that the measurement instrumentation resolution bandwidth be set to 1% of the fundamental emission bandwidth. For the 30 kHz TDMA carrier, the spectrum analyzer resolution bandwidth was set to 300 Hz. The standard measurement procedure is to align the center of the carrier with the top of the spectrum analyzer display reticle (i.e., 0 dBm) and reference required "attenuation below the carrier" to the 0 dBm reference. Attenuation below the carrier is then read directly off the 0 dBm to -110 dBm scale. Using the 300 Hz resolution bandwidth requires displacing (offsetting) the 30 kHz modulated carrier from the 0 dBm reference line by:

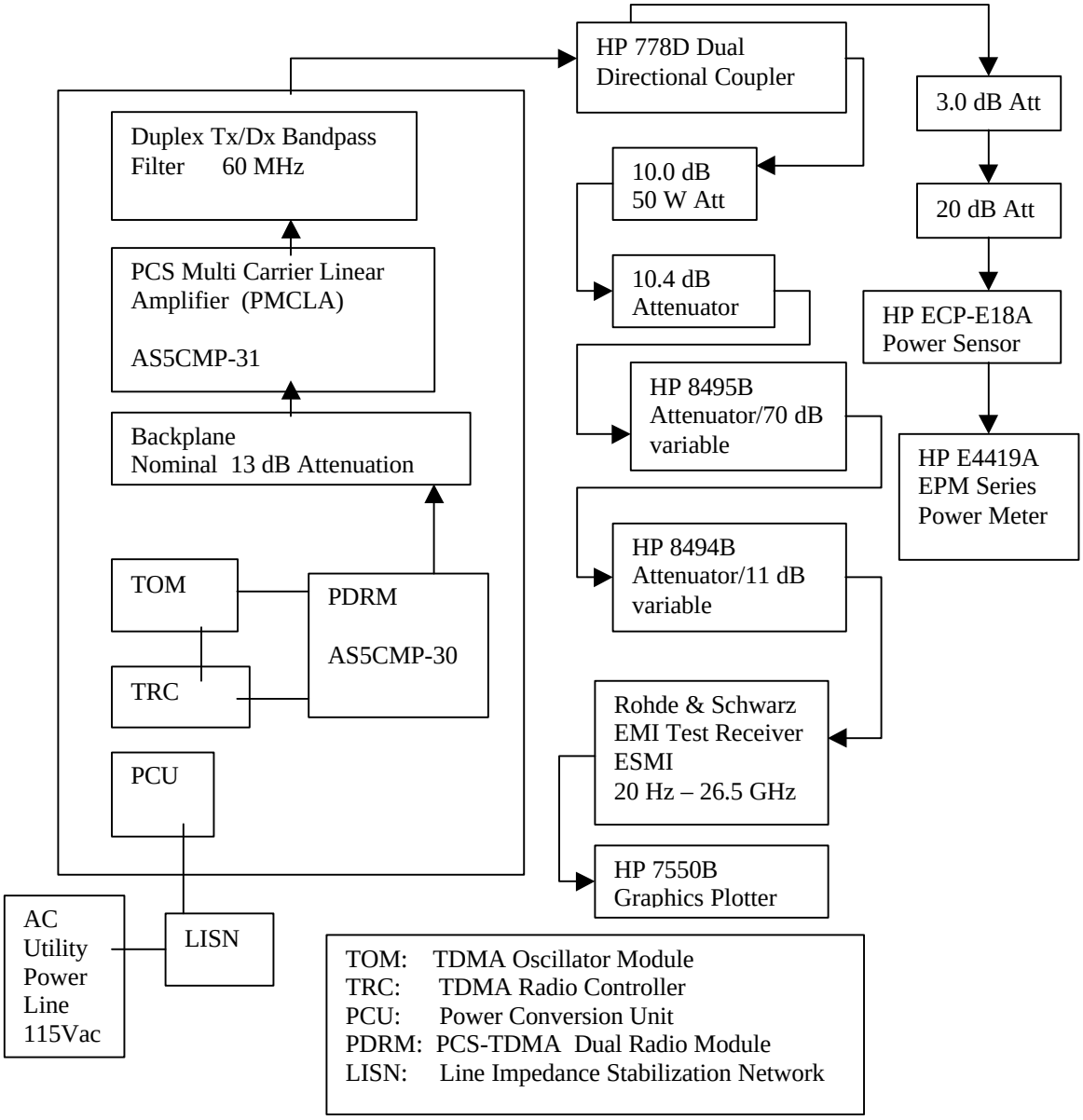
10 log (carrier bandwidth/instrumentation resolution bandwidth)
10 log (30 kHz/300 Hz) = 20 dB offset

RESULTS:

The attached occupied bandwidth plots demonstrate full compliance with the requirements of Part 24.238, for the required frequencies specified above. The block edge limitation of 43.8 dBc, for a carrier power level of +30.8 dBm, is less stringent than the 45 dBc emission mask. On this basis, and that all carriers are well within the required emission mask, the PCS-TDMA Multi Carrier Linear Amplifier (PMCLA) 44WA28 demonstrated full compliance with Part 24.238 for occupied bandwidth requirements. It also demonstrated it does not affect or influence the occupied bandwidth of the associated PCS-TDMA Dual Radio Module transceiver.

Test set-up for measuring the occupied bandwidth of the PCS-TDMA Dual Radio Module transceiver.

