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Nederland B.V. WCND
Report No. 540016

TEST REPORT

Subject: Processing Gain for WaveLAN-IEEE PC Card (Integrated)

Ref: FCC Rules 47 CFR Part 15, Section 15.247d

Report Prepared by:

Maarten Visee
Name


Signature

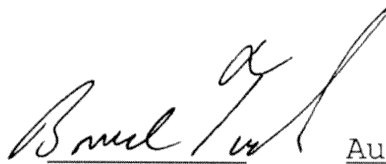
August 31, 1998
Date

Concurrence:

1. Director of Engineering

Bruce Tuch

Name



Signature

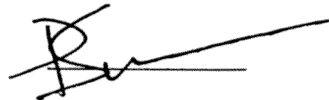
August 31, 1998

Date

2. Team Captain

Paul Siermann

Name



Signature

August 31, 1998

Date

1. Summary:

This document describes the Receiver Spreading Gain as measured for WaveLAN-II PC-Card Type 2 (Integrated) according to Ref.[2].

2. Conclusion:

The Lucent WaveLAN-II PC Card Type 2 (Integrated) product confirms to the minimum required 10 dB processing gain, as set forth by the FCC for operation in the 2.4 GHz ISM band.

3. References:

- 1- Document FCC 97-114, Appendix C, Guidance on Measurements for Direct Sequence Spread Spectrum Systems.
- 2- Hardware Functional Specification for WaveLAN-II/PC Card Type 2 Integrated, Doc. No. S-0000091 Rev. 1, Source Organization Lucent Technologies WCND Utrecht.
- 3- Viterbi, A. J., Principles of Coherent Communications,, New York, McGraw-Hill 1966.
- 4- Proakis, J.G., Digital Communications, New York, McGraw-Hill 1989, page 270.

4. Measurement description:

4.1 Test introduction - FCC requirements:

Part of FCC certification for the Lucent WaveLAN IEEE 802.11 compliant Network Interface Card (NIC) is a Processing Gain test. This test proves that the receiver of the tested product employs a true spread spectrum device receiver structure, taking full advantage of the direct sequence spread spectrum modulation technique.

This test verifies the Receiver Processing Gain to be 10 dB or more, by monitoring the Bit Error Rate (BER) of the product under test while operating under strict defined received signal conditions. since the product is capable of operation on either 2 Mbit/s or 1 Mbit/s the processing gain test is performed for both data rates.

Several methods of showing compliance to the rules are possible, from a stepped CW jammer to a continuous sweeping CW interferer. For this test the discrete stepped CW jammer method was chosen, as described in. Ref.[1].

Therefore a receiver input signal is applied to the product under test, in the presence of a Continuous Wave (CW) interference source, also referred to as a CW jammer.

The test criteria for meeting the minimal spreading gain is such that it takes the theoretical calculated SNR for the

applied modulation technique and specified BER as a reference. From this given SNR the spreading gain is subtracted, yielding the CW Signal to Jammer ratio J/S. From reference [4], likewise as Ref.[3] consulted in Ref. [1], it is determined that for a BER of 10^{-8} the SNR (S/N)₀ equals 15 dB @ 2 Mbit/s and 13 dB @ 1 Mbit/s data rate (QPSK, coherent detection as applied in the WaveLAN IEEE). Thus the J/S ratio for a processing gain of 10 dB that must be met is calculated as:

$-15 + 10 = -5$ dB @ 2 Mbit/s, and

$-13 + 10 = -3$ dB @ 1 Mbit/s.

The test takes place at the product Functional Specification (Ref.[2]) specified conditions for BER rate measurements, specifying a BER equal or better than 10^{-8} at an receiver input level of -55 dBm.

Two types of correction are allowed for as described in Ref. [1]. The first taking into account 2 dB implementation losses, thus increasing the absolute J/S ratio by 2 dB.

The second correction allows for deleting the 20% worst-case frequencies in the processing gain test that cause the test at that CW interference to fail. This implies that for the 14 MHz wide measurement interval that is been considered the worst case 56 CW jammer frequencies that result, in received data errors/missing frames can be ignored ($14 \times (1 \text{ MHz} / 50 \text{ KHz}) + 1 = 281$).

4.2 Test sequence:

The measurements are performed at a 50 KHz CW raster. For each CW jammer frequency 10^8 bits are transmitted by the reference transmitter, and received by the product under test. For practical reasons 50.000 messages are transmitted. After blanking out frame overhead 1927 bits per frame are monitored. This results in $50.000 \times 1927 = 96.350.000$ transmitted bits for a BER test, which is a mere 1.4% less than the targeted 10^8 bits.

