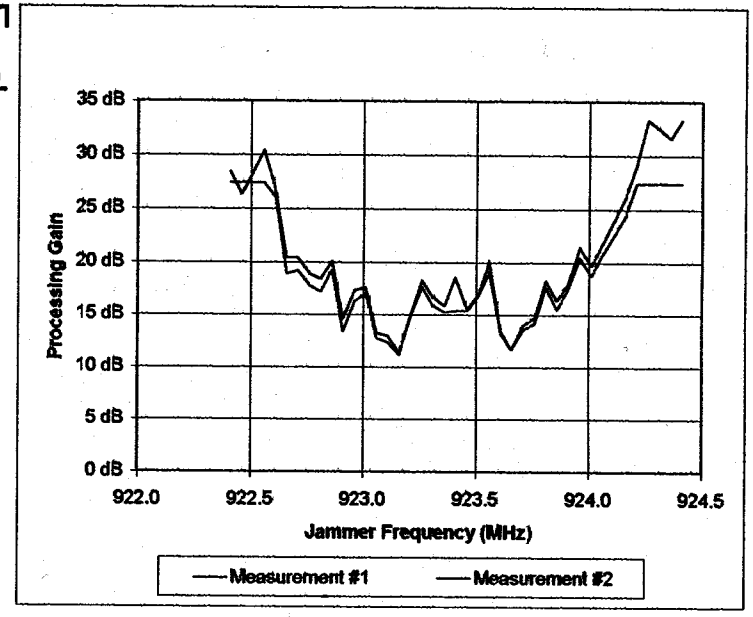
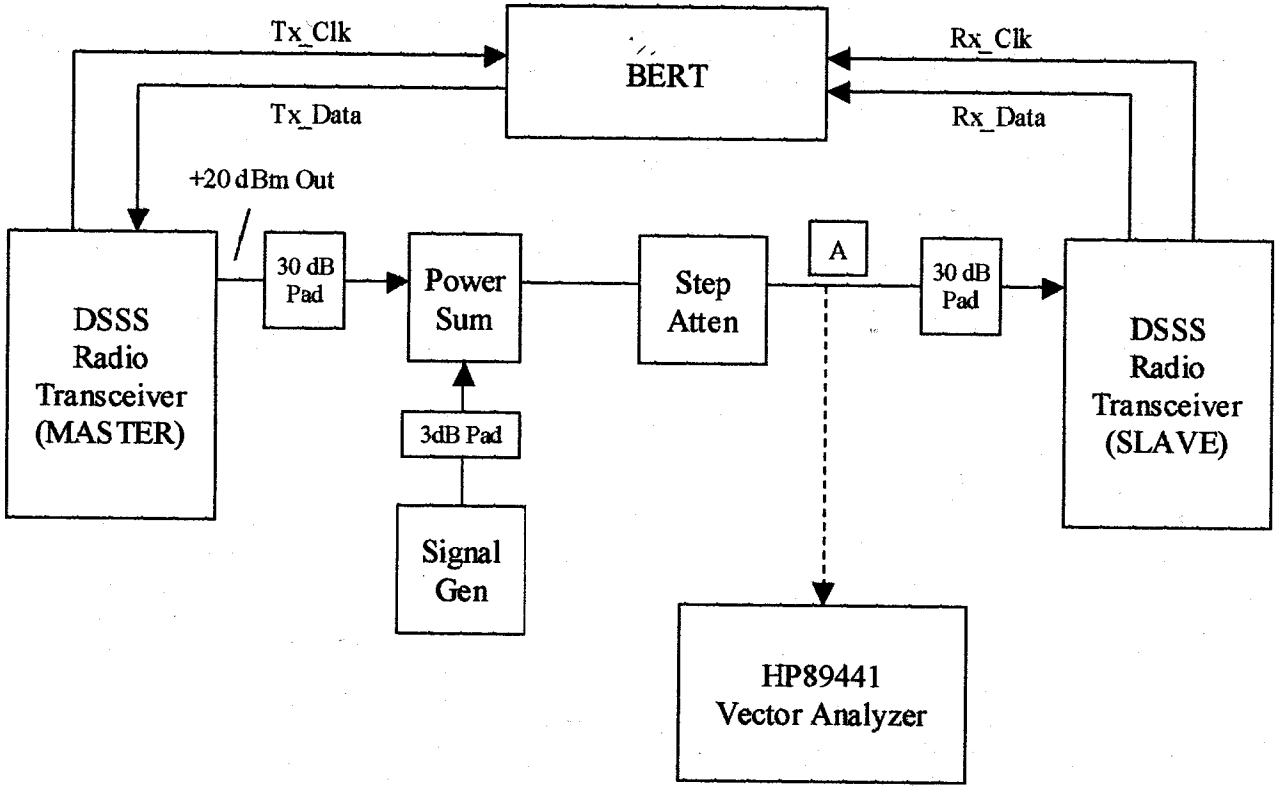
Tests performed at two different RX input levels
Test Frequency = 923.4 MHz
Processing Gain Test performed using CW Jamming Method per FCC Part 15.247(e)(2)
$(S/N)_0$ for DQPSK 64 ksps 1E-3 BER = 10.2 dB
Allowable System Losses = 2.0 dB
FCC Processing Gain Spec = 10.0 dB

