



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 50,157 as of 01/01/05. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

Test Point #9

Comcast

418 Bashford Ln.
Alexandria, VA

FCC Distortion Measurements

EQUIPMENT USED:

H/P 8591C, S/N 3916A04384

Pre-Amplifier 85905A, S/N 6093-0551

TRILITHIC VF-4-88, S/N 9330002

Tektronix VITS200, S/N B020963

CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 02/15/05

Time: 11:15 am

Temp: 41

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	0.7	0.3	70.7	64.5	53.4	4.5001
95	0.8	0.5	70.8	67.2	52.2	4.5002
21	1.0	0.5	77.6	64.5	52.2	4.5000
8	1.1	0.6	70.1	64.9	51.2	4.4999
28	1.2	0.6	70.2	56.8	52.0	4.5001
32	0.7	0.5	70.1	62.2	51.6	4.5000
47	1.0	0.5	68.1	60.2	51.3	4.5000
58	0.6	0.5	72.5	63.8	52.7	4.5000
72	0.9	0.5	67.1	63.5	52.9	4.5001
Minimum values:			67.1	56.8	51.2	
Maximum values:	1.2	0.6				0.0002

282

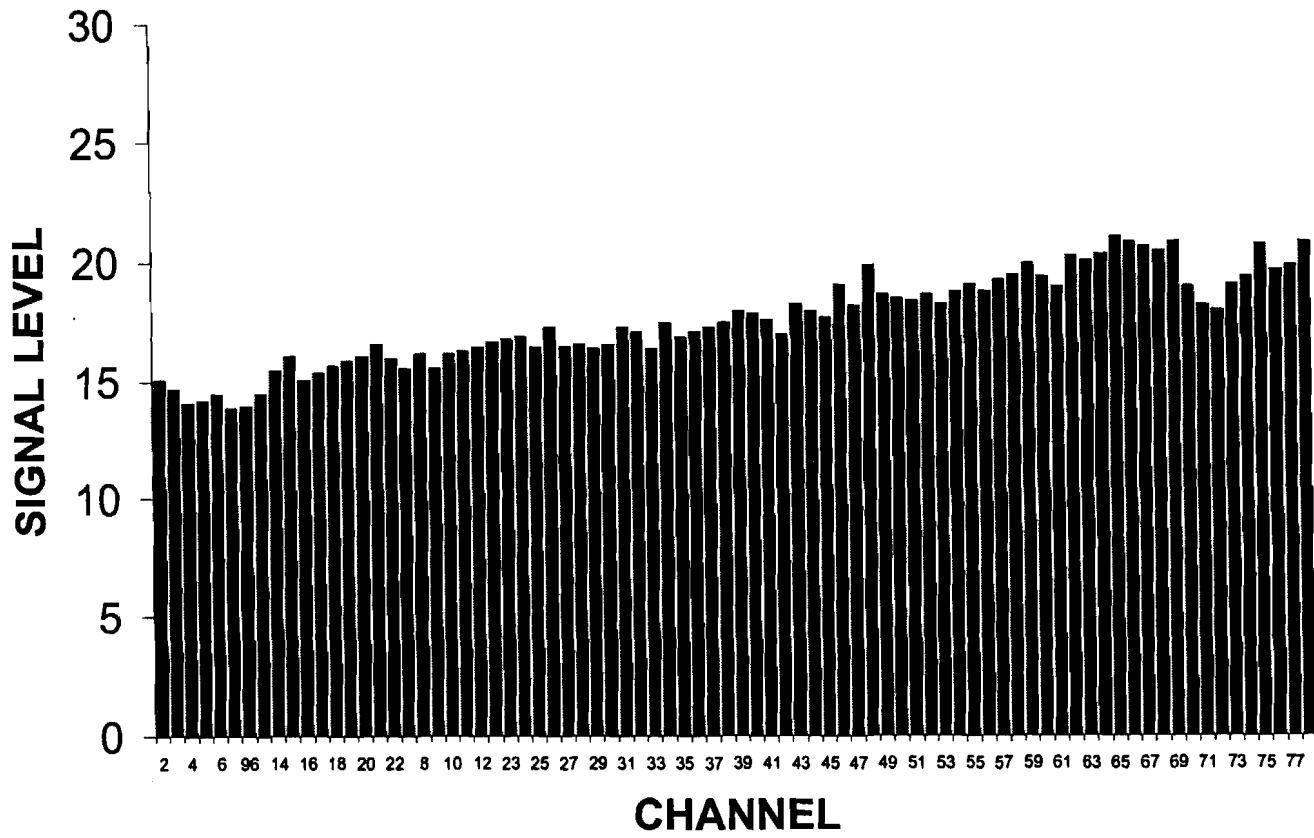


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #9



■ The maximum signal level is 21.4 dBmV

The maximum adjacent channel level difference is	2.1 dBmV
The maximum level difference between the highest and lowest is	7.7 dBmV
The maximum six month variance is	6.8 dBmV

