

Exhibit 12

SECTION 2.1046

MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT

The test arrangements used to measure the radio frequency power output of the **ULAM / AS5CMP-35** Ultra Linear Amplifier Module is on the following page. Measurements were made respectively at each frequency where Occupied Bandwidth measurements were performed. The use of the ULAM requires that the J4 power level be calibrated for each specific channel of use. The test configuration, Figure 12a, allowed the measurement of output power for each channel investigated for Occupied Bandwidth. These included the “Left” and “Right” Edge of Band/ Sub-Block and at a center channel for each Sub-Block.

The ULAM system has a maximum power output at the antenna terminals of 30.0 Watts (44.8 dBm) +2 / -4 dB per Carrier or 90 Watts total for a three carrier **MCA**. It also has a minimum power output at the antenna terminals of 0.2 Watts (+2 / -4 dB, across the Cellular down-link Band (869.00-894.00 MHz). The signal applied to the ULAM is defined in Table 12.1. The power was reset to 30.0 Watts/carrier at each measurement frequency to verify the spectral performance at that power level at each specific frequency of interest. The attenuation range was also verified. The specific Frequencies, channels and set power level was documented on each "Occupied Bandwidth" data sheet. These were performed for single dual and three carrier configurations.

The applied signal met the recommended characteristics per IS-97 and ANSI J-STD-008 section 3.1.4 as defined below.

Type	Number of Channels	Fraction of Power (Linear)	Fraction of Power (dB)	Comments
Pilot	1	0.1490	-8.3	Walsh 0
Sync	1	0.015/p	-18.3	Walsh 32, always 1/8 rate
Paging	1	0.054	-12.7	Walsh 1, full rate only
Traffic	6	0.13 each	-8.8 each	Variable Walsh Assignments, full rate only

TABLE 12.1 Base Station Test Model, Nominal

Exhibit 12 RF Power Test Configuration

Figure 12A/14A/15A Test Configuration For RF Power, Occupied Bandwidth and Conducted Spurious

