

**Exhibit 24**

Occupied Bandwidth and Spurious Emission Measured Data --  
for CDMA mode when operating in P\_REV 6 or above

KWC-2325 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-2325
3. Set the following parameters of the *Access Parameters Message* as specified below:

<b>Parameter</b>	<b>Value (Decimal)</b>
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/RC2....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.
  - Test Mode 3 implies using a Rate Set 1 loopback service option.
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-2325 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-2325 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.
  - Test Mode 3 implies using a Rate Set 1 loopback service option.
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-2325 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-2325 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-2325 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-2325 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-2325 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-2325 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 <sup>^</sup>	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
<del>&gt; 1.98 MHz (Band Class 3 only)</del>	<del>-54 dBc/30 kHz</del>
<del>2.25 MHz to 4.00 MHz (Band Class 7 only)</del>	<del>-35 dBm/6.25 kHz</del>
> 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
<del>&gt; 4.00 MHz (ITU Category B only) (required for Band Class 5 and 9)</del>	<del>-36 dBm / 1 kHz; 9 kHz &lt; f &lt; 150 kHz -36 dBm / 10 kHz; 150 kHz &lt; f &lt; 30 MHz -36 dBm/100 kHz; 30 MHz &lt; f &lt; 1 GHz -36 dBm / 1 MHz; 1 GHz &lt; f &lt; 12.75 GHz</del>

Note: All frequencies in the measurement bandwidth shall satisfy the restrictions on  $|\Delta f|$  where  $\Delta f$  = 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
<del>2.25 MHz to 4.00 MHz (Band Class 6 only)</del>	<del><math>-[13 + 1 \times (\Delta f - 2.25 \text{ MHz})] \text{ dBm} / 1 \text{ MHz}</math></del>
<del>&gt; 2.25 MHz (Band Class 6 in Japan only)</del>	<del>-13 dBm / 1 MHz</del>
> 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
<del>&gt; 4.00 MHz (ITU Category B) (required for Band Class 6 and 8)</del>	<del>-36 dBm / 1 kHz; 9 kHz &lt; f &lt; 150 kHz -36 dBm / 10 kHz; 150 kHz &lt; f &lt; 30 MHz -36 dBm/100 kHz; 30 MHz &lt; f &lt; 1 GHz -36 dBm / 1 MHz; 1 GHz &lt; f &lt; 12.75 GHz</del>

Note: All frequencies in the measurement bandwidth shall satisfy the restrictions on  $|\Delta f|$  where  $\Delta f$  = 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-2325 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

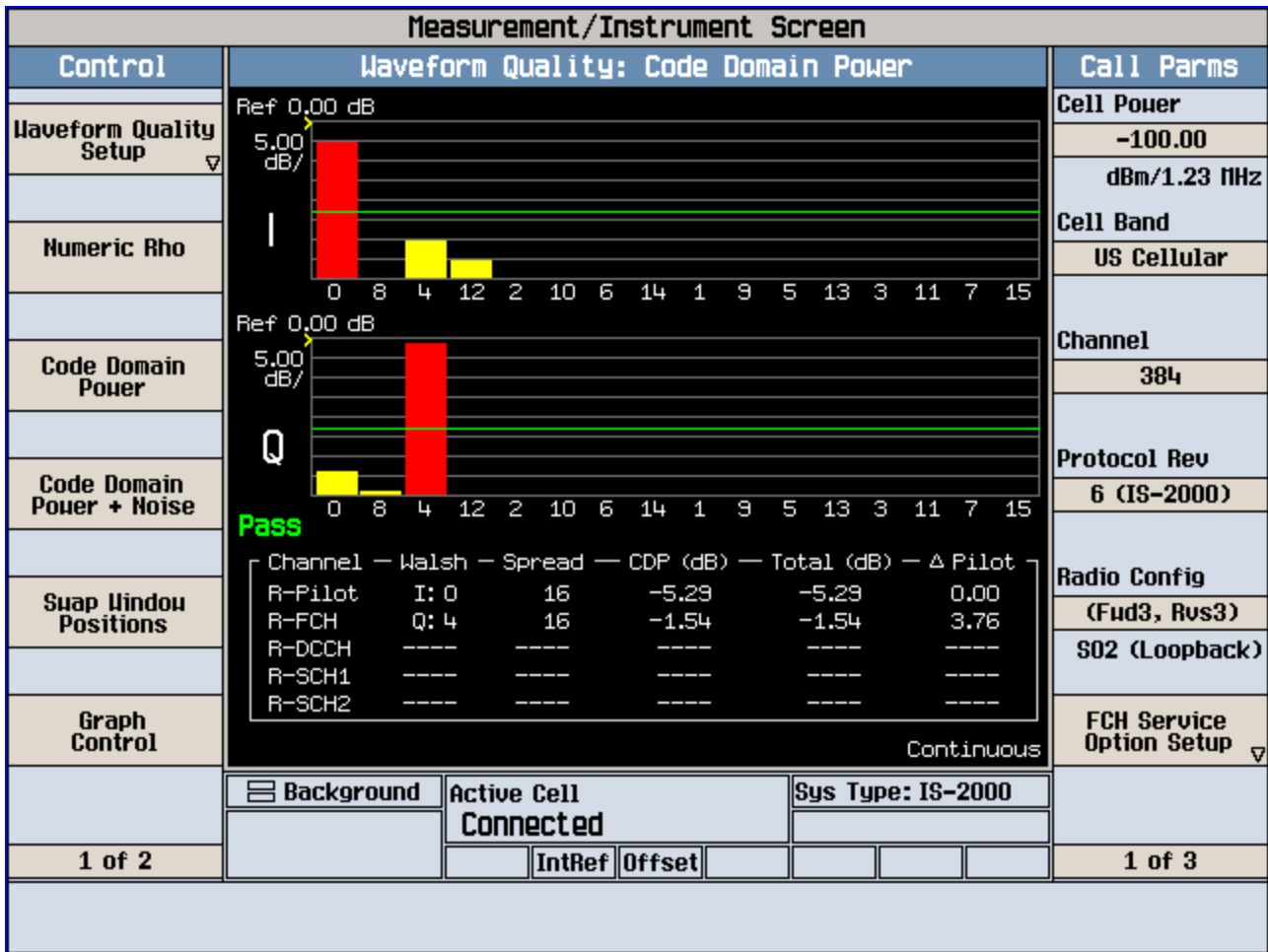
The test results show KWC-2325 is in compliance with IS-98D and FCC requirements. Test data as follows.

## **Occupied Bandwidth & Spurious Emission**

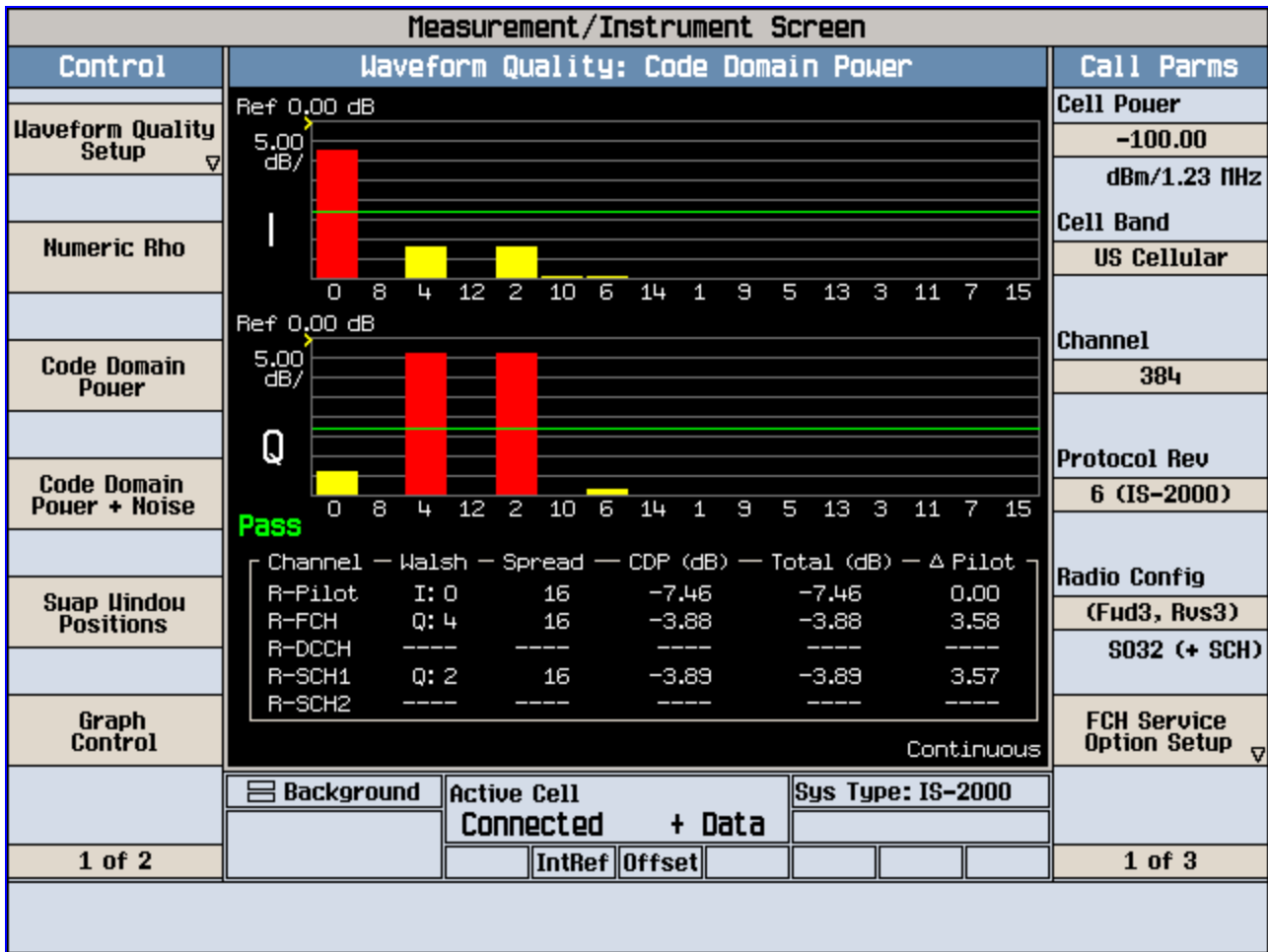
### **Cellular Band**

#### **Ch384**

The graphs of RC3 R-FCH Code Domain and RC3 R-FCH+R-SCH Code Domain are in the proceeding pages.



Click image to update.



Click image to update.

The plots of occupied bandwidth and spurious emission for CDMA cellular, ch384 are attached in the proceeding pages.



KWCONF-2345

(OBW  
CDMA2000)

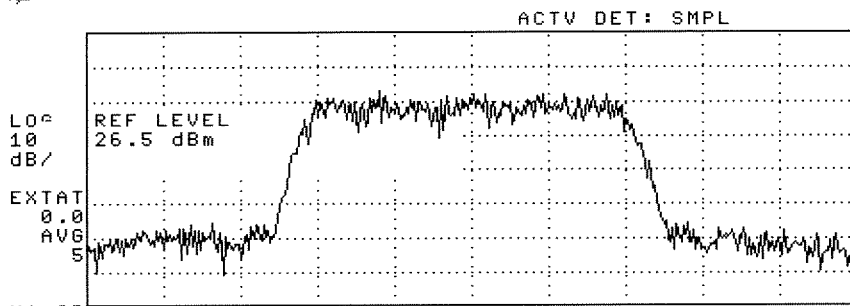
R-FCH + R-PICH  
+ R-SCH

CELLULAR  
CH384

15:53:55 APR 19, 2002

CDMA

COPY DEV  
PRNT PLT



Plot Config

Print Config

Time Date

Change Prefix

More 1 of 3

RC3

R-FCH + R-PICH

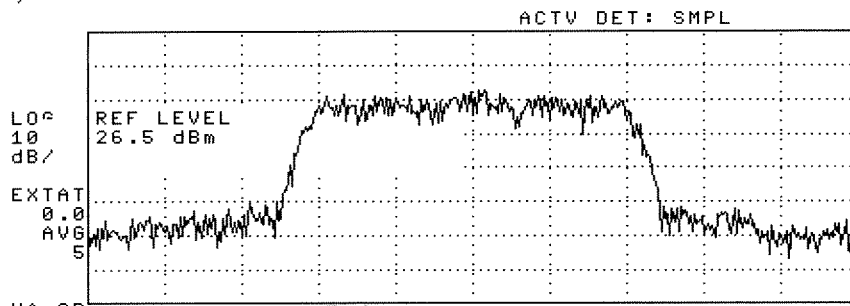
VA SB MS CH 384  
SC FCR 836.52 SPAN 3.000 MHz  
#IF BW 30 kHz #AVG BW 300 kHz