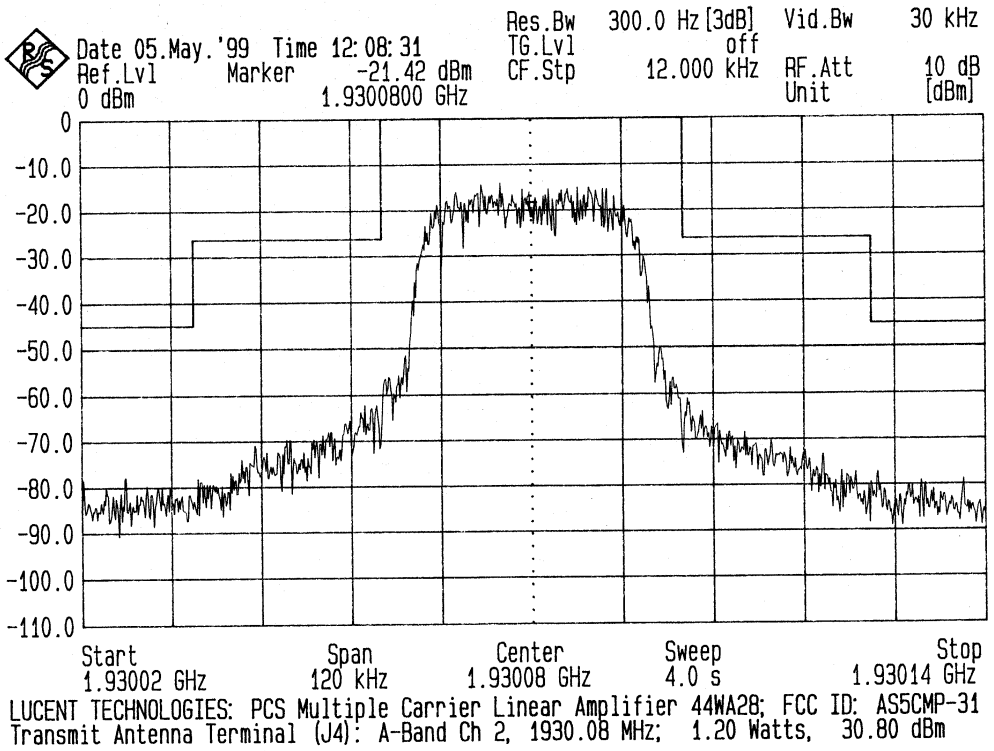
FLEXENT™ PCS-TDMA Microcell J41698A-1



APPLICANT: Lucent Technologies **FCC ID: AS5CMP-31**

EXHIBIT 16

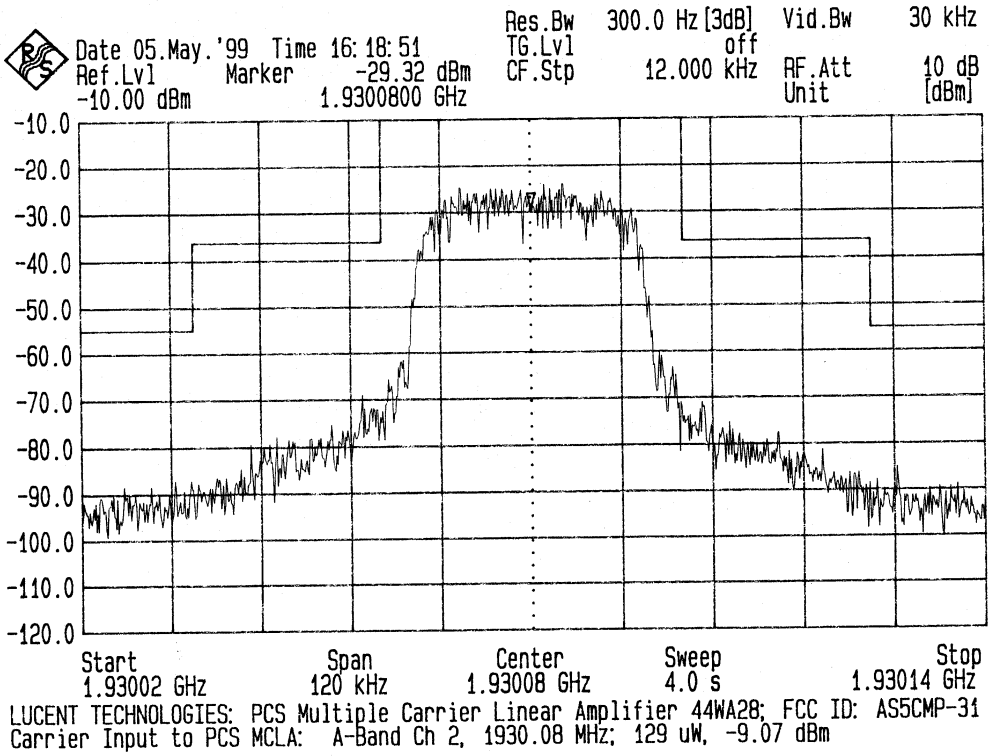
OCCUPIED BANDWIDTH PLOTS:



PCS A-Block: Lower Edge Channel
Channel 2, 1930.08 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

EXHIBIT 16

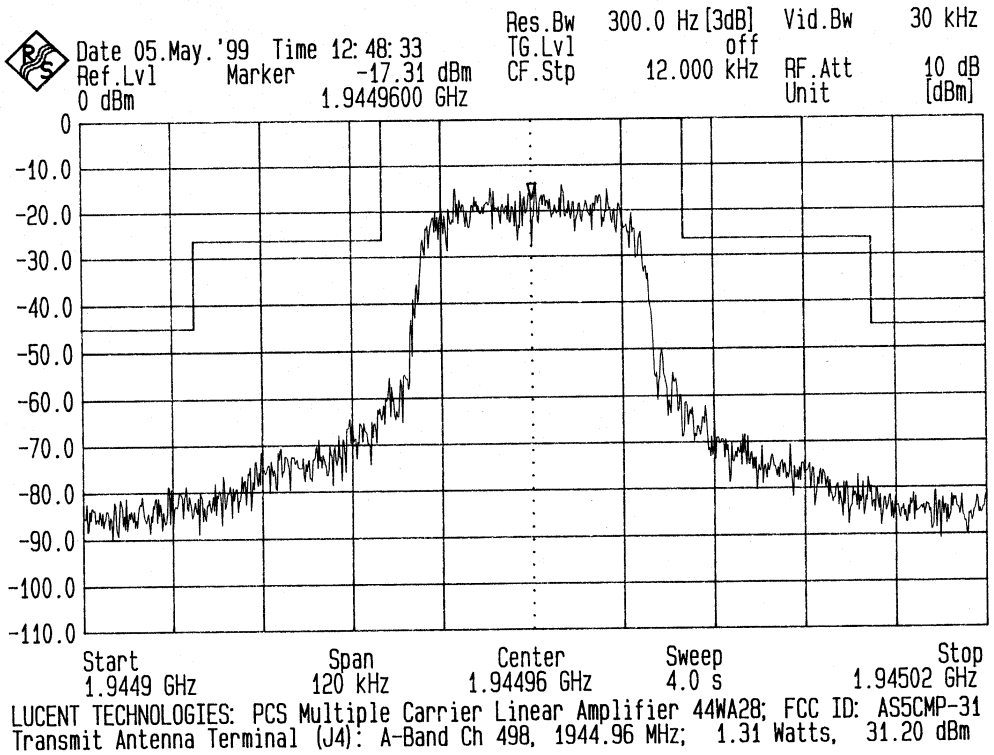
OCCUPIED BANDWIDTH PLOTS:



PCS A-Block: **Lower Edge Channel**
Channel 2, 1930.08 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

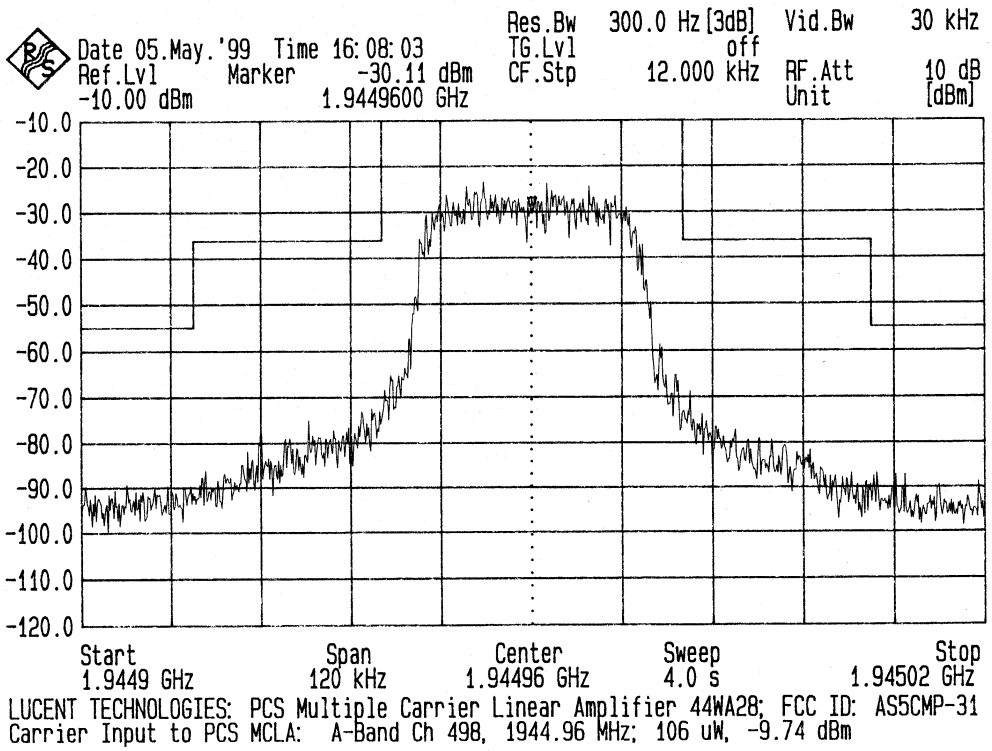
OCCUPIED BANDWIDTH PLOTS:



PCS A-Block: Upper Edge Channel
Channel 498, 1944.96 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

EXHIBIT 16

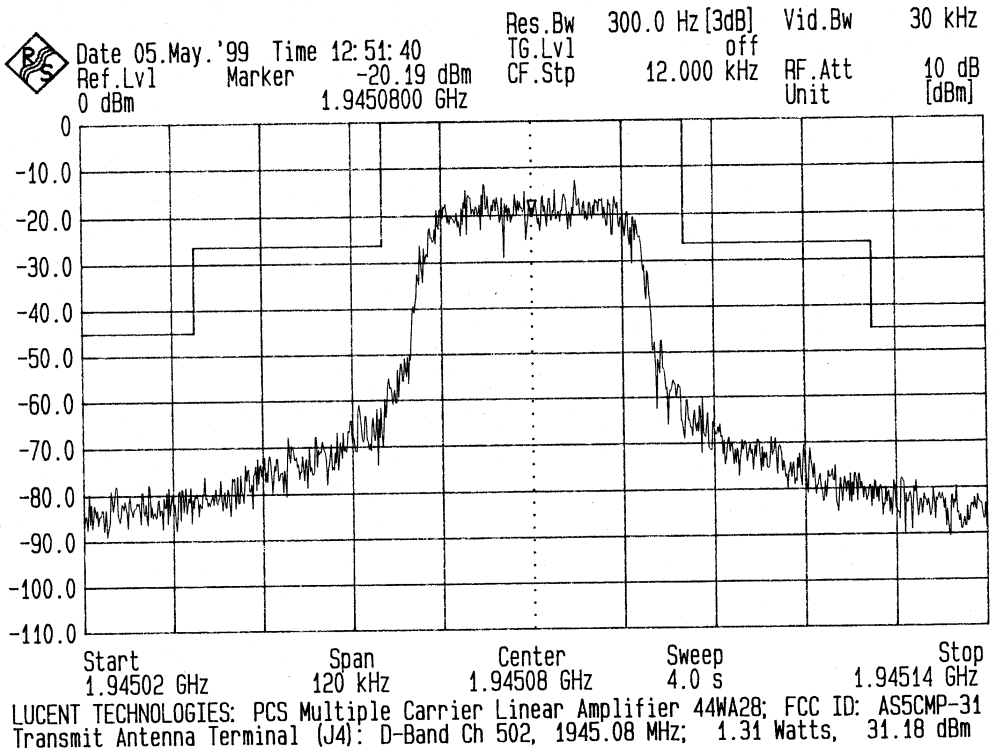
OCCUPIED BANDWIDTH PLOTS:



PCS A-Block: **Upper Edge Channel**
Channel 498, 1944.96 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, in put signal

EXHIBIT 16

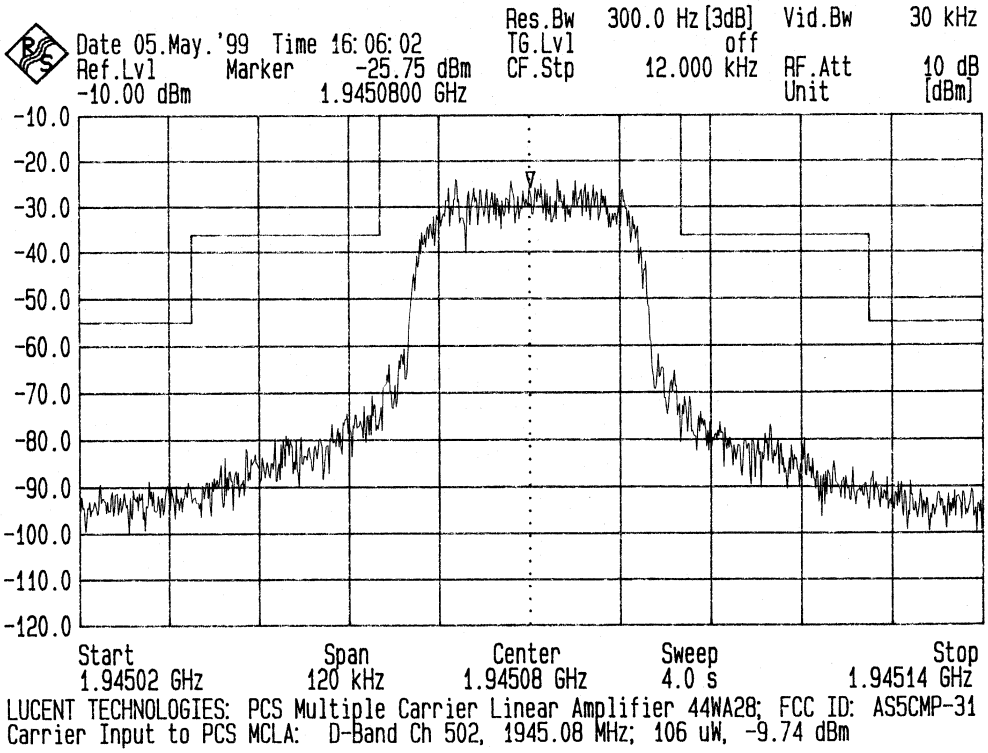
OCCUPIED BANDWIDTH PLOTS:



PCS D-Block: Lower Edge Channel
Channel 502, 1945.08MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

EXHIBIT 16

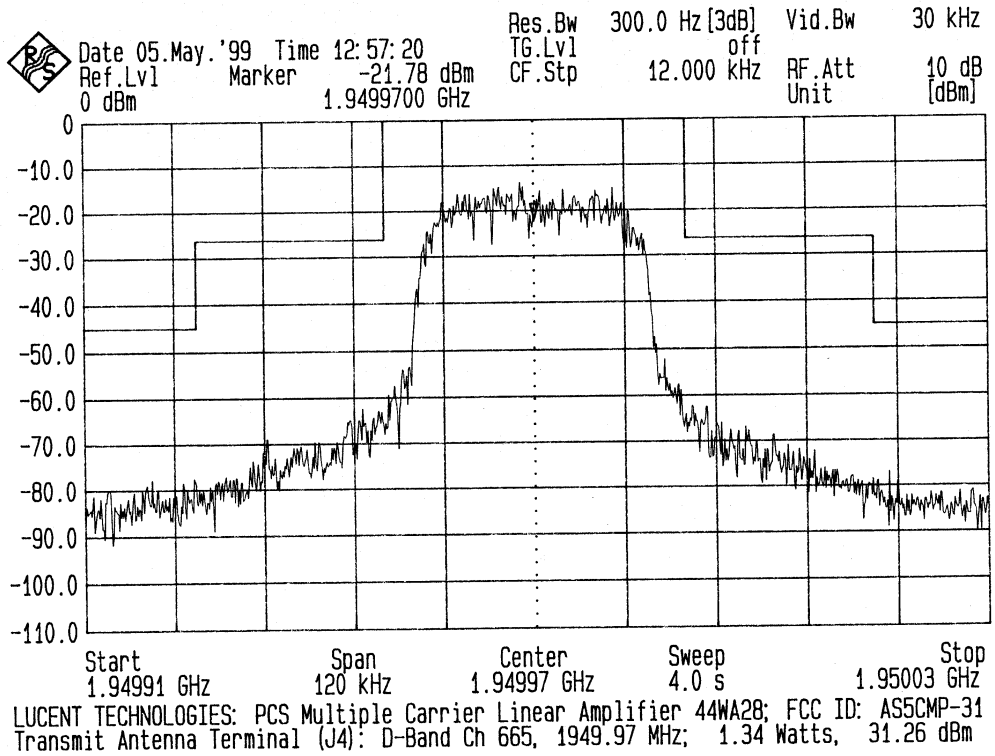
OCCUPIED BANDWIDTH PLOTS:



PCS D-Block: Lower Edge Channel
Channel 502, 1945.08MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

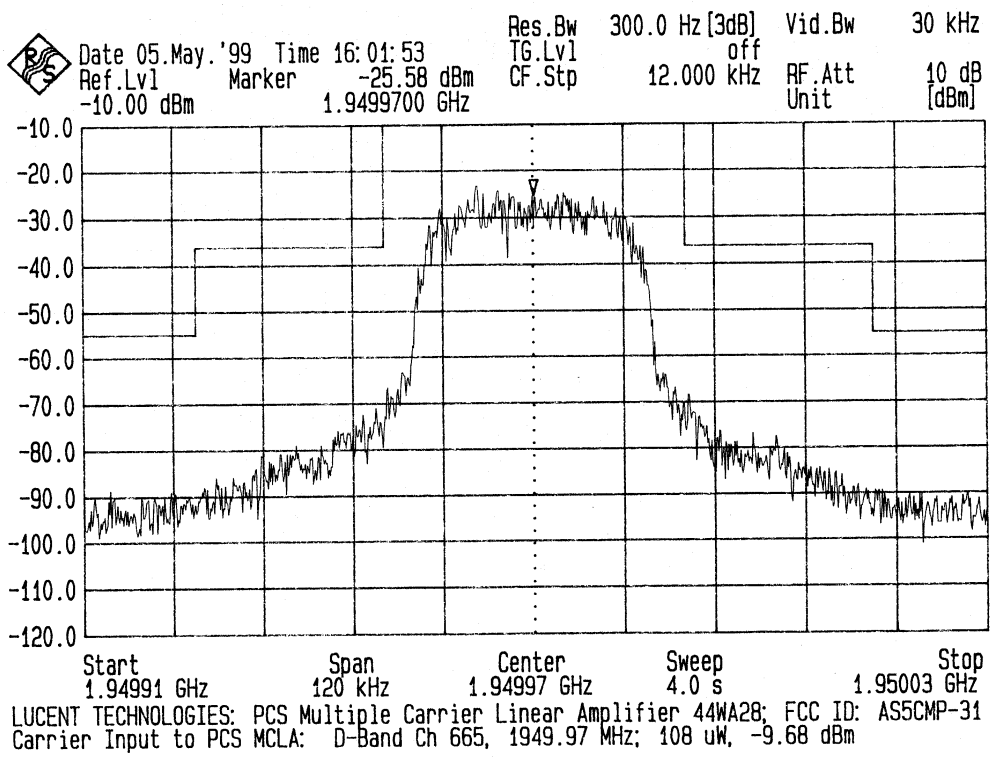
OCCUPIED BANDWIDTH PLOTS:



