



**UNH-IOL**  
**DSL Consortium**  
**ADSL Rate vs. Reach Interoperability**  
**Test Suite (ARR) Report** Revision 1.0

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22 March 2007

Mr. Mike Vendor  
DSL Consortium  
121 Technology Drive, Suite 2  
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Mr. Vendor,

Enclosed are the Rate vs. Reach Interoperability Test Suite results for the DSL Consortium Model A CPE and DSL Consortium Model AB DSLAM. The testing was performed according to Version 3.4.0 of the ADSL Rate vs. Reach Interoperability Test Suite for ADSL over POTS, which may be downloaded from the following address:

[ftp://ftp.iol.unh.edu/pub/dsl/testsuites/ARRv340\\_test\\_suite.pdf](ftp://ftp.iol.unh.edu/pub/dsl/testsuites/ARRv340_test_suite.pdf)

If you have any questions about the test procedures or results, please contact me via email at [joe@iol.unh.edu](mailto:joe@iol.unh.edu), or by phone at +1-603-862-2911.

Sincerely,

*Joe Tester*

Joe Tester

Report reviewed by

*Jane Tester*

Jane Tester

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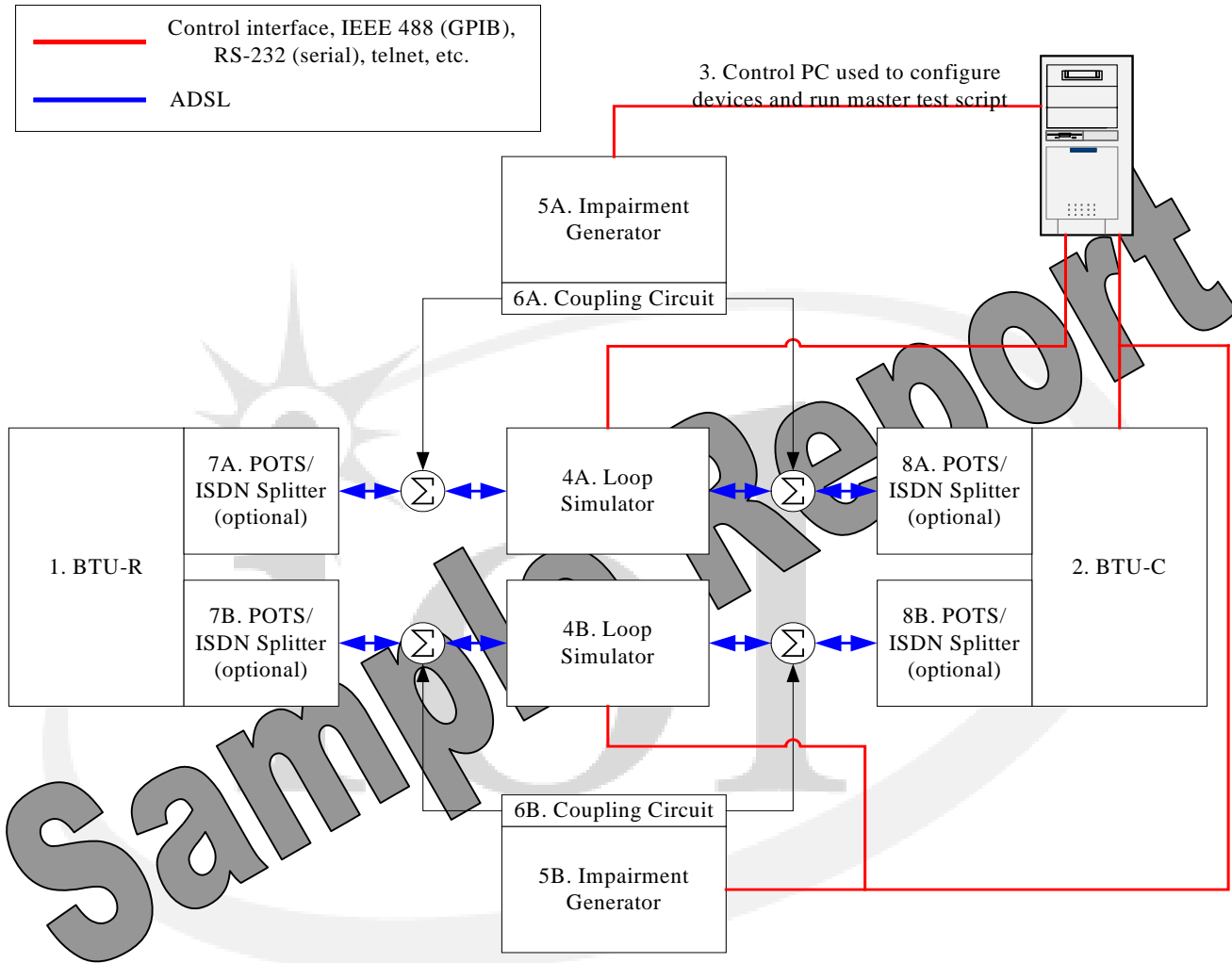
MD5 Fingerprint: A303 D24B 3F7D 0E0D 27F2 B8BC 5FA0 1FC6  
SHA-1 Fingerprint: 7BD1 A2EE 89DC AB98 2E32 F36A A9E6 E865 A0EE 88EE

**Sample Report**



## Test Setups

### Test Setup 1: Basic Test Setup



## Equipment List

1. DSL Consortium Model A (IOL ID: 9999)
  - Chipset Make: DSL Consortium
  - Chipset Model: DC1
  - Chipset Firmware Version: 1.2.3
  - The Model A was set to train in multimode
2. Company A Model 10
  - Line-card: Model 10; ports 4,5 (IOL ID: 4587)
  - Chipset Make: DSL
  - Chipset Model: 2.0
  - Chipset Firmware Version: 2.2
  - System Software Version: 1.2.23
  - Profile parameters used for each section of this test are displayed in appendix A of this document
  - Net data rates were taken from the ATU-C configuration interface
3. Testing station 3 with LASI (Lasi Automation with Standard Interfaces) version 2006.06.01

### Connection A (ATU-C Port 4 and ATU-R inner pair)

4. Loop simulator: DSL Line Simulator
  - Loop simulator serial #: 99999
  - Compensated loops were not applied in this test setup
5. Impairment generator: Company C Noise Generator.
  - DSL noise file package version 1.0.
    - Noise 1.
    - Noise 2.
    - Noise 3.
  - Compensated noise levels were not applied in this test setup.
6. Coupling Circuit: Company C internal coupling circuit.
7. Splitter Information: No CPE Splitter Installed
8. Splitter Information: No CO Splitter Installed

### Connection B (ATU-C Port 5 and ATU-R outer pair)

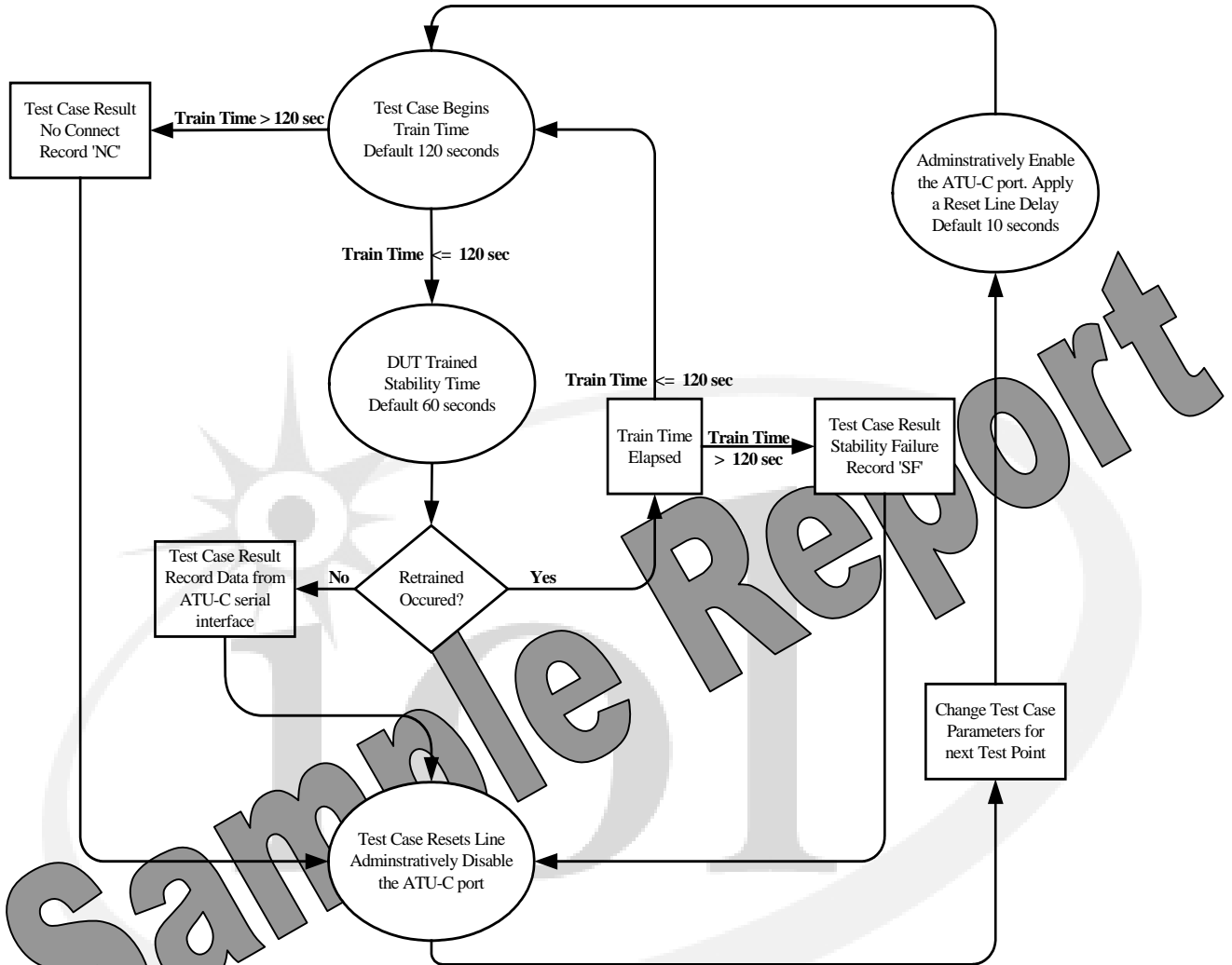
4. Loop simulator: DSL Line Simulator
  - Loop simulator serial #: 99999
  - Compensated loops were not applied in this test setup
5. Impairment generator: Company C Noise Generator.
  - DSL noise file package version 1.0.
    - Noise 1.
    - Noise 2.
    - Noise 3.
  - Compensated noise levels were not applied in this test setup.
6. Coupling Circuit: Company C internal coupling circuit.
7. Splitter Information: No CPE Splitter Installed
4. Splitter Information: No CO Splitter Installed

## Terminology and Abbreviations

Term	Description
NT	Not Tested (By request of vendor)
NC	No Connection
SF	Stability Failure
NA	Not Available
UDR	Upstream Data Rate
UNM	Upstream Noise Margin
DDR	Downstream Data Rate
DNM	Downstream Noise Margin
AUDR	Aggregate Upstream Data Rate
ADDR	Aggregate Downstream Data Rate
Time	Time = Time in seconds required to reach SHOWTIME
Mode	Mode = ANSI (ANSI T1.413-1998), DMT (ITU-T G.992.1 Annex A/B), LITE (ITU-T G.992.2), A2 (ITU-T G.992.3 Annex A/B), A2 L (ITU-T G.992.3 Annex L) or A2+ (ITU-T G.992.5).

Sample Report

## Graphical Representation of the Test Procedure



1. If the ATU-C and the ATU-R do not train within 120 seconds, the trial is considered a failure and “NC” is recorded.
2. After the DUT achieves a connection, the net data rate and noise margin are recorded after a 60 second stability period. During the 60-second stability period, if the DUT re-trains the trial is considered a failure and “SF” is recorded.
3. A line-reset delay of 10 seconds is applied between each test case.