OCCUPIED BW [99.00%]		PASS
1.275	MHZ	Delta Frequency -15.0 kHz

15:57:03 APR 19, 2002

CDMA

REF LVL



ATTEN AUTO MAN

SCALE LOG LIN

AUTORANG ON OFF

LIN CHCK ON OFF

More 1 of 3

RC3

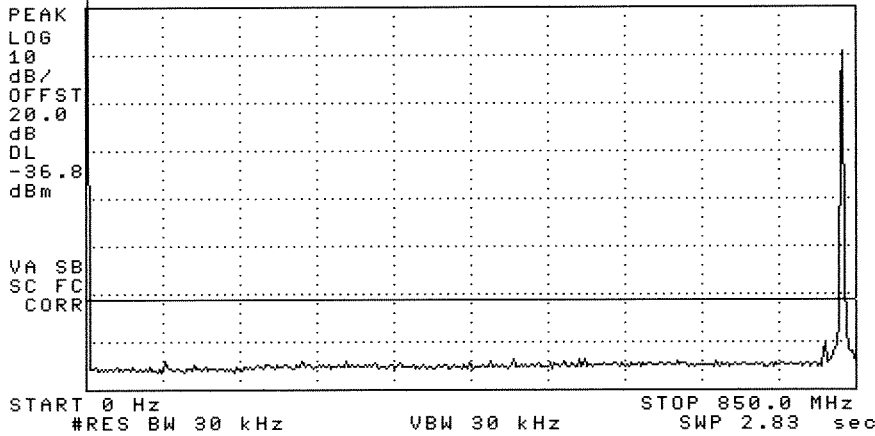
R-FCH + R-SCH  
+ R-PICH

VA SB MS CH 384  
SC FCR 836.52 SPAN 3.000 MHz  
#IF BW 30 kHz #AVG BW 300 kHz

OCCUPIED BW [99.00%]		PASS
1.290	MHZ	Delta Frequency -7.5 kHz

06:16:48 APR 22, 2002

REF 24.2 dBm #AT 20 dB



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

Trace  
A B C

More  
1 of 4

CH 394

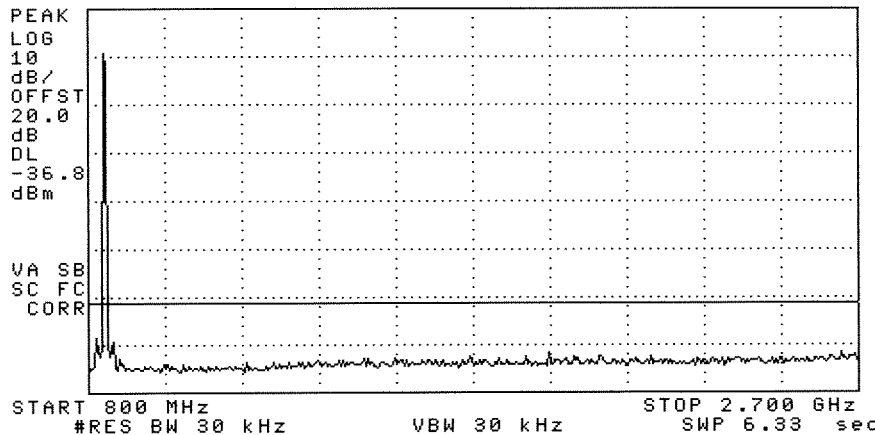
CELLULAR  
RC3

R-FCH FR-PICH

850 MHz TO 850 MHz

06:17:31 APR 22, 2002

REF 24.2 dBm #AT 20 dB



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

Trace  
A B C

More  
1 of 4

CH 384

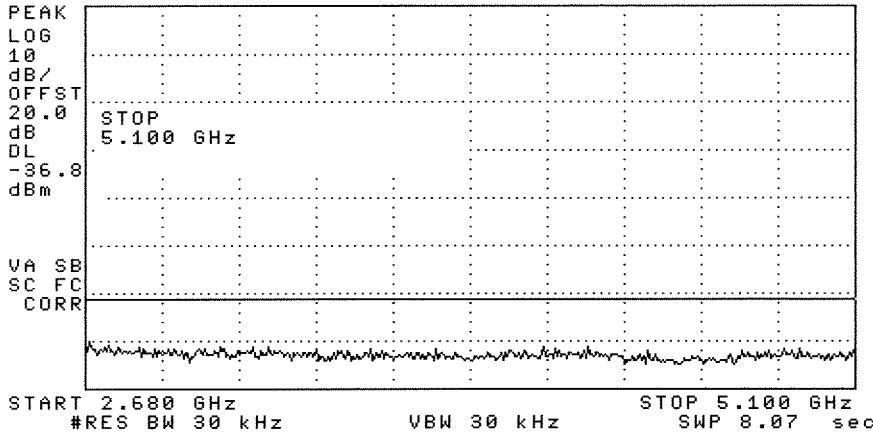
CELLULAR  
RC3

R-FCH + R-PICH

800 MHz  
TO  
2.700 GHz

06:18:04 APR 22, 2002

REF 24.2 dBm #AT 20 dB



CLEAR WRITE A

MAX HOLD A

VIEW A

BLANK A

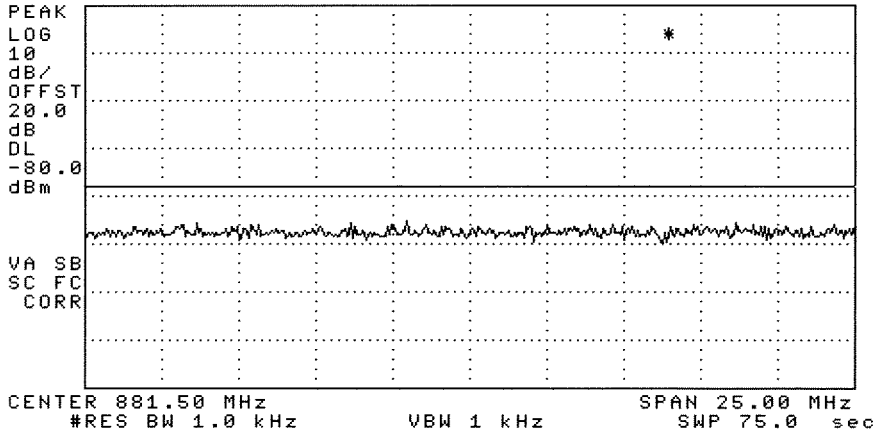
Trace A B C

More 1 of 4

CH 384  
 CELLULAR  
 RC3  
 R-FCA + R-PCCH  
 2.68 GHz  
 TO  
 5.10 GHz

06:23:11 APR 22, 2002

REF -42.0 dBm #AT 0 dB



CLEAR WRITE A

MAX HOLD A

VIEW A

BLANK A

Trace A B C

More 1 of 4

CH 384  
 CELLULAR  
 RC3  
 R-FCA + R-PCCH  
 RX BAND

07:06:21 APR 22, 2002

REF 24.2 dBm #AT 20 dB

PEAK  
LOG  
10  
dB/  
OFFST  
20.0  
dB  
DL  
-36.8  
dBm

VA SB  
SC FC  
CORR

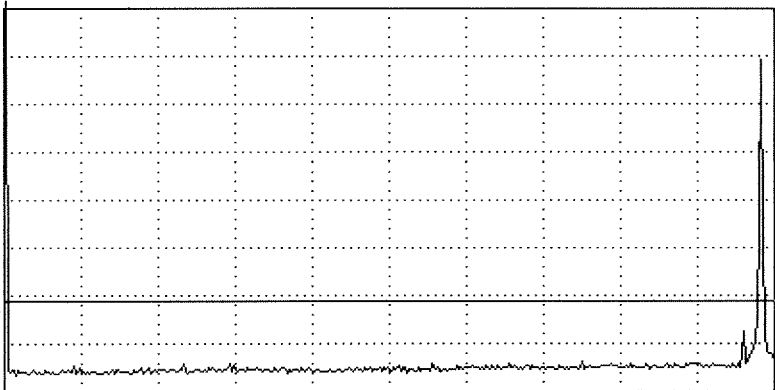
START 0 Hz

#RES BW 30 kHz

VBW 30 kHz

STOP 850.0 MHz

SWP 2.83 sec



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

Trace  
A B C

More  
1 of 4

CH 384

CELLULAR

RC3

R-FCH + R-SCA  $\phi$

+ R-PCH

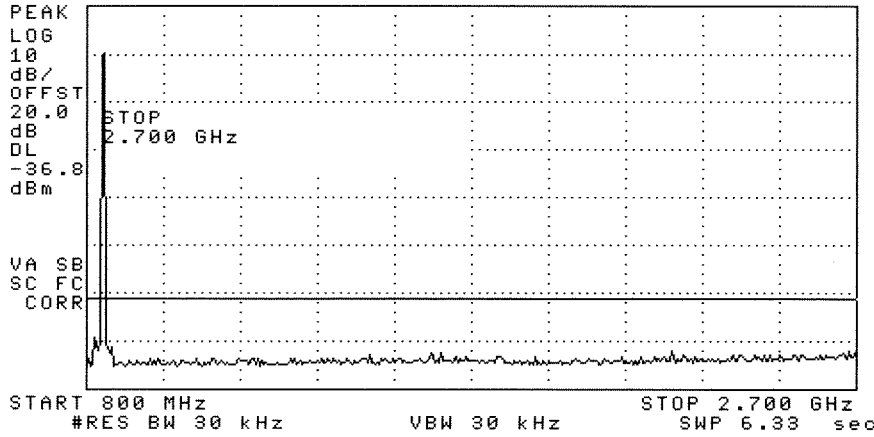
$\phi$  Hz

TO

850 MHz

07:08:07 APR 22, 2002

REF 24.2 dBm #AT 20 dB



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

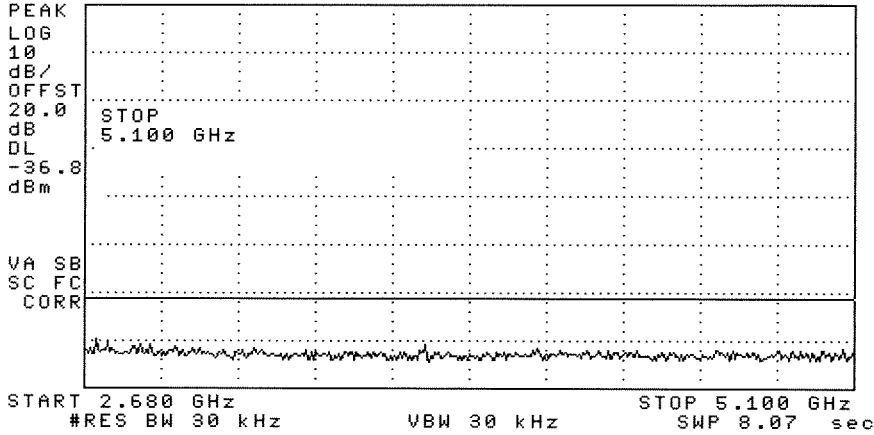
Trace  
A B C

More  
1 of 4

CH 384  
 CELLULAR  
 RC3  
 R-FCH + R-SCHP  
 + R-PICH  
 800 MHz  
 TO  
 2.70 GHz

07:09:24 APR 22, 2002

REF 24.2 dBm #AT 20 dB



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

Trace  
A B C

More  
1 of 4

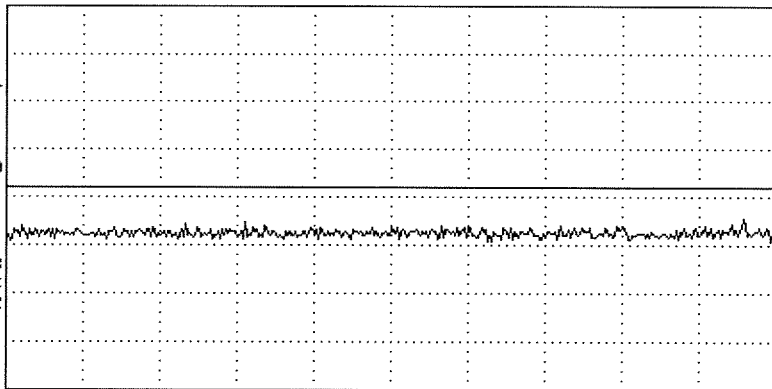
CH 384  
 CELLULAR  
 RC3  
 R-FCH + R-SCHP  
 + R-PICH  
 2.68 GHz  
 TO  
 5.10 GHz

