

Exhibit 24Occupied Bandwidth and Spurious Emission Measured Data --
for CDMA mode when operating in P_REV 6 or above

KWC-2255 supports additional reverse channels, as per IS-98D, additional measurements have taken to show compliance. Below is the applicable section from IS-98D

4.5 Limitations on Emissions

4.5.1 Conducted Spurious Emissions

4.5.1.1 Definition

Conducted spurious emissions are emissions at frequencies that are outside the assigned CDMA Channel, measured at the mobile station antenna connector. This test measures the spurious emissions during continuous transmission.

4.5.1.2 Method of Measurement

1. Connect the base station to the mobile station antenna connector as shown in Figure 6.5.1-4. The AWGN generator and the interference generator are not applicable in this test. Connect a spectrum analyzer (or other suitable test equipment) to the mobile station antenna connector.
2. For each band class and radio configuration that the mobile station supports, configure the base station and mobile station to operate in that band class and perform steps 3 through 17.
 - Thus Band Class 0 and Band Class 1 for the KWC-2255
3. Set the following parameters of the *Access Parameters Message* as specified below:

Parameter	Value (Decimal)
NOM_PWR	7 (7 dB)
INIT_PWR	15 (15 dB)
PWR_STEP	7 (7 dB/step)
NUM_STEP	15 (16 probes/sequence)
MAX_RSP_SEQ	15 (15 sequences)

If the Enhanced Access Channel is used, set the following parameters of the *Enhanced Access Parameters Message* as specified below (N/A so Table not included below)

4. If the mobile station supports Reverse Traffic Channel Radio Configuration 1 and Forward Traffic Channel Radio Configuration 1, set up a call using Fundamental Channel Test Mode 1 (see 1.3) with 9600 bps data rate only and perform steps 15 through 17.
 - Test Mode 1 implies an S02 call(Rate Set 1) on RC1/RC1....this is equivalent to what was performed already h-1 through h-4 of Exhibit 8 and a, b, c, and d of Exhibit 9
5. If the mobile station supports the Radio Configuration 3 Reverse Fundamental Channel and demodulation of Radio Configuration 3, 4, or 5, set up a call using Fundamental Channel Test Mode 3 (see 1.3) with 9600 bps data rate only and perform steps 15 through 17.
 - This is a new addition and will require the usage of QXDM and placing the handset into FTM
 - Test Mode 3 implies using a Rate Set 1 loopback service option.(S055 is not supported by the KWC-2255 handset)
6. If the mobile station supports the Radio Configuration 3 Reverse Dedicated Control Channel and demodulation of Radio Configuration 3, 4, or 5, set up a call using Dedicated Control Channel Test Mode 3 (see 1.3) with 9600 bps data rate only and 100% frame activity and perform steps 15 through 17.
 - N/A, the KWC-2255 will not support F/R-DCCH