## Test Summary

### Group 1: Rate vs. Reach Tests for ADSL over POTS

Test RR.1.1, -140 dBm/Hz AWGN Impairment, Low Latency Path, IOL Test ID: 5555									
Length (feet)	Iteration 1			Iteration 2			Iteration 3		
	AUDR	ADDR	Time	AUDR	ADDR	Time	AUDR	ADDR	Time
0	2226	48534	47	2214	48682	46	2222	48486	40
1000	999	23870	24	2254	46874	47	2283	47070	47
2000	2283	45642	47	2234	45942	46	2218	46010	46
3000	2254	44822	47	2206	45302	65	2186	44866	46
4000	2219	42818	46	2206	42666	47	1019	21478	24
5000	2222	39550	47	2262	39173	42	1003	19470	31
6000	2235	33258	46	2202	33198	47	2230	33066	43
7000	2226	26550	41	2226	26317	47	2230	26369	46
8000	2230	21321	47	2218	21017	47	2210	21041	42
9000	2170	16608	41	2070	16704	42	2087	16640	47
10000	2018	12748	41	2106	12685	46	2026	12588	41
11000	1958	9752	41	1966	9652	42	1930	9644	41
12000	1858	7700	65	1846	7640	64	1842	7700	59
13000	1762	6256	41	1750	6188	42	1726	6216	47
14000	1615	4668	47	1634	4692	46	1582	4649	47
15000	1450	3412	47	1434	3344	47	1431	3417	47
16000	818	2889	47	778	2828	46	798	2860	47
17000	622	2104	46	635	2085	47	630	2044	41
18000	461	1404	41	482	1420	46	493	1456	47
19000	342	900	41	338	900	47	138	403	47
20000	75	212	47	177	510	47	91	204	46
21000	NC	NC	NC	NC	NC	NC	NC	NC	NC
22000	NC	NC	NC	NC	NC	NC	NC	NC	NC
23000	NC	NC	NC	NC	NC	NC	NC	NC	NC
CSA #4	2038	17894	64	2102	17802	59	2078	17806	60
ANSI #13	1622	6053	59	1638	6037	65	1650	6116	64

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.1, -140 dBm/Hz AWGN Impairment, High Latency Path, IOL Test ID: 5555</b>									
<b>Length (feet)</b>	<b>Iteration 1</b>			<b>Iteration 2</b>			<b>Iteration 3</b>		
	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>
<b>0</b>	2257	48138	41	2245	47911	40	2268	48158	46
<b>1000</b>	2280	47421	46	1032	24338	50	2253	47370	47
<b>2000</b>	996	23816	25	2257	46027	47	2198	45948	46
<b>3000</b>	2276	44259	42	2234	44587	41	2257	44491	47
<b>4000</b>	1020	21731	25	2261	42373	47	2288	42511	41
<b>5000</b>	2287	39466	47	2319	39482	64	2314	39419	60
<b>6000</b>	2234	33565	41	2277	33243	47	2246	33178	46
<b>7000</b>	2268	27022	47	2265	26868	46	2284	26807	42
<b>8000</b>	2253	21331	41	2238	21319	42	2280	21054	41
<b>9000</b>	2126	16655	47	2096	16742	47	2083	16531	47
<b>10000</b>	2049	12604	47	2053	12590	47	2057	12587	46
<b>11000</b>	1995	9727	47	1977	9664	46	2060	9662	46
<b>12000</b>	1889	7547	65	1878	7544	64	939	3991	45
<b>13000</b>	1790	6182	41	1775	6127	41	1809	6177	47
<b>14000</b>	1667	4444	42	1674	4449	47	1683	4559	41
<b>15000</b>	1504	3137	46	1492	3127	47	1484	3141	46
<b>16000</b>	416	1659	45	459	1674	50	866	2423	47
<b>17000</b>	688	1470	46	670	1464	47	674	1426	46
<b>18000</b>	323	1006	50	320	1017	50	327	986	50
<b>19000</b>	221	665	50	221	669	50	218	676	50
<b>20000</b>	159	406	50	159	413	50	NC	NC	NC
<b>21000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>22000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>23000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>CSA #4</b>	2130	18154	46	1051	9140	50	1017	9155	50
<b>ANSI #13</b>	913	3385	45	1691	6158	64	1713	5969	63



**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, Low Latency Path, IOL Test ID: 5555</b>									
<b>Length (feet)</b>	<b>Iteration 1</b>			<b>Iteration 2</b>			<b>Iteration 3</b>		
	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>
<b>0</b>	1108	23884	35	1104	23884	35	2295	47880	40
<b>1000</b>	2323	47304	47	2315	47324	47	2291	47344	47
<b>2000</b>	1124	23884	35	1104	23504	35	2347	46140	46
<b>3000</b>	1124	23472	35	2299	46308	64	2344	45964	64
<b>4000</b>	2308	44252	46	1092	22592	35	1112	22700	25
<b>5000</b>	2240	40672	41	2260	40232	46	2256	40496	42
<b>6000</b>	2183	34656	41	2191	34296	47	2163	34724	46
<b>7000</b>	2055	27488	42	2043	27656	47	2055	27628	47
<b>8000</b>	1867	21788	46	1871	21740	47	1859	21836	46
<b>9000</b>	1719	16543	47	1711	16507	47	1699	16515	47
<b>10000</b>	1515	12300	47	1503	12295	41	1515	12283	47
<b>11000</b>	1323	8939	47	1299	8883	41	1319	8899	47
<b>12000</b>	1139	6931	64	1111	6663	63	1127	6923	64
<b>13000</b>	947	4743	41	935	4739	42	939	4756	42
<b>14000</b>	739	3175	41	759	3163	41	751	3183	47
<b>15000</b>	555	1924	41	555	1903	43	571	1911	42
<b>16000</b>	234	1071	46	224	1063	46	228	1071	47
<b>17000</b>	124	148	35	116	144	35	128	144	25
<b>18000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>19000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>20000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>21000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>22000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>23000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>CSA #4</b>	1727	18016	66	844	9332	35	1747	18012	47
<b>ANSI #13</b>	795	5147	63	779	5103	63	779	5083	59

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, High Latency Path, IOL Test ID: 5555</b>									
<b>Length (feet)</b>	<b>Iteration 1</b>			<b>Iteration 2</b>			<b>Iteration 3</b>		
	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>
<b>0</b>	1132	23884	35	2330	46916	47	2310	46916	45
<b>1000</b>	1124	23884	35	2342	46916	46	2342	46916	48
<b>2000</b>	2330	45796	47	2357	45716	41	2326	45813	47
<b>3000</b>	1136	23540	35	1136	23576	35	2373	45424	42
<b>4000</b>	2349	43645	41	2345	43310	42	2350	43848	63
<b>5000</b>	2267	40630	65	2299	40283	64	2283	40203	42
<b>6000</b>	2219	34042	47	2189	34361	42	2223	34420	47
<b>7000</b>	2087	27677	41	2099	27639	46	2099	27663	47
<b>8000</b>	1883	21645	46	1883	21681	47	1966	21681	47
<b>9000</b>	1715	16230	47	1727	16188	46	1719	16258	41
<b>10000</b>	1540	12122	41	1548	12112	46	716	6220	35
<b>11000</b>	620	4564	35	1337	8599	47	1357	8656	46
<b>12000</b>	1169	6759	59	1157	6755	59	1157	6757	59
<b>13000</b>	967	4310	63	967	4363	59	979	4377	63
<b>14000</b>	796	2642	47	800	2622	47	788	2679	41
<b>15000</b>	605	1296	46	605	1344	47	610	1348	47
<b>16000</b>	208	392	50	200	392	35	220	388	25
<b>17000</b>	120	144	50	120	140	35	120	144	25
<b>18000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>19000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>20000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>21000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>22000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>23000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>CSA #4</b>	1770	17818	46	1747	17867	70	1751	17810	70
<b>ANSI #13</b>	820	4684	59	408	2428	35	833	4680	59

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, Low Latency Path, IOL Test ID: 5555</b>									
<b>Length (feet)</b>	<b>Iteration 1</b>			<b>Iteration 2</b>			<b>Iteration 3</b>		
	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>
<b>0</b>	2231	47992	47	2242	47992	46	2231	47992	53
<b>1000</b>	2202	47060	47	2210	47500	41	2210	47360	59
<b>2000</b>	1023	23996	45	2182	46200	46	1023	23996	47
<b>3000</b>	2135	46500	65	2126	46484	46	1023	23996	47
<b>4000</b>	2062	44505	42	1023	23485	50	1023	23649	47
<b>5000</b>	1990	41888	46	1023	22519	50	1998	42087	47
<b>6000</b>	1906	36791	41	1898	36712	42	1906	36671	47
<b>7000</b>	1023	17114	45	1798	29558	41	1798	29590	47
<b>8000</b>	1023	14251	45	1687	23672	48	1687	23696	47
<b>9000</b>	1591	18620	47	1594	18489	46	1023	11638	47
<b>10000</b>	1482	14054	41	1482	13978	41	1023	9231	47
<b>11000</b>	1374	10455	42	1023	7091	50	1374	10435	47
<b>12000</b>	1266	8174	64	1007	5743	75	1286	8102	64
<b>13000</b>	NC	NC	NC	1118	5646	59	915	4311	47
<b>14000</b>	135	643	40	962	3970	47	946	3950	71
<b>15000</b>	59	283	42	819	2686	41	59	269	40
<b>16000</b>	NC	NC	NC	627	1683	75	NC	NC	NC
<b>17000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>18000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>19000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>20000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>21000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>22000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>23000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>CSA #4</b>	1642	20436	58	1642	20356	65	1642	20320	70
<b>ANSI #13</b>	NC	NC	NC	843	4847	75	993	6371	71

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, High Latency Path, IOL Test ID: 5555</b>									
<b>Length (feet)</b>	<b>Iteration 1</b>			<b>Iteration 2</b>			<b>Iteration 3</b>		
	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>
<b>0</b>	2242	46328	53	2238	46328	53	2242	46328	47
<b>1000</b>	2218	46328	47	1024	23296	53	2215	45852	47
<b>2000</b>	1024	23296	48	2179	45247	48	2180	45099	47
<b>3000</b>	2138	45021	53	2138	45217	47	1024	23296	47
<b>4000</b>	2080	44314	59	2080	44157	64	2084	44161	64
<b>5000</b>	2015	41295	47	2015	41354	47	2023	41268	47
<b>6000</b>	1920	36234	47	1928	36048	48	1920	36194	47
<b>7000</b>	1824	29880	47	1828	29792	47	1832	29817	47
<b>8000</b>	1717	23779	47	1724	23768	47	696	9377	47
<b>9000</b>	1625	18579	47	1024	11943	46	1625	18590	47
<b>10000</b>	1524	14211	47	1508	14200	47	1505	14243	47
<b>11000</b>	1394	10644	47	1414	10687	47	1409	10684	47
<b>12000</b>	1311	7764	63	1306	7761	61	1322	7755	63
<b>13000</b>	1156	5437	60	1163	5483	64	938	4512	71
<b>14000</b>	NC	NC	5	993	3649	71	977	3637	71
<b>15000</b>	756	2699	47	748	2688	47	709	2680	71
<b>16000</b>	NC	NC	NC	657	1896	71	NC	NC	NC
<b>17000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>18000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>19000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>20000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>21000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>22000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>23000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>CSA #4</b>	1021	13370	71	1673	20696	71	1669	20679	71
<b>ANSI #13</b>	154	1219	41	862	5123	71	839	5107	71

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, Low Latency Path, IOL Test ID: 5555</b>									
<b>Length (feet)</b>	<b>Iteration 1</b>			<b>Iteration 2</b>			<b>Iteration 3</b>		
	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>
<b>0</b>	2419	47692	40	1219	23996	46	2435	47648	41
<b>1000</b>	2471	46394	46	2467	46307	47	2471	46449	69
<b>2000</b>	2431	44500	41	2435	44333	47	2415	44494	47
<b>3000</b>	2475	40563	59	2459	40494	65	1216	20395	23
<b>4000</b>	2459	33800	43	2471	34951	41	2447	34597	59
<b>5000</b>	2456	26895	41	2459	27380	41	2467	27179	46
<b>6000</b>	2456	17642	42	2451	17465	47	2431	17452	47
<b>7000</b>	1216	4936	24	2435	9180	47	2427	9379	46
<b>8000</b>	2383	6663	64	2399	6730	64	2387	6667	58
<b>9000</b>	2351	5154	41	2351	4686	47	2347	4781	47
<b>10000</b>	2296	3811	46	1216	2024	24	1216	2003	23
<b>11000</b>	2092	2671	47	2183	2810	41	2162	2703	41
<b>12000</b>	2029	1974	40	2010	2015	47	2001	1978	41
<b>13000</b>	1845	1322	41	1813	1314	41	1833	1344	46
<b>14000</b>	1645	789	47	1599	806	46	1613	735	41
<b>15000</b>	1366	421	47	739	254	25	647	208	41
<b>16000</b>	1033	295	46	499	108	41	NC	NC	NC
<b>17000</b>	835	120	41	806	134	44	NC	NC	NC
<b>18000</b>	NC	NC	NC	362	50	56	NC	NC	NC
<b>19000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>20000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>21000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>22000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>23000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>CSA #4</b>	2227	4548	46	2239	4276	47	2207	4635	46
<b>ANSI #13</b>	1677	813	42	1641	754	46	1651	841	47

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, High Latency Path, IOL Test ID: 5555</b>									
<b>Length (feet)</b>	<b>Iteration 1</b>			<b>Iteration 2</b>			<b>Iteration 3</b>		
	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>	<b>AUDR</b>	<b>ADDR</b>	<b>Time</b>
<b>0</b>	2437	46904	46	2426	47304	41	1210	23032	40
<b>1000</b>	2434	46479	46	1216	23625	23	2476	46747	46
<b>2000</b>	2480	44598	47	2434	44748	47	2434	44690	47
<b>3000</b>	1216	21992	24	2476	40820	66	2476	40728	63
<b>4000</b>	2468	34225	63	2480	35059	46	2464	34757	47
<b>5000</b>	2472	27723	41	2472	27455	46	2472	28400	47
<b>6000</b>	2441	18724	47	2472	18818	47	2457	18859	42
<b>7000</b>	2434	10613	48	2422	10778	41	1216	6034	23
<b>8000</b>	2403	7224	63	2403	7484	59	2399	7455	59
<b>9000</b>	2360	4700	64	2367	4777	65	2363	4708	64
<b>10000</b>	2295	3517	46	1196	2314	23	2275	3542	42
<b>11000</b>	2159	2452	42	2124	2190	41	2148	2407	46
<b>12000</b>	1993	1523	46	2017	1467	41	2017	1479	41
<b>13000</b>	NC	NC	NC	985	821	25	981	817	25
<b>14000</b>	NC	NC	NC	NC	NC	NC	859	566	25
<b>15000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>16000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>17000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>18000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>19000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>20000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>21000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>22000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>23000</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>CSA #4</b>	2253	4810	46	2221	4822	47	2252	4743	41
<b>ANSI #13</b>	889	795	25	889	802	25	889	787	25