07:21:43 APR 22, 2002

REF -42.0 dBm #AT 0 dB

PEAK  
LOG  
10  
dB/  
OFFST  
20.0  
dB  
DL  
-80.0  
dBm

VA SB  
SC FC  
CORR



CENTER 881.50 MHz  
#RES BW 1.0 kHz

VBW 1 kHz

SPAN 25.00 MHz  
SWP 75.0 sec

CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

Trace  
A B C

More  
1 of 4

CH 384  
CELLULAR  
RC3

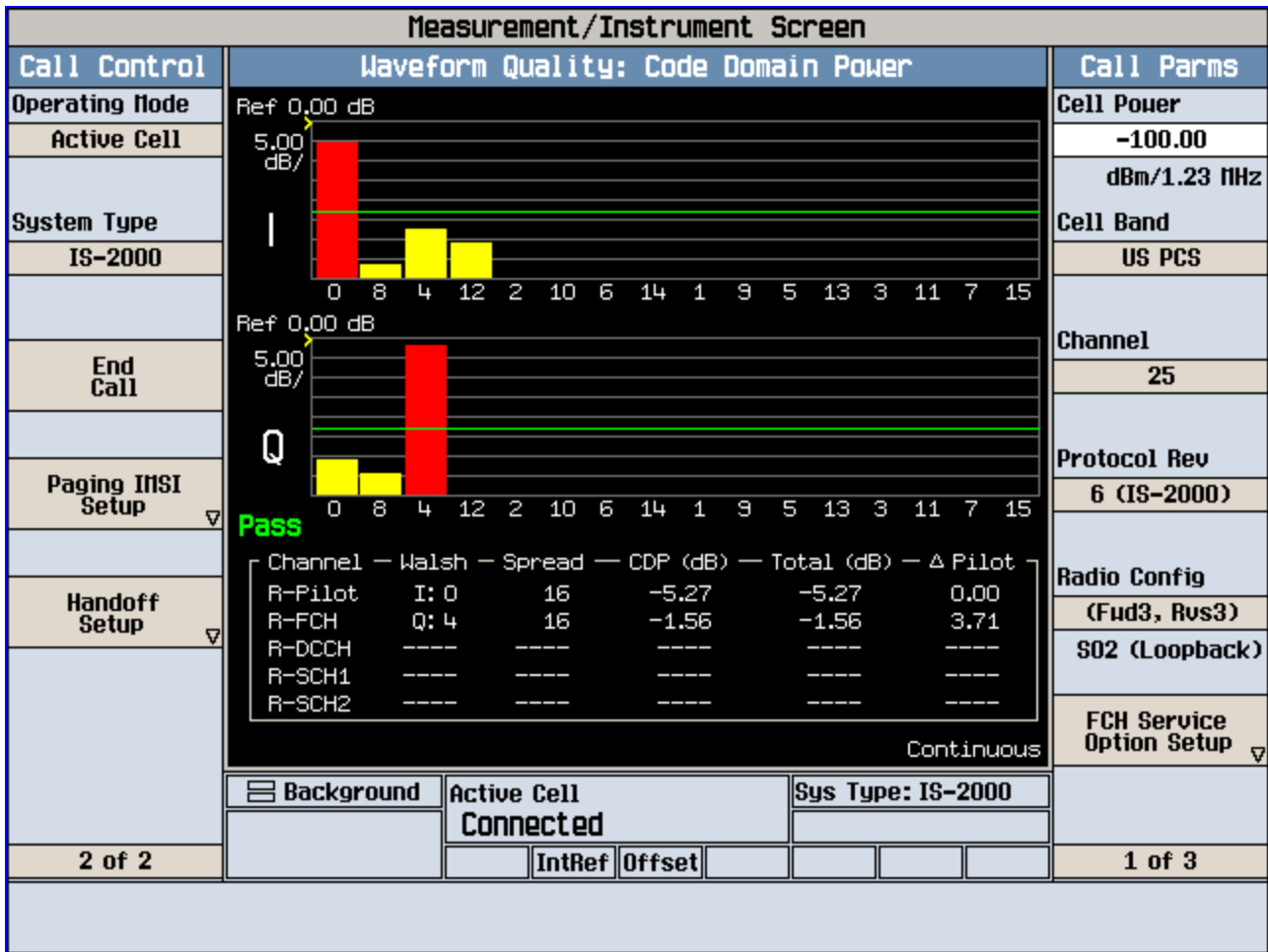
R-FCH + R-SCH  
+ R-PICH

RX BAND

## **PCS Band**

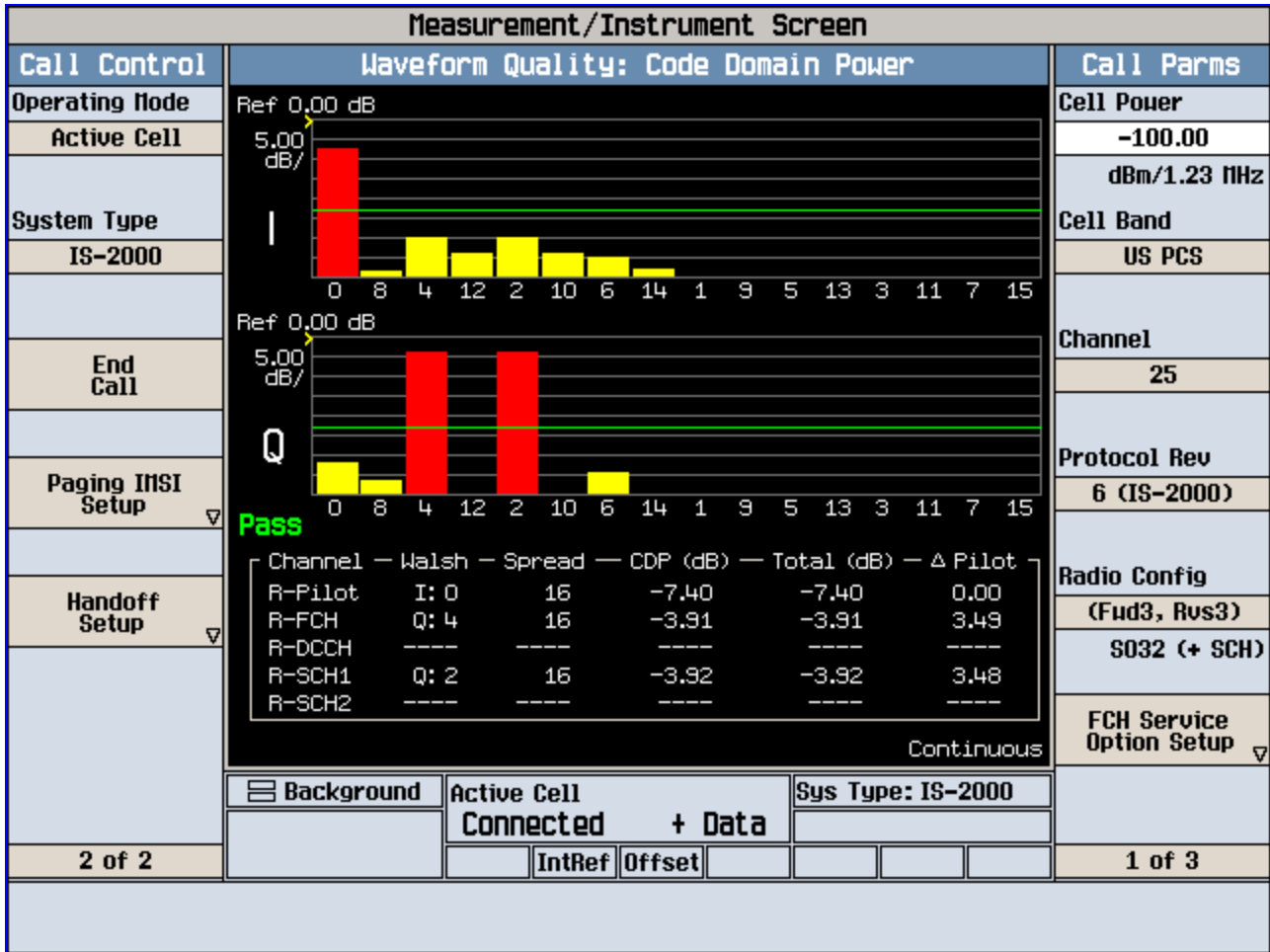
### **Ch25**

The graphs of RC3 R-FCH Code Domain and RC3 R-FCH+R-SCH Code Domain are in the proceeding pages.

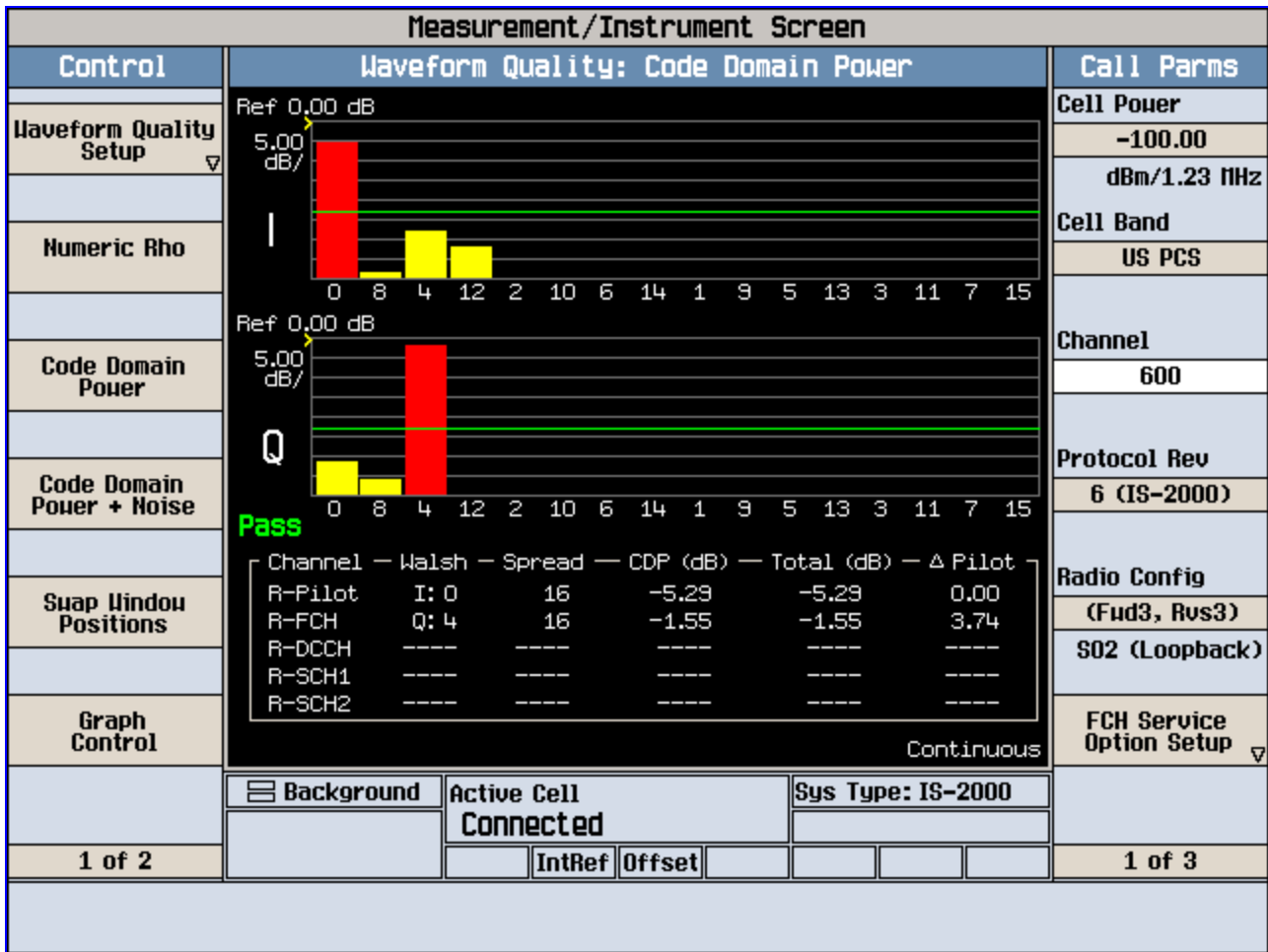


Click image to update.