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

EXHIBIT 16

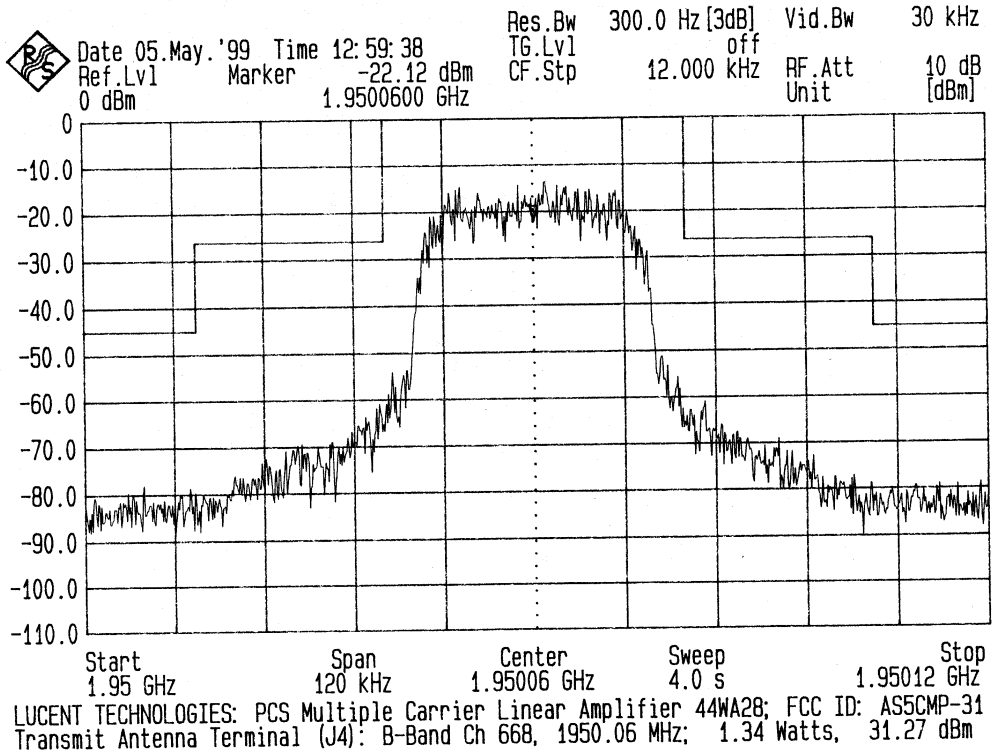
OCCUPIED BANDWIDTH PLOTS:



PCS D-Block: **Upper Edge Channel**
Channel 665, 1949.97 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

OCCUPIED BANDWIDTH PLOTS:

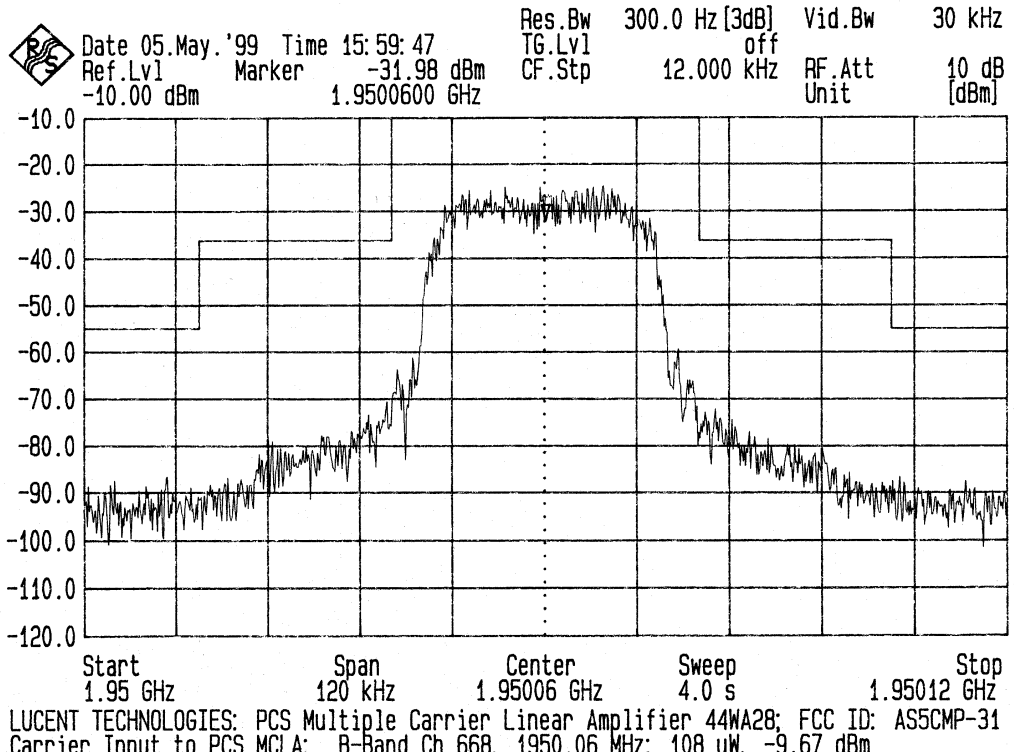


PCS B-Block: Lower Edge Channel
Channel 668, 1950.06 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

APPLICANT: Lucent Technologies **FCC ID: AS5CMP-31**

EXHIBIT 16

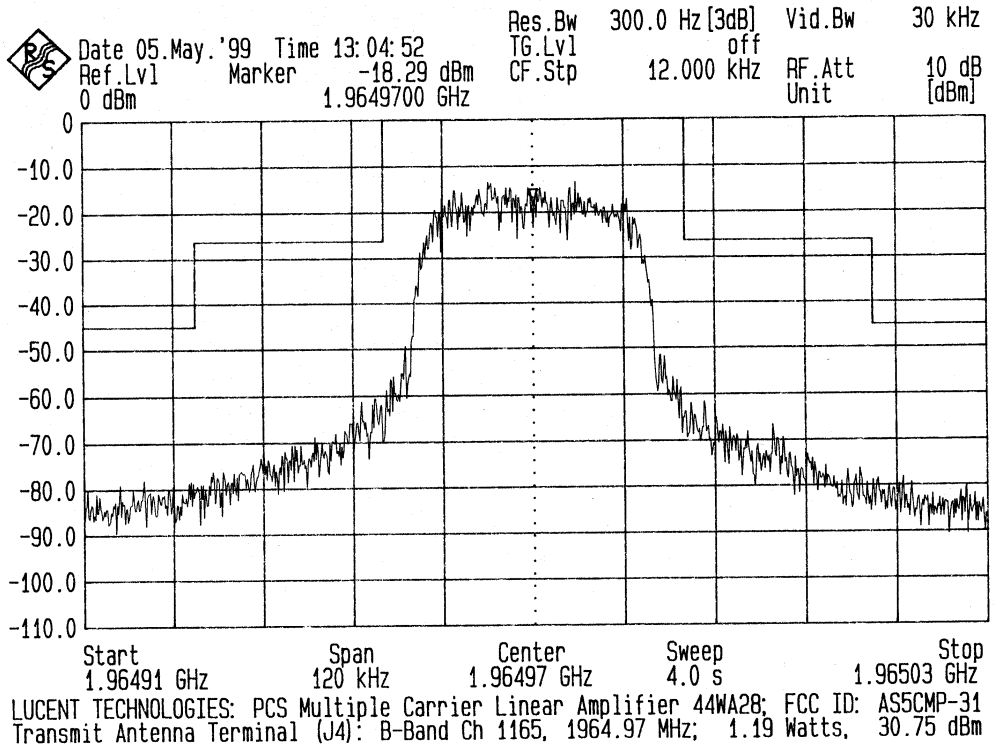
OCCUPIED BANDWIDTH PLOTS:



PCS B-Block: Lower Edge Channel
Channel 668, 1950.06 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