7. If the mobile station supports the Radio Configuration 3 Reverse Fundamental Channel, Radio Configuration 3 Reverse Dedicated Control Channel and demodulation of Radio Configuration 3, 4, or 5, set up a call using Fundamental Channel Test Mode 3 (see 1.3) with 1500 bps Fundamental Channel data rate only and 9600 bps Dedicated Control Channel with 100 % frame activity, and perform steps 15 through 17.
 - N/A, the KWC-2255 will not support F/R-DCCH
8. If the mobile station supports the Radio Configuration 3 Reverse Fundamental Channel, Radio Configuration 3 Reverse Supplemental Channel 0 and demodulation of Radio Configuration 3, 4, or 5, set up a call using Supplemental Channel Test Mode 3 (see 1.3) with 9600 bps Fundamental Channel and 9600 bps Supplemental Channel 0 data rate, and perform steps 15 through 17.
 - This is a new addition and will require the usage of QXDM and placing the handset into FTM
 - Test Mode 3 implies using a Rate Set 1 loopback service option.(S055 is not supported by the KWC-2255 handset)
9. If the mobile station supports the Radio Configuration 3 Reverse Dedicated Control Channel, Radio Configuration 3 Reverse Supplemental Channel 0 and demodulation of Radio Configuration 3, 4, or 5, set up a call using Supplemental Channel Test Mode 3 (see 1.3) with 9600 bps Dedicated Control Channel with 100% frame activity and 9600 bps Supplemental Channel 0 data rate, and perform steps 15 through 17.
 - N/A, the KWC-2255 will not support F/R-DCCH
10. If the mobile station supports the Radio Configuration 5 Reverse Fundamental Channel and demodulation of Radio Configuration 6, 7, 8, or 9, set up a call using Fundamental Channel Test Mode 7 (see 1.3) with 9600 bps data rate only and perform steps 15 through 17.
 - N/A, the KWC-2255 will not support RC5 on the reverse link, nor RC6, 7, 8, or 9 on the forward link.
11. If the mobile station supports the Radio Configuration 5 Reverse Dedicated Control Channel and demodulation of Radio Configuration 6, 7, 8, or 9, set up a call using Dedicated Control Channel Test Mode 7 (see 1.3) with 9600 bps data rate only and 100% frame activity and perform steps 15 through 17.
 - N/A, the KWC-2255 will not support RC5 on the reverse link, nor RC6, 7, 8, or 9 on the forward link.
12. If the mobile station supports the Radio Configuration 5 Reverse Fundamental Channel, Radio Configuration 5 Reverse Dedicated Control Channel and demodulation of Radio Configuration 6, 7, 8, or 9, set up a call using Fundamental Channel Test Mode 7 (see 1.3) with 1500 bps Fundamental Channel data rate only and 9600 bps Dedicated Control Channel with 100 % frame activity, and perform steps 15 through 17.
 - N/A, the KWC-2255 will not support RC5 on the reverse link, nor RC6, 7, 8, or 9 on the forward link.
13. If the mobile station supports the Radio Configuration 5 Reverse Fundamental Channel, Radio Configuration 5 Reverse Supplemental Channel 0 and demodulation of Radio Configuration 6, 7, 8, or 9, set up a call using Supplemental Channel Test Mode 7 (see 1.3) with 9600 bps Fundamental Channel and 9600 bps Supplemental Channel 0 data rate, and perform steps 15 through 17.
 - N/A, the KWC-2255 will not support RC5 on the reverse link, nor RC6, 7, 8, or 9 on the forward link.
14. If the mobile station supports the Radio Configuration 5 Reverse Dedicated Control Channel, Radio Configuration 5 Reverse Supplemental Channel 0 and demodulation of Radio Configuration 6, 7, 8, or 9, set up a call using Supplemental Channel Test Mode 7 (see 1.3) with 9600 bps Dedicated Control Channel with 100% frame activity and 9600 bps Supplemental Channel 0 data rate, and perform steps 10 through 17.
 - N/A, the KWC-2255 will not support RC5 on the reverse link, nor RC6, 7, 8, or 9 on the forward link.
15. Set the test parameters as specified in Table 4.5.1.2-1.
16. Send continuously , '0' power control bits to the mobile station.
17. Measure the spurious emission levels.

Table 4.5.1.2-1. Test Parameters for Testing Spurious Emissions at Maximum RF Output Power

Parameter	Units	Value
Ior [^]	dBm/1.23 MHz	-104
Pilot Ec / Ior	dB	-7.0
Traffic Ec / Ior	dB	-7.4

4.5.1.3 Minimum Standard

Depending on local radio regulations, the mobile station shall meet ITU Category A or B emissions rules as appropriate. For Band Class 5, 6, 8, and 9, a mobile station shall meet ITU Category B emission rules.

4.5.1.3.1 Spreading Rate 1

When transmitting in Band Class 0, 2, 3, 5, 7 or 9 with Spreading Rate 1, the spurious emissions shall be less than all limits specified in Table 4.5.1.3.1-1.

Table 4.5.1.3.1-1. Band Class 0, 2, 3, 5, 7 and 9 Transmitter Spurious Emission Limits for Spreading Rate 1

For $ \Delta f $ Within the Range	Emission Limit
885 kHz to 1.98 MHz	Less stringent of -42 dBc/30 kHz or -54 dBm/1.23 MHz
1.98 MHz to 4.00 MHz	Less stringent of -54 dBc/30 kHz or -54 dBm/1.23 MHz
> 1.98 MHz (Band Class 3 only)	-54 dBc/30 kHz
2.25 MHz to 4.00 MHz (Band Class 7 only)	-35 dBm/6.25 kHz
> 4.00 MHz (ITU Category A only)	-13 dBm / 1 kHz; 9 kHz < f < 150 kHz -13 dBm / 10 kHz; 150 kHz < f < 30 MHz -13 dBm/100 kHz; 30 MHz < f < 1 GHz -13 dBm / 1 MHz; 1 GHz < f < 5 GHz
> 4.00 MHz (ITU Category B only) (required for Band Class 5 and 9)	-36 dBm / 1 kHz; 9 kHz < f < 150 kHz -36 dBm / 10 kHz; 150 kHz < f < 30 MHz -36 dBm/100 kHz; 30 MHz < f < 1 GHz -36 dBm / 1 MHz; 1 GHz < f < 12.75 GHz

Note: All frequencies in the measurement bandwidth shall satisfy the restrictions on $|\Delta f|$ where Δf = center frequency - closer measurement edge frequency (f). Compliance with the -35 dBm / 6.25 kHz limit is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral power in a 6.25 kHz segment. For Band Class 3, the lower and upper limits of the frequency measurement are currently 10 MHz and 3 GHz in Japan radio measurement documents.