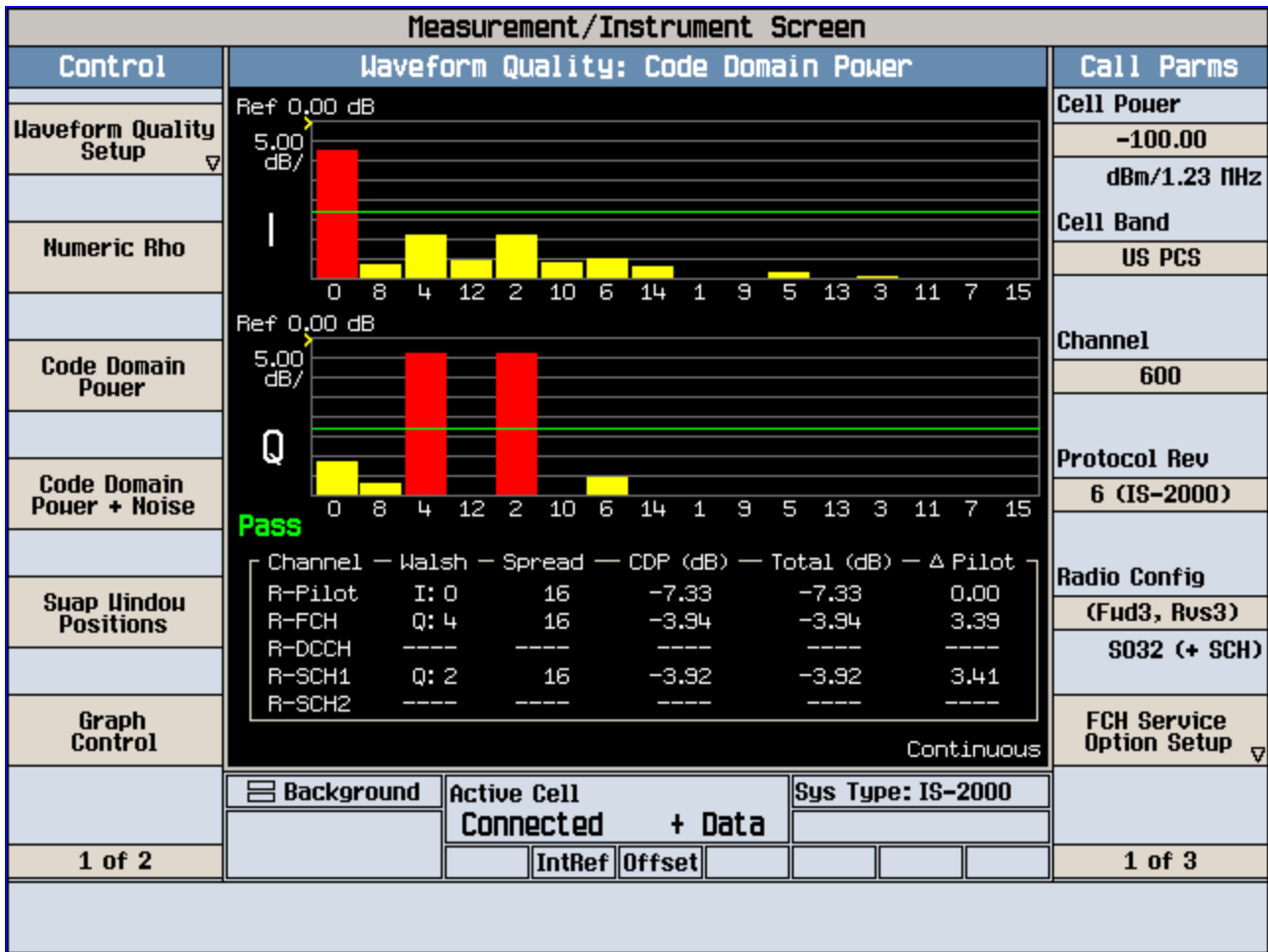




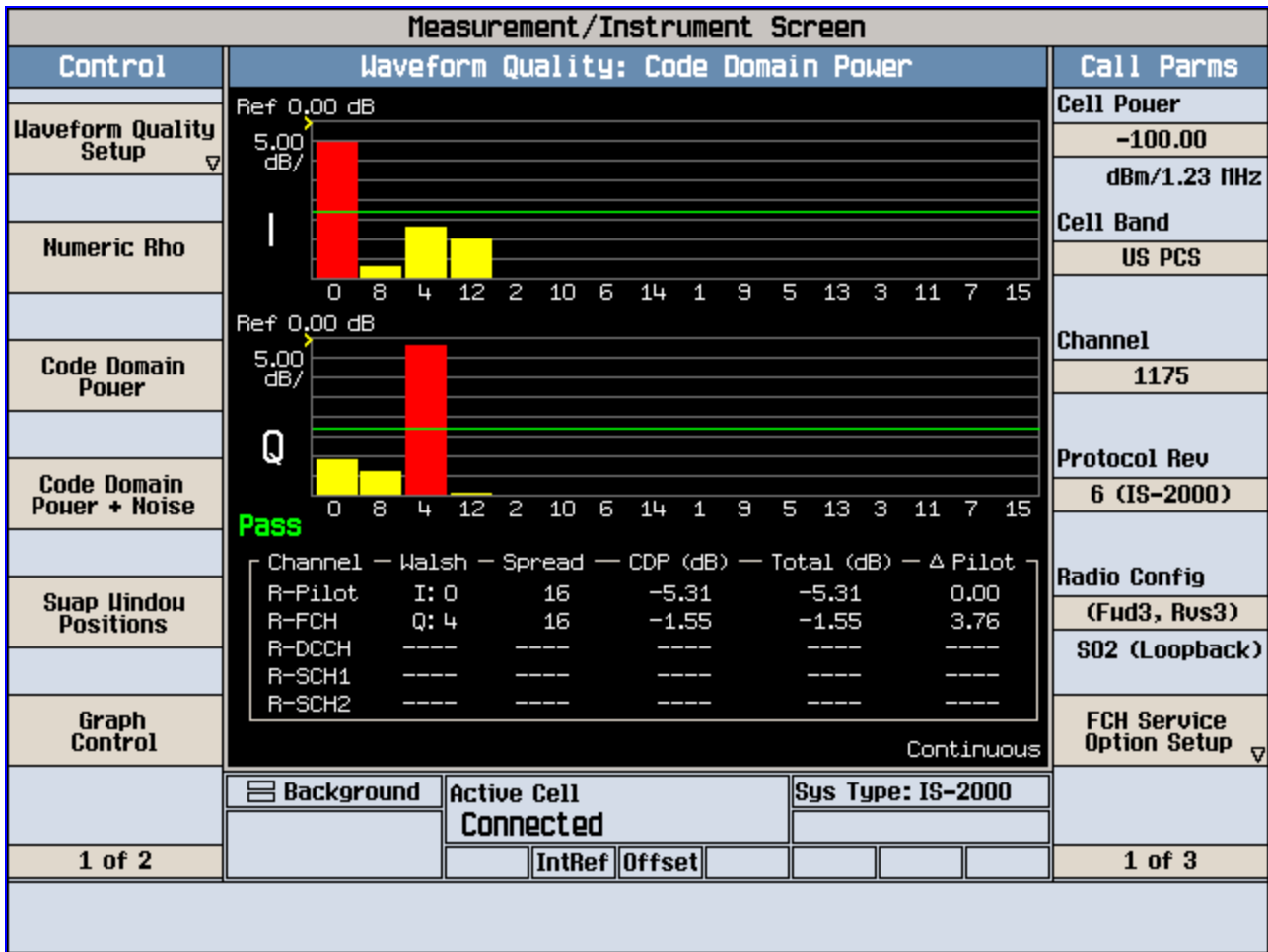
Click image to update.



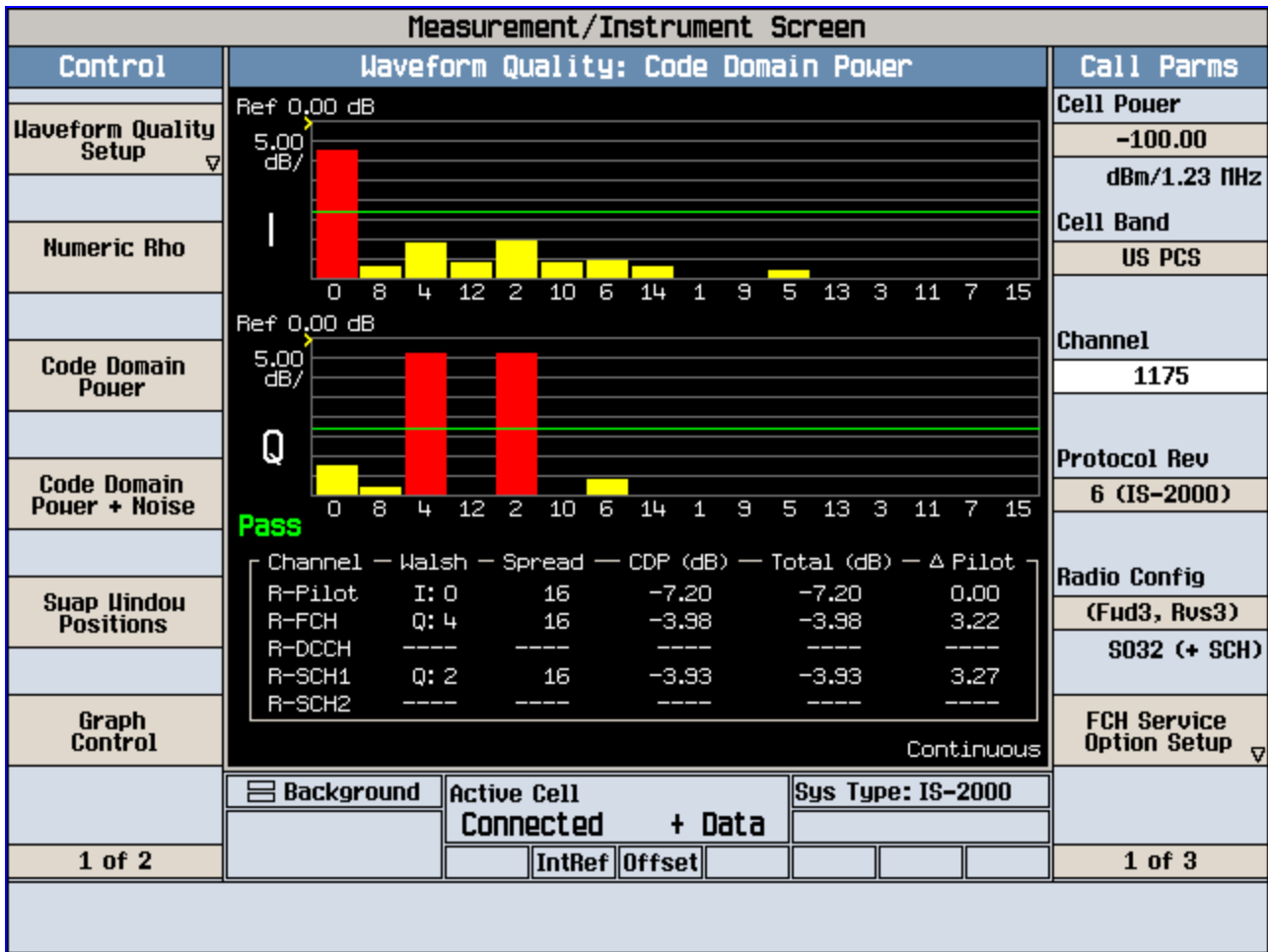
Click image to update.



Click image to update.



Click image to update.



Click image to update.

Applicant: KWC Corp.

FCC ID: OVFKWC-2325

RC3 R-FCH and RC3 R-FCH+R-SCH ACPR data

Measurement/Instrument Screen									
Control		TX Spurious Emissions						Call Params	
TX Spurious Setup ▾		<b>Pass</b>						Cell Power	
Numeric		-1.250 MHz Offset <b>-50.76</b> dBc			1.250 MHz Offset <b>-51.73</b> dBc			-102.00 dBm/1.23 MHz	
Graph		-1.980 MHz Offset <b>-66.18</b> dBc			1.980 MHz Offset <b>-66.87</b> dBc			Cell Band US PCS	
		Continuous						Channel 25	
		Digital Average Power						Protocol Rev 6 (IS-2000)	
Swap Window Positions		Digital Average Power <b>22.68</b> dBm						Radio Config (Fud3, Rvs3)	
		Expected Mobile Power: 22.78 dBm/1.23 MHz						S02 (Loopback)	
		Continuous						FCH Service Option Setup ▾	
		Active Cell Connected				Sys Type: IS-2000			
1 of 2		IntRef		Offset				1 of 3	

Click image to update.