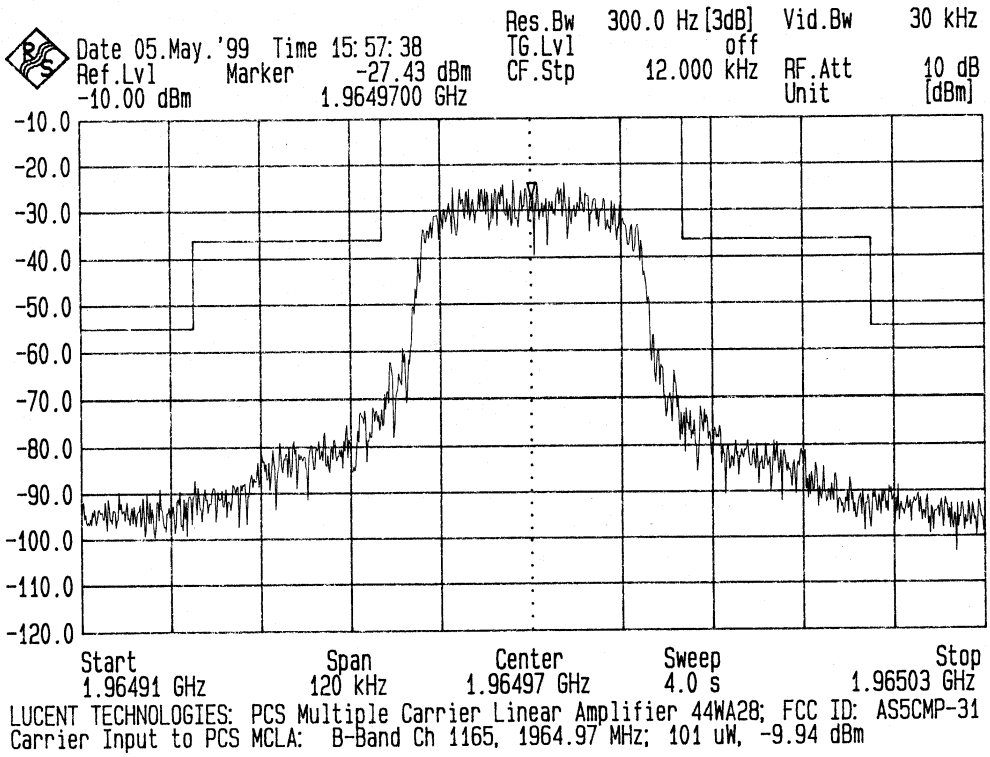
OCCUPIED BANDWIDTH PLOTS:



PCS B-Block: **Upper Edge Channel**
Channel 1165, 1964.97 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

EXHIBIT 16

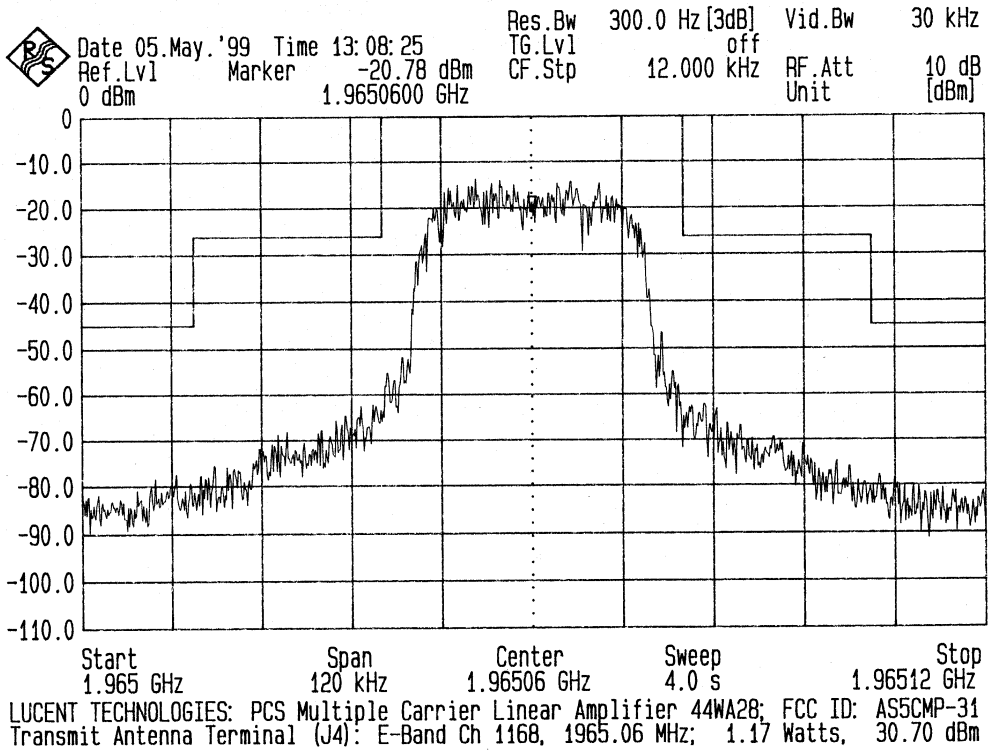
OCCUPIED BANDWIDTH PLOTS:



PCS B-Block: **Upper Edge Channel**
Channel 1165, 1964.97 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

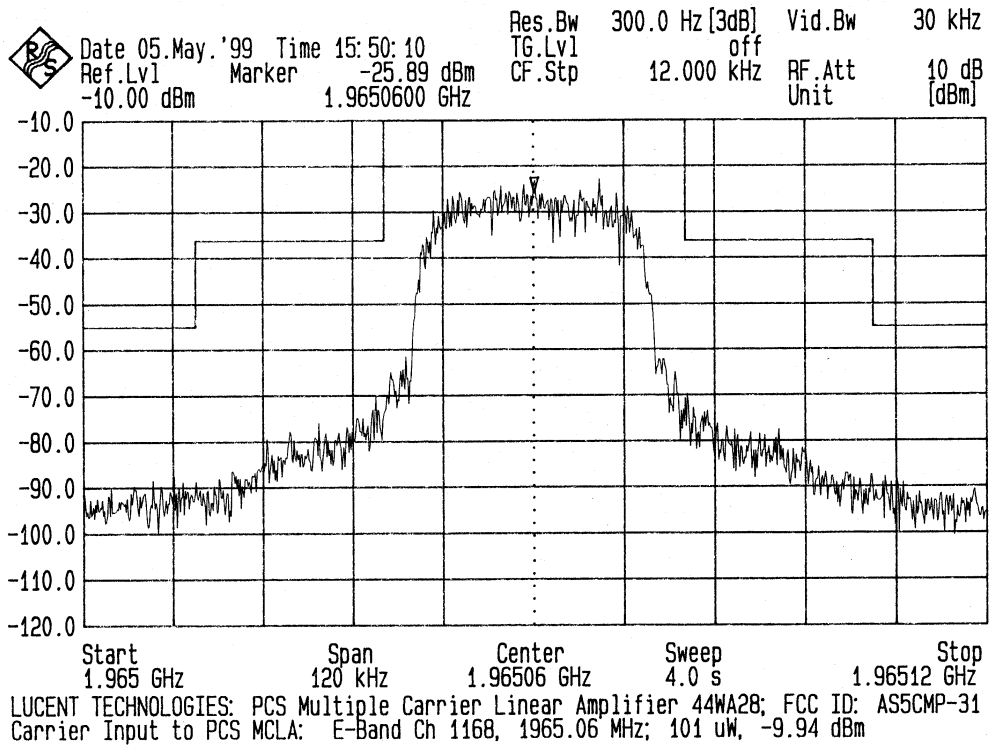
OCCUPIED BANDWIDTH PLOTS:



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

EXHIBIT 16

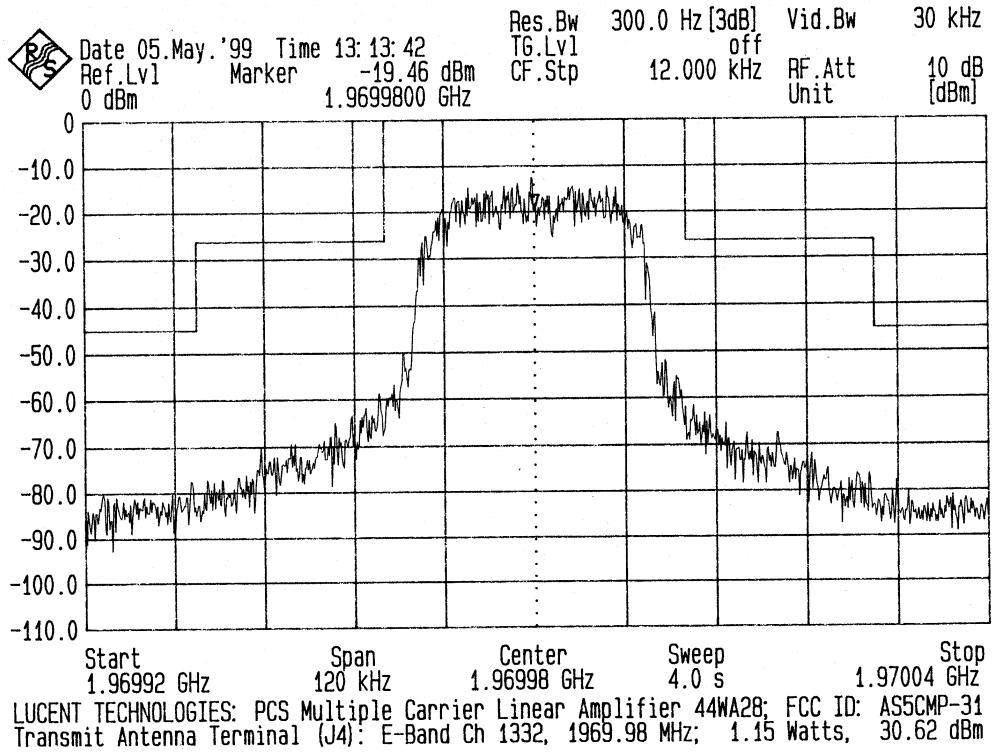
OCCUPIED BANDWIDTH PLOTS:



PCS E-Block: **Lower Edge Channel**
Channel 1168, 1965.06 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

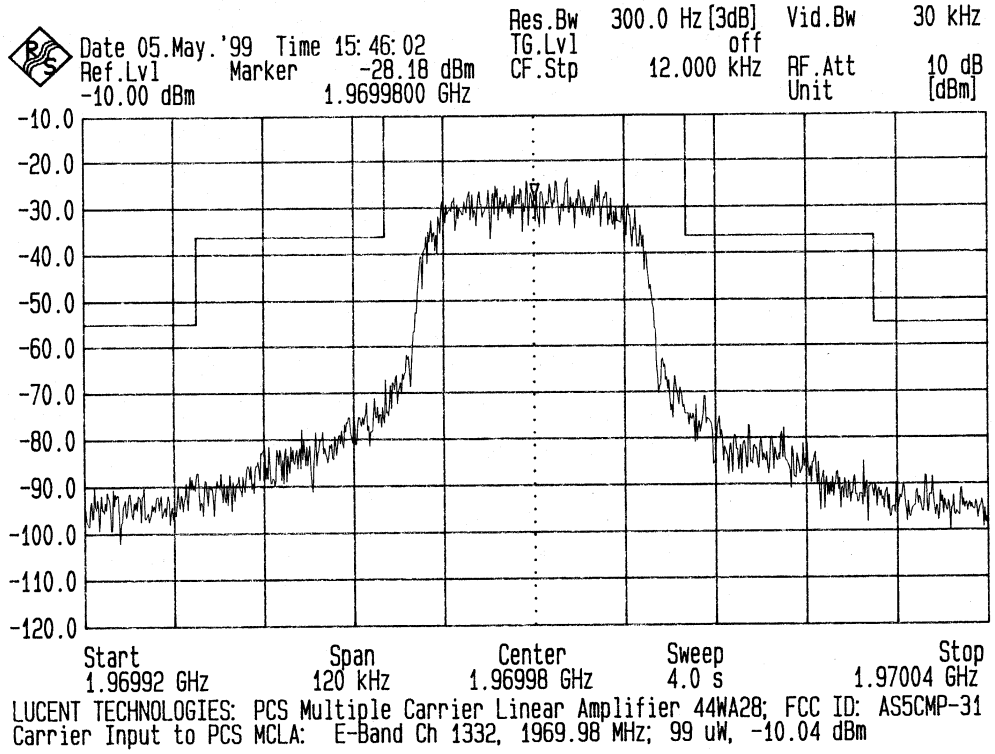
OCCUPIED BANDWIDTH PLOTS:



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

EXHIBIT 16

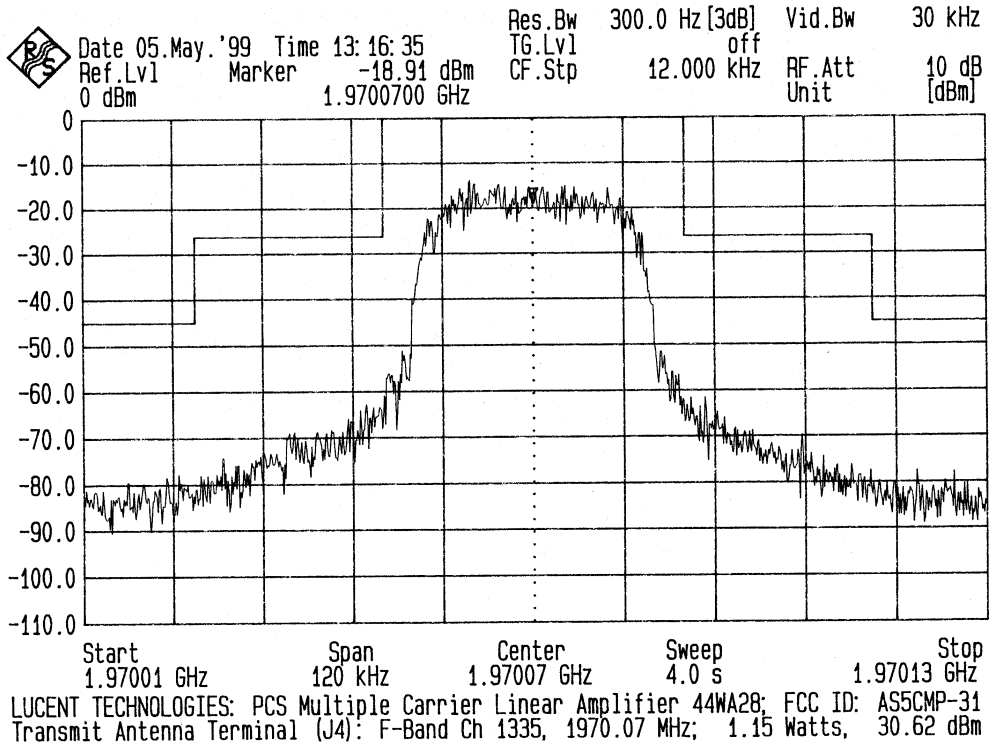
OCCUPIED BANDWIDTH PLOTS:



PCS E-Block: **Upper Edge Channel**
Channel 1332, 1969.98 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

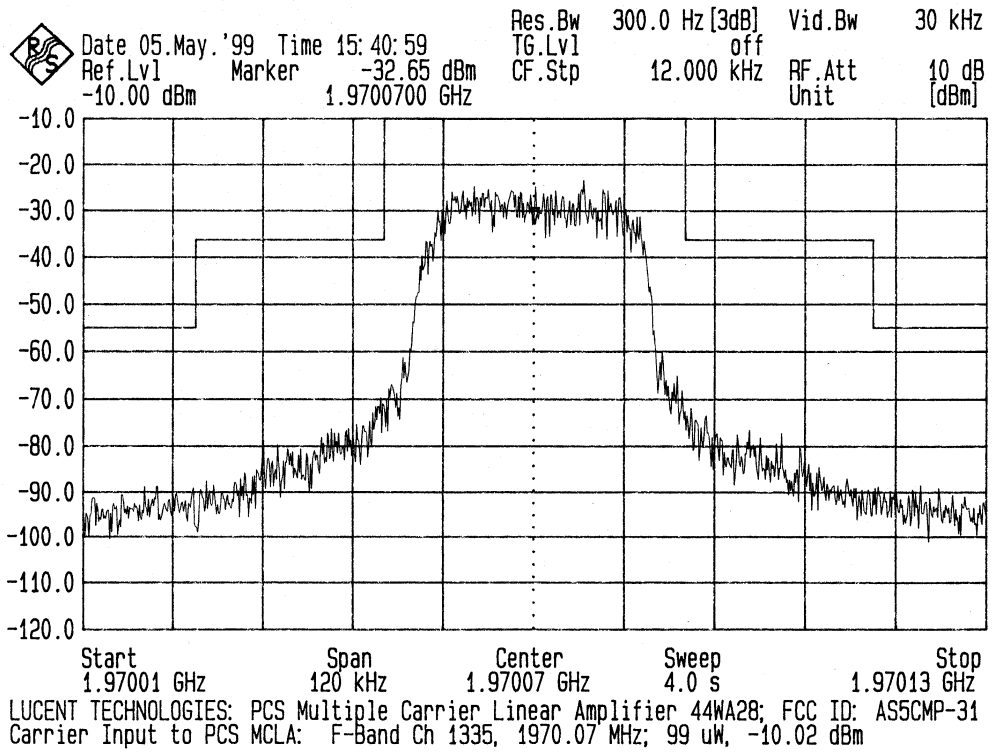
OCCUPIED BANDWIDTH PLOTS:



PCS F-Block: Lower Edge Channel
Channel 1335, 1970.07 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

EXHIBIT 16

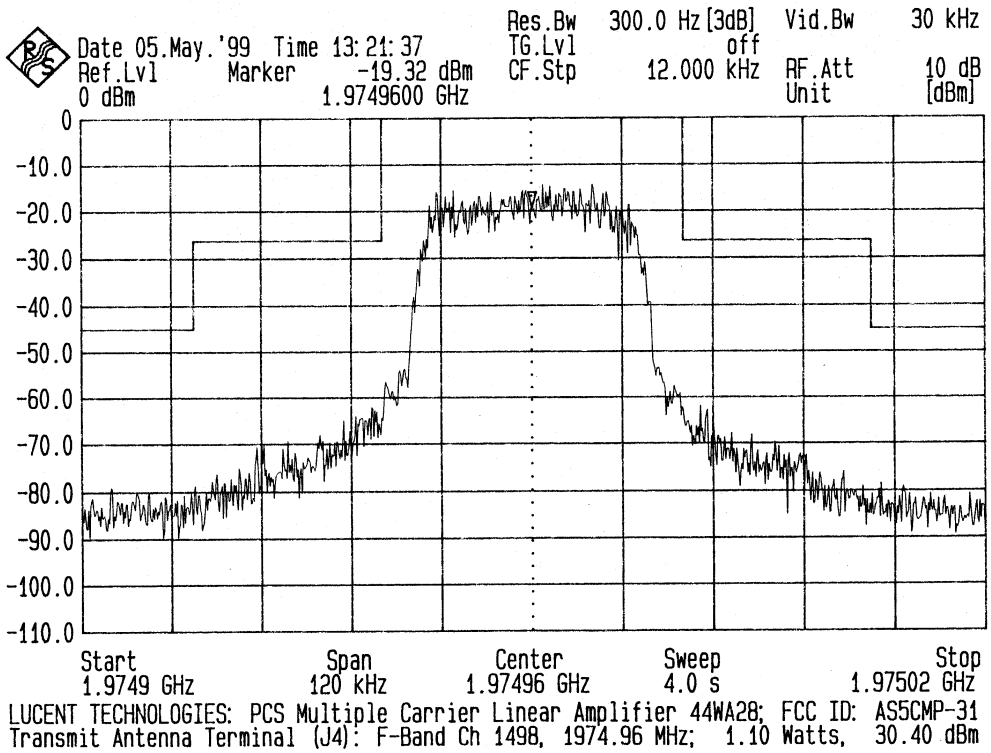
OCCUPIED BANDWIDTH PLOTS:



PCS F-Block: **Lower Edge Channel**
Channel 1335, 1970.07 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

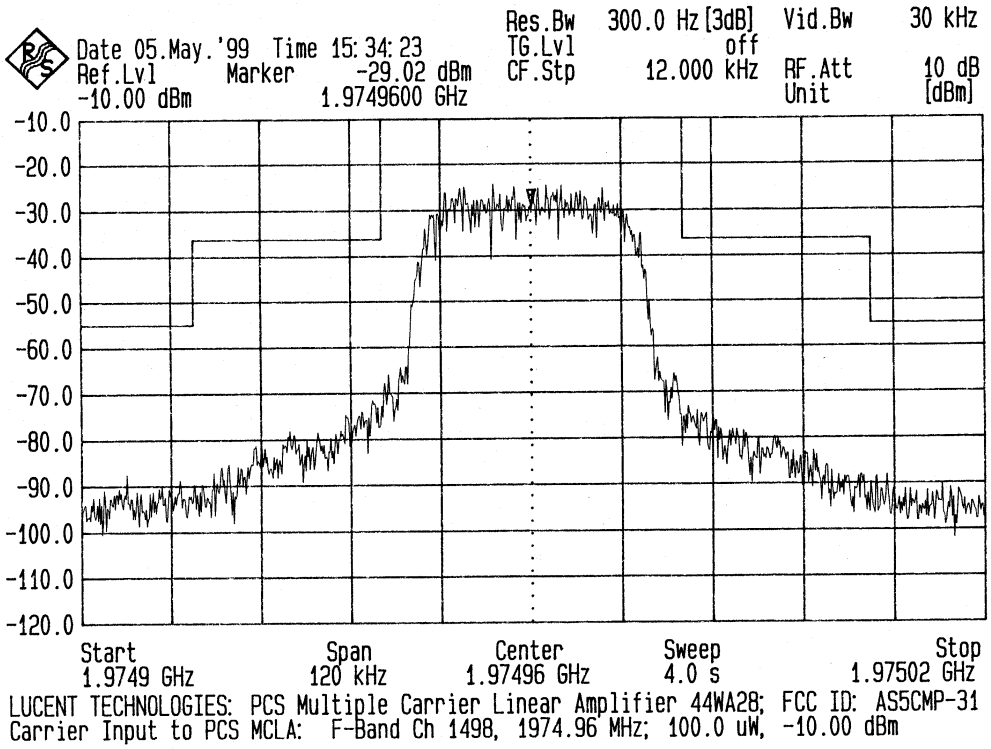
OCCUPIED BANDWIDTH PLOTS:



PCS F-Block: **Upper Edge Channel**
Channel 1498, 1974.96 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

EXHIBIT 16

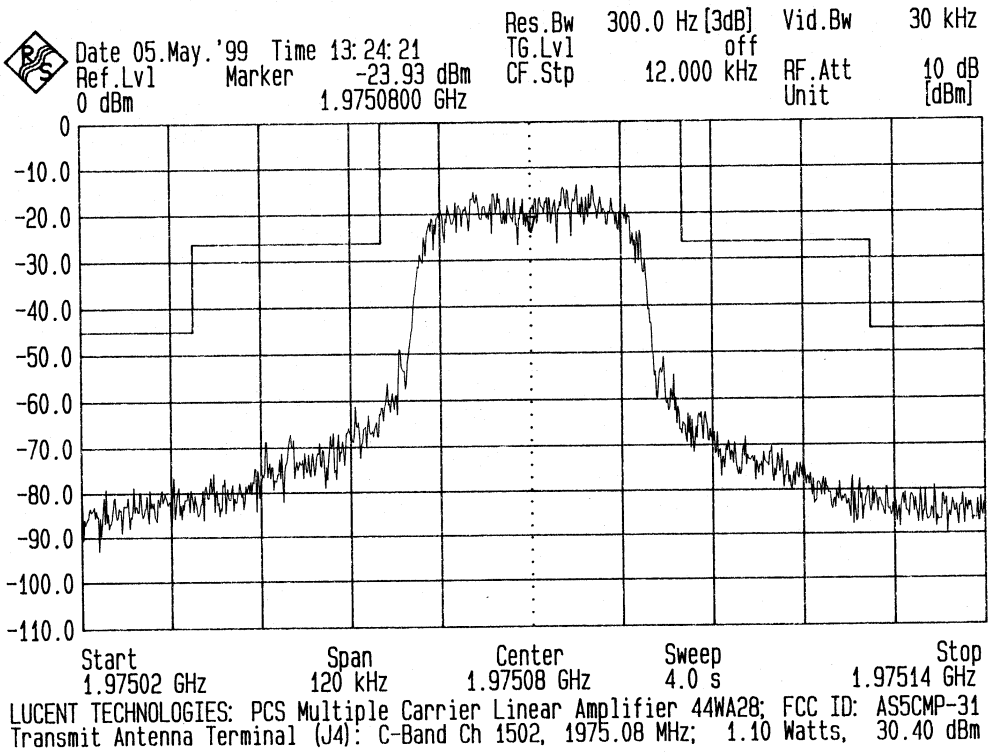
OCCUPIED BANDWIDTH PLOTS:



PCS F-Block: **Upper Edge Channel**
Channel 1498, 1974.96 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

OCCUPIED BANDWIDTH PLOTS:

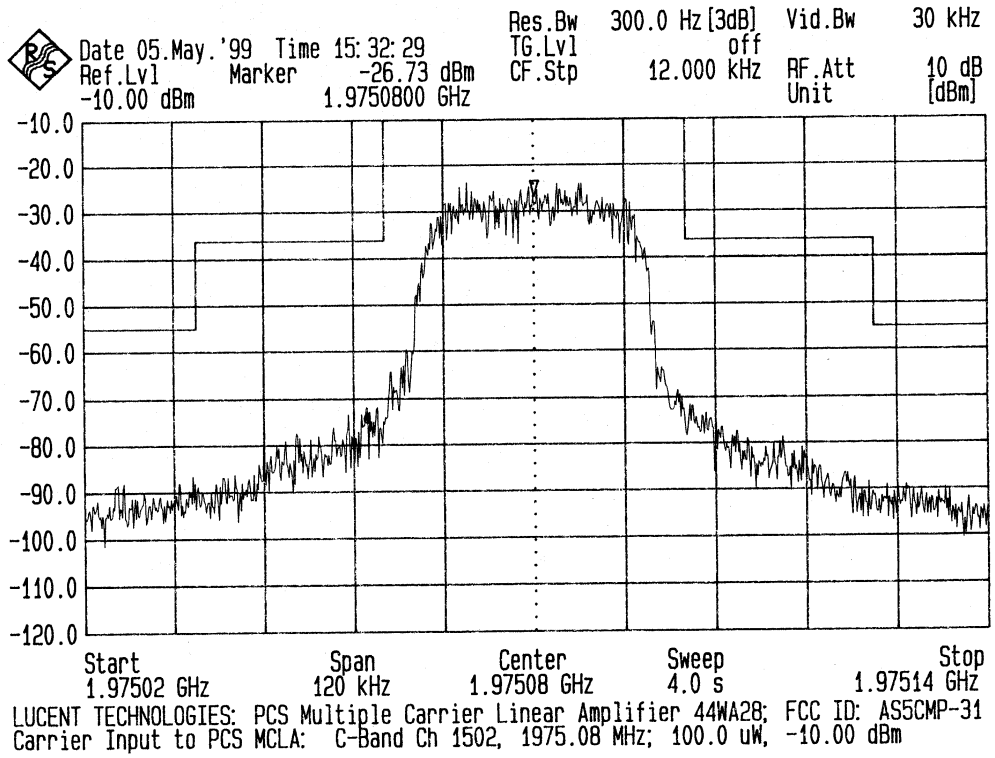


PCS C-Block: Lower Edge Channel
Channel 1502, 1975.08 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

APPLICANT: Lucent Technologies **FCC ID: AS5CMP-31**

EXHIBIT 16

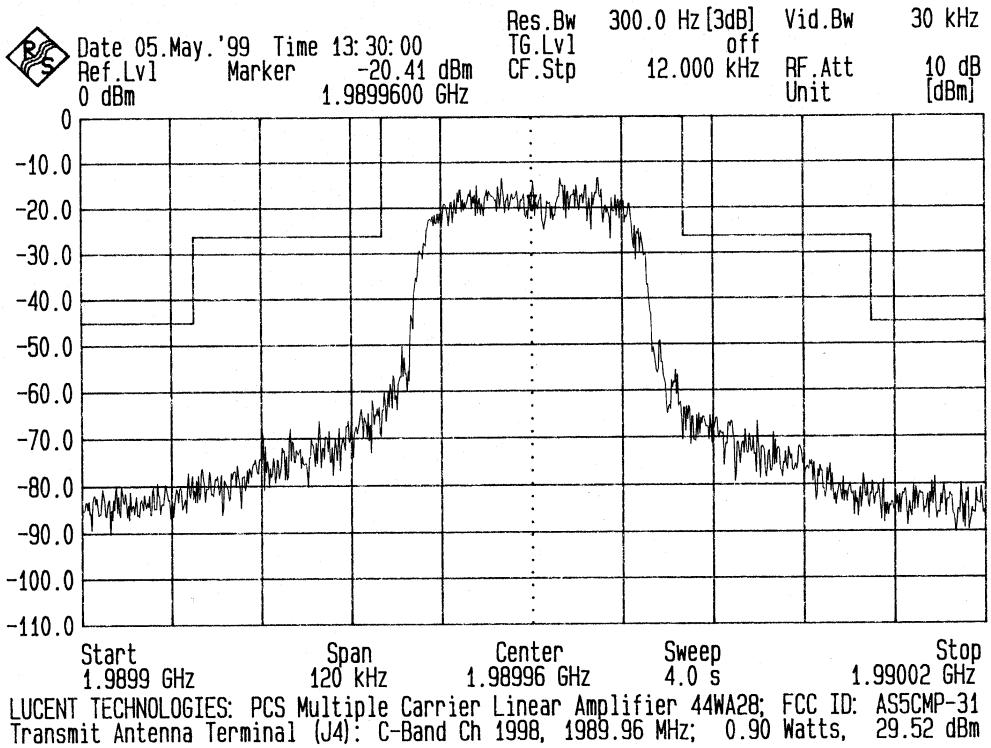
OCCUPIED BANDWIDTH PLOTS:



PCS C-Block: Lower Edge Channel
Channel 1502, 1975.08 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal

EXHIBIT 16

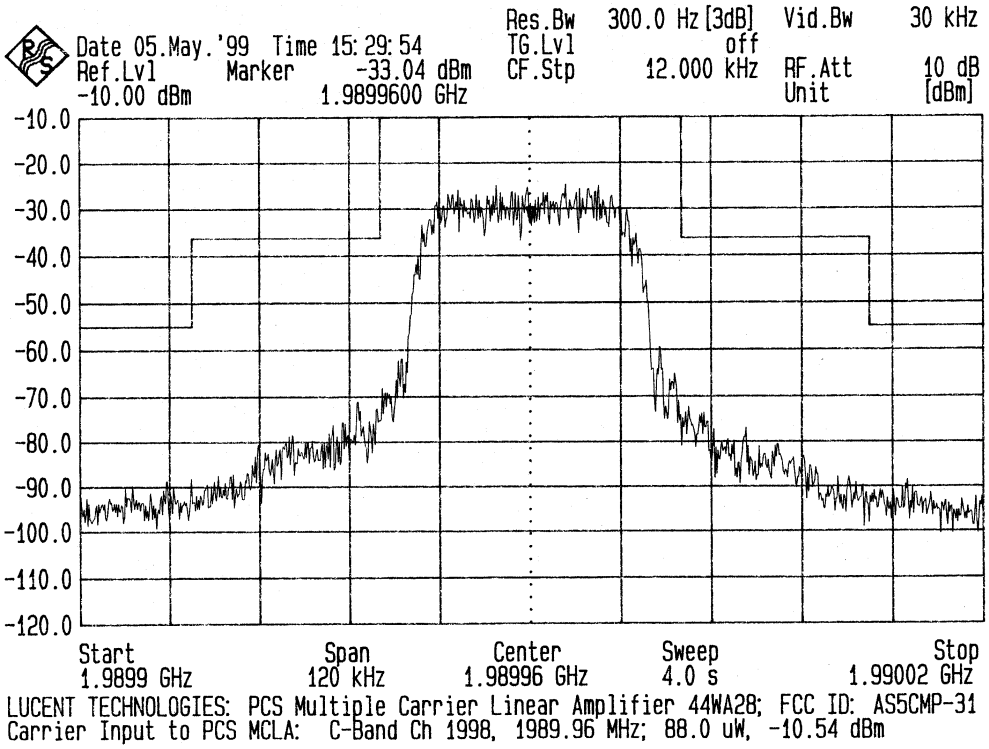
OCCUPIED BANDWIDTH PLOTS:



PCS C-Block: Upper Edge Channel
Channel 1998, 1989.96 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, output at antenna terminal

EXHIBIT 16

OCCUPIED BANDWIDTH PLOTS:



PCS C-Block: Upper Edge Channel
Channel 1998, 1989.96 MHz
PCS-TDMA Multi Carrier Linear Amplifier, 44WA28, input signal