Though it would be more elegant to show BER compliance for at least say ten times 10^8 transmitted/received bits, the time involved with this grows significantly. Since the CW interferer is stepped in a 50 KHz raster, covering the receiver bandwidth of 14 MHz, it is considered that the BER requirement is sufficiently met since such a multitude of measurements are taken.

The total measurement is being performed under computer control, hereafter referred to as controller. It involves the control over the reference transmitter, CW-interference generator, receiver under test and received data error-checker/frame counter. The controller program flow chart is given in Annex C, FCC Processing Gain Controller Flowchart.

In the receiver at the inter-connection between the RF circuits and the Digital Signal Processor (DSP) the demodulated received RF signal is made available to an error

checker. This error checker is a dedicated piece of hardware that monitors real-time the received data, gating_out any other non-relevant information that is present in the received data (message header, message length field, CRC field, diagnostic information field etc.). For a chosen Tx message length of 230 bytes this yields 1927 useable bits.

The transmitted data pattern is fixed, and known at the receiver. Therefore the error checker compares the known transmitted data sequence with received data sequence. Received data errors and missing received frames information is retrieved by the controller.

The test sequence is as follows: the controller issues a request for transmit to the transmitter for 1000 frames. Once this number of frames has been transmitted the transmitter signals to the controller the finish of the controller request. The controller reads the number of received frames and number of erroneous received frames. If there are no missing frames or errors detected, the controller increases the CW interference level by 1 dB. Consequently it re-issues an transmit request. This sequence is repeated until errors or missing frames are detected by the controller. When this is detected, the controller lowers the CW interference level by 1 dB. Instead of a quick error scan using 1000 messages, 50000 messages are transmitted to check the BER.

The test continues by raising the jammer frequency by 50 KHz and re-setting the CW jammer level to the start value. For this new CW frequency the measurements are repeated as described above (see Annex C). The CW frequency and power levels are pre-programmed in a command-file that is read by the controller during test start-up.

Before measurements are started, the receiver input level and CW jammer level need to be calibrated. See figure 1 for the test set-up.

The test takes place at an arbitrarily chosen channel, being channel two (2417 MHz).

4.3 Receiver level calibration:

The receiver input level is calibrated using the RF power meter. For this purpose, the reference transmitter output attenuator is set to 0 dB. The CW jammer is disabled for this calibration. Using the RF power meter at the receiver input of the device under test, the received level at the receiver input is measured for a continues active reference transmitter. The attenuator value is calculated to achieve a received level of -55 dBm. Finally the attenuator is adjusted to this value.

4.4 CW level-calibration:

The CW jammer generator output level is set to 0 dBm, and the RF power meter value is read. The reference transmitter is disabled during this calibration. The difference in CW output level setting and RF power meter measured at receiver input of the device under test is the attenuation of the test set-up. This is the correction factor that needs to be applied for analysis of the measurements results.

5. Equipment used:

# Item needed	Description
1	Portable PC with WaveLAN-II NIC, Panasonic CF-V21P, SN-3JKSM01028, for transmitter.
1	Software 'Testware' <TW.EXE>, 208392 bytes, 06-12-98. Used for the transmitter.
1	Portable PC with WaveLAN-II NIC, NCR 3150, SN 17-26106224, for receiver.
1	Software 'Host test' <CERT21.EXE>, 116.492 bytes, 06-19-1998. Used for the receiver.
2	WaveLAN IEEE NIC.
1	PC + IEEE interface card, NCR PC6, SN 17-17039925 and CEC PC<>488 interface card.
1	Received error checker, wire-wrap prototype, Lucent WCND designed and built.
1	Power supply, Delta D030-1, for error checker.
1	Spectrum Analyzer, HP 9592B SN 3009U00102.
1	Power Meter, Rohde & Schwarz, Millivolt meter URV5, SN 893430/070
1	Power Sensor, Rhode & Schwarz, type NRV-Z2 828.3218.02, SN 860925/005.
1	CW jammer generator, Gigatronics 7200, SN 746604.
1	Variable attenuator, 0-70 dB, Midwest Microwave, Model 1044.
2	Fixed attenuator, 10 dB, Inmet Corp., model 18AH-10.
1	RF power splitter, ARRA 3-9200-2, SN 2001
1	Misc. IEEE cabling
1	Misc. SMA cabling
1	RF shielded cage

6. Measurement set_up:

The test set_up is given below in figure 1, measurement test set-up. To avoid interference that can disrupt the measurement, the whole test is performed within the shielded RF cage.