Measurement/Instrument Screen									
Control		TX Spurious Emissions						Call Params	
TX Spurious Setup ▾		<b>Pass</b>						Cell Power	
Numeric		-1.250 MHz Offset <b>-48.40</b> dBc			1.250 MHz Offset <b>-49.65</b> dBc			-100.00 dBm/1.23 MHz	
Graph		-1.980 MHz Offset <b>-62.86</b> dBc			1.980 MHz Offset <b>-62.83</b> dBc			Cell Band US PCS	
		Continuous						Channel 25	
		Digital Average Power						Protocol Rev 6 (IS-2000)	
Swap Window Positions		Digital Average Power <b>22.31</b> dBm						Radio Config (Fud3, Rvs3)	
		Expected Mobile Power: 23.00 dBm/1.23 MHz						S032 (+ SCH)	
		1 / 1						FCH Service Option Setup ▾	
		Background		Active Cell Connected + Data			Sys Type: IS-2000		
1 of 2				IntRef			Offset		
								1 of 3	

Click image to update.



Measurement/Instrument Screen									
Control		TX Spurious Emissions						Call Params	
TX Spurious Setup ▾		<b>Pass</b>						Cell Power	
Numeric		-1.250 MHz Offset <b>-51.71</b> dBc			1.250 MHz Offset <b>-52.33</b> dBc			-102.00 dBm/1.23 MHz	
Graph		-1.980 MHz Offset <b>-66.58</b> dBc			1.980 MHz Offset <b>-67.10</b> dBc			Cell Band US PCS	
		Continuous						Channel 600	
		Digital Average Power						Protocol Rev 6 (IS-2000)	
Swap Window Positions		Digital Average Power <b>22.63</b> dBm						Radio Config (Fud3, Rvs3)	
		Expected Mobile Power: 22.78 dBm/1.23 MHz						S02 (Loopback)	
		Continuous						FCH Service Option Setup ▾	
		Active Cell Connected				Sys Type: IS-2000			
1 of 2		IntRef		Offset				1 of 3	

Click image to update.

Measurement/Instrument Screen									
Control		TX Spurious Emissions					Call Params		
TX Spurious Setup ▾		<b>Pass</b>					Cell Power		
Numeric		-1.250 MHz Offset		1.250 MHz Offset			-100.00		
Graph		<b>-49.16</b> dBc		<b>-49.16</b> dBc			dBm/1.23 MHz		
Swap Window Positions		-1.980 MHz Offset		1.980 MHz Offset			Cell Band		
1 of 2		<b>-63.27</b> dBc		<b>-62.30</b> dBc			US PCS		
		Continuous					Channel		
		Digital Average Power					600		
		Digital Average Power					Protocol Rev		
		<b>21.96</b> dBm					6 (IS-2000)		
		Expected Mobile Power: 23.00 dBm/1.23 MHz					Radio Config		
		1 / 1					Continuous		
		Background		Active Cell			Sys Type: IS-2000		
				Connected + Data					
				IntRef			Offset		
							FCH Service Option Setup ▾		
							S032 (+ SCH)		
							1 of 3		

Click image to update.

Measurement/Instrument Screen									
Control		TX Spurious Emissions						Call Params	
TX Spurious Setup ▾		<b>Pass</b>						Cell Power	
Numeric		-1.250 MHz Offset <b>-50.46</b> dBc			1.250 MHz Offset <b>-52.59</b> dBc			-102.00 dBm/1.23 MHz	
Graph		-1.980 MHz Offset <b>-67.13</b> dBc			1.980 MHz Offset <b>-67.35</b> dBc			Cell Band US PCS	
		Continuous						Channel 1175	
		Digital Average Power						Protocol Rev 6 (IS-2000)	
Swap Window Positions		Digital Average Power <b>22.68</b> dBm						Radio Config (Fud3, Rvs3)	
		Expected Mobile Power: 22.78 dBm/1.23 MHz						S02 (Loopback)	
		Continuous						FCH Service Option Setup ▾	
		Active Cell Connected			Sys Type: IS-2000				
1 of 2		IntRef		Offset				1 of 3	

Click image to update.

Measurement/Instrument Screen									
Control		TX Spurious Emissions						Call Params	
TX Spurious Setup ▾		<b>Pass</b>						Cell Power	
Numeric		-1.250 MHz Offset <b>-51.27</b> dBc			1.250 MHz Offset <b>-45.25</b> dBc			-103.00 dBm/1.23 MHz	
Graph		-1.980 MHz Offset <b>-59.87</b> dBc			1.980 MHz Offset <b>-60.50</b> dBc			Cell Band US PCS	
		Continuous						Channel 1175	
		Digital Average Power						Protocol Rev 6 (IS-2000)	
Swap Window Positions		Digital Average Power <b>22.56</b> dBm						Radio Config (Fud3, Rvs3)	
		Expected Mobile Power: 23.00 dBm/1.23 MHz						S032 (+ SCH)	
		Continuous						FCH Service Option Setup ▾	
		Background		Active Cell Connected + Data			Sys Type: IS-2000		
1 of 2				IntRef	Offset				1 of 3

Click image to update.

RC3 R-FCH and RC3 R-FCH+R-SCH Occupied Bandwidth

KWCOVF-2325

[ORW cdma2000]

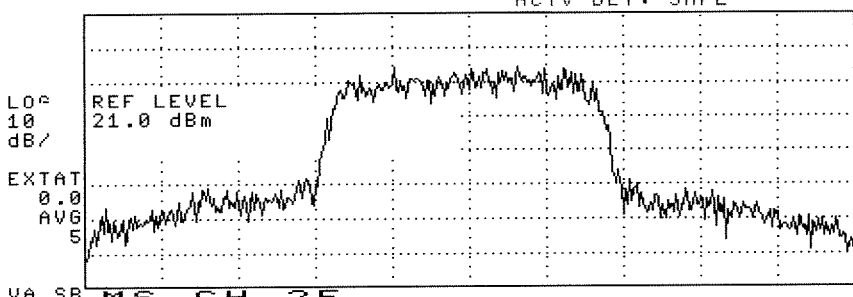
PCS

CH 25

PC3

R-FCH + R-PICH

16:16:00 APR 19, 2002



CDMA REF LVL

ATTEN AUTO MAN

SCALE LOG LIN

AUTORANG ON OFF

LIN CHCK ON OFF

VA SB MS CH 25

SC FCR 1.8512 SPAN 3.750 MHz

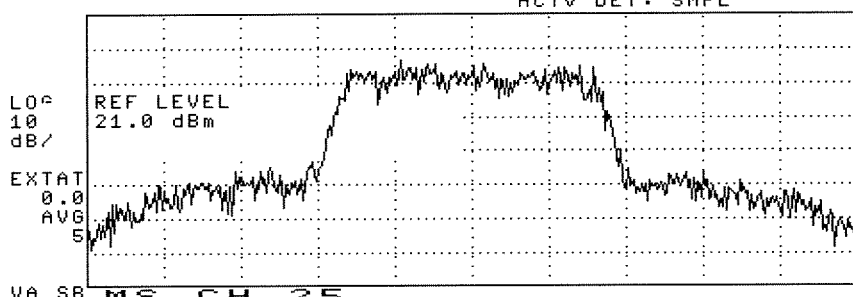
#IF BW 30 kHz #AVG BW 300 kHz

OCCUPIED BW [99.00%] **PASS**

1.266 MHz | Delta Frequency -14.0 kHz

More 1 of 3

16:17:39 APR 19, 2002



CDMA REF LVL

ATTEN AUTO MAN

SCALE LOG LIN

AUTORANG ON OFF

LIN CHCK ON OFF

VA SB MS CH 25

SC FCR 1.8512 SPAN 3.750 MHz

#IF BW 30 kHz #AVG BW 300 kHz

OCCUPIED BW [99.00%] **PASS**

1.284 MHz | Delta Frequency -4.7 kHz

More 1 of 3

PCS

CH 25

PC3

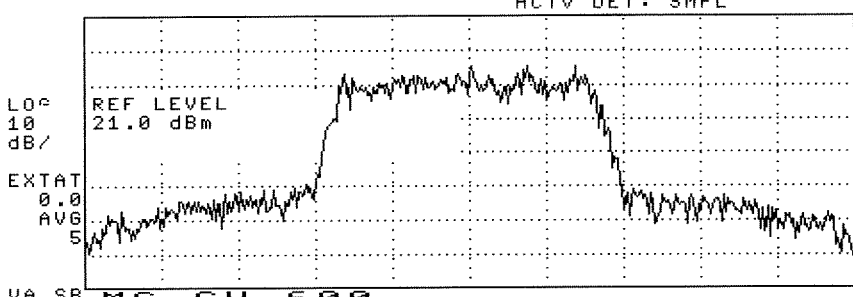
R-FCH + R-PICH + R-SCH

KWC-OVF-2345

(ORW cdma2000)

PCS CH  
600

16:20:01 APR 19, 2002



LO<sup>2</sup> 10 dB/ REF LEVEL 21.0 dBm  
 EXTAT 0.0  
 AVG 5  
 VA SB MS CH 600  
 SC FCR 1.8800 SPAN 3.750 MHz  
 #IF BW 30 kHz #AVG BW 300 kHz

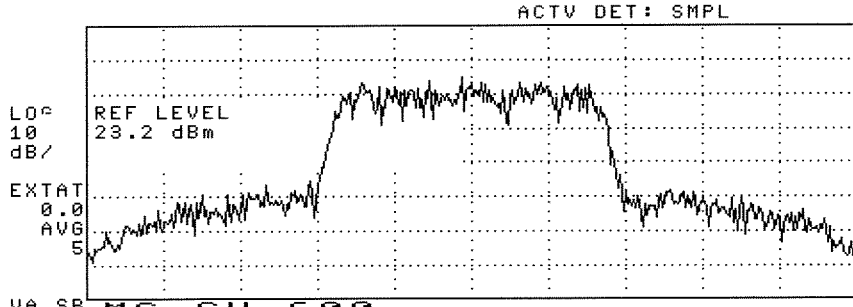
OCCUPIED BW [99.00%] **PASS**  
 1.256 MHz | Delta Frequency -9.4 kHz

CDMA  
 REF LVL  
 ATTN AUTO MAN  
 SCALE LOG LIN  
 AUTORANG ON OFF  
 LIN CHCK ON OFF

PC3  
 R-FCH + R-PCH

More 1 of 3

16:22:49 APR 19, 2002



LO<sup>2</sup> 10 dB/ REF LEVEL 23.2 dBm  
 EXTAT 0.0  
 AVG 5  
 VA SB MS CH 600  
 SC FCR 1.8800 SPAN 3.750 MHz  
 #IF BW 30 kHz #AVG BW 300 kHz

OCCUPIED BW [99.00%] **PASS**  
 1.303 MHz | Delta Frequency -14.0 kHz

CDMA  
 REF LVL  
 ATTN AUTO MAN  
 SCALE LOG LIN  
 AUTORANG ON OFF  
 LIN CHCK ON OFF

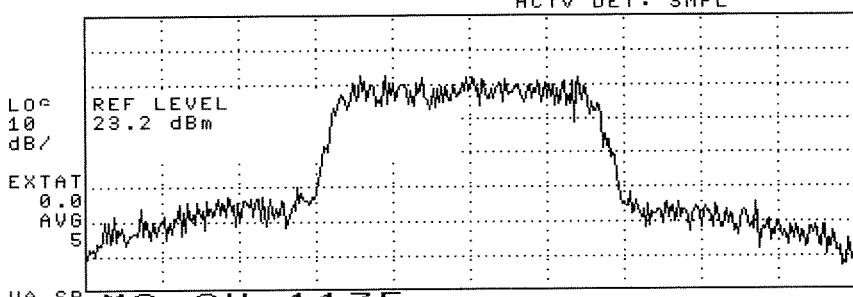
PCS CH 600  
 PC3  
 R-FCH + R-PCH  
 + RSCH

More 1 of 3

KWCONF-2315 [OBW cdma2000]

