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Federal Communications Commission  
Equipment Authorization Division, Application Processing Branch

Attention: **Joe Dichoso**  
Subject: FCC ID: E2XSWL-1000D; Confirmation # EA89702  
Dear Mr. Dichoso,

This letter is in response to your request for additional information that was sent via FAX on July 21, 1998. Your questions are listed in quotes before each answer.

1. "Remeasure processing gain using standard conducted tests as described in Appendix C of the Report & Order in ET Docket 96-8 (FCC 97-114). We do not accept radiated measurements for processing gain because there are too many variables for these measurements to be accurate. The manufacturer of this module may have to perform these tests. Be sure they provide actual data or readings and a sample calculation of processing gain, after discarding the worst case 20% of the readings."

The same question arose from Rich Fabina on the device FCC ID: E2XSWL-1000N. This LAN card has the same Harris chipset as the E2XSWL-1000D which was approved by Rich Fabina on 8/12/98. The same procedures were used on this device. Based on the fact that the Aironet submittal was granted using the same chipset the 1000D version of this device was accepted.

Radiometrics contacted the module manufacturer, Harris Semiconductor, for the processing gain. Mr. Richard Abraham of Harris at 407-729-4088 informed us that Harris was unable to provide any processing gain data for this module, however, he told us that an approval had been granted to Aironet for their model LM4511 radio with FCC ID LOZ102035 which uses the same module. The report for this application was retrieved for us by Fair Press Services. The report contains the following information regarding processing gain:

for 1 Mb data rate:

S/N = 13 dB; taken from Wireless Information Networks by Pahlavan & Levesque

Mj = -0.6 dB; worst case jamming margin (sic) from tests in lab

Lsys = 0.5 dB; system losses

therefore the processing gain at 1 Mb is  $13\text{db} - 0.6\text{ dB} + 0.5\text{ dB} = 12.9\text{ dB}$

for 2 Mb data rate:

S/N = 13 dB; taken from Wireless Information Networks by Pahlavan & Levesque

Mj = -3.3 dB; worst case jamming margin (sic) from tests in lab

Lsys = 2.0 dB; system losses

therefore the processing gain at 2 Mb is  $13\text{db} - 3.3\text{ dB} + 2.0\text{ dB} = 11.7\text{ dB}$