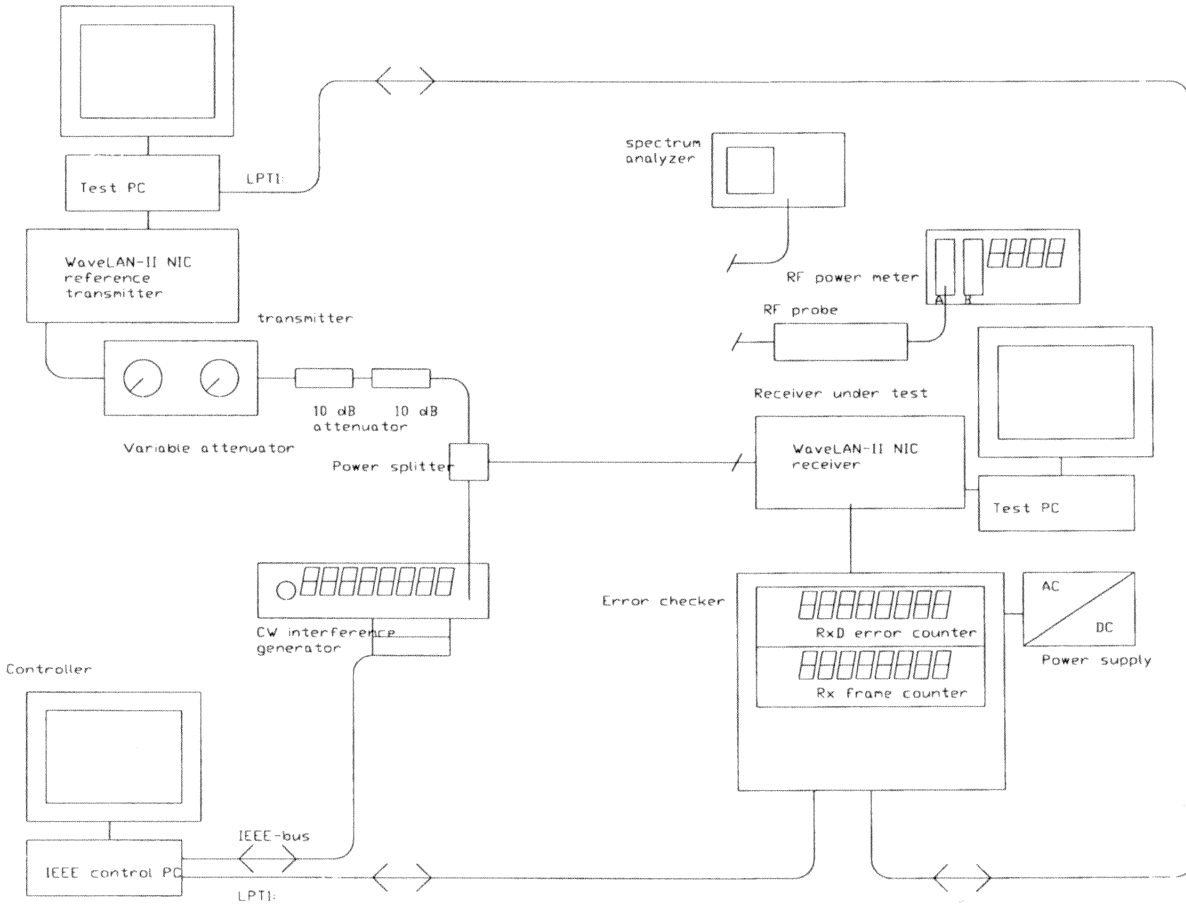


Figure 1, measurement test set-up.

7. Measurement results:

Calibrations:

Receiver calibration: For 0 dB total attenuator setting (variable and fixed = 0) the received level at the receiver input equals +10 dBm. Test setting: the fixed attenuator is chosen to be 20 dB, the variable attenuator is set to 45 dB, attenuation.

CW jammer generator calibration: For a 0 dBm output level at the generator the received level at the receiver input is -5 dBm.

Processing Gain Measurement Results:

Annex A lists the measurement results tests taken for a data rate of 2 Mbit/s, while Annex B lists the results for a data rate of 1 Mbit/s.

For each frequency between $F_c \pm 8$ MHz a BER measurement is taken. Note that for verification of the spreading gain the measurement results are taken for $F_c \pm 7$ MHz, being the receiver bandwidth.