	Measurement #1			Measurement #2		
Jammer Frequency	Jammer Level	J/S	Processing Gain	Jammer Level	J/S	Processing Gain
922.410 MHz	0.0 dBm	15.2 dB	27.4 dB	-4.9 dBm	16.2 dB	28.4 dB
922.460 MHz	0.0 dBm	15.2 dB	27.4 dB	-7.0 dBm	14.1 dB	26.3 dB
922.510 MHz	0.0 dBm	15.2 dB	27.4 dB	-4.8 dBm	16.3 dB	28.5 dB
922.560 MHz	0.0 dBm	15.2 dB	27.4 dB	-2.9 dBm	18.2 dB	30.4 dB
922.610 MHz	-1.4 dBm	13.8 dB	26.0 dB	-6.7 dBm	14.4 dB	26.6 dB
922.660 MHz	-8.5 dBm	6.7 dB	18.9 dB	-12.9 dBm	8.2 dB	20.4 dB
922.710 MHz	-8.2 dBm	7.0 dB	19.2 dB	-12.9 dBm	8.2 dB	20.4 dB
922.760 MHz	-9.6 dBm	5.6 dB	17.8 dB	-14.4 dBm	6.7 dB	18.9 dB
922.810 MHz	-10.2 dBm	5.0 dB	17.2 dB	-14.9 dBm	6.2 dB	18.4 dB
922.860 MHz	-8.1 dBm	7.1 dB	19.3 dB	-13.2 dBm	7.9 dB	20.1 dB
922.910 MHz	-14.0 dBm	1.2 dB	13.4 dB	-18.7 dBm	2.4 dB	14.6 dB
922.960 MHz	-11.1 dBm	4.1 dB	16.3 dB	-16.0 dBm	5.1 dB	17.3 dB
923.010 MHz	-10.3 dBm	4.9 dB	17.1 dB	-15.7 dBm	5.4 dB	17.6 dB
923.060 MHz	-14.6 dBm	0.6 dB	12.8 dB	-20.0 dBm	1.1 dB	13.3 dB
923.110 MHz	-15.0 dBm	0.2 dB	12.4 dB	-20.3 dBm	0.8 dB	13.0 dB
923.160 MHz	-16.2 dBm	-1.0 dB	11.2 dB	-21.9 dBm	-0.8 dB	11.4 dB
923.210 MHz	-12.5 dBm	2.7 dB	14.9 dB	-18.3 dBm	2.8 dB	15.0 dB
923.260 MHz	-9.7 dBm	5.5 dB	17.7 dB	-15.0 dBm	6.1 dB	18.3 dB
923.310 MHz	-11.5 dBm	3.7 dB	15.9 dB	-16.6 dBm	4.5 dB	16.7 dB
923.360 MHz	-12.1 dBm	3.1 dB	15.3 dB	-17.4 dBm	3.7 dB	15.9 dB
923.410 MHz	-12.0 dBm	3.2 dB	15.4 dB	-14.7 dBm	6.4 dB	18.6 dB
923.460 MHz	-12.0 dBm	3.2 dB	15.4 dB	-17.8 dBm	3.3 dB	15.5 dB
923.510 MHz	-10.5 dBm	4.7 dB	16.9 dB	-16.3 dBm	4.8 dB	17.0 dB
923.560 MHz	-8.3 dBm	6.9 dB	19.1 dB	-13.2 dBm	7.9 dB	20.1 dB
923.610 MHz	-14.1 dBm	1.1 dB	13.3 dB	-19.8 dBm	1.3 dB	13.5 dB
923.660 MHz	-15.7 dBm	-0.5 dB	11.7 dB	-21.6 dBm	-0.5 dB	11.7 dB
923.710 MHz	-13.8 dBm	1.4 dB	13.6 dB	-19.3 dBm	1.8 dB	14.0 dB
923.760 MHz	-13.2 dBm	2.0 dB	14.2 dB	-18.6 dBm	2.5 dB	14.7 dB
923.810 MHz	-9.7 dBm	5.5 dB	17.7 dB	-15.0 dBm	6.1 dB	18.3 dB
923.860 MHz	-11.9 dBm	3.3 dB	15.5 dB	-16.9 dBm	4.2 dB	16.4 dB
923.910 MHz	-9.9 dBm	5.3 dB	17.5 dB	-15.3 dBm	5.8 dB	18.0 dB
923.960 MHz	-6.9 dBm	8.3 dB	20.5 dB	-11.9 dBm	9.2 dB	21.4 dB
924.010 MHz	-8.6 dBm	6.6 dB	18.8 dB	-13.6 dBm	7.5 dB	19.7 dB
924.060 MHz	-6.6 dBm	8.6 dB	20.8 dB	-11.5 dBm	9.6 dB	21.8 dB
924.110 MHz	-4.8 dBm	10.4 dB	22.6 dB	-9.4 dBm	11.7 dB	23.9 dB
924.160 MHz	-3.2 dBm	12.0 dB	24.2 dB	-7.4 dBm	13.7 dB	25.9 dB
924.210 MHz	0.0 dBm	15.2 dB	27.4 dB	-4.2 dBm	16.9 dB	29.1 dB
924.260 MHz	0.0 dBm	15.2 dB	27.4 dB	0.0 dBm	21.1 dB	33.3 dB
924.310 MHz	0.0 dBm	15.2 dB	27.4 dB	-0.8 dBm	20.3 dB	32.5 dB
924.360 MHz	0.0 dBm	15.2 dB	27.4 dB	-1.7 dBm	19.4 dB	31.6 dB
924.410 MHz	0.0 dBm	15.2 dB	27.4 dB	0.0 dBm	21.1 dB	33.3 dB