## Test Detail

### Group 1: Rate vs. Reach Tests for ADSL over POTS

Test RR.1.1, -140 dBm/Hz AWGN Impairment, Low Latency Path, Iteration 1, IOL Test ID: 5555														
Length (feet)	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	
<b>AUDR</b>	2226	999	2283	2254	2219	2222	2235	2226	2230	2170	2018	1958	1858	
<b>ADDR</b>	48534	23870	45642	44822	42818	39550	33258	26550	21321	16608	12748	9752	7700	
<b>Time</b>	47	24	47	47	46	47	46	41	47	41	41	41	65	
<b>Pair #1</b>	<b>UDR</b>	1211	SF	1248	1215	1208	1211	1248	1227	1211	1171	1119	1063	967
	<b>DDR</b>	23996	SF	21980	22100	21320	19884	16832	13476	10928	8456	6495	4903	3907
	<b>UNM</b>	6	SF	6	6	6	6.5	6	6.5	6	6.5	6.5	6.5	7
	<b>DNM</b>	8	SF	8.5	8.5	8	8.5	7.5	7	6	5.5	6	6	5.5
	<b>Time</b>	42	SF	42	42	41	42	41	36	42	36	36	36	60
	<b>Mode</b>	A2+	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1015	999	1035	1039	1011	1011	987	999	1019	999	899	895	891
	<b>DDR</b>	24538	23870	23662	22722	21498	19666	16426	13074	10393	8152	6253	4849	3793
	<b>UNM</b>	5.9	6.1	6	5.9	6.3	6.5	6.2	6.5	6.2	6.1	6	5.8	6.1
	<b>DNM</b>	7	8.2	8.6	8.9	8.6	8.1	7.5	6.7	6.2	5.9	6	6.2	5.7
	<b>Time</b>	19	19	19	19	19	31	39	36	37	37	37	36	37
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
Length (feet)	13000	14000	15000	16000	17000	18000	19000	20000	21000	22000	23000	CSA #4	ANSI #13	
<b>AUDR</b>	1762	1615	1450	818	622	461	342	75	NC	NC	NC	2038	1622	
<b>ADDR</b>	6256	4668	3412	2889	2104	1404	900	212	NC	NC	NC	17894	6053	
<b>Time</b>	41	47	47	47	46	41	41	47	NC	NC	NC	64	59	
<b>Pair #1</b>	<b>UDR</b>	883	760	679	383	275	223	155	75	NC	NC	NC	1055	779
	<b>DDR</b>	3147	2323	1679	1400	967	643	391	212	NC	NC	NC	9132	2968
	<b>UNM</b>	6.5	6.5	6.5	7	6.5	6.5	7.5	8.5	NC	NC	NC	6	7
	<b>DNM</b>	5.5	5.5	5.5	5.5	5.5	6	5.5	6	NC	NC	NC	6	5.5
	<b>Time</b>	36	42	42	42	41	36	36	42	NC	NC	NC	59	54
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	879	855	771	435	347	238	187	NC	NC	NC	NC	983	843
	<b>DDR</b>	3109	2345	1733	1489	1137	761	509	NC	NC	NC	NC	8762	3085
	<b>UNM</b>	6.1	4.8	5	6.2	6.8	6.8	7.6	NC	NC	NC	NC	6.1	5.9
	<b>DNM</b>	6	5.8	5.7	6.5	6.5	6.5	7	NC	NC	NC	NC	6	5.9
	<b>Time</b>	37	38	36	36	37	35	35	NC	NC	NC	NC	46	37
	<b>Mode</b>	A2+	A2+	A2+	A2_L	A2_L	A2_L	A2_L	NC	NC	NC	NC	A2+	A2+

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.1, -140 dBm/Hz AWGN Impairment, Low Latency Path, Iteration 2, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2214	2254	2234	2206	2206	2262	2202	2226	2218	2070	2106	1966	1846	
<b>ADDR</b>	48682	46874	45942	45302	42666	39173	33198	26317	21017	16704	12685	9652	7640	
<b>Time</b>	46	47	46	65	47	42	47	47	47	42	46	42	64	
<b>Pair #1</b>	<b>UDR</b>	1211	1219	1227	1219	1203	1255	1215	1227	1211	1159	1107	1067	943
	<b>DDR</b>	23996	23096	22308	22508	21348	19808	16980	13416	10752	8572	6456	4871	3887
	<b>UNM</b>	6	6	6	6	6.5	6	6	6.5	6	6.5	6	6	7
	<b>DNM</b>	8	8.5	9	8.5	8.5	8	7.5	6.5	6	5.5	6	5.5	5.5
	<b>Time</b>	41	42	41	60	42	37	42	42	42	37	41	37	59
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1003	1035	1007	987	1003	1007	987	999	1007	911	999	899	903
	<b>DDR</b>	24686	23778	23634	22794	21318	19365	16218	12901	10265	8132	6229	4781	3753
	<b>UNM</b>	6.1	5.5	6	6.1	6.6	6.4	6.1	6.7	6.2	6	6.2	5.6	6
	<b>DNM</b>	7.2	8.5	8.9	9.2	8.4	8.2	7.5	6.8	6.2	5.8	5.9	6	6
	<b>Time</b>	20	21	21	17	37	38	35	39	37	35	35	35	36
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1750	1634	1434	778	635	482	338	177	NC	NC	NC	2102	1638	
<b>ADDR</b>	6188	4692	3344	2828	2085	1420	900	510	NC	NC	NC	17802	6037	
<b>Time</b>	42	46	47	46	47	46	47	47	NC	NC	NC	59	65	
<b>Pair #1</b>	<b>UDR</b>	863	779	667	363	280	191	155	75	NC	NC	NC	1067	775
	<b>DDR</b>	3107	2311	1663	1375	984	623	399	237	NC	NC	NC	9116	2996
	<b>UNM</b>	6.5	6.5	6	6	6.5	8	7	6.5	NC	NC	NC	6	7
	<b>DNM</b>	5.5	5.5	5.5	5.5	6	5.5	6	5	NC	NC	NC	6	5.5
	<b>Time</b>	37	41	42	41	42	41	42	42	NC	NC	NC	54	60
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	887	855	767	415	355	291	183	102	NC	NC	NC	1035	863
	<b>DDR</b>	3081	2381	1681	1453	1101	797	501	273	NC	NC	NC	8686	3041
	<b>UNM</b>	5.8	4.6	4.9	6.2	6.6	6.4	7.2	8.7	NC	NC	NC	6.5	4.8
	<b>DNM</b>	5.9	5.9	5.8	6.5	7	7	7	6.5	NC	NC	NC	6	5.9
	<b>Time</b>	36	37	45	36	36	37	45	33	NC	NC	NC	37	36
	<b>Mode</b>	A2+	A2+	A2+	A2_L	A2_L	A2_L	A2_L	A2_L	NC	NC	NC	A2+	A2+



**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.1, -140 dBm/Hz AWGN Impairment, Low Latency Path, Iteration 3, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2222	2283	2218	2186	1019	1003	2230	2230	2210	2067	2026	1930	1842	
<b>ADDR</b>	48486	47070	46010	44866	21478	19470	33066	26369	21041	16640	12588	9644	7700	
<b>Time</b>	40	47	46	46	24	31	43	46	42	47	41	41	59	
<b>Pair #1</b>	<b>UDR</b>	1219	1248	1199	1215	SF	SF	1243	1219	1203	1144	1103	1027	943
	<b>DDR</b>	23996	23292	22368	22180	SF	SF	16708	13428	10752	8512	6427	4827	3955
	<b>UNM</b>	6	6	6.5	6	SF	SF	6.5	6.5	6	6	6	6.5	6.5
	<b>DNM</b>	8.5	8	9	8.5	SF	SF	7	7	6	5.5	6	6	5.5
	<b>Time</b>	35	42	41	41	SF	SF	38	41	37	42	36	36	54
	<b>Mode</b>	A2+	A2+	A2+	A2+	SF	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1003	1035	1019	971	1019	1003	987	1011	1007	923	923	903	899
	<b>DDR</b>	24490	23778	23642	22686	21478	19470	16358	12941	10289	8128	6161	4817	3745
	<b>UNM</b>	6.2	5.4	6.6	6.4	6.8	6.3	6.5	6.3	6.4	6	6	5.9	5.7
	<b>DNM</b>	7.2	8.7	8.8	9	8.6	8.2	7.4	6.8	6.1	5.8	6	6.1	5.9
	<b>Time</b>	29	18	19	20	19	27	35	38	36	36	35	39	35
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1726	1582	1431	798	630	493	138	91	NC	NC	NC	2078	1650	
<b>ADDR</b>	6216	4649	3417	2860	2044	1456	403	204	NC	NC	NC	17806	6116	
<b>Time</b>	47	47	47	47	41	47	47	46	NC	NC	NC	60	64	
<b>Pair #1</b>	<b>UDR</b>	843	747	664	371	271	210	138	91	NC	NC	NC	1059	795
	<b>DDR</b>	3135	2328	1684	1391	967	635	403	204	NC	NC	NC	9124	3099
	<b>UNM</b>	7	6.5	6	6.5	6.5	6.5	7	7	NC	NC	NC	6.5	6.5
	<b>DNM</b>	6	5.5	5.5	5.5	5.5	5.5	5.5	6	NC	NC	NC	5.5	5.5
	<b>Time</b>	42	42	42	42	36	42	42	41	NC	NC	NC	55	59
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	883	835	767	427	359	283	NC	NC	NC	NC	NC	1019	855
	<b>DDR</b>	3081	2321	1733	1469	1077	821	NC	NC	NC	NC	NC	8682	3017
	<b>UNM</b>	6	4.8	5.1	6.7	6.4	6.6	NC	NC	NC	NC	NC	6.3	5.9
	<b>DNM</b>	5.9	5.7	5.9	6.5	7	6.5	NC	NC	NC	NC	NC	6.1	5.9
	<b>Time</b>	35	37	35	36	37	35	NC	NC	NC	NC	NC	37	38
	<b>Mode</b>	A2+	A2+	A2+	A2_L	A2_L	A2_L	NC	NC	NC	NC	NC	A2+	A2+

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.1, -140 dBm/Hz AWGN Impairment, High Latency Path, Iteration 1, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2257	2280	996	2276	1020	2287	2234	2268	2253	2126	2049	1995	1889	
<b>ADDR</b>	48138	47421	23816	44259	21731	39466	33565	27022	21331	16655	12604	9727	7547	
<b>Time</b>	41	46	25	42	25	47	41	47	41	47	47	47	65	
<b>Pair #1</b>	<b>UDR</b>	1214	1248	SF	1229	SF	1221	1229	1248	1210	1183	1110	1052	957
	<b>DDR</b>	23032	23032	SF	21663	SF	19624	16762	13636	10671	8190	6055	4613	3556
	<b>UNM</b>	6	6	SF	6	SF	6	6.5	6	6.5	6	6.5	6.5	6.5
	<b>DNM</b>	9.5	9	SF	9	SF	8.5	7.5	6.5	6	5.5	5.5	5	5.5
	<b>Time</b>	36	41	SF	37	SF	42	36	42	36	42	42	42	60
	<b>Mode</b>	A2+	A2+	SF	A2+	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1043	1032	996	1047	1020	1066	1005	1020	1043	943	939	943	932
	<b>DDR</b>	25106	24389	23816	22596	21731	19842	16803	13386	10660	8465	6549	5114	3991
	<b>UNM</b>	6.3	5.7	6.1	6.9	6	6.1	7.3	6.1	6.3	6	6	6	6.1
	<b>DNM</b>	7.6	8.9	9.5	9.4	9.3	8.2	7.5	6.7	6.1	5.7	5.9	6.1	5.4
	<b>Time</b>	20	21	20	42	20	36	20	46	45	36	48	35	39
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1790	1667	1504	416	688	323	221	159	NC	NC	NC	2130	913	
<b>ADDR</b>	6182	4444	3137	1659	1470	1006	665	406	NC	NC	NC	18154	3385	
<b>Time</b>	41	42	46	45	46	50	50	50	NC	NC	NC	46	45	
<b>Pair #1</b>	<b>UDR</b>	881	781	696	SF	297	NC	NC	NC	NC	NC	NC	1079	SF
	<b>DDR</b>	2782	1817	1078	SF	192	NC	NC	NC	NC	NC	NC	8973	SF
	<b>UNM</b>	6.5	6.5	7	SF	6.5	NC	NC	NC	NC	NC	NC	6	SF
	<b>DNM</b>	5.5	5.5	5.5	SF	5.5	NC	NC	NC	NC	NC	NC	5.5	SF
	<b>Time</b>	36	37	41	SF	41	NC	NC	NC	NC	NC	NC	41	SF
	<b>Mode</b>	A2+	A2+	A2+	SF	A2+	NC	NC	NC	NC	NC	NC	A2+	SF
<b>Pair #2</b>	<b>UDR</b>	909	886	808	416	391	323	221	159	NC	NC	NC	1051	913
	<b>DDR</b>	3400	2627	2059	1659	1278	1006	665	406	NC	NC	NC	9181	3385
	<b>UNM</b>	6	5.6	4.1	7.2	6	6.1	7.1	7.8	NC	NC	NC	6.3	5.7
	<b>DNM</b>	5.7	5.8	5.8	6.5	7	6.5	6.5	7	NC	NC	NC	5.8	5.7
	<b>Time</b>	45	35	44	35	37	35	43	48	NC	NC	NC	40	38
	<b>Mode</b>	A2+	A2+	A2+	A2_L	A2_L	A2_L	A2_L	A2_L	NC	NC	NC	A2+	A2+