When transmitting in Band Class 1, 4, 6 or 8 with Spreading Rate 1, the spurious emissions shall be less than all limits specified in Table 4.5.1.3.1-2.

Table 4.5.1.3.1-2. Band Class 1, 4, 6 and 8 Transmitter Spurious Emission Limit for Spreading Rate 1

For $ \Delta f $ Within the Range	Emission Limit
1.25 MHz to 1.98 MHz	less stringent of -42 dBc/30 kHz or -54 dBm/1.23 MHz
1.98 MHz to 4.00 MHz	less stringent of -50 dBc/30 kHz or -54 dBm/1.23 MHz
2.25 MHz to 4.00 MHz (Band Class 6 only)	$-[13 + 1 \times (\Delta f - 2.25 \text{ MHz})] \text{ dBm} / 1 \text{ MHz}$
> 2.25 MHz (Band Class 6 in Japan only)	-13 dBm / 1 MHz
> 4.00 MHz (ITU Category A)	-13 dBm / 1 kHz; 9 kHz < f < 150 kHz -13 dBm / 10 kHz; 150 kHz < f < 30 MHz -13 dBm/100 kHz; 30 MHz < f < 1 GHz -13 dBm / 1 MHz; 1 GHz < f < 10 GHz
> 4.00 MHz (ITU Category B) (required for Band Class 6 and 8)	-36 dBm / 1 kHz; 9 kHz < f < 150 kHz -36 dBm / 10 kHz; 150 kHz < f < 30 MHz -36 dBm/100 kHz; 30 MHz < f < 1 GHz -36 dBm / 1 MHz; 1 GHz < f < 12.75 GHz

Note: All frequencies in the measurement bandwidth shall satisfy the restrictions on $|\Delta f|$ where Δf = center frequency - closer measurement edge frequency (f). The lower and upper limits of the frequency measurement for Band Class 6 greater than 2.25 MHz offset are currently unspecified in Japan radio measurement documents.

All other sub-sections of the Emissions section have been omitted since the MS does not support.

After all this, the bottom line for KWC-2255 is to perform Tests as per #5 and #8. Four additional fundamental set-ups are,

1. Cellular CDMA F/R-FCH at RC3 using a rate set 1 loopback service option
2. PCS CDMA F/R-FCH at RC3 using a rate set 1 loopback service option
3. Cellular CDMA F-FCH and R-FCH + R-SCH at RC3 using a rate set 1 loopback service option @ 9600bps for both Reverse channels
4. PCS CDMA F-FCH and R-FCH + R-SCH at RC3 using a rate set 1 loopback service option @ 9600bps for both Reverse channels

The test results show KWC-2255 is in compliance with IS-98D and FCC requirements. Test data as follows.