The J/S ratio is given at the top of the table, as well as the CW-correction factor.

For each CW measurement frequency the jammer level is varied from -65 dBm to -57 dBm at the receiver input, yielding a J/S ratio of -10 to -2 dB.

As can be seen, for some CW frequencies received data errors/missing frames are detected.

Applying the rule of discarding the 20% worst-case jamming/signal points (Ref.[1]), results in zero received errors for both 2 Mbit/s and 1 Mbit/s. Respectively 3.2% and 3.9% of the total CW frequencies were found to cause data errors and/or missing frames.

Therefore, a J/S ratio better or equal to -5 dB @ 2 Mbit/s and -3 dB @ 1 Mbit/s is measured.

Therefore it can be concluded the tested product complies to the required Processing Gain of 10 dB, as set forth in Ref[1].

Annex A, 2 MBit/s, FCC Processing Gain Measurements Results, Lucent Confidential, ©1998

Annex A: Measurement results, 2 Mbit/s

Measurement file output name is: 2mb.TX
INPUT.
CMD
5 dB
Note: 2 Mbit, 5 dB SIR tested for (15 dB SNR - 10).
No usage of allowed 2 dB SIR margin.
Total SIR is 5 dB
Lowcount is: 1000 messa
ges
Highcount is: 50000 messa
ges
Rx level Tx is: -55 dBm

total errors 9 out of 281 measurement points.
percentage 3.20%

OK? <20% so OK

Number of received data errors as a function of frequency and interference level Not measured combinations listed as "-1"																			OK? <20% so OK											
		Uncorrected interference level dialed at CW generator -80		-59		-58		-57		-56		-55		-54		-53		-52		Errors detected	PDA missing	Errors detected	PDA missing	Both error RxD and PDA						
		True CW interference level at receiver input (dBm) -85		-84		-83		-82		-81		-80		-58		-56		-57							full test range	full test range	up to CW =< -80 dBm	up to CW =< -80 dBm	PDA	
J/S ratio (dB)		-10	#PDA	-9	#PDA	-8	#PDA	-7	#PDA	-6	#PDA	-5	#PDA	-4	#PDA	-3	#PDA	-2	#PDA											
Frequency (Hz)																						(J/S = -5 dB)	(J/S = -5 dB)		time	date				
2409000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:28:25	8/25/98					
2409050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:28:49	8/25/98					
2409100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:29:12	8/25/98					
2409150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:29:36	8/25/98					
2409200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:17:59	8/25/98					
2409250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:18:23	8/25/98					
2409300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:12:46	8/25/98					
2409350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:10:10	8/25/98					
2409400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:07:33	8/25/98					
2409450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:04:57	8/25/98					
2409500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	7:02:20	8/25/98					
2409550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:59:43	8/25/98					
2409600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:57:07	8/25/98					
2409650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:54:30	8/25/98					
2409700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:51:54	8/25/98					
2409750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:49:16	8/25/98					
2409800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:46:40	8/25/98					
2409850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:44:03	8/25/98					
2409900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	6:41:27	8/25/98					

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Annex A, 2 MBit/s, FCC Processing Gain Measurements Results,
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2413350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:14.24	8/24/98		
2413400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:17:01	8/24/98		
2413450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:19:37	8/24/98		
2413500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:22:14	8/24/98		
2413550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:24:50	8/24/98		
2413600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	RxD errors	OK, No PDA errors	0	0	0	21:27:27	8/24/98		
2413650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:30:03	8/24/98		
2413700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:32:40	8/24/98		
2413750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:35:16	8/24/98		
2413800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:37:53	8/24/98		
2413850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:40:30	8/24/98		
2413900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:43:07	8/24/98		
2413950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:45:43	8/24/98		
2414000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:48:20	8/24/98		
2414050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:50:57	8/24/98		
2414100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	21:51:37	8/24/98		
2414150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	2.1	50000	RxD errors	OK, No PDA errors	0	0	0	21:54:13	8/24/98		
2414200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:56:50	8/24/98		
2414250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	21:59:27	8/24/98		
2414300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:02:03	8/24/98		
2414350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	4.1	50000	RxD errors	OK, No PDA errors	0	0	0	22:04:39	8/24/98		
2414400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	14.1	50000	RxD errors	OK, No PDA errors	0	0	0	22:07:16	8/24/98		
2414450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	RxD errors	OK, No PDA errors	0	0	0	22:09:52	8/24/98		
2414500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:12:29	8/24/98		
2414550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:15:05	8/24/98		
2414600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:17:42	8/24/98		
2414650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:20:16	8/24/98		
2414700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	5.1	50000	RxD errors	OK, No PDA errors	0	0	0	22:22:56	8/24/98		
2414750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:25:32	8/24/98		
2414800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:28:08	8/24/98		
2414850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	22:30:45	8/24/98		
2414900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	RxD errors	OK, No PDA errors	0	0	0	22:33:22	8/24/98		
2414950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	1	1000	RxD errors	PDA errors	0	0	0	22:35:58	8/24/98
2415000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	2.1	50000	3	1000	RxD errors	PDA errors	0	0	0	22:38:34	8/24/98

