

Type Acceptance Test Report

**Multimode PCS Repeater
FCC Rule Parts: 2, 15 & 24**

ACS Report Number: 03-0089-24TA

Manufacturer: EMS Wireless
Model: Link2Cell

New Data

Power

Power measurements were made and are reported in tables 1 and 2 below. All measurements were made using and HP438A Power meter and an HP 8481A Power Sensor. The test setup is show in figure 1 below:

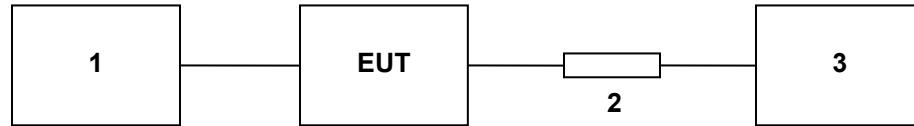


Figure 1: Setup Diagram

Test Equipment

Diagram Number	Equipment Type	MFG	Model	Serial Number	Cal Date	Cal Due
1	RF Signal Generator	Agilent	E4432B	A55445-4	4/5/2003	4/5/2004
2	Power Meter	Agilent	438A	A55444-1	4/5/2003	4/5/2004
3	Power Sensor	Agilent	8481A	A55444-2	4/5/2003	4/5/2004

Test Results

Table 1: Output Power - Uplink

Transmission Mode	Frequency (MHz)	Output Power (dBm)
TDMA	1850	+15dBm
	1880	+15dBm
	1910	+15dBm
GSM	1850	+15dBm
	1880	+15dBm
	1910	+15dBm
CDMA	1850	+15dBm
	1880	+15dBm
	1910	+15dBm

Table 2: Output Power - Downlink

Transmission Mode	Frequency (MHz)	Output Power (dBm)
TDMA	1930	+2dBm
	1960	+2dBm
	1990	+2dBm
GSM	1930	+2dBm
	1960	+2dBm
	1990	+2dBm
CDMA	1930	+2dBm
	1960	+2dBm
	1990	+2dBm