Occupied Bandwidth

Cellular Band

Ch1013

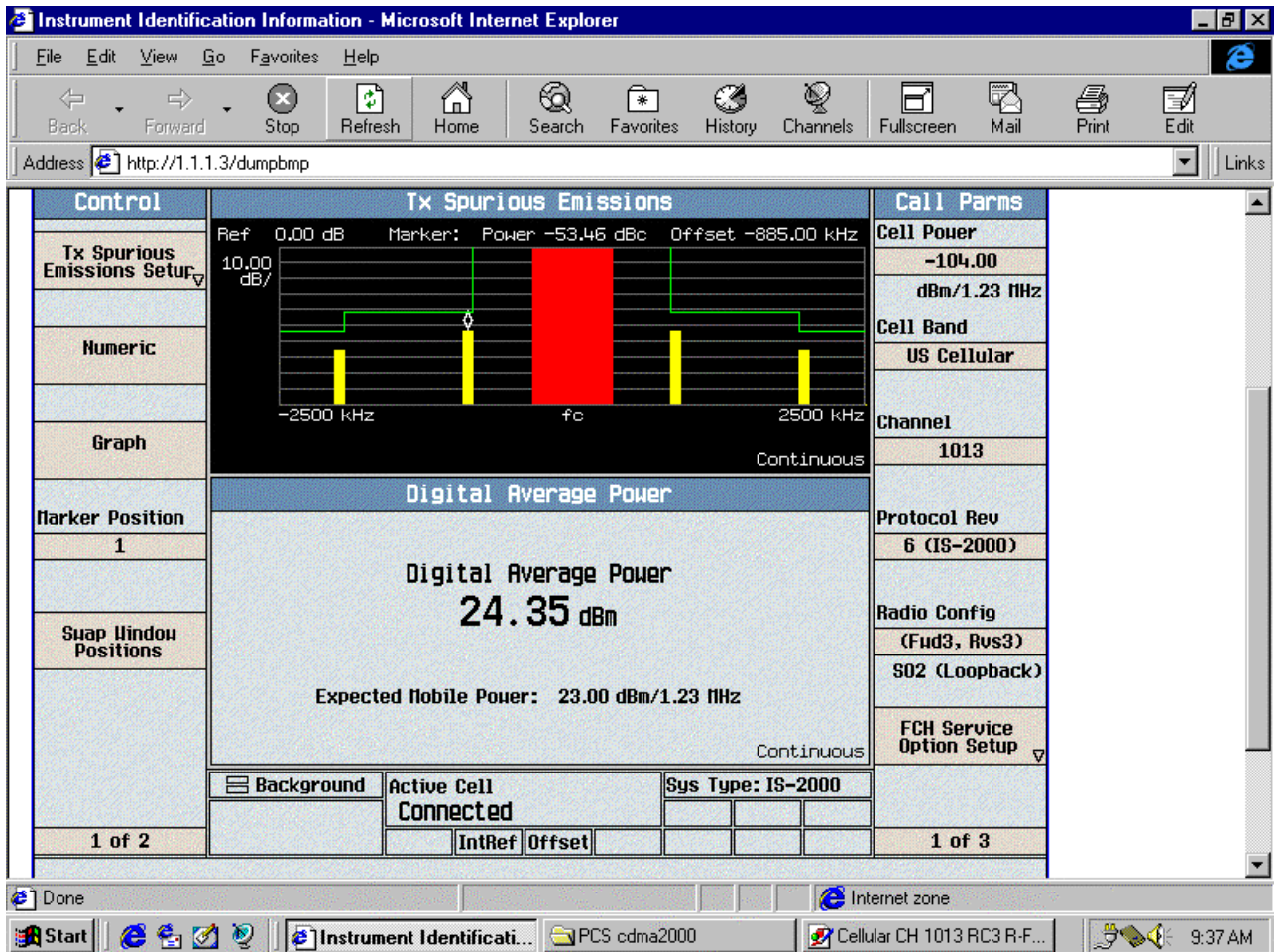
RC3 R-FCH ACPR Data + PTXmax

The screenshot shows a Microsoft Internet Explorer window titled "Instrument Identification Information - Microsoft Internet Explorer". The address bar shows "http://1.1.1.3/dumpbmp". The main content area is a table with several sections:

Control	Tx Spurious Emissions		Call Parms
Tx Spurious Emissions Setup	-0.885 MHz Offset	0.885 MHz Offset	Cell Power
	-53.03 dBc	-53.11 dBc	-104.00
Numeric			dBm/1.23 MHz
	-1.98 MHz Offset	+1.98 MHz Offset	Cell Band
	-65.87 dBc	-65.54 dBc	US Cellular
Graph		Continuous	Channel
			1013
	Digital Average Power		Protocol Rev
	Digital Average Power		6 (IS-2000)
	24.63 dBm		Radio Config
Swap Window Positions	Expected Mobile Power: 23.00 dBm/1.23 MHz		(Fud3, Rvs3)
	Continuous		S02 (Loopback)
	Background	Active Cell	FCH Service Option Setup
		Connected	
		Sys Type: IS-2000	
1 of 2	IntRef	Offset	1 of 3

The browser's taskbar at the bottom shows the Start button, several open applications including "Instrument Identificati...", "PCS cdma2000", and "Cellular CH 1013 RC3 R-F...", and the system clock showing 9:36 AM.