285

Test Point #9



418 Bashford Ln.

24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338;

Date: 02/17/05

Run 1					2				3				4				
Time: 02:08:51					Time: 07:55:11				Time: 14:29:58				Time: 20:04:35				
Temp 86					86				89				84				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	15.1	14.1		-0.5	14.8	13.9		-1.2	14.7	13.9		-0.9	14.9	14.0		-0.5	0.4
3	14.7	16.3	-0.4	-0.5	15.1	16.6	0.3	-0.3	14.7	16.5	0.0	-0.6	15.3	16.8	0.4	0.2	0.6
4	14.1	17.7	-0.6	-1.1	14.0	17.6	-1.1	-1.5	13.9	17.6	-0.8	-1.4	14.0	17.5	-1.3	-1.2	0.2
5	14.2	17.4	0.1	-1.0	14.4	17.5	0.4	-1.0	14.3	17.6	0.4	-0.9	14.6	17.7	0.6	-0.5	0.4
6	14.5	16.1	0.3	-0.2	14.6	16.2	0.2	-0.4	14.2	15.8	-0.1	-0.6	14.7	16.1	0.1	0.1	0.5
95	13.9	13.9	-0.6	-1.4	13.8	13.8	-0.8	-1.6	13.8	13.9	-0.4	-1.7	14.0	13.9	-0.7	-1.0	0.2
96	14.0	16.9	0.1	0.5	13.7	16.6	-0.1	0.0	14.0	16.8	0.2	0.6	14.0	16.7	0.0	0.6	0.3
99	14.5	17.3	0.5	0.9	14.3	17.1	0.6	0.4	14.1	16.9	0.1	0.5	14.5	17.0	0.5	1.3	0.4
14	15.5	16.6	1.0	0.4	15.2	16.2	0.9	-0.1	15.3	16.5	1.2	0.1	15.3	16.3	0.8	0.3	0.3
15	16.1	16.4	0.6	0.8	16.0	16.6	0.8	0.3	16.1	16.7	0.8	0.6	16.4	16.8	1.1	1.2	0.4
16	15.1	20.4	-1.0	0.8	14.9	20.2	-1.1	0.2	14.9	20.3	-1.2	0.2	15.1	20.1	-1.3	1.6	0.2
17	15.4	16.6	0.3	0.6	15.4	16.6	0.5	0.5	15.4	16.6	0.5	0.6	15.6	16.7	0.5	1.0	0.2
18	15.7	16.9	0.3	0.5	15.4	16.9	0.0	0.0	15.3	16.8	-0.1	0.1	15.3	16.6	-0.3	0.3	0.4
19	15.9	17.5	0.2	1.3	16.0	17.6	0.6	0.6	15.9	17.4	0.6	0.7	15.8	17.0	0.5	0.8	0.2
20	16.1	16.8	0.2	1.5	15.5	16.4	-0.5	0.5	15.5	16.5	-0.4	0.6	15.8	16.5	0.0	1.3	0.6
21	16.6	14.7	0.5	1.1	16.3	14.7	0.8	0.4	16.3	14.8	0.8	0.7	16.4	14.5	0.6	1.0	0.3
22	16.0	16.9	-0.6	0.7	16.0	16.9	-0.3	0.4	15.8	16.9	-0.5	0.4	16.2	16.9	-0.2	1.0	0.4
7	15.6	16.8	-0.4	0.0	15.6	16.9	-0.4	-0.3	15.3	16.7	-0.5	-0.3	15.8	16.9	-0.4	0.4	0.5
8	16.2	15.4	0.6	1.0	16.0	15.4	0.4	0.5	16.0	15.4	0.7	0.7	16.1	15.3	0.3	0.9	0.2
9	15.6	16.8	-0.6	0.4	15.3	16.4	-0.7	-0.1	15.3	16.5	-0.7	0.0	15.7	16.7	-0.4	0.5	0.4
10	16.2	17.5	0.6	0.8	16.4	17.6	1.1	0.6	16.1	17.6	0.8	0.5	16.5	17.7	0.8	1.1	0.4
11	16.3	17.2	0.1	1.1	16.3	17.2	-0.1	0.8	16.1	17.1	0.0	0.7	16.4	17.1	-0.1	1.2	0.3
12	16.5	17.1	0.2	0.9	16.6	17.2	0.3	0.7	16.5	17.1	0.4	0.9	16.6	17.0	0.2	1.1	0.1
13	16.7	17.0	0.2	1.0	16.7	16.9	0.1	0.5	16.7	16.9	0.2	0.7	17.0	16.9	0.4	1.4	0.3
23	16.8	17.2	0.1	1.5	16.8	17.0	0.1	1.2	16.7	16.9	0.0	1.3	17.0	16.9	0.0	1.7	0.3
24	16.9	17.5	0.1	1.5	16.4	16.7	-0.4	0.6	16.9	17.2	0.2	1.4	17.2	17.3	0.2	1.8	0.8
25	16.5	17.1	-0.4	0.7	16.2	16.6	-0.2	-0.1	16.5	16.8	-0.4	0.4	16.6	16.8	-0.6	0.8	0.4
26	17.3	17.0	0.8	1.8	17.4	17.1	1.2	1.6	17.3	16.8	0.8	1.7	17.7	17.0	1.1	2.3	0.4
27	16.5	16.2	-0.8	2.9	16.6	16.2	-0.8	2.4	16.5	16.1	-0.8	2.2	17.0	16.3	-0.7	2.5	0.5
28	16.6	14.4	0.1	1.5	16.9	14.7	0.3	1.5	16.8	14.5	0.3	1.6	16.9	14.4	-0.1	1.9	0.3
29	16.4	16.8	-0.2	1.3	16.5	16.8	-0.4	1.1	16.5	16.8	-0.3	1.4	16.7	16.7	-0.2	1.7	0.3
30	16.6	16.5	0.2	1.4	16.8	16.5	0.3	1.3	16.8	16.5	0.3	1.6	17.0	16.5	0.3	2.0	0.4
31	17.3	17.2	0.7	1.5	17.3	17.1	0.5	1.3	17.3	17.2	0.5	1.5	17.6	17.4	0.6	2.1	0.3
32	17.1	14.9	-0.2	3.6	17.0	14.5	-0.3	3.3	17.3	14.8	0.0	3.8	17.5	14.8	-0.1	3.5	0.5