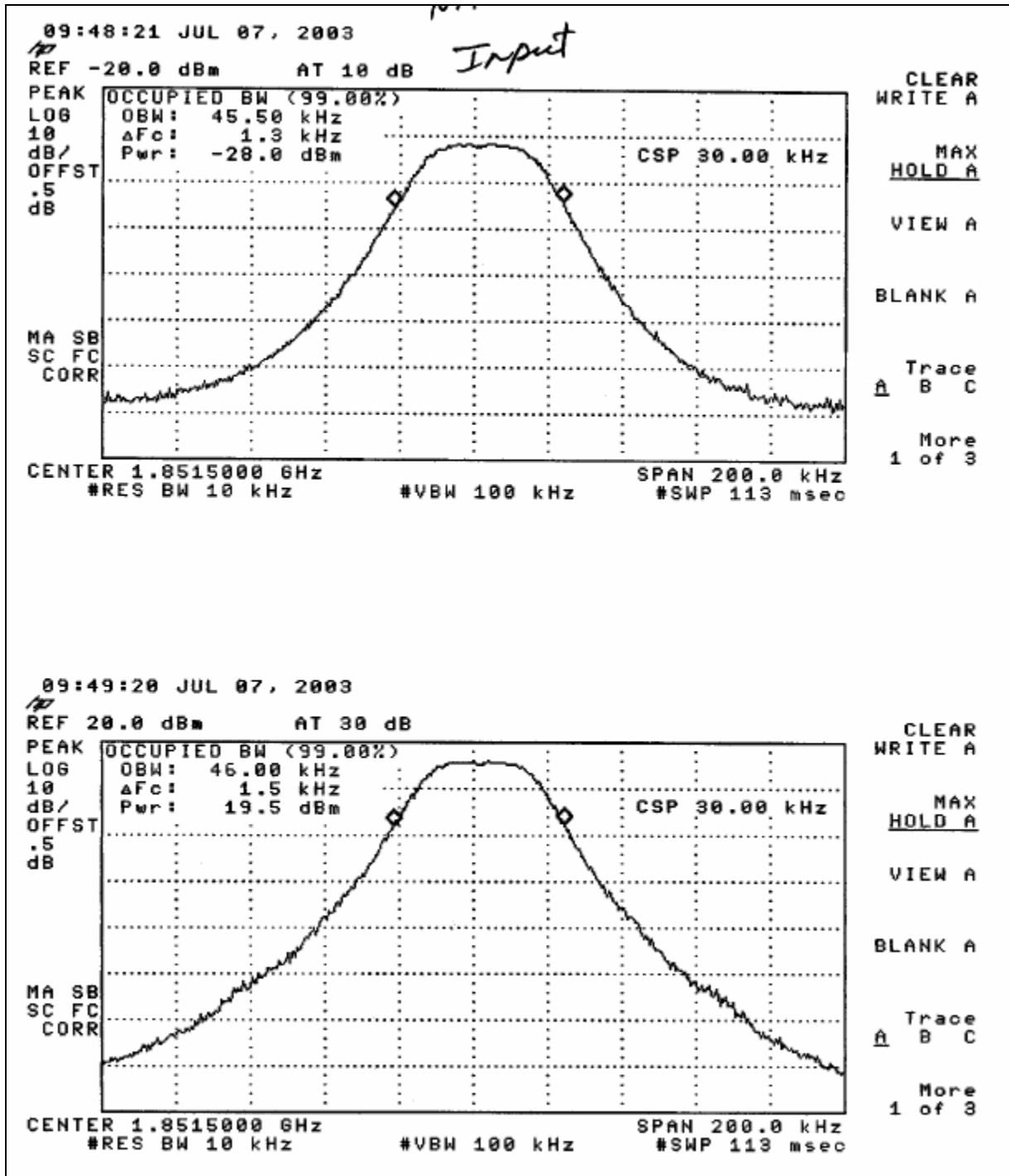
Input vs. Output Levels

Input vs. Output plots are shown in plots 1-6 below. The test setup is shown in figure 2 below:

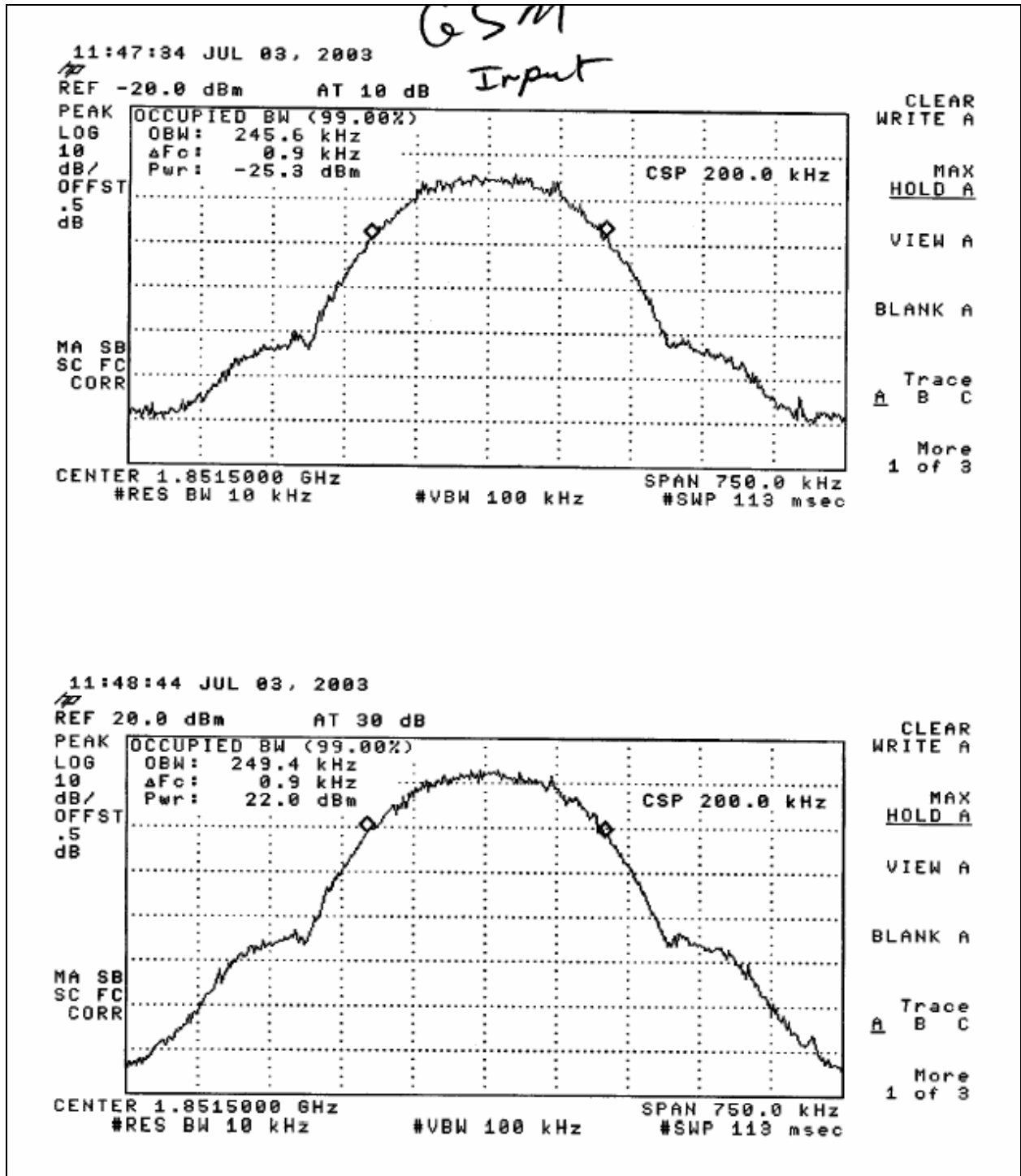


Figure 2: Setup Diagram

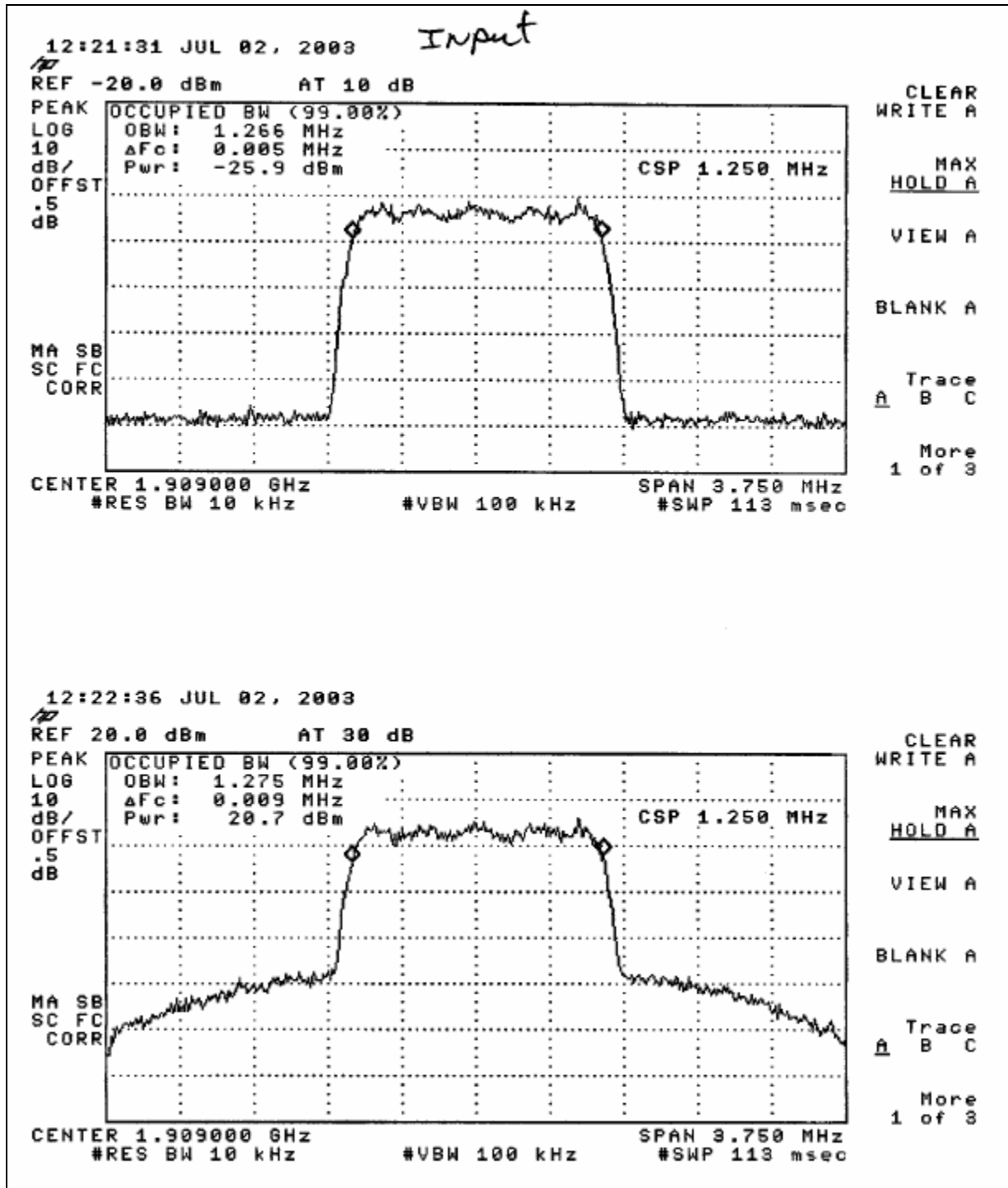
Diagram Number	Equipment Type	MFG	Model	Serial Number	Cal Date	Cal Due
1	RF Signal Generator	Agilent	E4432B	A55445-4	4/5/2003	4/5/2004
2	Spectrum Analyzer	Agilent	8593E	A55445-1	4/5/2003	4/5/2004