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

Test RR.1.1, -140 dBm/Hz AWGN Impairment, High Latency Path, Iteration 2, IOL Test ID: 5555														
Length (feet)	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	
AUDR	2245	1032	2257	2234	2261	2319	2277	2265	2238	2096	2053	1977	1878	
ADDR	47911	24338	46027	44587	42373	39482	33243	26868	21319	16742	12590	9664	7544	
Time	40	50	47	41	47	64	47	46	42	47	47	46	64	
Pair #1	UDR	1206	SF	1218	1229	1218	1268	1245	1229	1210	1168	1087	1045	946
	DDR	23032	SF	21976	21980	20695	19606	16485	13523	10689	8277	6082	4610	3583
	UNM	6.5	SF	6	6	6.5	6	6.5	6.5	6.5	6	6.5	6.5	6.5
	DNM	9.5	SF	9.5	9.5	9	8	7.5	6.5	5.5	5.5	5.5	5.5	5.5
	Time	35	SF	42	36	42	59	42	41	37	42	42	41	59
	Mode	A2+	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
Pair #2	UDR	1039	1032	1039	1005	1043	1051	1032	1036	1028	928	966	932	932
	DDR	24879	24338	24051	22607	21678	19876	16758	13345	10630	8465	6508	5054	3961
	UNM	6.3	5.6	5.6	7.1	6.4	6.1	6.1	6.2	6.1	6	6.1	6	6
	DNM	7.5	8.8	9.3	9.5	9	8.1	7.4	6.6	6.3	5.6	5.8	5.7	5.5
	Time	23	19	20	21	23	19	19	36	35	34	35	35	45
	Mode	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
Length (feet)	13000	14000	15000	16000	17000	18000	19000	20000	21000	22000	23000	CSA #4	ANSI #13	
AUDR	1775	1674	1492	459	670	320	221	159	NC	NC	NC	1051	1691	
ADDR	6127	4449	3127	1674	1464	1017	669	413	NC	NC	NC	9140	6158	
Time	41	47	47	50	47	50	50	50	NC	NC	NC	50	64	
Pair #1	UDR	866	788	688	SF	290	NC	NC	NC	NC	NC	NC	NC	797
	DDR	2753	1800	1091	SF	193	NC	NC	NC	NC	NC	NC	NC	2773
	UNM	6.5	6	6.5	SF	6.5	NC	NC	NC	NC	NC	NC	NC	6.5
	DNM	5.5	5.5	5.5	SF	5.5	NC	NC	NC	NC	NC	NC	NC	5.5
	Time	36	42	42	SF	42	NC	NC	NC	NC	NC	NC	NC	59
	Mode	A2+	A2+	A2+	SF	A2+	NC	NC	NC	NC	NC	NC	NC	A2+
Pair #2	UDR	909	886	804	459	380	320	221	159	NC	NC	1051	894	
	DDR	3374	2649	2036	1674	1271	1017	669	413	NC	NC	9140	3385	
	UNM	6.1	5	5.1	6.1	6.6	6.7	7	7.4	NC	NC	NC	6.2	5.6
	DNM	5.7	5.8	5.7	6.5	6.5	6.5	6.5	6.5	NC	NC	NC	5.9	5.6
	Time	38	35	35	36	39	46	34	31	NC	NC	NC	37	36
	Mode	A2+	A2+	A2+	A2_L	A2_L	A2_L	A2_L	A2_L	NC	NC	NC	A2+	A2+

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

Test RR.1.1, -140 dBm/Hz AWGN Impairment, High Latency Path, Iteration 3, IOL Test ID: 5555														
Length (feet)	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	
AUDR	2268	2253	2198	2257	2288	2314	2246	2284	2280	2083	2057	2060	939	
ADDR	48158	47370	45948	44491	42511	39419	33178	26807	21054	16531	12587	9662	3991	
Time	46	47	46	47	41	60	46	42	41	47	46	46	45	
Pair #1	UDR	1210	1214	1202	1214	1218	1260	1245	1248	1248	1159	1114	1071	NC
	DDR	23032	23032	21995	21929	20810	19650	16485	13432	10428	8197	6079	4600	NC
	UNM	6	6.5	6	6	6	6	6	6	6.5	6	6.5	6	NC
	DNM	8.5	9	9	9.5	9	8	7.5	6.5	6	5.5	5.5	5.5	NC
	Time	41	42	41	42	36	55	41	37	36	42	41	41	NC
	Mode	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
Pair #2	UDR	1058	1039	996	1043	1070	1054	1001	1036	1032	924	943	989	939
	DDR	25126	24338	23953	22562	21701	19769	16693	13375	10626	8334	6508	5062	3991
	UNM	6.5	5.6	6.9	6.9	6.3	6.3	0.6	6	6.1	6	6.1	6	6.1
	DNM	7.5	9.1	9.2	9.3	8.8	8.1	7.4	6.6	6.3	5.6	5.7	5.9	5.5
	Time	23	20	21	20	18	36	38	36	35	37	36	35	35
	Mode	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
Length (feet)	13000	14000	15000	16000	17000	18000	19000	20000	21000	22000	23000	CSA #4	ANSI #13	
AUDR	1809	1683	1484	866	674	327	218	NC	NC	NC	NC	1017	1713	
ADDR	6177	4559	3141	2423	1426	986	676	NC	NC	NC	NC	9155	5969	
Time	47	41	46	47	46	50	50	NC	NC	NC	NC	50	63	
Pair #1	UDR	896	797	680	404	298	NC	NC	NC	NC	NC	NC	NC	808
	DDR	2773	1854	1105	716	189	NC	NC	NC	NC	NC	NC	NC	2636
	UNM	6.5	6.5	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	NC	6
	DNM	5.5	5.5	5.5	5.5	5.5	NC	NC	NC	NC	NC	NC	NC	5.5
	Time	42	36	41	42	41	NC	NC	NC	NC	NC	NC	NC	58
	Mode	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	A2+
Pair #2	UDR	913	886	804	462	376	327	218	NC	NC	NC	NC	1017	905
	DDR	3404	2705	2036	1707	1237	986	676	NC	NC	NC	NC	9155	3333
	UNM	6.1	4.6	4.6	5.8	6.6	6.7	7	NC	NC	NC	NC	6.5	6.1
	DNM	5.7	5.8	5.9	-2.95	6.5	6.5	6.5	NC	NC	NC	NC	5.9	5.8
	Time	35	38	38	38	39	38	34	NC	NC	NC	NC	46	38
	Mode	A2+	A2+	A2+	A2_L	A2_L	A2_L	A2_L	NC	NC	NC	NC	A2+	A2+

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, Low Latency Path, Iteration 1, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	1108	2323	1124	1124	2308	2240	2183	2055	1867	1719	1515	1323	1139	
<b>ADDR</b>	23884	47304	23884	23472	44252	40672	34656	27488	21788	16543	12300	8939	6931	
<b>Time</b>	35	47	35	35	46	41	41	42	46	47	47	47	64	
<b>Pair #1</b>	<b>UDR</b>	SF	1211	NC	SF	1208	1176	1139	1063	991	899	799	703	591
	<b>DDR</b>	SF	23420	NC	SF	21572	20052	16908	13264	10632	8075	6068	4371	3699
	<b>UNM</b>	SF	6	NC	SF	6	6	6	6.5	6	6	6.5	6	6.5
	<b>DNM</b>	SF	8	NC	SF	8.5	8.5	7	6	5.5	6	5.5	5.5	5.5
	<b>Time</b>	SF	42	NC	SF	41	36	36	37	41	42	42	42	59
	<b>Mode</b>	SF	A2+	NC	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1108	1112	1124	1124	1100	1064	1044	992	876	820	716	620	548
	<b>DDR</b>	23884	23884	23884	23472	22680	20620	17748	14224	11156	8468	6232	4568	3232
	<b>UNM</b>	6	6.5	6	6.5	6	7	6	6	5.5	6	6	6	6
	<b>DNM</b>	7.5	8	8	7	7	6.5	6.5	6	6	6	6	6	6
	<b>Time</b>	24	21	23	23	23	21	21	21	20	21	37	21	22
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	947	739	555	234	124	NC	NC	NC	NC	NC	NC	1727	795	
<b>ADDR</b>	4743	3175	1924	1071	148	NC	NC	NC	NC	NC	NC	18016	5147	
<b>Time</b>	41	41	41	46	35	NC	NC	NC	NC	NC	NC	66	63	
<b>Pair #1</b>	<b>UDR</b>	483	379	275	34	NC	NC	NC	NC	NC	NC	NC	899	411
	<b>DDR</b>	2595	1771	1144	679	NC	NC	NC	NC	NC	NC	NC	8684	2727
	<b>UNM</b>	6.5	6.5	6	7	NC	NC	NC	NC	NC	NC	NC	6	6
	<b>DNM</b>	5.5	5.5	5.5	6	NC	NC	NC	NC	NC	NC	NC	5.5	5.5
	<b>Time</b>	36	36	36	41	NC	NC	NC	NC	NC	NC	NC	61	58
	<b>Mode</b>	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	464	360	280	200	124	NC	NC	NC	NC	NC	NC	828	384
	<b>DDR</b>	2148	1404	780	392	148	NC	NC	NC	NC	NC	NC	9332	2420
	<b>UNM</b>	6	6.5	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	6	6
	<b>DNM</b>	6	6.5	6.5	6.5	6	NC	NC	NC	NC	NC	NC	6	6
	<b>Time</b>	20	21	23	33	21	NC	NC	NC	NC	NC	NC	25	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	A2+	A2+

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, Low Latency Path, Iteration 2, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	1104	2315	1104	2299	1092	2260	2191	2043	1871	1711	1503	1299	1111	
<b>ADDR</b>	23884	47324	23504	46308	22592	40232	34296	27656	21740	16507	12295	8883	6663	
<b>Time</b>	35	47	35	64	35	46	47	47	47	47	41	41	63	
<b>Pair #1</b>	<b>UDR</b>	NC	1211	SF	1199	SF	1176	1139	1067	991	891	783	691	575
	<b>DDR</b>	NC	23440	SF	22672	SF	19636	16784	13396	10584	8047	6067	4319	3455
	<b>UNM</b>	NC	6	SF	6	SF	6.5	6	6	6	6.5	6.5	6.5	6.5
	<b>DNM</b>	NC	8.5	SF	8.5	SF	8	7	6.5	5.5	6	5.5	5.5	6
	<b>Time</b>	NC	42	SF	59	SF	41	42	42	42	42	36	36	58
	<b>Mode</b>	NC	A2+	SF	A2+	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1104	1104	1104	1100	1092	1084	1052	976	880	820	720	608	536
	<b>DDR</b>	23884	23884	23504	23636	22592	20596	17512	14260	11156	8460	6228	4564	3208
	<b>UNM</b>	6	6.5	6.5	6.5	6.5	6.5	6	6	6	5.5	6	6.5	6
	<b>DNM</b>	7	8	7	7.5	7	6.5	6.5	6.5	6	6	6	6	6
	<b>Time</b>	28	23	21	21	21	21	21	37	21	21	21	21	22
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	935	759	555	224	116	NC	NC	NC	NC	NC	NC	NC	844	779
<b>ADDR</b>	4739	3163	1903	1063	144	NC	NC	NC	NC	NC	NC	NC	9332	5103
<b>Time</b>	42	41	43	46	35	NC	NC	NC	NC	NC	NC	NC	35	63
<b>Pair #1</b>	<b>UDR</b>	483	383	275	32	NC	NC	NC	NC	NC	NC	NC	NC	395
	<b>DDR</b>	2611	1771	1131	675	NC	NC	NC	NC	NC	NC	NC	NC	2707
	<b>UNM</b>	6	6.5	6	7.5	NC	NC	NC	NC	NC	NC	NC	NC	6.5
	<b>DNM</b>	5.5	5.5	5.5	6	NC	NC	NC	NC	NC	NC	NC	NC	5.5
	<b>Time</b>	37	36	38	41	NC	NC	NC	NC	NC	NC	NC	NC	58
	<b>Mode</b>	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC
<b>Pair #2</b>	<b>UDR</b>	452	376	280	192	116	NC	NC	NC	NC	NC	NC	844	384
	<b>DDR</b>	2128	1392	772	388	144	NC	NC	NC	NC	NC	NC	9332	2396
	<b>UNM</b>	6	6	6.5	7	7	NC	NC	NC	NC	NC	NC	6	6
	<b>DNM</b>	6	6.5	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	6	6.5
	<b>Time</b>	21	21	21	21	21	NC	NC	NC	NC	NC	NC	23	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	A2+