Annex A, 2 MBit/s, FCC Processing Gain Measurements Results,
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2415050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	8	1000	RxD errors	PDA errors	0	0	0	22:41:11	8/24/98
2415100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	23.1	50000	RxD errors	OK, No PDA errors	0	0	0	22:43:47	8/24/98
2415150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	8.1	50000	5	1000	RxD errors	PDA errors	0	0	0	22:46:24	8/24/98
2415200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	2.1	50000	12	1000	RxD errors	PDA errors	0	0	0	22:49:01	8/24/98
2415250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	19.1	50000	34	1000	RxD errors	PDA errors	0	0	0	22:51:37	8/24/98
2415300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	11	1000	RxD errors	PDA errors	0	0	0	22:54:13	8/24/98
2415350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	4	1000	RxD errors	PDA errors	0	0	0	22:56:49	8/24/98
2415400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	37.3	50000	-1	-1	RxD errors	PDA errors	0	0	0	23:01:22	8/24/98
2415450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	1	1000	RxD errors	PDA errors	0	0	0	23:03:58	8/24/98
2415500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	1	1000	RxD errors	PDA errors	0	0	0	23:06:34	8/24/98
2415550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	1	1000	RxD errors	PDA errors	0	0	0	23:09:11	8/24/98
2415600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 RxD errors	PDA errors	0	0	0	23:09:51	8/24/98
2415650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	8.1	50000	RxD errors	OK, No PDA errors	0	0	0	23:12:28	8/24/98
2415700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	8.1	50000	RxD errors	OK, No PDA errors	0	0	0	23:15:04	8/24/98
2415750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	23:17:41	8/24/98
2415800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	RxD errors	OK, No PDA errors	0	0	0	23:20:17	8/24/98
2415850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	2.1	50000	RxD errors	OK, No PDA errors	0	0	0	23:22:54	8/24/98
2415900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	8.1	50000	RxD errors	OK, No PDA errors	0	0	0	23:25:31	8/24/98
2415950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	31.1	50000	RxD errors	OK, No PDA errors	0	0	0	23:28:07	8/24/98
2416000000	0.3	49008	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	23:32:15	8/24/98
2416050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	3	1000	RxD errors	PDA errors	0	0	0	23:34:51	8/24/98
2416100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	6.1	50000	RxD errors	OK, No PDA errors	0	0	0	23:37:28	8/24/98
2416150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	15.1	50000	15	1000	RxD errors	PDA errors	0	0	0	23:40:04	8/24/98
2416200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	3	1000	RxD errors	PDA errors	0	0	0	23:42:41	8/24/98
2416250000	0.3	49371	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	23:46:48	8/24/98
2416300000	0	1000	0	1000	0.1	49908	0.3	49990	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	23:51:08	8/24/98
2416350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	92.1	49998	RxD errors	PDA errors	0	0	0	23:53:43	8/24/98
2416400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	1	1000	RxD errors	PDA errors	0	0	0	23:56:19	8/24/98
2416450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	23:58:57	8/24/98
2416500000	0.3	48104	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	0:03:04	8/25/98
2416550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	2.1	50000	RxD errors	OK, No PDA errors	0	0	0	0:05:40	8/25/98
2416600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	0:08:16	8/25/98
2416650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	0:10:53	8/25/98
2416700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	0:13:29	8/25/98