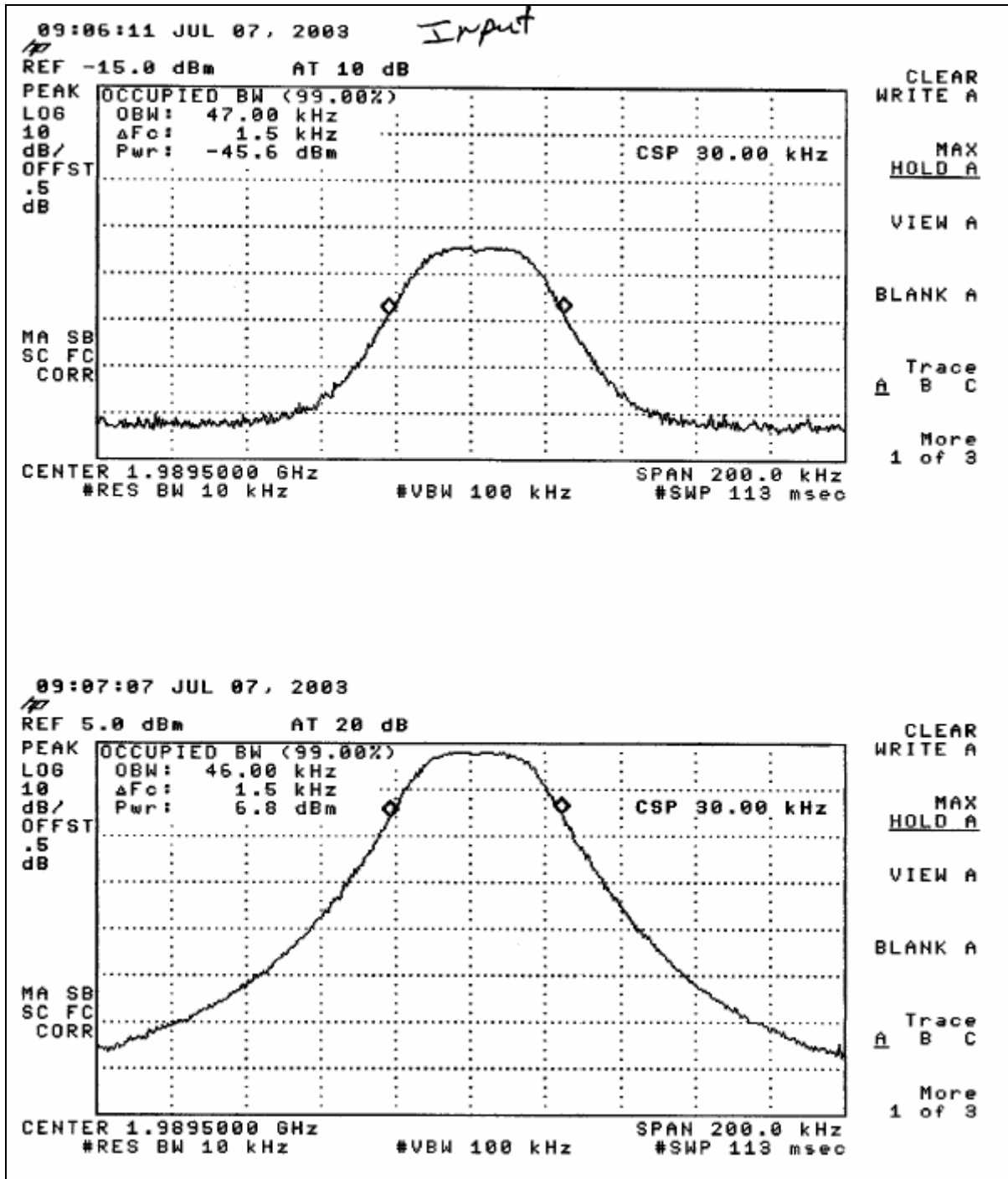
Plot 1: TDMA Uplink - Low Channel 99% BW, Power Output vs. Input