Measured signal power (3 MHz BW, Point 'A') = -15.2 dBm
(Step Attenuator = 0 dB)
RF power at SLAVE RX = -44.2 dBm

Meas Sig power (3 MHz BW, Point 'A' -21.1 dBm
(Step Attenuator = 6 dB)
RF power at SLAVE RX = -50.0 dBm





The equation for processing gain is

PG(dB) = Es/No(dB) + J/S(dB) + Lsys(dB)

where Es/No is the energy-to-noise ratio for a 1E-3 BER for the type of modulation used and is defined as 10.2 dB for DQPSK 64 ksps

J/S is the jammer-to-signal power ratio in dB

Lsys is the system implementation losses in dB and is limited to 2 dB by FCC rule

1. With the MASTER unit in continuous transmit mode, adjust the step attenuator to provide a strong RX input level to the SLAVE unit (about -50 dBm).
2. Accurately measure the output spread signal band power level in a 5 MHz resolution bandwidth at the output of the step attenuator (point 'A').
3. Turn the MASTER unit OFF.
4. Set the signal generator to output a CW tone 1 MHz below the center frequency of the spread spectrum signal.
5. Adjust the level of this CW signal to provide exactly the same level as the output level of the MASTER unit.

6. Note the amplitude setting of the CW signal generator required to provide (after pad losses and combiner losses) this same output level as the MASTER ur
7. Step the frequency of the CW signal generator upwards in 50 kHz steps over a 2 MHz range (40 steps).
8. Verify that the CW signal generator output level remains constant. Record any variations in level for purposes of calibration.
9. Reset the frequency of the CW signal generator to 1MHz below the center frequency of the spread signal.
10. Enable the MASTER unit again and run a TDD BER measurement.
11. Adjust the output level of the CW signal generator upwards until the BER is degraded to 1E-3.
12. Calculate the CW jammer level at point 'A' by noting the increase in CW signal generator level relative to the reference level obtained in Step 6.
13. Calculate the J/S power ratio as the CW jammer level minus the MASTER power level.
14. Step the CW signal generator frequency upwards by 50 kHz increments, finding the J/S power ratio at each frequency required to obtain 1E-3 BER.
15. Apply amplitude correction factors (if any) as found in Step 8.
16. Repeat by stepping the CW signal generator upwards over a 2 MHz frequency range (+/- 1 MHz range relative to the MASTER center frequency).
17. Discard the worst 8 processing gain measurement numbers (20% of the 40 total measurements).
18. If the WORST (lowest) value of the remaining processing gain measurements exceeds 10 dB, the unit passes.