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, Low Latency Path, Iteration 3, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2295	2291	2347	2344	1112	2256	2163	2055	1859	1699	1515	1319	1127	
<b>ADDR</b>	47880	47344	46140	45964	22700	40496	34724	27628	21836	16515	12283	8899	6923	
<b>Time</b>	40	47	46	64	25	42	46	47	46	47	47	47	64	
<b>Pair #1</b>	<b>UDR</b>	1211	1195	1227	1240	SF	1176	1123	1063	995	891	795	691	583
	<b>DDR</b>	23996	23460	22256	22392	SF	19868	16944	13420	10648	8039	6059	4331	3695
	<b>UNM</b>	6	6	6.5	6	SF	6	6	6	6	6.5	6.5	6	6.5
	<b>DNM</b>	8.5	8.5	9	9	SF	8	7	6	5.5	6	6	6	5.5
	<b>Time</b>	35	42	41	59	SF	37	41	42	41	42	42	42	59
	<b>Mode</b>	A2+	A2+	A2+	A2+	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1084	1096	1120	1104	1112	1080	1040	992	864	808	720	628	544
	<b>DDR</b>	23884	23884	23884	23572	22700	20628	17780	14208	11188	8476	6224	4568	3228
	<b>UNM</b>	6	6	6.5	6.5	6.5	6	6	6	5.5	6	6.5	6	6
	<b>DNM</b>	7	8	7.5	7.5	7	6.5	6.5	6.5	6	6	6	6	6
	<b>Time</b>	20	21	23	21	21	21	21	23	21	21	21	21	37
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	939	751	571	228	128	NC	NC	NC	NC	NC	NC	1747	779	
<b>ADDR</b>	4756	3183	1911	1071	144	NC	NC	NC	NC	NC	NC	18012	5083	
<b>Time</b>	42	47	42	47	25	NC	NC	NC	NC	NC	NC	47	59	
<b>Pair #1</b>	<b>UDR</b>	483	371	283	32	NC	NC	NC	NC	NC	NC	NC	907	383
	<b>DDR</b>	2616	1775	1127	683	NC	NC	NC	NC	NC	NC	NC	8680	2667
	<b>UNM</b>	6	6.5	6	7	NC	NC	NC	NC	NC	NC	NC	6	7
	<b>DNM</b>	5.5	5.5	5.5	6	NC	NC	NC	NC	NC	NC	NC	5.5	5.5
	<b>Time</b>	37	42	37	42	NC	NC	NC	NC	NC	NC	NC	42	54
	<b>Mode</b>	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	456	380	288	196	128	NC	NC	NC	NC	NC	NC	840	396
	<b>DDR</b>	2140	1408	784	388	144	NC	NC	NC	NC	NC	NC	9332	2416
	<b>UNM</b>	6	6	6	6.5	6.5	NC	NC	NC	NC	NC	NC	6	6
	<b>DNM</b>	6	6.5	6.5	6.5	6	NC	NC	NC	NC	NC	NC	6	6
	<b>Time</b>	21	21	21	22	21	NC	NC	NC	NC	NC	NC	21	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	A2+	A2+

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, High Latency Path, Iteration 1, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	1132	1124	2330	1136	2349	2267	2219	2087	1883	1715	1540	620	1169	
<b>ADDR</b>	23884	23884	45796	23540	43645	40630	34042	27677	21645	16230	12122	4564	6759	
<b>Time</b>	35	35	47	35	41	65	47	41	46	47	41	35	59	
<b>Pair #1</b>	<b>UDR</b>	NC	SF	1198	SF	1225	1183	1151	1079	1003	915	824	SF	609
	<b>DDR</b>	NC	SF	21944	SF	20961	20034	16526	13389	10449	7766	5894	SF	3543
	<b>UNM</b>	NC	SF	6	SF	6	6	6	6	6.5	6	6.5	SF	6.5
	<b>DNM</b>	NC	SF	9	SF	9.5	8.5	7	6	5.5	5.5	5.5	SF	5.5
	<b>Time</b>	NC	SF	42	SF	36	60	42	36	41	42	36	SF	54
	<b>Mode</b>	NC	SF	A2+	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	SF
<b>Pair #2</b>	<b>UDR</b>	1132	1124	1132	1136	1124	1084	1068	1008	880	800	716	620	560
	<b>DDR</b>	23884	23884	23852	23540	22684	20596	17516	14288	11196	8464	6228	4564	3216
	<b>UNM</b>	5.5	6	6.5	7	5.5	6.5	6	6	6	6	6.5	6	5.5
	<b>DNM</b>	7.5	8	7.5	7.5	7	6.5	6.5	6	6	6	6	6	6
	<b>Time</b>	23	21	21	21	21	21	21	20	23	21	21	21	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	967	796	605	208	120	NC	NC	NC	NC	NC	NC	1770	820	
<b>ADDR</b>	4310	2642	1296	392	144	NC	NC	NC	NC	NC	NC	17818	4684	
<b>Time</b>	63	47	46	50	50	NC	NC	NC	NC	NC	NC	46	59	
<b>Pair #1</b>	<b>UDR</b>	515	408	309	NC	NC	NC	NC	NC	NC	NC	NC	930	424
	<b>DDR</b>	2174	1234	516	NC	NC	NC	NC	NC	NC	NC	NC	8486	2252
	<b>UNM</b>	7	6.5	6.5	NC	NC	NC	NC	NC	NC	NC	NC	6.5	6.5
	<b>DNM</b>	5.5	6	5	NC	NC	NC	NC	NC	NC	NC	NC	5.5	5.5
	<b>Time</b>	58	42	41	NC	NC	NC	NC	NC	NC	NC	NC	41	54
	<b>Mode</b>	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+
<b>Pair #2</b>	<b>UDR</b>	452	388	296	208	120	NC	NC	NC	NC	NC	NC	840	396
	<b>DDR</b>	2136	1408	780	392	144	NC	NC	NC	NC	NC	NC	9332	2432
	<b>UNM</b>	6	6	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	6	6.5
	<b>DNM</b>	6	6.5	6.5	6.5	6	NC	NC	NC	NC	NC	NC	6	6
	<b>Time</b>	21	21	21	23	24	NC	NC	NC	NC	NC	NC	21	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	A2+	A2+



**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, High Latency Path, Iteration 2, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2330	2342	2357	1136	2345	2299	2189	2099	1883	1727	1548	1337	1157	
<b>ADDR</b>	46916	46916	45716	23576	43310	40283	34361	27639	21681	16188	12112	8599	6755	
<b>Time</b>	47	46	41	35	42	64	42	46	47	46	46	47	59	
<b>Pair #1</b>	<b>UDR</b>	1206	1206	1241	NC	1221	1187	1137	1075	1003	919	832	713	605
	<b>DDR</b>	23032	23032	21936	NC	20462	19687	16681	13411	10533	7720	5880	4047	3543
	<b>UNM</b>	6.5	6	6	NC	6	6	6	6.5	6	6	6	6.5	7
	<b>DNM</b>	9.5	9	9	NC	9	8	7	6	5.5	5.5	5.5	5.5	5.5
	<b>Time</b>	42	41	36	NC	37	59	37	41	42	41	41	42	54
	<b>Mode</b>	A2+	A2+	A2+	NC	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1124	1136	1116	1136	1124	1112	1052	1024	880	808	716	624	552
	<b>DDR</b>	23884	23884	23780	23576	22848	20596	17680	14228	11148	8468	6232	4552	3212
	<b>UNM</b>	6	6	7	6	6	6	6	6	6	6	6.5	6.5	6
	<b>DNM</b>	7.5	7.5	7.5	7.5	7.5	6.5	6.5	6	6	6	6	6	6
	<b>Time</b>	20	21	21	23	23	21	21	21	23	37	21	22	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	967	800	605	200	120	NC	NC	NC	NC	NC	NC	1747	408	
<b>ADDR</b>	4363	2622	1344	392	140	NC	NC	NC	NC	NC	NC	17867	2428	
<b>Time</b>	59	47	47	35	35	NC	NC	NC	NC	NC	NC	70	35	
<b>Pair #1</b>	<b>UDR</b>	511	412	309	NC	NC	NC	NC	NC	NC	NC	NC	923	SF
	<b>DDR</b>	2235	1234	568	NC	NC	NC	NC	NC	NC	NC	NC	8535	SF
	<b>UNM</b>	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	NC	NC	6.5	SF
	<b>DNM</b>	5.5	5.5	5	NC	NC	NC	NC	NC	NC	NC	NC	5.5	SF
	<b>Time</b>	54	42	42	NC	NC	NC	NC	NC	NC	NC	NC	65	SF
	<b>Mode</b>	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	A2+	SF
<b>Pair #2</b>	<b>UDR</b>	456	388	296	200	120	NC	NC	NC	NC	NC	NC	824	408
	<b>DDR</b>	2128	1388	776	392	140	NC	NC	NC	NC	NC	NC	9332	2428
	<b>UNM</b>	6.5	6	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	6	6
	<b>DNM</b>	6	6.5	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	6	6
	<b>Time</b>	21	21	21	21	21	NC	NC	NC	NC	NC	NC	21	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	A2+	A2+

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.2, 24-disturber DSL NEXT Impairment, High Latency Path, Iteration 3, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2310	2342	2326	2373	2350	2283	2223	2099	1966	1719	716	1357	1157	
<b>ADDR</b>	46916	46916	45813	45424	43848	40203	34420	27663	21681	16258	6220	8656	6757	
<b>Time</b>	45	48	47	42	63	42	47	47	47	41	35	46	59	
<b>Pair #1</b>	<b>UDR</b>	1218	1206	1194	1241	1218	1191	1147	1087	1010	915	SF	725	609
	<b>DDR</b>	23032	23032	21929	21976	21208	19595	16684	13443	10533	7814	SF	4088	3549
	<b>UNM</b>	6	6.5	6	6	6.5	6	6	6	6	6.5	SF	6	6.5
	<b>DNM</b>	9	9	9	9.5	9	8	7	6	5.5	5.5	SF	5	5.5
	<b>Time</b>	40	43	42	37	58	37	42	42	42	36	SF	41	54
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	SF	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1092	1136	1132	1132	1132	1092	1076	1012	956	804	716	632	548
	<b>DDR</b>	23884	23884	23884	23448	22640	20608	17736	14220	11148	8444	6220	4568	3208
	<b>UNM</b>	6.5	6.5	6.5	6	6	6.5	6	6.5	6	6	6.5	6	6
	<b>DNM</b>	7	7.5	8	7	7	6.5	6.5	6	6	6	6	6	6
	<b>Time</b>	26	21	23	21	20	21	21	21	21	21	24	21	26
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	979	788	610	220	120	NC	NC	NC	NC	NC	NC	1751	833	
<b>ADDR</b>	4377	2679	1348	388	144	NC	NC	NC	NC	NC	NC	17810	4680	
<b>Time</b>	63	41	47	25	25	NC	NC	NC	NC	NC	NC	70	59	
<b>Pair #1</b>	<b>UDR</b>	519	408	310	NC	NC	NC	NC	NC	NC	NC	NC	915	429
	<b>DDR</b>	2241	1279	568	NC	NC	NC	NC	NC	NC	NC	NC	8510	2268
	<b>UNM</b>	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	NC	NC	6	7
	<b>DNM</b>	5.5	5.5	5	NC	NC	NC	NC	NC	NC	NC	NC	5.5	5.5
	<b>Time</b>	58	36	42	NC	NC	NC	NC	NC	NC	NC	NC	65	54
	<b>Mode</b>	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+
<b>Pair #2</b>	<b>UDR</b>	460	380	300	220	120	NC	NC	NC	NC	NC	NC	836	404
	<b>DDR</b>	2136	1400	780	388	144	NC	NC	NC	NC	NC	NC	9300	2412
	<b>UNM</b>	6	6.5	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	6	6
	<b>DNM</b>	6	6.5	6.5	6.5	6	NC	NC	NC	NC	NC	NC	6	6
	<b>Time</b>	21	21	23	21	21	NC	NC	NC	NC	NC	NC	21	21
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	A2+	A2+