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2416750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:18:06	8/25/98		
2416800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:18:42	8/25/98		
2416850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:21:18	8/25/98		
2416900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:23:56	8/25/98		
2416950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	49999	OK, 0 Rx/D errors	PDA errors	0	0	0	0:26:32	8/25/98		
2417000000	0.1	49974	0.3	49970	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	0:30:42	8/25/98			
2417050000	0.3	49978	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	0:34:49	8/25/98			
2417100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:37:25	8/25/98		
2417150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:40:01	8/25/98		
2417200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:42:37	8/25/98		
2417250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:45:14	8/25/98		
2417300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:47:50	8/25/98		
2417350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:50:27	8/25/98		
2417400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:53:04	8/25/98		
2417450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0:55:40	8/25/98		
2417500000	0.3	48870	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	0:59:47	8/25/98			
2417550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	24.1	50000	RxD errors	OK, No PDA errors	0	0	0	1:02:24	8/25/98		
2417600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	20.1	49999	RxD errors	PDA errors	0	0	0	1:05:00	8/25/98		
2417650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	42.1	49999	RxD errors	PDA errors	0	0	0	1:07:37	8/25/98		
2417700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	12.1	50000	2	1000	RxD errors	PDA errors	0	0	0	1:10:14	8/25/98		
2417750000	0.3	48824	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	1:14:21	8/25/98			
2417800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	11.1	50000	RxD errors	OK, No PDA errors	0	0	0	1:16:58	8/25/98		
2417850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	26.1	50000	RxD errors	OK, No PDA errors	0	0	0	1:19:34	8/25/98		
2417900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	1	1000	RxD errors	PDA errors	0	0	0	1:22:11	8/25/98
2417950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	3.1	50000	RxD errors	OK, No PDA errors	0	0	0	1:24:47	8/25/98		
2418000000	0.3	48178	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	1:28:54	8/25/98			
2418050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	RxD errors	OK, No PDA errors	0	0	0	1:31:31	8/25/98		
2418100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	1:34:07	8/25/98		
2418150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	1:36:43	8/25/98		
2418200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	1:39:29	8/25/98		
2418250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	1:41:57	8/25/98		
2418300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	1:44:34	8/25/98		
2418350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	1:47:10	8/25/98		
2418400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	2.1	50000	RxD errors	OK, No PDA errors	0	0	0	1:49:47	8/25/98		

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2418450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	1:52:23	8/25/98
2418500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	3.1	49999	RxD errors	PDA errors	0	0	0	1:55:00	8/25/98
2418550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	5.1	50000	RxD errors	OK, No PDA errors	0	0	0	1:57:36	8/25/98
2418600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	3.1	50000	RxD errors	OK, No PDA errors	0	0	0	2:00:13	8/25/98
2418650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:02:50	8/25/98
2418700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	2:03:31	8/25/98
2418750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	1.1	50000	RxD errors	OK, No PDA errors	0	0	0	2:06:07	8/25/98
2418800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:08:44	8/25/98
2418850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:11:20	8/25/98
2418900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:13:57	8/25/98
2418950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:16:33	8/25/98
2419000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:19:10	8/25/98
2419050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	2:19:49	8/25/98
2419100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:22:27	8/25/98
2419150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:25:03	8/25/98
2419200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:27:39	8/25/98
2419250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:30:15	8/25/98
2419300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:32:51	8/25/98
2419350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:35:27	8/25/98
2419400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:38:04	8/25/98
2419450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:40:40	8/25/98
2419500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:43:16	8/25/98
2419550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:45:54	8/25/98
2419600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:48:30	8/25/98
2419650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:51:07	8/25/98
2419700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:53:43	8/25/98
2419750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:56:20	8/25/98
2419800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	2:58:57	8/25/98
2419850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	3:01:33	8/25/98
2419900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	3:04:10	8/25/98
2419950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	3:06:47	8/25/98
2420000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	3:09:24	8/25/98
2420050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	3:12:00	8/25/98
2420100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	3:14:37	8/25/98

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2423550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:39:37	8/25/98
2423600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:42:13	8/25/98
2423650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:44:50	8/25/98
2423700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:47:27	8/25/98
2423750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:50:03	8/25/98
2423800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:52:41	8/25/98
2423850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:55:17	8/25/98
2423900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	9:57:54	8/25/98
2423950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:00:31	8/25/98
2424000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:03:07	8/25/98
2424050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:05:44	8/25/98
2424100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:08:20	8/25/98
2424150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:10:56	8/25/98
2424200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	10:11:38	8/25/98
2424250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:14:14	8/25/98
2424300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:16:51	8/25/98
2424350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:19:27	8/25/98
2424400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:22:04	8/25/98
2424450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:24:41	8/25/98
2424500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:27:17	8/25/98
2424550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:29:53	8/25/98
2424600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:32:30	8/25/98
2424650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:35:09	8/25/98
2424700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:37:46	8/25/98
2424750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:40:22	8/25/98
2424800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:42:59	8/25/98
2424850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:45:35	8/25/98
2424900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:48:12	8/25/98
2424950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:50:48	8/25/98
2425000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	10:53:25	8/25/98
																					9	9	9		
																					3.29%	3.20%	3.20%		

<20% so OK <20% so OK <20% so OK

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Annex B, Measurement results for 1 Mbit/s.