RC3 R-FCH ACPR Spectrum + PTXmax



Ch384

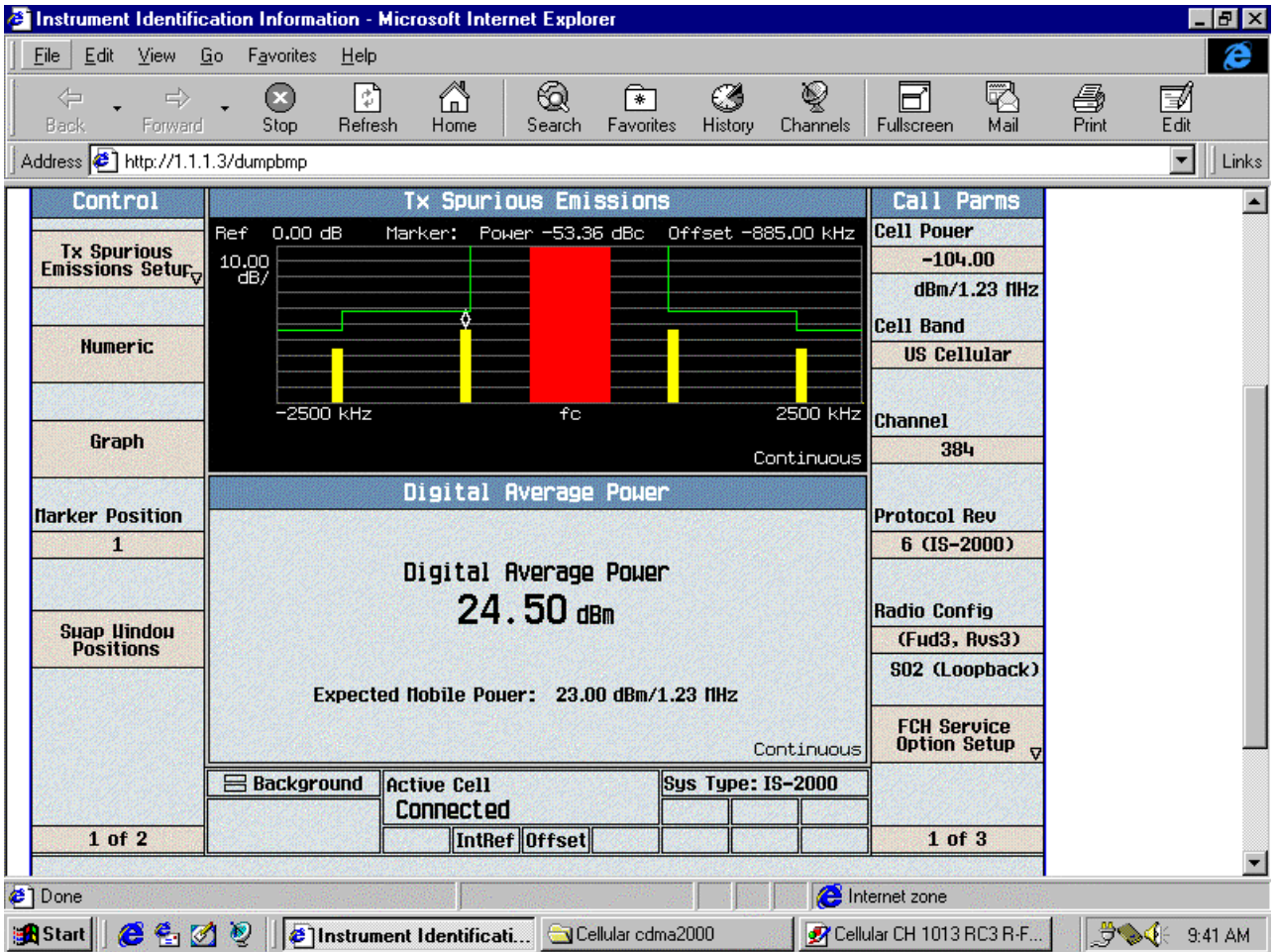
RC3 R-FCH ACPR Data + PTXmax

The screenshot shows a web browser window with the following content:

Control	Tx Spurious Emissions		Call Params
Tx Spurious Emissions Setup	-0.885 MHz Offset	0.885 MHz Offset	Cell Power
Numeric	-52.63 dBc	-53.72 dBc	-104.00
Graph	-1.98 MHz Offset	+1.98 MHz Offset	dBm/1.23 MHz
	-65.62 dBc	-65.71 dBc	Cell Band
		Continuous	US Cellular
			Channel
			384
			Protocol Rev
			6 (IS-2000)
			Radio Config
			(Fud3, Rvs3)
			S02 (Loopback)
			FCH Service Option Setup
1 of 2	Background	Active Cell Connected	Sys Type: IS-2000
		IntRef	Offset
			1 of 3

At the bottom of the browser window, the taskbar shows the Start button, several application icons, and the system tray with the time 9:41 AM.

RC3 R-FCH ACPR Spectrum + PTXmax



RC3 R-FCH Code Domain

Instrument Identification Information - Microsoft Internet Explorer

Address: http://1.1.1.3/dumpbmp

Control	Waveform Quality: Code Domain Power	Call Parms
Waveform Quality Setup		Cell Power
Numeric Rho		-104.00
Code Domain Power		dBm/1.23 MHz
Code Domain Power + Noise		Cell Band
Swap Window Positions		US Cellular
Graph Control		Channel
		384
		Protocol Rev
		6 (IS-2000)
		Radio Config
		(Fud3, Rvs3)
		S02 (Loopback)
		FCH Service Option Setup
	Background	
	Active Cell Connected	Sys Type: IS-2000
1 of 2	IntRef Offset	
		1 of 3

Done Internet zone

Start Instrument Identificati... Cellular cdma2000 Cellular CH 384 RC3 R-FC... 9:42 AM