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, Low Latency Path, Iteration 1, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2231	2202	1023	2135	2062	1990	1906	1023	1023	1591	1482	1374	1266	
<b>ADDR</b>	47992	47060	23996	46500	44505	41888	36791	17114	14251	18620	14054	10455	8174	
<b>Time</b>	47	47	45	65	42	46	41	45	45	47	41	42	64	
<b>Pair #1</b>	<b>UDR</b>	1208	1179	SF	1112	1039	967	883	NC	NC	568	459	351	271
	<b>DDR</b>	23996	23064	SF	22504	21052	19548	16336	NC	NC	6927	4783	3348	2411
	<b>UNM</b>	6	6.5	SF	6	6.5	6	6	NC	NC	6	6.5	6.5	6.5
	<b>DNM</b>	7.5	8	SF	8.5	8	7.5	6.5	NC	NC	5.5	6	5.5	6
	<b>Time</b>	42	42	SF	60	37	41	36	NC	NC	42	36	37	59
	<b>Mode</b>	A2+	A2+	SF	A2+	A2+	A2+	A2+	NC	NC	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	995	
	<b>DDR</b>	23996	23996	23996	23996	23453	22340	20455	17114	14251	11693	9271	5763	
	<b>UNM</b>	13.5	13	13.5	13	13	12.5	13	13	12	12	10.5	6	
	<b>DNM</b>	15	15.5	14.5	10.5	9	8.5	7.5	7	6.5	6	6	6	
	<b>Time</b>	42	42	42	42	42	42	42	42	42	42	42	66	
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	NC	135	59	NC	NC	NC	NC	NC	NC	NC	NC	1642	NC	
<b>ADDR</b>	NC	643	283	NC	NC	NC	NC	NC	NC	NC	NC	20436	NC	
<b>Time</b>	NC	40	42	NC	NC	NC	NC	NC	NC	NC	NC	58	NC	
<b>Pair #1</b>	<b>UDR</b>	SF	135	59	NC	NC	NC	NC	NC	NC	NC	NC	619	SF
	<b>DDR</b>	SF	643	283	NC	NC	NC	NC	NC	NC	NC	NC	7476	SF
	<b>UNM</b>	SF	6.5	7.5	NC	NC	NC	NC	NC	NC	NC	NC	6	SF
	<b>DNM</b>	SF	5.5	5.5	NC	NC	NC	NC	NC	NC	NC	NC	6	SF
	<b>Time</b>	SF	35	37	NC	NC	NC	NC	NC	NC	NC	NC	53	SF
	<b>Mode</b>	SF	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	A2+	SF
<b>Pair #2</b>	<b>UDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1023	NC
	<b>DDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	12960	NC
	<b>UNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	6	NC
	<b>DNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	6	NC
	<b>Time</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	66	NC
	<b>Mode</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	NC

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
 DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, Low Latency Path, Iteration 2, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2242	2210	2182	2126	1023	1023	1898	1798	1687	1594	1482	1023	1007	
<b>ADDR</b>	47992	47500	46200	46484	23485	22519	36712	29558	23672	18489	13978	7091	5743	
<b>Time</b>	46	41	46	46	50	50	42	41	48	46	41	50	75	
<b>Pair #1</b>	<b>UDR</b>	1219	1187	1159	1103	SF	NC	875	775	664	571	459	NC	NC
	<b>DDR</b>	23996	23504	22204	22488	SF	NC	16360	12508	9488	6863	4739	NC	NC
	<b>UNM</b>	6	6	6.5	6	SF	NC	6.5	6	6.5	6.5	6.5	NC	NC
	<b>DNM</b>	8	8.5	8.5	8.5	SF	NC	6.5	6	5.5	6	6	NC	NC
	<b>Time</b>	41	36	41	41	SF	NC	37	36	43	41	36	NC	NC
	<b>Mode</b>	A2+	A2+	A2+	A2+	SF	NC	A2+	A2+	A2+	A2+	A2+	A2+	NC
<b>Pair #2</b>	<b>UDR</b>	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	1007	
	<b>DDR</b>	23996	23996	23996	23996	23485	22519	20352	17050	14184	11626	9239	5743	
	<b>UNM</b>	13	13.5	12.5	13	13.5	13	13	12.5	12	12	10.5	8	6
	<b>DNM</b>	15	15.5	14	10	9	8.5	7.5	7	6.5	6	5.5	6	6
	<b>Time</b>	48	42	41	42	42	42	41	42	42	42	42	42	66
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1118	962	819	627	NC	NC	NC	NC	NC	NC	NC	1642	843	
<b>ADDR</b>	5646	3970	2686	1683	NC	NC	NC	NC	NC	NC	NC	20356	4847	
<b>Time</b>	59	47	41	75	NC	NC	NC	NC	NC	NC	NC	65	75	
<b>Pair #1</b>	<b>UDR</b>	191	131	88	NC	NC	NC	NC	NC	NC	NC	NC	619	NC
	<b>DDR</b>	1327	655	255	NC	NC	NC	NC	NC	NC	NC	NC	7451	NC
	<b>UNM</b>	6.5	6.5	7	NC	NC	NC	NC	NC	NC	NC	NC	6.5	NC
	<b>DNM</b>	5.5	6	5.5	NC	NC	NC	NC	NC	NC	NC	NC	5.5	NC
	<b>Time</b>	54	42	36	NC	NC	NC	NC	NC	NC	NC	NC	60	NC
	<b>Mode</b>	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+
<b>Pair #2</b>	<b>UDR</b>	927	831	731	627	NC	NC	NC	NC	NC	NC	NC	1023	843
	<b>DDR</b>	4319	3315	2431	1683	NC	NC	NC	NC	NC	NC	NC	12905	4847
	<b>UNM</b>	6.5	6	6.5	6	NC	NC	NC	NC	NC	NC	NC	7	6.5
	<b>DNM</b>	5.5	5.5	6	6	NC	NC	NC	NC	NC	NC	NC	6	5.5
	<b>Time</b>	66	66	66	66	NC	NC	NC	NC	NC	NC	NC	65	66
	<b>Mode</b>	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	A2+

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, Low Latency Path, Iteration 3, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2231	2210	1023	1023	1023	1998	1906	1798	1687	1023	1023	1374	1286	
<b>ADDR</b>	47992	47360	23996	23996	23649	42087	36671	29590	23696	11638	9231	10435	8102	
<b>Time</b>	53	59	47	47	47	47	47	47	47	47	47	47	64	
<b>Pair #1</b>	<b>UDR</b>	1208	1187	SF	NC	SF	975	883	775	664	NC	NC	351	275
	<b>DDR</b>	23996	23364	SF	NC	SF	19596	16300	12528	9496	NC	NC	3352	2363
	<b>UNM</b>	6.5	6	SF	NC	SF	6	6	6	6.5	NC	NC	6.5	6
	<b>DNM</b>	8.5	8.5	SF	NC	SF	7.5	6.5	6	5.5	NC	NC	5.5	5.5
	<b>Time</b>	35	54	SF	NC	SF	36	36	42	36	NC	NC	36	59
	<b>Mode</b>	A2+	A2+	SF	NC	SF	A2+	A2+	A2+	A2+	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	1023	1011	
	<b>DDR</b>	23996	23996	23996	23996	23649	22491	20371	17062	14200	11638	9231	7083	5739
	<b>UNM</b>	13	13	12	13	13	12.5	13	13	12	12	10	8.5	6
	<b>DNM</b>	15	15.5	14	10.5	9	8.5	7.5	7	6.5	6	6	6	5.5
	<b>Time</b>	48	42	42	42	42	42	42	42	42	42	42	42	42
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	915	946	59	NC	NC	NC	NC	NC	NC	NC	NC	1642	993	
<b>ADDR</b>	4311	3950	269	NC	NC	NC	NC	NC	NC	NC	NC	20320	6371	
<b>Time</b>	47	71	40	NC	NC	NC	NC	NC	NC	NC	NC	70	71	
<b>Pair #1</b>	<b>UDR</b>	NC	131	59	NC	NC	NC	NC	NC	NC	NC	NC	619	142
	<b>DDR</b>	NC	635	269	NC	NC	NC	NC	NC	NC	NC	NC	7403	1656
	<b>UNM</b>	NC	7.5	7.5	NC	NC	NC	NC	NC	NC	NC	NC	6.5	7
	<b>DNM</b>	NC	6	5.5	NC	NC	NC	NC	NC	NC	NC	NC	6	5.5
	<b>Time</b>	NC	37	35	NC	NC	NC	NC	NC	NC	NC	NC	59	60
	<b>Mode</b>	NC	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+
<b>Pair #2</b>	<b>UDR</b>	915	815	NC	NC	NC	NC	NC	NC	NC	NC	1023	851	
	<b>DDR</b>	4311	3315	NC	NC	NC	NC	NC	NC	NC	NC	12917	4715	
	<b>UNM</b>	6	6.5	NC	NC	NC	NC	NC	NC	NC	NC	NC	7	6
	<b>DNM</b>	6	6	NC	NC	NC	NC	NC	NC	NC	NC	NC	6	5.5
	<b>Time</b>	42	66	NC	NC	NC	NC	NC	NC	NC	NC	NC	65	66
	<b>Mode</b>	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	A2+

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, High Latency Path, Iteration 1, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2242	2218	1024	2138	2080	2015	1920	1824	1717	1625	1524	1394	1311	
<b>ADDR</b>	46328	46328	23296	45021	44314	41295	36234	29880	23779	18579	14211	10644	7764	
<b>Time</b>	53	47	48	53	59	47	47	47	47	47	47	47	63	
<b>Pair #1</b>	<b>UDR</b>	1218	1194	NC	1114	1056	991	896	800	693	601	500	373	290
	<b>DDR</b>	23032	23032	NC	21725	21353	19240	16024	12618	9332	6579	4549	3168	2110
	<b>UNM</b>	6	6.5	NC	6	6.5	6	6.5	6	6.5	6.5	6.5	6.5	7
	<b>DNM</b>	9.5	9	NC	9	8.5	8	6.5	5.5	5.5	5.5	5.5	5.5	5.5
	<b>Time</b>	41	35	NC	48	54	42	42	37	41	42	42	38	58
	<b>Mode</b>	A2+	A2+	NC	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1021	1021
	<b>DDR</b>	23296	23296	23296	23296	22961	22055	20210	17262	14447	12000	9662	7476	5654
	<b>UNM</b>	14	13.5	13.5	13.5	12.5	13	14	13	12.5	12	10.5	9	6.5
	<b>DNM</b>	16.5	17	15.5	12	10.5	9.5	8.5	7.5	7.5	6.5	6	6	6
	<b>Time</b>	48	42	43	42	42	42	42	42	42	42	42	42	42
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1156	NC	756	NC	NC	NC	NC	NC	NC	NC	NC	1021	154	
<b>ADDR</b>	5437	NC	2699	NC	NC	NC	NC	NC	NC	NC	NC	13370	1219	
<b>Time</b>	60	5	47	NC	NC	NC	NC	NC	NC	NC	NC	71	41	
<b>Pair #1</b>	<b>UDR</b>	206	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	154
	<b>DDR</b>	899	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1219
	<b>UNM</b>	7	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	7
	<b>DNM</b>	5.5	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	5.5
	<b>Time</b>	55	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	36
	<b>Mode</b>	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+
<b>Pair #2</b>	<b>UDR</b>	950	NC	756	NC	NC	NC	NC	NC	NC	NC	1021	NC	
	<b>DDR</b>	4538	NC	2699	NC	NC	NC	NC	NC	NC	NC	13370	NC	
	<b>UNM</b>	6.5	NC	6.5	NC	NC	NC	NC	NC	NC	NC	8	NC	
	<b>DNM</b>	6	NC	6	NC	NC	NC	NC	NC	NC	NC	6	NC	
	<b>Time</b>	42	NC	42	NC	NC	NC	NC	NC	NC	NC	66	NC	
	<b>Mode</b>	A2+	NC	A2+	NC	NC	NC	NC	NC	NC	NC	NC	A2+	NC

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, High Latency Path, Iteration 2, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2238	1024	2179	2138	2080	2015	1928	1828	1724	1024	1508	1414	1306	
<b>ADDR</b>	46328	23296	45247	45217	44157	41354	36048	29792	23768	11943	14200	10687	7761	
<b>Time</b>	53	53	48	47	64	47	48	47	47	46	47	47	61	
<b>Pair #1</b>	<b>UDR</b>	1214	SF	1155	1114	1056	991	904	804	700	NC	484	393	285
	<b>DDR</b>	23032	SF	21951	21921	20861	19292	15990	12599	9387	NC	4569	3211	2115
	<b>UNM</b>	6.5	SF	6.5	6.5	6.5	6.5	6	6	6	NC	6.5	6.5	6.5
	<b>DNM</b>	9.5	SF	9	9	8.5	8	6.5	5.5	5.5	NC	5.5	5.5	5.5
	<b>Time</b>	35	SF	41	36	59	36	42	42	42	NC	36	42	56
	<b>Mode</b>	A2+	SF	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1024	1021	1021
	<b>DDR</b>	23296	23296	23296	23296	23296	22062	20058	17193	14381	11943	9631	7476	5646
	<b>UNM</b>	14.5	13.5	14	13.5	14	13.5	13.5	13	12.5	11.5	10.5	9	6
	<b>DNM</b>	16.5	17	16	12	11	9.5	8.5	7.5	7.5	6.5	6	6	6
	<b>Time</b>	48	48	43	42	43	42	43	41	41	41	42	42	42
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1163	993	748	657	NC	NC	NC	NC	NC	NC	NC	1673	862	
<b>ADDR</b>	5483	3649	2688	1896	NC	NC	NC	NC	NC	NC	NC	20696	5123	
<b>Time</b>	64	71	47	71	NC	NC	NC	NC	NC	NC	NC	71	71	
<b>Pair #1</b>	<b>UDR</b>	217	142	NC	NC	NC	NC	NC	NC	NC	NC	NC	652	NC
	<b>DDR</b>	952	124	NC	NC	NC	NC	NC	NC	NC	NC	NC	7330	NC
	<b>UNM</b>	6.5	7.5	NC	NC	NC	NC	NC	NC	NC	NC	NC	6.5	NC
	<b>DNM</b>	5.5	5	NC	NC	NC	NC	NC	NC	NC	NC	NC	5.5	NC
	<b>Time</b>	59	66	NC	NC	NC	NC	NC	NC	NC	NC	NC	58	NC
	<b>Mode</b>	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+
<b>Pair #2</b>	<b>UDR</b>	946	851	748	657	NC	NC	NC	NC	NC	NC	1021	862	
	<b>DDR</b>	4531	3525	2688	1896	NC	NC	NC	NC	NC	NC	13366	5123	
	<b>UNM</b>	6.5	6.5	6.5	6.5	NC	NC	NC	NC	NC	NC	7.5	6.5	
	<b>DNM</b>	6	5.5	6	6	NC	NC	NC	NC	NC	NC	6	6	
	<b>Time</b>	42	42	42	66	NC	NC	NC	NC	NC	NC	66	66	
	<b>Mode</b>	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	A2+	A2+