Measurement file output name is: 1mb.TX
 Input command file name is: INPUT.CMD
 Input CW correction level: 5 dB
 Lowcount is: 1000
 Highcount is: 50000
 Rx level Tx is: -55 dBm

Note: 1 Mbit, 3 dB SIR tested for (13 dB SNR - 10)
 Makes usage of 0 dB of allowed 2 dB SIR margin.
 Total SIR is 3 dB

total errors 11 out of 281 measurement points.
 percentage 3.91%

OK? <20% so OK

Number of received data errors as a function of frequency and interference level Not measured combinations listed as "-1"																				OK? <20% so OK						
Uncorrected interference level dlat at CW generator -60		-59		-58		-57		-56		-55		-54		-53		-52		Errors detected full test range	PDA missing full test range	Errors detected up to CW ≤ -56 dBm	PDA missing up to CW ≤ -56 dBm	Both error RxD and PDA ≤ -56 dBm				
True CW interference level at receiver input (dBm) -65		-64		-63		-62		-61		-60		-59		-58		-57										
J/S ratio (dB)	#PDA	-10	#PDA	-9	#PDA	-8	#PDA	-7	#PDA	-6	#PDA	-5	#PDA	-4	#PDA	-3	#PDA						-2	#PDA		
Frequency (Hz)																									(J/S = -3 dB)	(J/S = -3 dB)
240900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	2:12:54	6/23/98	
240905000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	2:09:46	6/23/98	
240910000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	2:08:39	6/23/98	
240915000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	2:03:32	6/23/98	
240920000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	2:00:24	6/23/98	
240925000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:57:16	6/23/98	
240930000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:54:08	6/23/98	
240935000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:51:00	6/23/98	
240940000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:47:53	6/23/98	
240945000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:44:45	6/23/98	
240950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:41:37	6/23/98	
240955000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	80000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:38:29	6/23/98	
240960000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:35:21	6/23/98	
240965000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:32:13	6/23/98	
240970000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:29:05	6/23/98	
240975000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 RxD errors	PDA errors	0	0	0	1:25:57	6/23/98	
240980000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:25:11	6/23/98	
240985000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:22:03	6/23/98	
240990000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 RxD errors	OK, No PDA errors	0	0	0	1:18:56	6/23/98	

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2411690000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:31:48	8/22/98
2411700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	0	23:28:40	8/22/98
2411750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:27:54	8/22/98
2411800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:24:47	8/22/98
2411850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:21:38	8/22/98
2411900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	0	23:18:30	8/22/98
2411950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:17:45	8/22/98
2412000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:14:38	8/22/98
2412050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:11:30	8/22/98
2412100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:08:23	8/22/98
2412150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:05:15	8/22/98
2412200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	23:02:08	8/22/98
2412250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:59:00	8/22/98
2412300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:55:51	8/22/98
2412350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:52:44	8/22/98
2412400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:49:36	8/22/98
2412450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:46:29	8/22/98
2412500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:43:21	8/22/98
2412550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:40:13	8/22/98
2412600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:37:06	8/22/98
2412650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:33:58	8/22/98
2412700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:30:51	8/22/98
2412750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:27:43	8/22/98
2412800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:24:34	8/22/98
2412850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:21:27	8/22/98
2412900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:18:19	8/22/98
2412950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	22:15:11	8/22/98
2413000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	13:37:34	8/22/98
2413050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50001	OK, 0 Rx/D errors	PDA errors	0	0	0	0	13:40:41	8/22/98
2413100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	13:43:40	8/22/98
2413150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	13:46:56	8/22/98
2413200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	13:50:03	8/22/98
2413250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	13:53:11	8/22/98
2413300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	0	13:56:18	8/22/98