CH 777

RC3 R-FCH ACPR Data + PTXmax

Instrument Identification Information - Microsoft Internet Explorer

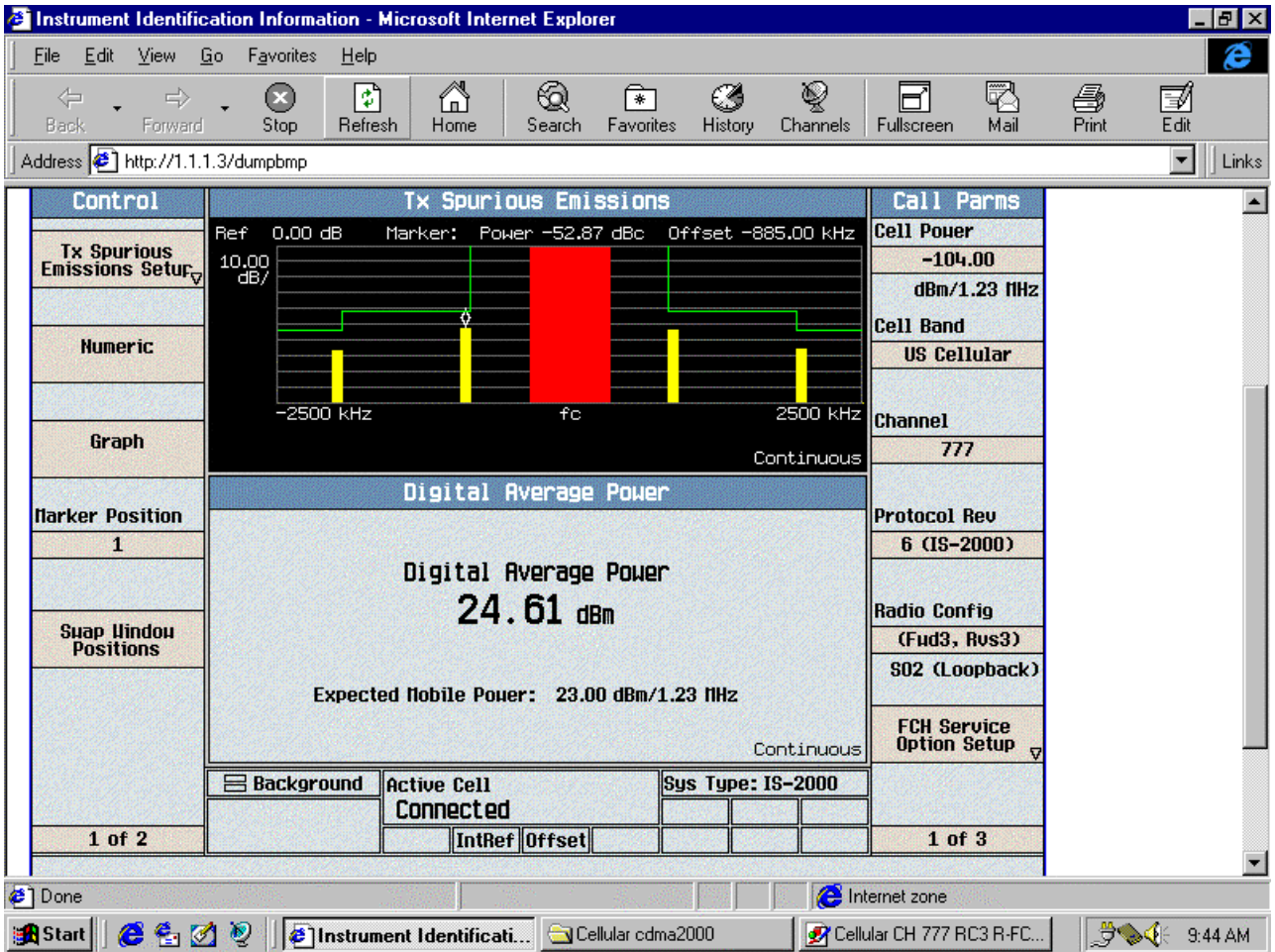
Address: http://1.1.1.3/dumpbmp

Control	Tx Spurious Emissions		Call Parms
Tx Spurious Emissions Setup	-0.885 MHz Offset -53.33 dBc	0.885 MHz Offset -53.11 dBc	Cell Power -104.00 dBm/1.23 MHz
Numeric	-1.98 MHz Offset -65.75 dBc	+1.98 MHz Offset -66.03 dBc	Cell Band US Cellular
Graph	Continuous		Channel 777
Swap Window Positions	Digital Average Power Digital Average Power 24.56 dBm Expected Mobile Power: 23.00 dBm/1.23 MHz Continuous		Protocol Rev 6 (IS-2000)
1 of 2	Background	Active Cell Connected	Radio Config (Fud3, Rvs3) S02 (Loopback)
		Sys Type: IS-2000	FCH Service Option Setup
		IntRef	Offset
			1 of 3

Done Internet zone

Start Instrument Identificati... Cellular cdma2000 Cellular CH 777 RC3 R-FC... 9:44 AM