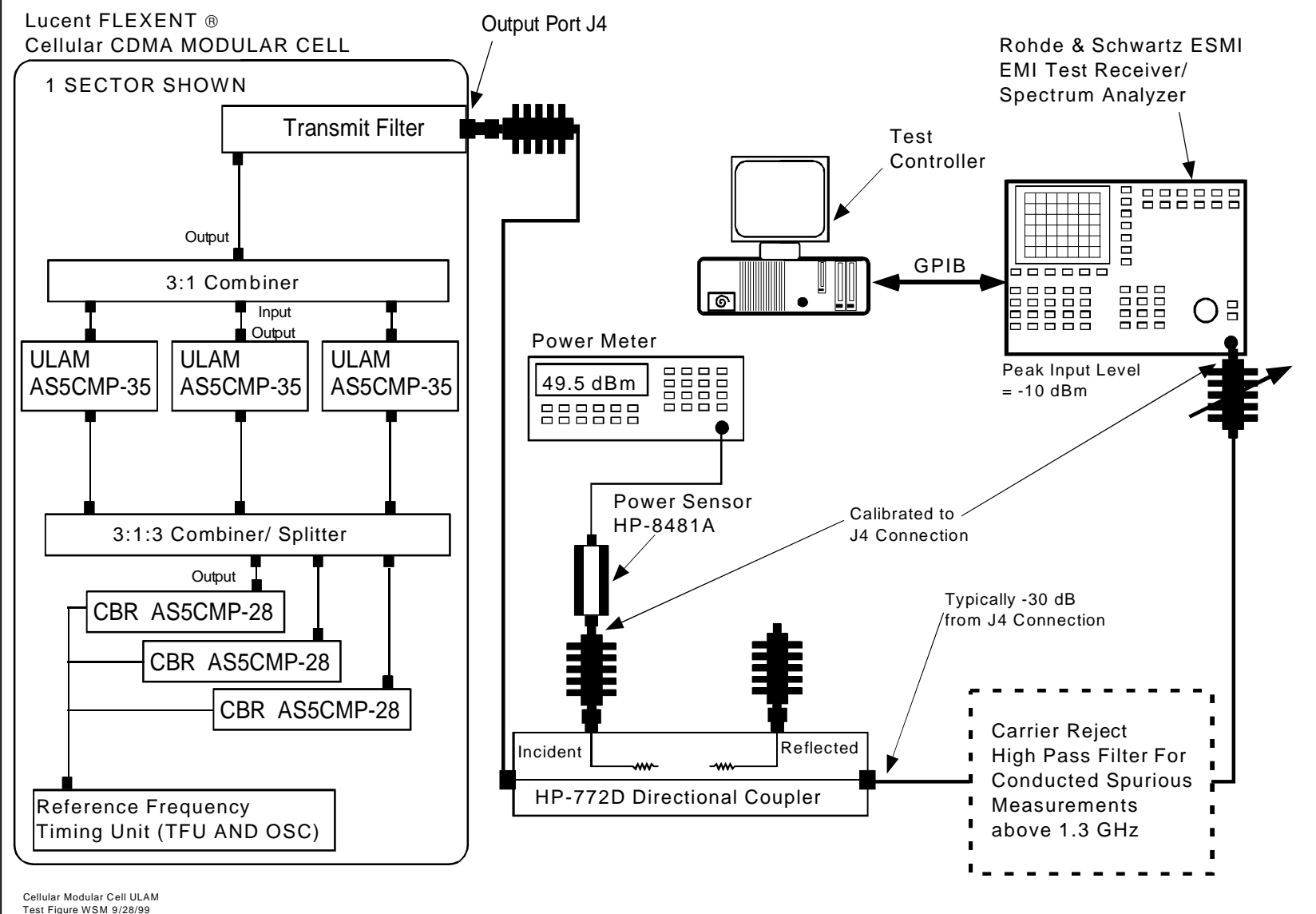


Exhibit 12

Equipment used in Figure 12 For Measurement of RF Power

Cellular Modular Cell:	Fully Populated Cellular Modular Cell
OM 1&2 :	Oscillator Module, 15 MHz Rubidium and Crystal types
CBR-850: 1-9:	CDMA Baseband Radio (FCC ID: AS5CMP-28)
ULAM: 1-9:	Ultra Linear Amplifier Module (FCC ID: AS5CMP-35)
Transmit Filter:	PCS Block Transmit Filter appropriate for the investigated Block
Directional Coupler:	HP 778D and 772D Dual Directional Coupler
Power Meter:	HP E4419A Power Meter with EPC-E18A Power Head
Test Cables:	W.L. Gore; Low loss test cables custom mfg. for Lucent FCC Laboratory
Plotter:	HP Model 7470A Plotter
Printer:	HP Model 4500DN Printer
Attenuators, Variable	HP 8494B and 8495B DC-18 GHz digital attenuators
Attenuators, Fixed	Weinschel Corp DC-18 GHz, various values
Spectrum Analyzer:	Rohde & Schwarz ESMI EMI Test Receiver
Band Pass Filters:	Trialithic, 0.800-10 GHz, Custom manufactured for Lucent FCC Laboratory
Computer Controller:	EG Technology, Custom Mfg for FCC Laboratory Intel™ Pentium II& III, 450 and 550 MHz controllers with TILE™ software

Exhibit 12**RESULTS:**

The **ULAM/ AS5CMP-35** was configured in the test setup shown in Figure 12A. For each of the PCS channels tested the **ULAM/ AS5CMP-35** delivered a minimum of 30.0 Watts per carrier $\pm 2/-0$ dB when measured at the J4 output connection.

This data is recorded on the Occupied Bandwidth Data Sheets for “Left edge”, and “Right Edge” channels for each frequency Band/ Sub-Block.

For Cellular Band A , the Sub-Block filter A2 is for the “Left Edge of Block” and is designed for as many as three carriers. Likewise the Sub-Block filter A1 is for the “Right Edge of Band” and will accommodate three carrier. Band B is partitioned similarly but B1 is the Left edge. When operated in the multi-carrier MCA configuration the A1/ A2 or B1/B2 Occupied Bandwidth plots present three center channel performance charts.

Data is presented for Cellular Bands “A”, and “B” .

Note: The **ULAM/ AS5CMP-35** can be operated as a single carrier or as a Multiple Carrier CDMA amplifier. The maximum power level are verified at each cell site during setup of the Cellular CDMA Modular Cell and installation of the **CBR, FCC ID: AS5CMP-28**.