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.3, 24-disturber HDSL NEXT Impairment, High Latency Path, Iteration 3, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2242	2215	2180	1024	2084	2023	1920	1832	696	1625	1505	1409	1322	
<b>ADDR</b>	46328	45852	45099	23296	44161	41268	36194	29817	9377	18590	14243	10684	7755	
<b>Time</b>	47	47	47	47	64	47	47	47	47	47	47	47	63	
<b>Pair #1</b>	<b>UDR</b>	1218	1191	1156	NC	1060	999	896	808	696	601	484	388	301
	<b>DDR</b>	23032	22556	21803	NC	20865	19248	16079	12643	9377	6632	4620	3211	2120
	<b>UNM</b>	6.5	6	6.5	NC	6	6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	<b>DNM</b>	9	9	9	NC	8.5	8	6.5	5.5	5.5	5.5	5.5	5.5	5.5
	<b>Time</b>	36	41	42	NC	59	42	42	37	42	36	41	42	58
	<b>Mode</b>	A2+	A2+	A2+	NC	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1024	1024	1024	1024	1024	1024	1024	1024	NC	1024	1021	1021	1021
	<b>DDR</b>	23296	23296	23296	23296	23296	22020	20115	17174	NC	11958	9623	7473	5635
	<b>UNM</b>	14.5	14	14	13.5	12.5	13.5	13.5	13	NC	11.5	10.5	8	6.5
	<b>DNM</b>	16.5	17	15.5	11.5	11	9.5	8.5	7.5	NC	6.5	6	6	6
	<b>Time</b>	42	42	42	42	42	42	42	42	NC	42	42	42	42
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	NC	A2+	A2+	A2+	A2+
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	938	977	709	NC	NC	NC	NC	NC	NC	NC	NC	1669	839	
<b>ADDR</b>	4512	3637	2680	NC	NC	NC	NC	NC	NC	NC	NC	20679	5107	
<b>Time</b>	71	71	71	NC	NC	NC	NC	NC	NC	NC	NC	71	71	
<b>Pair #1</b>	<b>UDR</b>	NC	142	NC	NC	NC	NC	NC	NC	NC	NC	NC	648	NC
	<b>DDR</b>	NC	123	NC	NC	NC	NC	NC	NC	NC	NC	NC	7320	NC
	<b>UNM</b>	NC	6.5	NC	NC	NC	NC	NC	NC	NC	NC	NC	6.5	NC
	<b>DNM</b>	NC	5	NC	NC	NC	NC	NC	NC	NC	NC	NC	5.5	NC
	<b>Time</b>	NC	60	NC	NC	NC	NC	NC	NC	NC	NC	NC	60	NC
	<b>Mode</b>	NC	A2+	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+
<b>Pair #2</b>	<b>UDR</b>	938	835	709	NC	NC	NC	NC	NC	NC	NC	NC	1021	839
	<b>DDR</b>	4512	3514	2680	NC	NC	NC	NC	NC	NC	NC	NC	13359	5107
	<b>UNM</b>	6.5	6.5	6	NC	NC	NC	NC	NC	NC	NC	NC	8	6.5
	<b>DNM</b>	6	5.5	6	NC	NC	NC	NC	NC	NC	NC	NC	6	6
	<b>Time</b>	66	66	66	NC	NC	NC	NC	NC	NC	NC	NC	66	66
	<b>Mode</b>	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	A2+	A2+



**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, Low Latency Path, Iteration 1, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2419	2471	2431	2475	2459	2456	2456	1216	2383	2351	2296	2092	2029	
<b>ADDR</b>	47692	46394	44500	40563	33800	26895	17642	4936	6663	5154	3811	2671	1974	
<b>Time</b>	40	46	41	59	43	41	42	24	64	41	46	47	40	
<b>Pair #1</b>	<b>UDR</b>	1203	1255	1215	1259	1243	1240	1240	SF	1167	1135	1080	1011	931
	<b>DDR</b>	23996	23368	21837	20156	16428	12592	8191	SF	3375	2459	1799	1287	1019
	<b>UNM</b>	6	6	6	6	6	6.5	6.5	SF	6.5	6.5	6	6.5	7
	<b>DNM</b>	7	7	6.5	6	6	5.5	6	SF	5.5	5.5	5.5	6	6
	<b>Time</b>	35	41	36	54	38	36	37	SF	59	36	41	42	35
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	SF	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1216	1216	1216	1216	1216	1216	1216	1216	1216	1216	1216	1081	1098
	<b>DDR</b>	23696	23026	22663	20407	17372	14303	9451	4936	3288	2695	2012	1384	955
	<b>UNM</b>	5.7	5.9	5.6	6.1	5.8	5.7	6	6	5.8	6.1	5.9	5.8	5.7
	<b>DNM</b>	9.5	9.5	9.5	8.5	9	8.5	7.5	7.5	7	6.5	7	5	8
	<b>Time</b>	17	19	20	19	18	19	18	19	18	19	19	20	20
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2	A2	A2	A2
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1845	1645	1366	1033	835	NC	NC	NC	NC	NC	NC	2227	1677	
<b>ADDR</b>	1322	789	421	295	120	NC	NC	NC	NC	NC	NC	4548	813	
<b>Time</b>	41	47	47	46	41	NC	NC	NC	NC	NC	NC	46	42	
<b>Pair #1</b>	<b>UDR</b>	847	771	639	559	408	NC	NC	NC	NC	NC	NC	1011	783
	<b>DDR</b>	703	419	195	136	64	NC	NC	NC	NC	NC	NC	2403	263
	<b>UNM</b>	7.5	6.5	6.5	6.5	7.5	NC	NC	NC	NC	NC	NC	6	7.5
	<b>DNM</b>	5.5	5	6.5	5	5.5	NC	NC	NC	NC	NC	NC	6	6
	<b>Time</b>	36	42	42	41	36	NC	NC	NC	NC	NC	NC	41	37
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	998	874	727	474	427	NC	NC	NC	NC	NC	NC	1216	894
	<b>DDR</b>	619	370	226	159	56	NC	NC	NC	NC	NC	NC	2145	550
	<b>UNM</b>	5.7	5.7	6.6	5.8	5.1	NC	NC	NC	NC	NC	NC	5.9	6.1
	<b>DNM</b>	8.5	9	9.5	8	8.5	NC	NC	NC	NC	NC	NC	6	9
	<b>Time</b>	20	20	31	37	31	NC	NC	NC	NC	NC	NC	25	20
	<b>Mode</b>	A2	A2	A2	A2 L	A2 L	NC	NC	NC	NC	NC	NC	A2+	A2

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, Low Latency Path, Iteration 2, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	1219	2467	2435	2459	2471	2459	2451	2435	2399	2351	1216	2183	2010	
<b>ADDR</b>	23996	46307	44333	40494	34951	27380	17465	9180	6730	4686	2024	2810	2015	
<b>Time</b>	46	47	47	65	41	41	47	47	64	47	24	41	47	
<b>Pair #1</b>	<b>UDR</b>	1219	1251	1219	1243	1255	1243	1235	1219	1183	1135	SF	1011	920
	<b>DDR</b>	23996	23316	21696	20108	16596	12952	8143	4295	3399	2527	SF	1443	1055
	<b>UNM</b>	6	6	6	6.5	6	6	6	6	6	6.5	SF	6	7.5
	<b>DNM</b>	7	6.5	6.5	6	6	5.5	5.5	6	5.5	5.5	SF	5.5	5.5
	<b>Time</b>	41	42	42	60	36	36	42	42	59	42	SF	36	42
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	SF	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	NC	1216	1216	1216	1216	1216	1216	1216	1216	1216	1216	1172	1090
	<b>DDR</b>	NC	22991	22637	20386	18355	14428	9322	4885	3331	2159	2024	1367	960
	<b>UNM</b>	NC	6	5.6	5.9	6.1	5.7	5.7	6.2	5.9	5.8	5.9	5.9	5.7
	<b>DNM</b>	NC	8	9	9	9.5	8	7.5	7.5	6.5	7	7.5	8	8
	<b>Time</b>	NC	18	18	18	18	19	18	19	18	18	19	20	20
	<b>Mode</b>	NC	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2	A2	A2
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1813	1599	739	499	806	362	NC	NC	NC	NC	NC	2239	1641	
<b>ADDR</b>	1314	806	254	108	134	50	NC	NC	NC	NC	NC	4276	754	
<b>Time</b>	41	46	25	41	44	56	NC	NC	NC	NC	NC	47	46	
<b>Pair #1</b>	<b>UDR</b>	831	735	NC	499	383	NC	NC	NC	NC	NC	NC	1023	751
	<b>DDR</b>	683	440	NC	108	59	NC	NC	NC	NC	NC	NC	2459	227
	<b>UNM</b>	6.5	6.5	NC	6.5	6.5	NC	NC	NC	NC	NC	NC	6.5	6.5
	<b>DNM</b>	5.5	6	NC	5.5	6	NC	NC	NC	NC	NC	NC	6	6.5
	<b>Time</b>	36	41	NC	36	36	NC	NC	NC	NC	NC	NC	42	41
	<b>Mode</b>	A2+	A2+	NC	A2+	A2+	NC	NC	NC	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	982	864	739	NC	423	362	NC	NC	NC	NC	NC	1216	890
	<b>DDR</b>	631	366	254	NC	75	50	NC	NC	NC	NC	NC	1817	527
	<b>UNM</b>	5.8	6.1	5.3	NC	5.7	0.9	NC	NC	NC	NC	NC	6	6.2
	<b>DNM</b>	9	9	9.5	NC	8.5	8	NC	NC	NC	NC	NC	6	9
	<b>Time</b>	24	20	20	NC	39	51	NC	NC	NC	NC	NC	19	20
	<b>Mode</b>	A2	A2	A2	NC	A2 L	A2 L	NC	NC	NC	NC	NC	A2+	A2

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, Low Latency Path, Iteration 3, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2435	2471	2415	1216	2447	2467	2431	2427	2387	2347	1216	2162	2001	
<b>ADDR</b>	47648	46449	44494	20395	34597	27179	17452	9379	6667	4781	2003	2703	1978	
<b>Time</b>	41	69	47	23	59	46	47	46	58	47	23	41	41	
<b>Pair #1</b>	<b>UDR</b>	1219	1255	1199	NC	1231	1251	1215	1211	1171	1131	NC	995	911
	<b>DDR</b>	23996	23440	21572	NC	16432	12768	8023	4395	3375	2523	NC	1275	1048
	<b>UNM</b>	6	6.5	6.5	NC	6.5	6	6	6	6	6.5	NC	7	6.5
	<b>DNM</b>	7	7	6.5	NC	6	5.5	5.5	6	5.5	5.5	NC	6	5.5
	<b>Time</b>	36	64	42	NC	54	41	42	41	53	42	NC	36	36
	<b>Mode</b>	A2+	A2+	A2+	NC	A2+	A2+	A2+	A2+	A2+	A2+	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1216	1216	1216	1216	1216	1216	1216	1216	1216	1216	1216	1167	1090
	<b>DDR</b>	23652	23009	22922	20395	18165	14411	9429	4984	3292	2258	2003	1428	930
	<b>UNM</b>	5.7	5.8	5.6	6	6.1	5.8	5.9	6.1	5.9	5.8	6	6.1	5.9
	<b>DNM</b>	9.5	9.5	9.5	9	8.5	8	7	6.5	6	6.5	7	7.5	8.5
	<b>Time</b>	18	18	17	18	18	19	18	18	18	36	18	20	20
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2	A2	A2
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	1833	1613	647	NC	NC	NC	NC	NC	NC	NC	NC	2207	1651	
<b>ADDR</b>	1344	735	208	NC	NC	NC	NC	NC	NC	NC	NC	4635	841	
<b>Time</b>	46	41	41	NC	NC	NC	NC	NC	NC	NC	NC	46	47	
<b>Pair #1</b>	<b>UDR</b>	847	739	647	NC	NC	NC	NC	NC	NC	NC	NC	991	743
	<b>DDR</b>	696	404	208	NC	NC	NC	NC	NC	NC	NC	NC	2459	267
	<b>UNM</b>	6.5	6.5	6	NC	NC	NC	NC	NC	NC	NC	NC	6.5	6.5
	<b>DNM</b>	5.5	5	6	NC	NC	NC	NC	NC	NC	NC	NC	6	5.5
	<b>Time</b>	41	36	36	NC	NC	NC	NC	NC	NC	NC	NC	41	42
	<b>Mode</b>	A2+	A2+	A2+	NC	NC	NC	NC	NC	NC	NC	NC	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	986	874	NC	NC	NC	NC	NC	NC	NC	NC	NC	1216	908
	<b>DDR</b>	648	331	NC	NC	NC	NC	NC	NC	NC	NC	NC	2176	574
	<b>UNM</b>	5.7	6	NC	NC	NC	NC	NC	NC	NC	NC	NC	6	5.6
	<b>DNM</b>	9	9	NC	NC	NC	NC	NC	NC	NC	NC	NC	6.5	9
	<b>Time</b>	20	31	NC	NC	NC	NC	NC	NC	NC	NC	NC	18	20
	<b>Mode</b>	A2	A2	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	A2