RC3 R-FCH ACPR Spectrum + PTXmax



Ch384

RC3 R-FCH+R-SCH ACPR Spectrum + PTXmax and Occupied Bandwidth

CELLULAR CH 384

ACPR

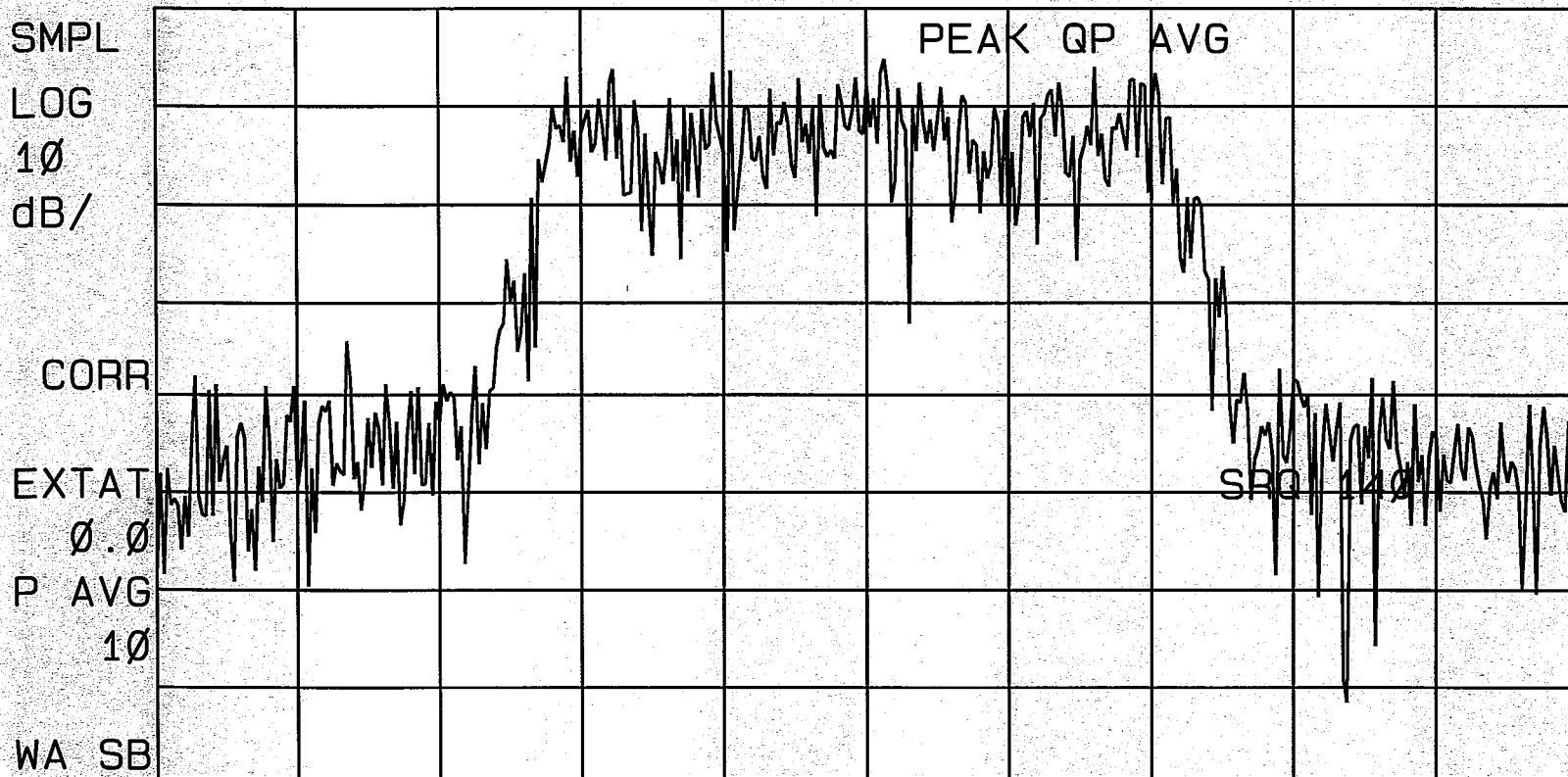
RC3 R-FCH+R-SCH

14:10:06 JUL 20, 2001

(c) HP 1993 - 1998 CDMA ANALYZER C.00.03

REF 20.0 dBm

#AT 40 dB



MARKER
NORMAL

MARKER
Δ

MARKER
AMPTD

SELECT
1 2 3 4

SC FC MS CH 384

CENTER 836.520 MHz

SPAN 2.800 MHz

MARKER 1
ON OFF

#RES BW 30 kHz

#VBW 300 kHz

SWP 20.0 msec

ACPR -OFFSET (dBc) +OFFSET (dBc)