PCS CH 1175

16:25:06 APR 19, 2002



VA SB MS CH 1175

SC FCR 1.9087 SPAN 3.750 MHz

#IF BW 30 kHz #AVG BW 300 kHz

OCCUPIED BW [99.00%] **PASS**

1.284 MHz | Delta Frequency -14.0 kHz

CDMA

REF LVL

ATTEN AUTO MAN

SCALE LOG LIN

AUTORANG ON OFF

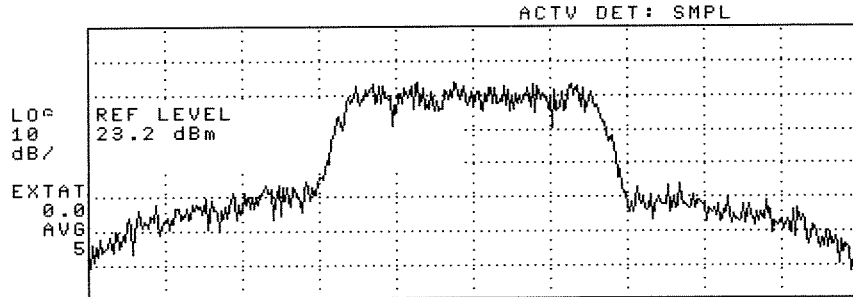
LIN CHCK ON OFF

PC3

E-FCH + E-PCH

More 1 of 3

16:26:15 APR 19, 2002



VA SB MS CH 1175

SC FCR 1.9087 SPAN 3.750 MHz

#IF BW 30 kHz #AVG BW 300 kHz

OCCUPIED BW [99.00%] **PASS**

1.284 MHz | Delta Frequency -14.0 kHz

CDMA

REF LVL

ATTEN AUTO MAN

SCALE LOG LIN

AUTORANG ON OFF

LIN CHCK ON OFF

PCS CH 1175

PC3

E-FCH + E-PCH

+E-SCH

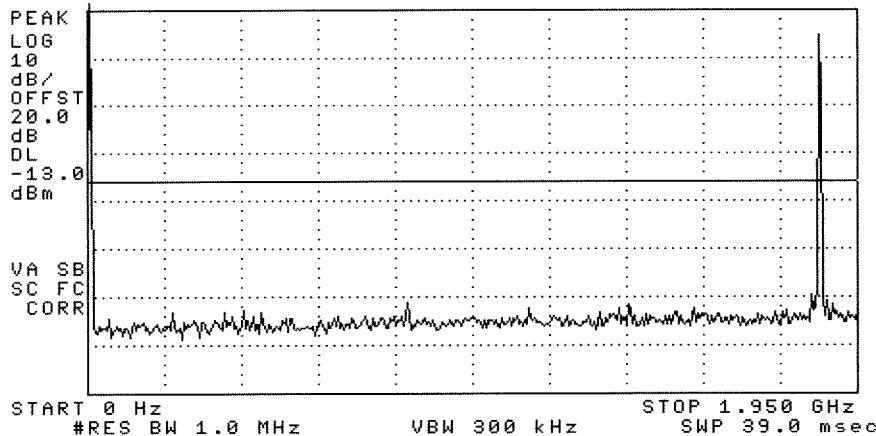
More 1 of 3



RC3 R-FCH and RC3 R-FCH+R-SCH Spurious Up to 10<sup>th</sup> Harmonics

07:53:47 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

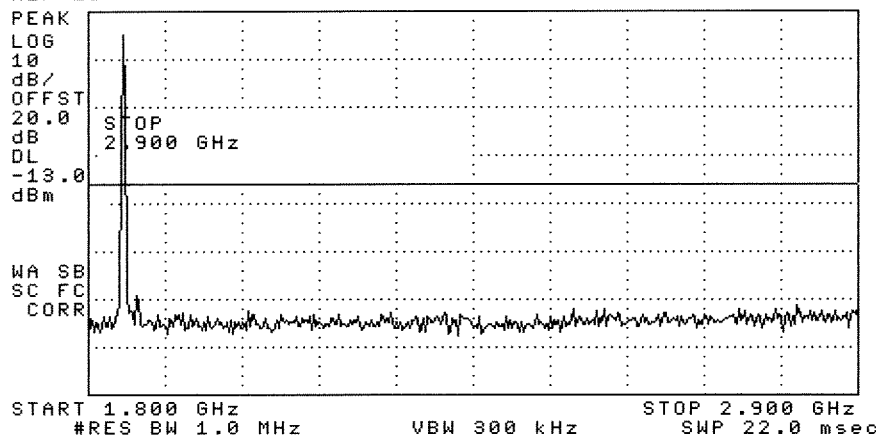
Trace  
A B C

More  
1 of 4

CH25  
PCS  
PC3  
R-FCH + R-PCCH  
  
0 Hz  
TO  
1.95 GHz

07:54:52 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

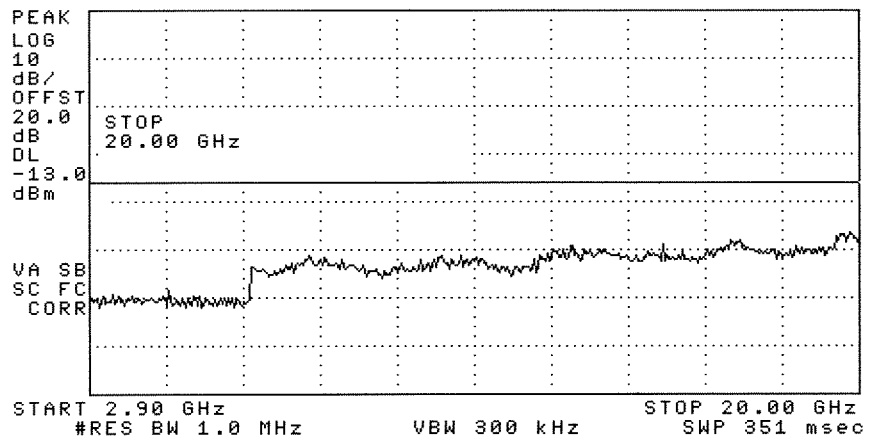
Trace  
A B C

More  
1 of 4

CH25  
PCS  
PC3  
R-FCH + R-PCCH  
  
1.80 GHz  
TO  
2.90 GHz

07:59:25 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CLEAR  
WRITE A

MAX  
HOLD A

VIEW A

BLANK A

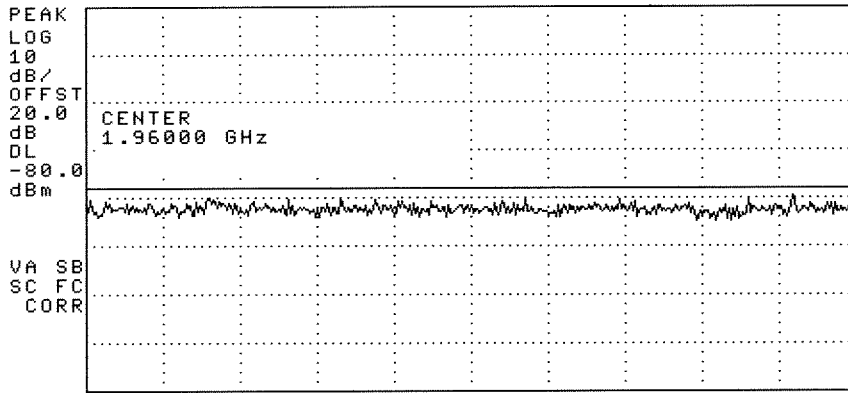
Trace  
A B C

More  
1 of 4

CH25  
PCS  
PC3  
R-FCH + R-PCCH  
  
2.90 GHz  
TO  
20.0 GHz

08:04:52 APR 22, 2002

REF -42.0 dBm #AT 0 dB



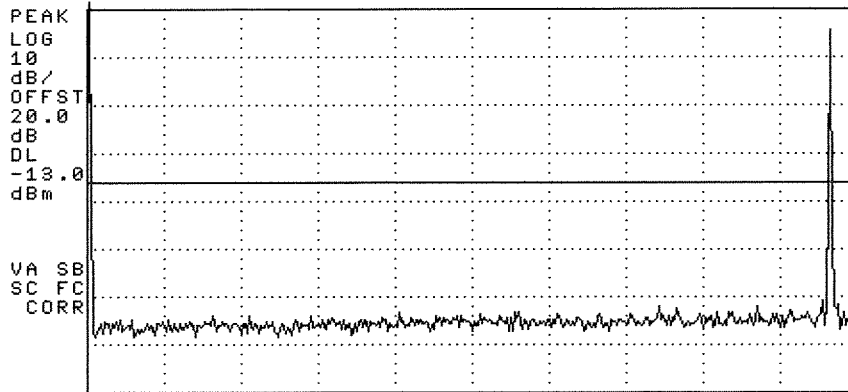
CENTER 1.96000 GHz #RES BW 3.0 kHz VBW 3 kHz SWP 20.0 sec

CLEAR WRITE A  
 MAX HOLD A  
 VIEW A  
 BLANK A  
 Trace A B C  
 More 1 of 4

CH 25  
 PCS  
 RC3  
 R-FCH + R-PICH  
 RX BAND

08:06:48 APR 22, 2002

REF 23.0 dBm #AT 20 dB



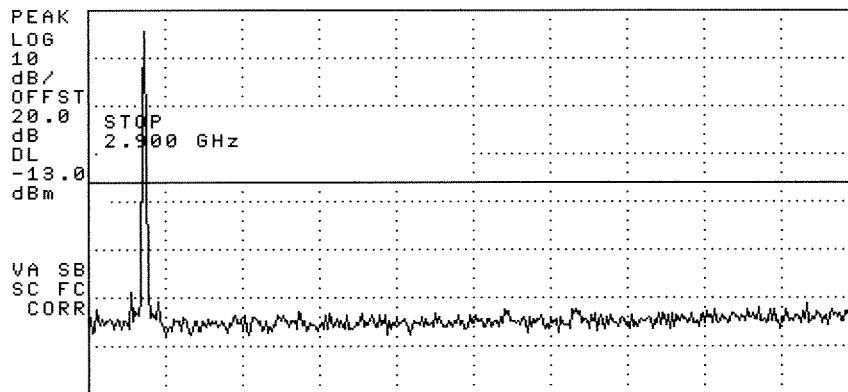
START 0 Hz #RES BW 1.0 MHz VBW 300 kHz SWP 39.0 msec STOP 1.950 GHz

CLEAR WRITE A  
 MAX HOLD A  
 VIEW A  
 BLANK A  
 Trace A B C  
 More 1 of 4

CH 600  
 PCS  
 RC3  
 R-FCH + R-PICH  
 0 Hz TO 1.95 GHz

08:07:21 APR 22, 2002

REF 23.0 dBm #AT 20 dB



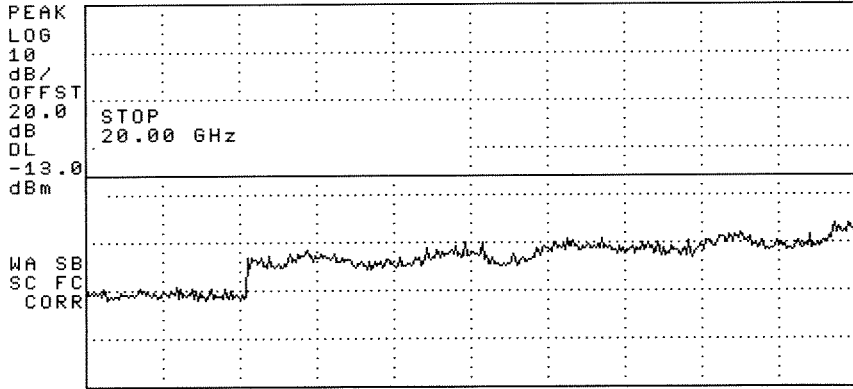
START 1.800 GHz #RES BW 1.0 MHz VBW 300 kHz SWP 22.0 msec STOP 2.900 GHz