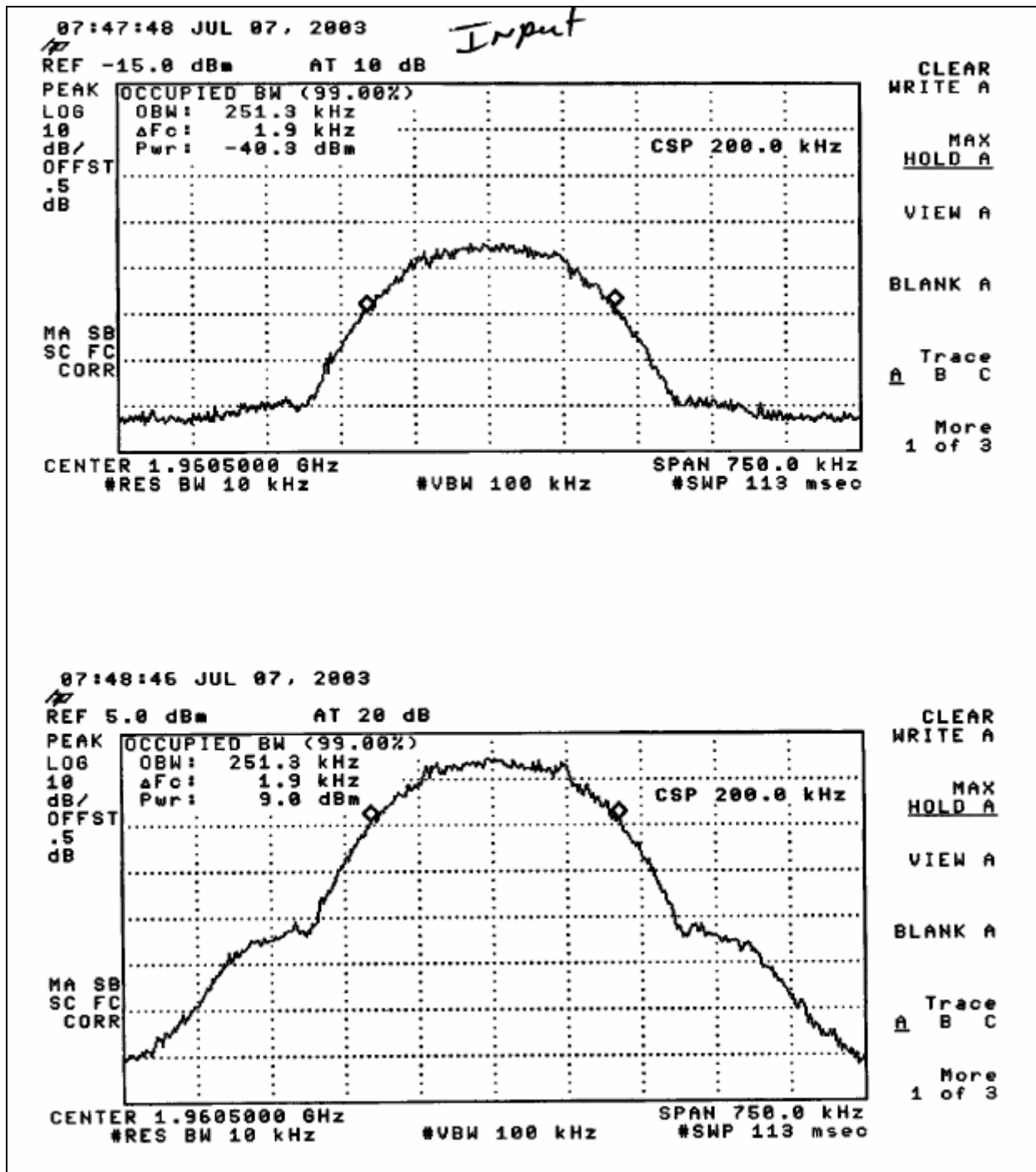
Plot 2: GSM Uplink – Low Channel 99% BW, Power Output vs. Input