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2415050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	15:45:47	8/22/98
2415100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	15:48:58	8/22/98
2415150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	15:52:04	8/22/98
2415200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	15:55:12	8/22/98
2415250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	15:58:20	8/22/98
2415300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:01:27	8/22/98
2415350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:04:35	8/22/98
2415400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:07:43	8/22/98
2415450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:10:50	8/22/98
2415500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	16:11:38	8/22/98
2415550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:14:44	8/22/98
2415600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:17:51	8/22/98
2415650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:20:59	8/22/98
2415700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:24:06	8/22/98
2415750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:27:14	8/22/98
2415800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:30:22	8/22/98
2415850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:33:30	8/22/98
2415900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:36:37	8/22/98
2415950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:39:45	8/22/98
2416000000	0.3	48391	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	16:44:46	8/22/98	
2416050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:47:54	8/22/98
2416100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:51:01	8/22/98
2416150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:54:08	8/22/98
2416200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	16:57:16	8/22/98
2416250000	0.3	48592	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	17:02:17	8/22/98	
2416300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	49998	OK, 0 Rx/D errors	PDA errors	0	0	0	17:05:25	8/22/98
2416350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	49998	OK, 0 Rx/D errors	PDA errors	0	0	0	17:08:32	8/22/98
2416400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:11:40	8/22/98
2416450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:14:49	8/22/98
2416500000	0.3	49116	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	17:19:48	8/22/98	
2416550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:22:56	8/22/98
2416600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:26:04	8/22/98
2416650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:29:11	8/22/98
2416700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:32:19	8/22/98

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2416750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:35:28	8/22/98
2416800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:38:34	8/22/98
2416850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:41:42	8/22/98
2416900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	17:44:50	8/22/98
2416950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	49998	OK, 0 Rx/D errors	PDA errors	0	0	0	17:47:58	8/22/98
2417000000	0.3	49934	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	17:52:58	8/22/98	
2417050000	0	1000	0.1	49967	0.3	49967	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	17:58:07	8/22/98	
2417100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:01:14	8/22/98
2417150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:04:22	8/22/98
2417200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:07:30	8/22/98
2417250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:10:38	8/22/98
2417300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:13:45	8/22/98
2417350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:16:54	8/22/98
2417400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:20:02	8/22/98
2417450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:23:09	8/22/98
2417500000	0.3	49350	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	18:28:10	8/22/98	
2417550000	0.1	49990	0.3	49980	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	18:33:15	8/22/98	
2417600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:36:22	8/22/98
2417650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	49998	OK, 0 Rx/D errors	PDA errors	0	0	0	18:39:30	8/22/98
2417700000	0.3	49996	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	18:44:31	8/22/98	
2417750000	0.3	49204	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	18:49:31	8/22/98	
2417800000	0	1000	0.1	49966	0.3	49964	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	18:54:40	8/22/98	
2417850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	18:57:49	8/22/98
2417900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:00:56	8/22/98
2417950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:04:03	8/22/98
2418000000	0.3	47574	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	RxD errors	PDA errors	1	1	1	19:09:03	8/22/98	
2418050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:12:11	8/22/98
2418100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:15:18	8/22/98
2418150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:18:25	8/22/98
2418200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:21:33	8/22/98
2418250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:24:40	8/22/98
2418300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:27:49	8/22/98
2418350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:30:56	8/22/98
2418400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	19:34:03	8/22/98

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2423550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	4:45:24	8/23/98
2423600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	4:48:32	8/23/98
2423650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	4:51:40	8/23/98
2423700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	4:54:48	8/23/98
2423750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	4:57:55	8/23/98
2423800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:01:03	8/23/98
2423850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:04:12	8/23/98
2423900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:07:20	8/23/98
2423950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:10:27	8/23/98
2424000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:13:35	8/23/98
2424050000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:16:43	8/23/98
2424100000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:19:50	8/23/98
2424150000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:22:58	8/23/98
2424200000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:26:05	8/23/98
2424250000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	1000.2	OK, 0 Rx/D errors	PDA errors	0	0	0	5:26:52	8/23/98
2424300000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:29:59	8/23/98
2424350000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:33:07	8/23/98
2424400000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:36:14	8/23/98
2424450000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:39:22	8/23/98
2424500000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:42:30	8/23/98
2424550000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:45:37	8/23/98
2424600000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:48:45	8/23/98
2424650000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:51:53	8/23/98
2424700000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:55:02	8/23/98
2424750000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	5:58:09	8/23/98
2424800000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	6:01:17	8/23/98
2424850000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	6:04:25	8/23/98
2424900000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	6:07:33	8/23/98
2424950000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	6:10:40	8/23/98
2425000000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0	1000	0.1	50000	OK, 0 Rx/D errors	OK, No PDA errors	0	0	0	6:13:48	8/23/98
																		11	11	11			
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Processing Gain

Annex C, FCC Processing Gain Measurements, Controller Flow Chart

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