CLEAR WRITE A  
 MAX HOLD A  
 VIEW A  
 BLANK A  
 Trace A B C  
 More 1 of 4

CH 600  
 PCS  
 RC3  
 R-FCH + R-PICH  
 1.8 GHz TO 2.9 GHz

08:07:56 APR 22, 2002

REF 23.0 dBm #AT 20 dB



START 2.90 GHz #RES BW 1.0 MHz VBW 300 kHz STOP 20.00 GHz SWP 351 msec

CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

SWEEP LOG LIN

More 1 of 2

CH 600

PCS

RC3

R-FCH + R-PICH

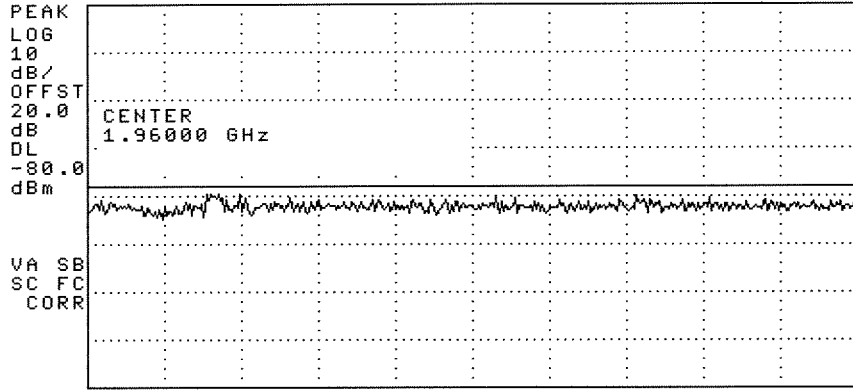
2.90 GHz

TO

20.0 GHz

08:10:20 APR 22, 2002

REF -42.0 dBm #AT 0 dB



CENTER 1.95000 GHz #RES BW 3.0 kHz VBW 3 kHz SPAN 60.00 MHz SWP 20.0 sec

CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

SWEEP LOG LIN

More 1 of 2

CH 600

PCS

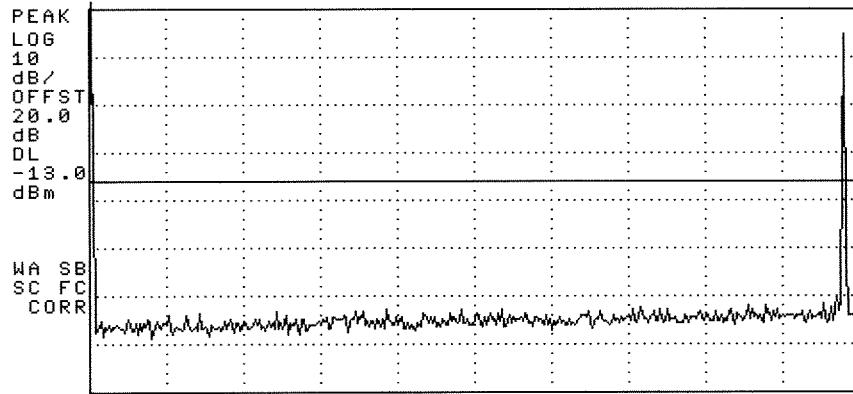
RC3

R-FCH + R-PICH

RX BAND

08:12:03 APR 22, 2002

REF 23.0 dBm #AT 20 dB



START 0 Hz #RES BW 1.0 MHz VBW 300 kHz STOP 1.950 GHz SWP 39.0 msec

MARKER NORMAL

MARKER Δ

MARKER AMPTD

SELECT 1 2 3 4

MARKER 1 ON OFF

More 1 of 3

CH 1175

PCS

RC3

R-FCH + R-PICH

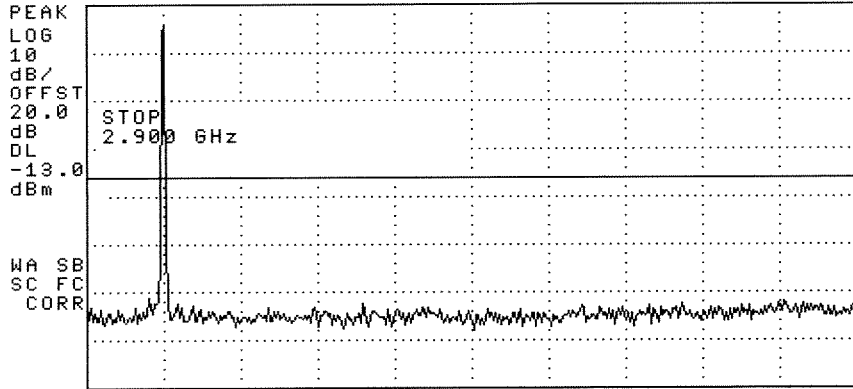
0 Hz

TO

1.95 GHz

08:29:57 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

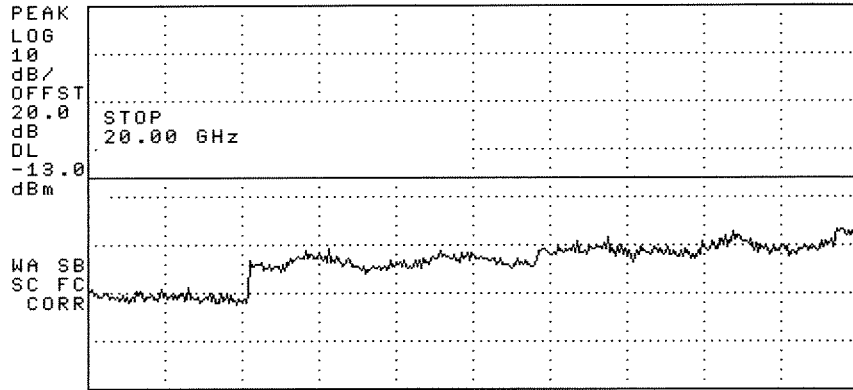
SWEEP LOG LIN

More 1 of 2

CH 1175  
PCS  
PC3  
R-FCH FR-ACH  
1.90 GHz  
TO  
2.90 GHz

08:31:02 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

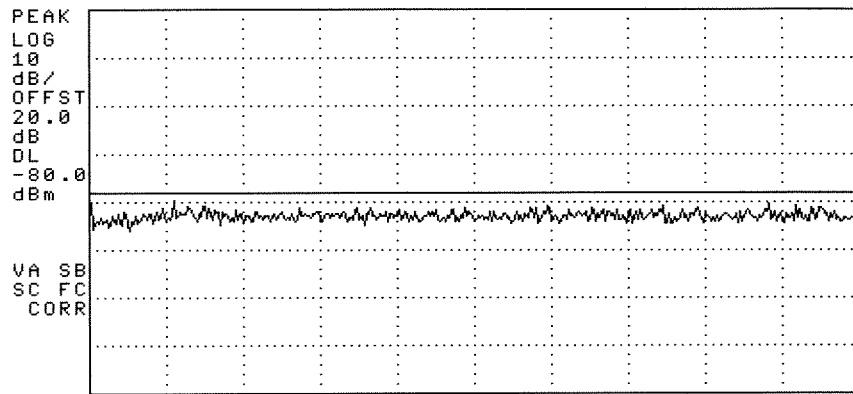
SWEEP LOG LIN

More 1 of 2

CH 1175  
PCS  
PC3  
R-FCH + R-ACH  
2.90 GHz  
TO  
20.0 GHz

08:32:48 APR 22, 2002

REF -42.0 dBm #AT 0 dB



CLEAR WRITE A

MAX HOLD A

VIEW A

BLANK A

Trace A B C

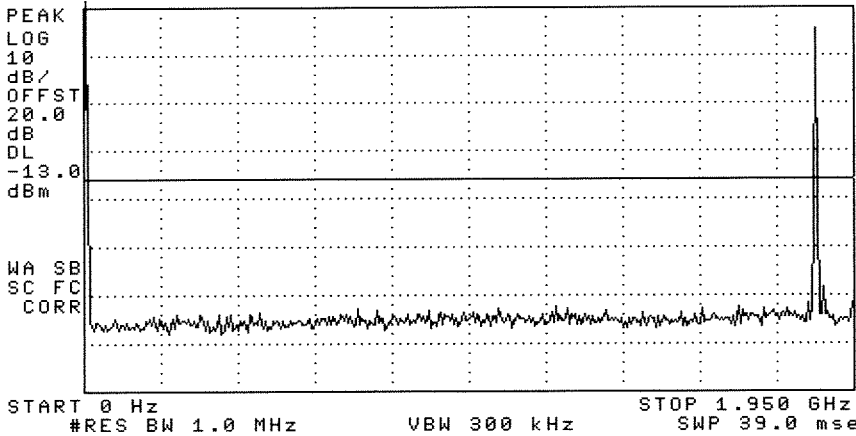
More 1 of 4

CH 1175  
PCS  
PC3  
R-FCH + R-ACH

EX BAND

08:52:18 APR 22, 2002

REF 23.0 dBm #AT 20 dB



MARKER NORMAL

MARKER Δ

MARKER AMPTD

SELECT 1 2 3 4

MARKER 1 ON OFF

More 1 of 3

CH 25

PCS

PC3

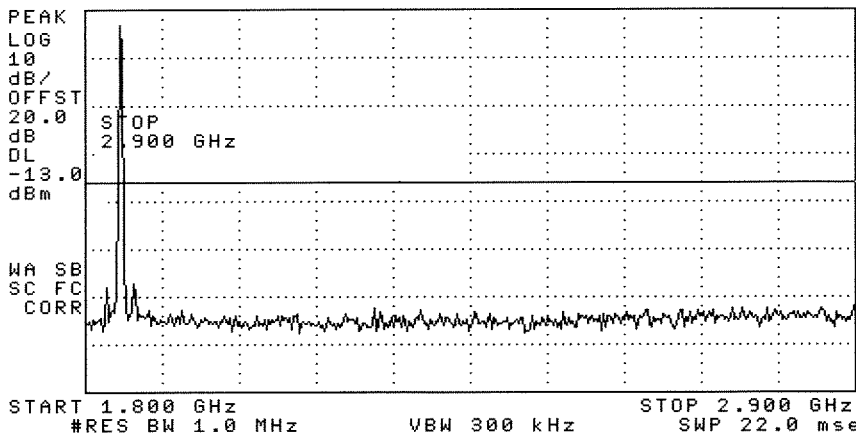
R-FCH + RSCCH  
+ R-PICH

1.95 GHz

1.95 GHz

08:52:48 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

SWEEP LOG LIN

More 1 of 2

CH 25

PCS

PC3

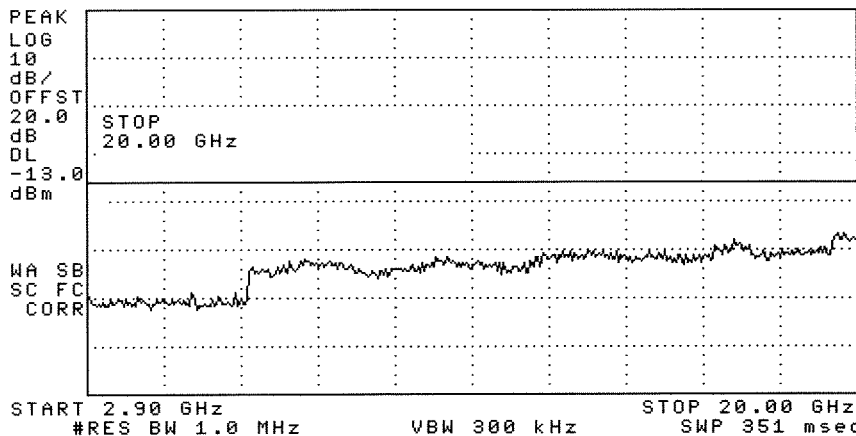
R-FCH + RSCCH  
+ R-PICH

2.90 GHz

2.90 GHz

08:53:11 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

SWEEP LOG LIN

More 1 of 2

CH 25

PCS

PC3

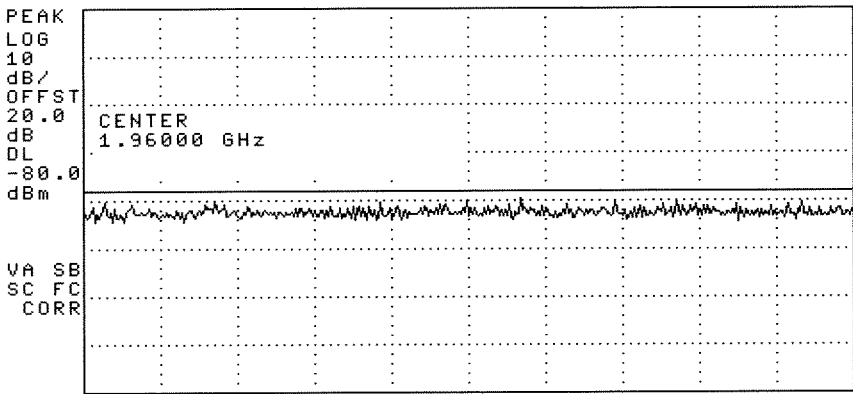
R-FCH + RSCCH  
+ R-PICH

2.90 GHz

20.0 GHz