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, High Latency Path, Iteration 1, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	2437	2434	2480	1216	2468	2472	2441	2434	2403	2360	2295	2159	1993	
<b>ADDR</b>	46904	46479	44598	21992	34225	27723	18724	10613	7224	4700	3517	2452	1523	
<b>Time</b>	46	46	47	24	63	41	47	48	63	64	46	42	46	
<b>Pair #1</b>	<b>UDR</b>	1221	1218	1264	NC	1252	1256	1225	1218	1187	1144	1091	1022	930
	<b>DDR</b>	23032	23032	21223	NC	16189	12992	8330	4623	3229	2051	1215	779	312
	<b>UNM</b>	6.5	6.5	6	NC	6	6	6.5	6.5	6	6	6	6.5	6.5
	<b>DNM</b>	8	7.5	6.5	NC	6	5.5	6	5.5	5	5.5	5.5	5.5	5
	<b>Time</b>	41	41	42	NC	58	36	42	43	58	59	41	37	41
	<b>Mode</b>	A2+	A2+	A2+	NC	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	1216	1216	1216	1216	1216	1216	1216	1216	1216	1216	1204	1137	1063
	<b>DDR</b>	23872	23447	23375	21992	18036	14731	10394	5990	3995	2649	2302	1673	1211
	<b>UNM</b>	6	5.8	5.9	6.2	6.2	5.8	5.8	5.5	5.4	5.5	5.6	5.8	5.6
	<b>DNM</b>	8.5	8	8.5	8.5	7.5	7.5	8	7	6.5	7	7.5	8	8.5
	<b>Time</b>	17	18	18	19	19	18	19	21	18	19	19	20	20
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2	A2	A2
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2253	889	
<b>ADDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	4810	795	
<b>Time</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	46	25	
<b>Pair #1</b>	<b>UDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1037	NC	
	<b>DDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2193	NC	
	<b>UNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	6	NC	
	<b>DNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	5	NC	
	<b>Time</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	41	NC	
	<b>Mode</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	NC
<b>Pair #2</b>	<b>UDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1216	889	
	<b>DDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2617	795	
	<b>UNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	5.3	5.7	
	<b>DNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	6	8.5	
	<b>Time</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	25	20	
	<b>Mode</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	A2

*ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0*  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, High Latency Path, Iteration 2, IOL Test ID: 5555</b>															
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>		
<b>AUDR</b>	2426	1216	2434	2476	2480	2472	2472	2422	2403	2367	1196	2124	2017		
<b>ADDR</b>	47304	23625	44748	40820	35059	27455	18818	10778	7484	4777	2314	2190	1467		
<b>Time</b>	41	23	47	66	46	46	47	41	59	65	23	41	41		
<b>Pair #1</b>	<b>UDR</b>	1210	NC	1218	1260	1264	1256	1256	1206	1187	1151	NC	999	946	
	<b>DDR</b>	23032	NC	21382	19229	16367	12978	8396	4640	3223	2104	NC	576	318	
	<b>UNM</b>	6	NC	6	6	6	6	6	6.5	6	6.5	NC	6.5	6	
	<b>DNM</b>	8	NC	6.5	6	6	5.5	5.5	5.5	5.5	5.5	NC	5.5	5.5	
	<b>Time</b>	36	NC	42	61	41	41	42	36	54	60	NC	36	36	
	<b>Mode</b>	A2+	NC	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	NC	A2+	A2+	
<b>Pair #2</b>	<b>UDR</b>	1216	1216	1216	1216	1216	1216	1216	1216	1216	1216	1196	1125	1071	
	<b>DDR</b>	24272	23625	23366	21591	18692	14477	10422	6138	4261	2673	2314	1614	1149	
	<b>UNM</b>	6	5.8	5.8	4.3	6.4	5.8	5.8	5.6	5.6	5.7	5.4	5.6	5.5	
	<b>DNM</b>	7.5	8.5	8.5	8.5	8	8	7.5	6.5	7	7.5	7	8	8.5	
	<b>Time</b>	18	18	18	20	18	18	19	19	19	19	18	18	20	20
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2	A2	A2	
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>		
<b>AUDR</b>	985	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2221	889	
<b>ADDR</b>	821	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	4822	802	
<b>Time</b>	25	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	47	25	
<b>Pair #1</b>	<b>UDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1010	NC	
	<b>DDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2193	NC	
	<b>UNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	6.5	NC	
	<b>DNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	5	NC	
	<b>Time</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	42	NC	
	<b>Mode</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	NC
<b>Pair #2</b>	<b>UDR</b>	985	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1211	889	
	<b>DDR</b>	821	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2629	802	
	<b>UNM</b>	5.6	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	5.5	5.4	
	<b>DNM</b>	8.5	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	7	8.5	
	<b>Time</b>	20	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	18	20	
	<b>Mode</b>	A2	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	A2

**ADSL Rate vs. Reach Interoperability Test Suite (RR) v. 3.4.0**  
DSL Consortium Model A (IOL ID: 9999)

<b>Test RR.1.4, 5-disturber T1 Impairment, High Latency Path, Iteration 3, IOL Test ID: 5555</b>														
<b>Length (feet)</b>	<b>0</b>	<b>1000</b>	<b>2000</b>	<b>3000</b>	<b>4000</b>	<b>5000</b>	<b>6000</b>	<b>7000</b>	<b>8000</b>	<b>9000</b>	<b>10000</b>	<b>11000</b>	<b>12000</b>	
<b>AUDR</b>	1210	2476	2434	2476	2464	2472	2457	1216	2399	2363	2275	2148	2017	
<b>ADDR</b>	23032	46747	44690	40728	34757	28400	18859	6034	7455	4708	3542	2407	1479	
<b>Time</b>	40	46	47	63	47	47	42	23	59	64	42	46	41	
<b>Pair #1</b>	<b>UDR</b>	1210	1260	1218	1260	1248	1256	1241	NC	1183	1147	1079	1026	950
	<b>DDR</b>	23032	23032	21430	19137	16223	13152	8336	NC	3412	2043	1224	774	318
	<b>UNM</b>	6	6	6	6	6.5	6	6	NC	6	6	6	6.5	6
	<b>DNM</b>	8	7	6.5	6	5.5	5.5	5.5	NC	5	5.5	5.5	5	5.5
	<b>Time</b>	35	41	42	58	42	42	37	NC	54	59	37	41	36
	<b>Mode</b>	A2+	A2+	A2+	A2+	A2+	A2+	A2+	NC	A2+	A2+	A2+	A2+	A2+
<b>Pair #2</b>	<b>UDR</b>	NC	1216	1216	1216	1216	1216	1216	1216	1216	1216	1196	1122	1067
	<b>DDR</b>	NC	23715	23260	21591	18534	15248	10523	6034	4043	2665	2318	1633	1161
	<b>UNM</b>	NC	6	6	4.4	6.2	5.8	5.8	5.5	5.5	5.8	5.4	5.8	5.4
	<b>DNM</b>	NC	7.5	9.5	8	8	8	7.5	7.5	6.5	7	7.5	8	8.5
	<b>Time</b>	NC	18	18	18	19	19	19	18	18	21	19	20	20
	<b>Mode</b>	NC	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2+	A2	A2	A2
<b>Length (feet)</b>	<b>13000</b>	<b>14000</b>	<b>15000</b>	<b>16000</b>	<b>17000</b>	<b>18000</b>	<b>19000</b>	<b>20000</b>	<b>21000</b>	<b>22000</b>	<b>23000</b>	<b>CSA #4</b>	<b>ANSI #13</b>	
<b>AUDR</b>	981	859	NC	NC	NC	NC	NC	NC	NC	NC	NC	2252	889	
<b>ADDR</b>	817	566	NC	NC	NC	NC	NC	NC	NC	NC	NC	4743	787	
<b>Time</b>	25	25	NC	NC	NC	NC	NC	NC	NC	NC	NC	41	25	
<b>Pair #1</b>	<b>UDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1048	NC
	<b>DDR</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2142	NC
	<b>UNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	6.5	NC
	<b>DNM</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	5	NC
	<b>Time</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	36	NC
	<b>Mode</b>	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	NC
<b>Pair #2</b>	<b>UDR</b>	981	859	NC	NC	NC	NC	NC	NC	NC	NC	NC	1204	889
	<b>DDR</b>	817	566	NC	NC	NC	NC	NC	NC	NC	NC	NC	2601	787
	<b>UNM</b>	5.8	5.2	NC	NC	NC	NC	NC	NC	NC	NC	NC	5.6	6.1
	<b>DNM</b>	9	8.5	NC	NC	NC	NC	NC	NC	NC	NC	NC	7	8
	<b>Time</b>	20	20	NC	NC	NC	NC	NC	NC	NC	NC	NC	18	20
	<b>Mode</b>	A2	A2	NC	NC	NC	NC	NC	NC	NC	NC	NC	A2+	A2

## Appendix A: Profile Parameters

### DSL Port Configurations:

Profile used in Low Latency Test Cases for Test RR.1.1 through Test RR.1.4		Profile used in High Latency Test Cases for Test RR.1.1 through Test RR.1.4	
Channel Configuration Parameters	Value	Channel Configuration Parameters	Value
Minimum Upstream Data Rate (kbps)	32	Minimum Upstream Data Rate (kbps)	32
Maximum Upstream Data Rate (kbps)	2048	Maximum Upstream Data Rate (kbps)	2048
Minimum Downstream Data Rate (kbps)	32	Minimum Downstream Data Rate (kbps)	32
Maximum Downstream Data Rate (kbps)	26000	Maximum Downstream Data Rate (kbps)	26000
Maximum Upstream Interleave Delay (ms)	1	Maximum Upstream Interleave Delay (ms)	16
Maximum Downstream Interleave Delay (ms)	1	Maximum Downstream Interleave Delay (ms)	6
Upstream Impulse Noise Protection	0	Upstream Impulse Noise Protection	0
Downstream Impulse Noise Protection	0	Downstream Impulse Noise Protection	0
Line Configuration Parameters	Value	Line Configuration Parameters	Value
Modulation	G.992.5	Modulation	G.992.5
Minimum Upstream SNR (dB)	0	Minimum Upstream SNR (dB)	0
Maximum Upstream SNR (dB)	31	Maximum Upstream SNR (dB)	31
Target Upstream SNR (dB)	6	Target Upstream SNR (dB)	6
Maximum Upstream Power (dBm)	13	Maximum Upstream Power (dBm)	13
Minimum Downstream SNR (dB)	0	Minimum Downstream SNR (dB)	0
Maximum Downstream SNR (dB)	31	Maximum Downstream SNR (dB)	31
Target Downstream SNR (dB)	6	Target Downstream SNR (dB)	6
Maximum Downstream Power (dBm)	20	Maximum Downstream Power (dBm)	20
Rate Mode	Adaptive	Rate Mode	Adaptive
Miscellaneous Parameters	Value	Miscellaneous Parameters	Value
Trellis Coding	Enabled	Trellis Coding	Enabled
Bit Swapping	Enabled	Bit Swapping	Enabled

### Bonded Group Configurations:

Profile used in Low Latency Test Cases for Test RR.1.1 through Test RR.1.4		Profile used in High Latency Test Cases for Test RR.1.1 through Test RR.1.4	
Maximum Aggregate Upstream Data Rate (kbps)	4000	Maximum Aggregate Upstream Data Rate (kbps)	4000
Maximum Aggregate Downstream Data Rate (kbps)	54000	Maximum Aggregate Downstream Data Rate (kbps)	54000
Minimum Aggregate Upstream Data Rate (kbps)	128	Minimum Aggregate Upstream Data Rate (kbps)	128
Minimum Aggregate Downstream Data Rate (kbps)	256	Minimum Aggregate Downstream Data Rate (kbps)	256
Differential Delay Tolerance Upstream (ms)	NA	Differential Delay Tolerance Upstream (ms)	NA
Differential Delay Tolerance Downstream (ms)	NA	Differential Delay Tolerance Downstream (ms)	NA