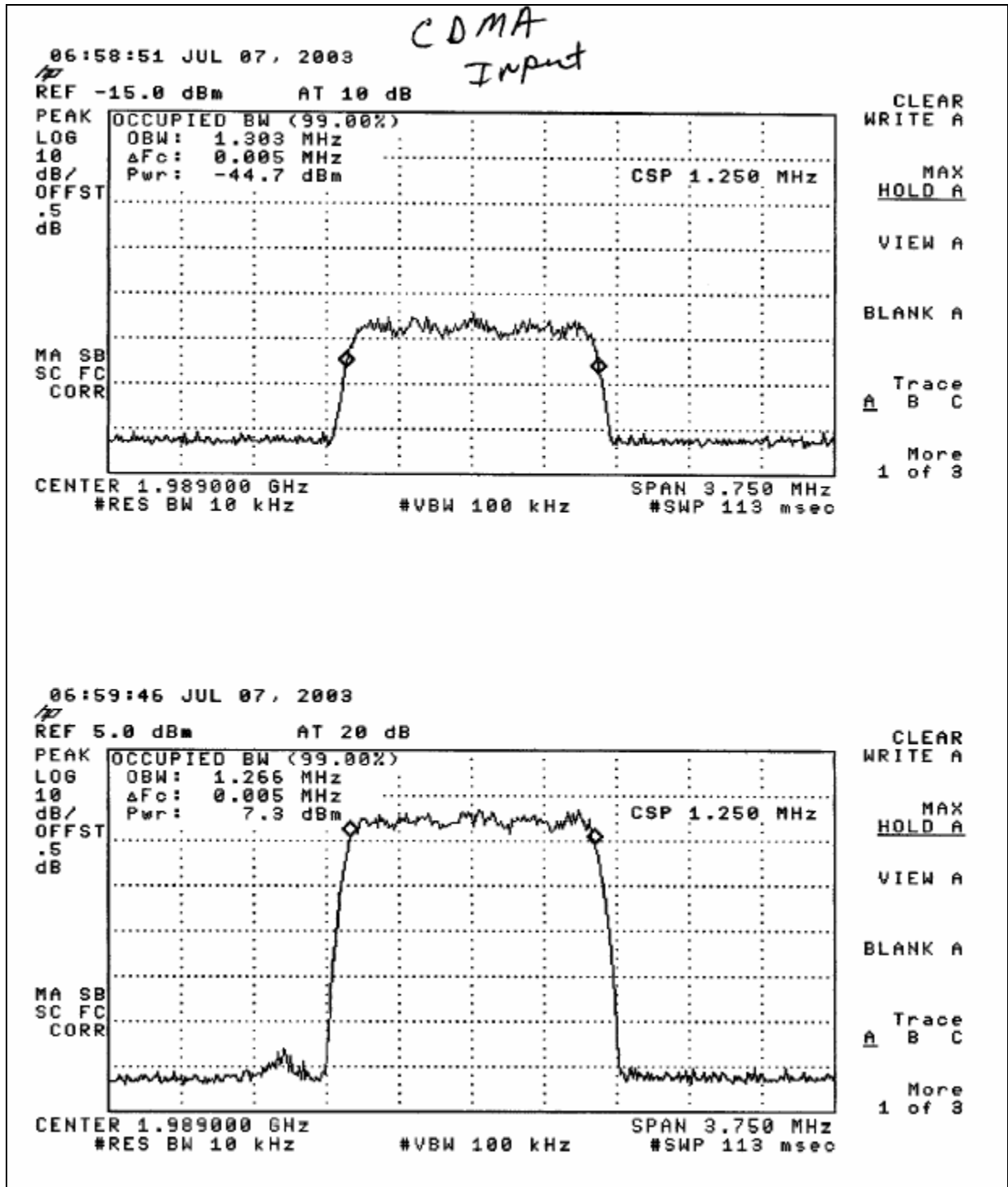
Plot 3: CDMA Uplink – High Channel 99% BW, Power Output vs. Input



Plot 4: TDMA Downlink – High Channel 99% BW, Power Output vs. Input



Plot 5: GSM Downlink – Middle Channel 99% BW, Power Output vs. Input



Plot 6: CDMA Downlink – High Channel 99% BW, Power Output vs. Input