08:59:53 APR 22, 2002

REF -42.0 dBm #AT 0 dB



CENTER 1.96000 GHz SPAN 60.00 MHz  
#RES BW 3.0 kHz VBW 3 kHz SWP 20.0 sec

CENTER  
FREQ

START  
FREQ

STOP  
FREQ

CF STEP  
AUTO MAN

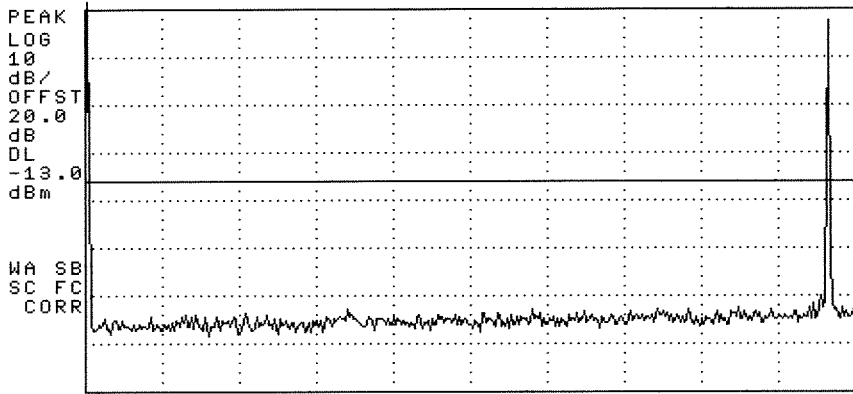
SWEEP  
LOG LIN

More  
1 of 2

CH 25  
PCS  
PC3  
R-FCH + RSCH  
+R-PICH  
  
2X BAND

09:01:19 APR 22, 2002

REF 23.0 dBm #AT 20 dB



START 0 Hz STOP 1.950 GHz  
#RES BW 1.0 MHz VBW 300 kHz SWP 39.0 msec

MARKER  
NORMAL

MARKER  
Δ

MARKER  
AMPTD

SELECT  
1 2 3 4

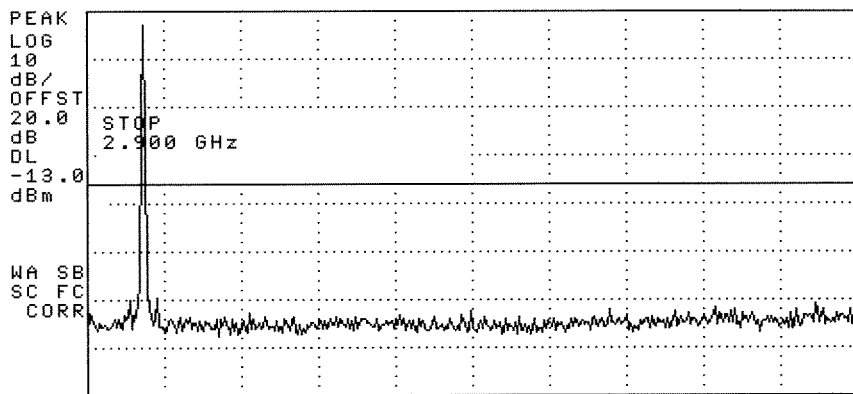
MARKER 1  
ON OFF

More  
1 of 3

CH 600  
PCS  
PC3  
R-FCH + RSCH  
+R-PICH  
  
CH 2  
TO  
1.956 GHz

09:01:44 APR 22, 2002

REF 23.0 dBm #AT 20 dB



START 1.800 GHz STOP 2.900 GHz  
#RES BW 1.0 MHz VBW 300 kHz SWP 22.0 msec

CENTER  
FREQ

START  
FREQ

STOP  
FREQ

CF STEP  
AUTO MAN

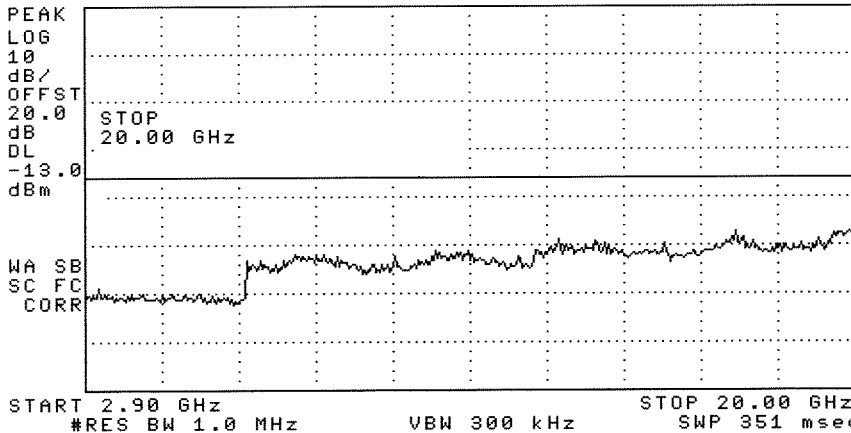
SWEEP  
LOG LIN

More  
1 of 2

CH 600  
PCS  
PC3  
R-FCH + RSCH  
+R-PICH  
  
1.8 GHz  
TO  
2.9 GHz

09:02:10 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

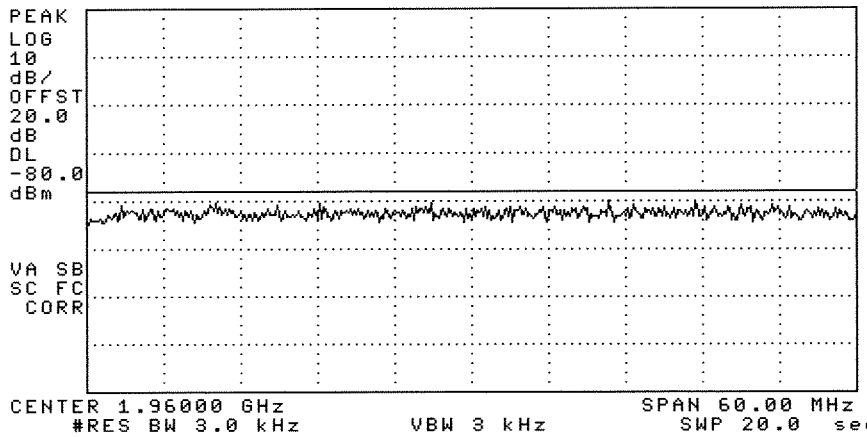
SWEEP LOG LIN

More 1 of 2

CH 600  
PCS  
PC 3  
R-FCH + R-SCH  
+ R-P.CH

09:04:34 APR 22, 2002

REF -42.0 dBm #AT 0 dB



CLEAR WRITE A

MAX HOLD A

VIEW A

BLANK A

Trace A B C

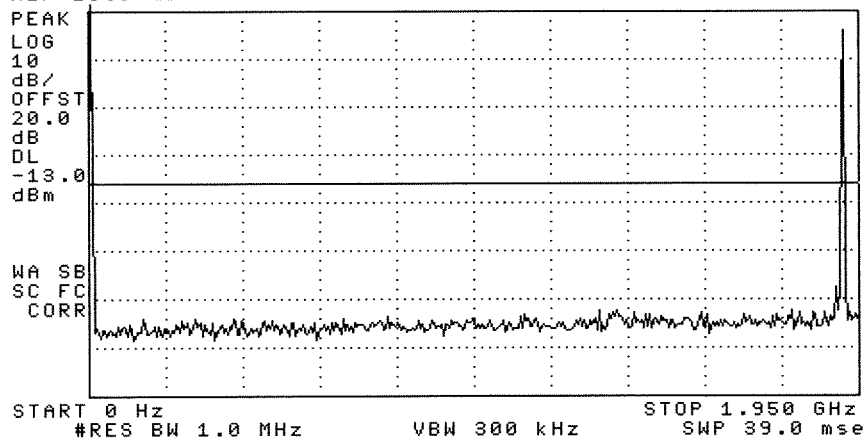
More 1 of 4

CH 600  
PCS  
PC 3  
R-FCH + R-SCH  
+ R-P.CH

RX BAND

09:05:58 APR 22, 2002

REF 23.0 dBm #AT 20 dB



MARKER NORMAL

MARKER Δ

MARKER AMPTD

SELECT 1 2 3 4

MARKER 1 ON OFF

More 1 of 3

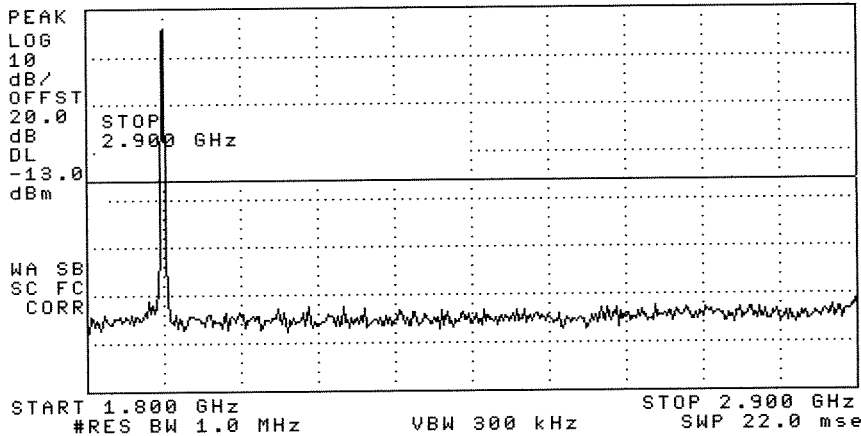
CH 1175  
PCS  
PC 3  
R-FCH + R-SCH  
+ R-P.CH

0 Hz TO 1.950 GHz



09:07:31 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

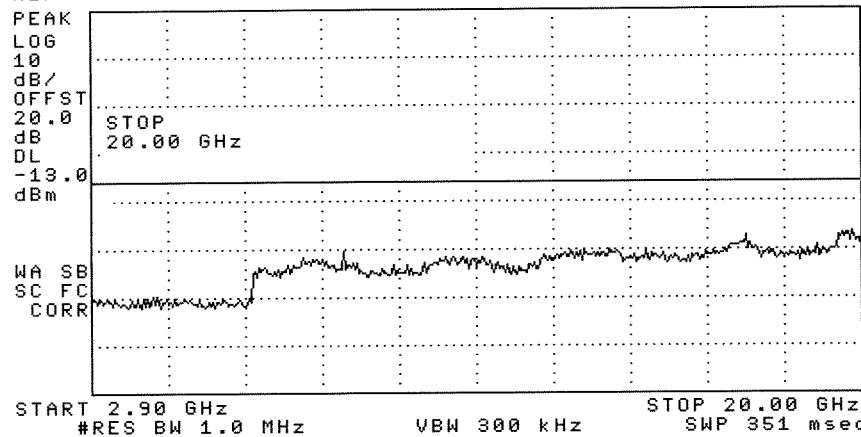
SWEEP LOG LIN

More 1 of 2

CH 1175  
 PCS  
 RC3  
 R-FCH + R-SCH  
 + R-PICH  
 1.8 GHz TO  
 2.9 GHz

09:07:56 APR 22, 2002

REF 23.0 dBm #AT 20 dB



CENTER FREQ

START FREQ

STOP FREQ

CF STEP AUTO MAN

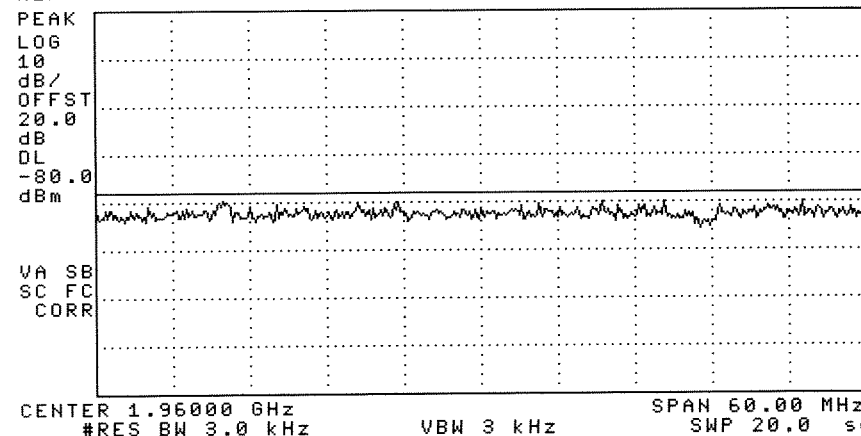
SWEEP LOG LIN

More 1 of 2

CH 1175  
 PCS  
 RC3  
 R-FCH + R-SCH  
 + R-PICH  
 2.9 GHz TO  
 20.0 GHz

09:09:58 APR 22, 2002

REF -42.0 dBm #AT 0 dB



CLEAR WRITE A

MAX HOLD A

VIEW A

BLANK A

Trace A B C

More 1 of 4

CH 1175  
 PCS  
 RC3  
 R-FCH + R-SCH  
 + R-PICH  
 RX BAND