PASS

885.0 kHz	-47.96	-47.97
1.256 MHz	-54.53	-55.22
2.750 MHz	-53.09	-53.54

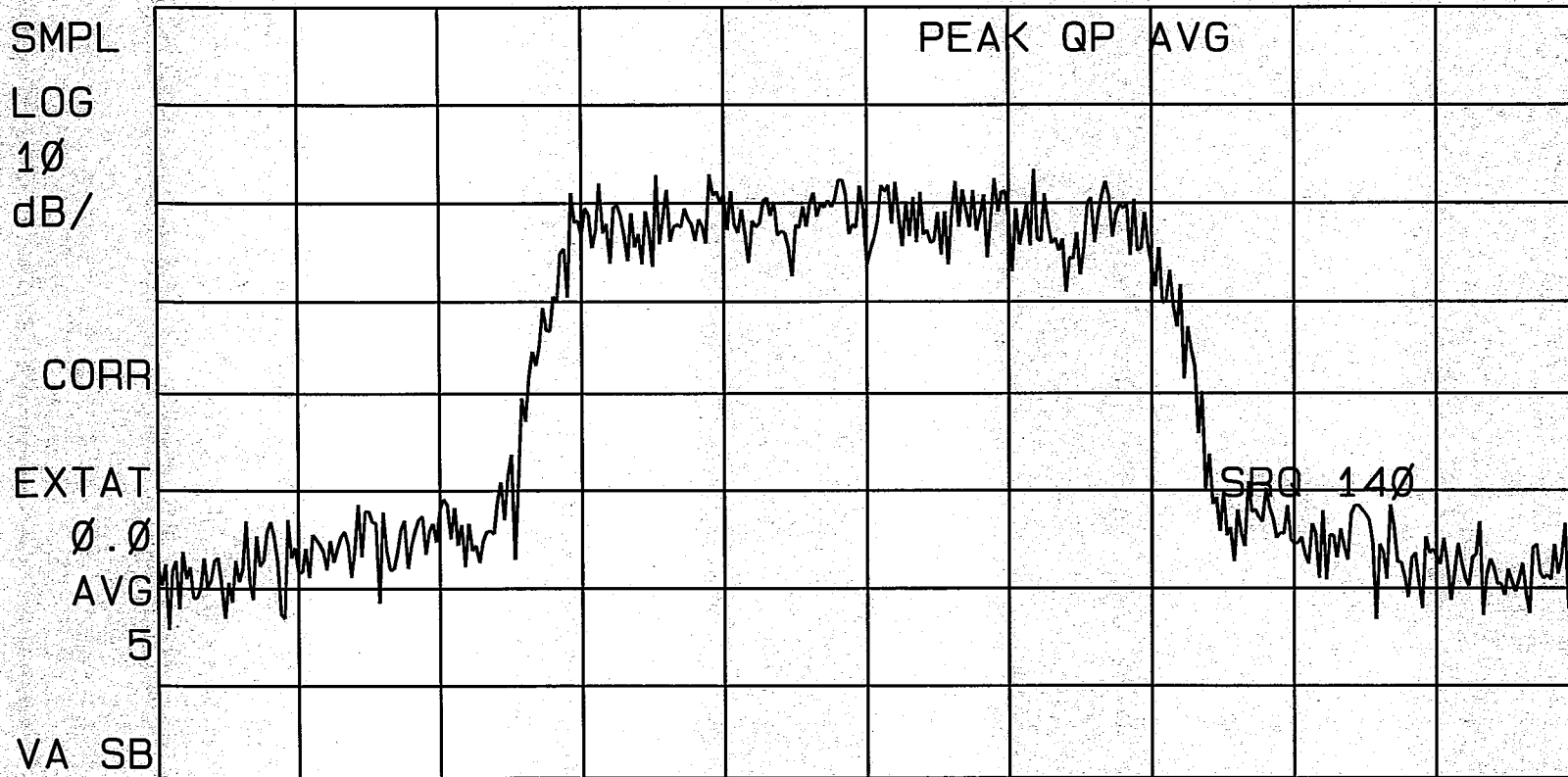
Chan Ref Power
23.66 dBm/
1.400 MHz

More
1 of 3

CH 384 CELLULAR
RC3 R-FEB +R-SCH

14:32:57 JUL 20, 2001
HP

REF 26.5 dBm AT 40 dB



MARKER
NORMAL

MARKER
△

MARKER
AMPTD

SELECT
1 2 3 4

SC FC MS CH 384
CENTER 836.520 MHz
#RES BW 30 KHZ

SPAN 3.000 MHz
SWP 20.0 msec

MARKER 1
ON OFF

OCCUPIED BW [99.00%]

PASS

More
1 of 3

1.283 MHz

Delta Frequency
-3.7 kHz

RC3 R-FCH+R_SCH Code Domain