286

Test Point #9



418 Bashford Ln.
24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338;

Date: 02/17/05

Run	1				2				3				4				
	Time: 02:08:51				Time: 07:55:11				Time: 14:29:58				Time: 20:04:35				
Temp	86				86				89				84				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	16.4	17.0	-0.7	1.4	16.4	16.9	-0.6	1.2	16.5	16.9	-0.8	1.7	16.8	17.0	-0.7	2.0	0.4
34	17.5	17.1	1.1	2.3	17.5	17.0	1.1	1.9	17.4	17.0	0.9	2.0	17.8	17.2	1.0	2.6	0.4
35	16.9	16.3	-0.6	3.1	17.3	16.7	-0.2	3.2	17.3	16.6	-0.1	3.2	17.3	16.4	-0.5	3.4	0.4
36	17.1	16.3	0.2	1.3	17.2	16.4	-0.1	1.4	17.2	16.4	-0.1	1.5	17.5	16.4	0.2	2.3	0.4
37	17.3	17.3	0.2	2.6	17.3	17.2	0.1	2.4	17.3	17.1	0.1	2.7	17.5	17.1	0.0	3.2	0.2
38	17.5	16.5	0.2	2.8	17.5	16.5	0.2	2.5	17.6	16.6	0.3	2.9	17.8	16.5	0.3	3.3	0.3
39	18.0	16.7	0.5	3.1	17.9	16.8	0.4	2.7	18.0	16.7	0.4	3.2	18.3	16.9	0.5	3.7	0.4
40	17.9	17.2	-0.1	2.6	17.9	17.1	0.0	2.3	17.7	17.0	-0.3	2.6	18.3	17.3	0.0	3.5	0.6
41	17.6	16.7	-0.3	2.4	17.7	16.6	-0.2	1.9	17.7	16.7	0.0	2.2	18.0	16.8	-0.3	2.9	0.4
42	17.0	16.7	-0.6	1.6	17.3	16.9	-0.4	2.0	17.1	16.6	-0.6	2.1	17.2	16.4	-0.8	2.5	0.3
43	18.3	17.2	1.3	2.9	18.4	17.1	1.1	2.8	18.1	16.9	1.0	3.0	18.6	17.3	1.4	3.7	0.5
44	18.0	16.1	-0.3	2.8	18.1	16.1	-0.3	2.6	18.0	16.1	-0.1	2.8	18.4	16.3	-0.2	3.4	0.4
45	17.7	17.0	-0.3	2.0	17.8	16.9	-0.3	1.8	17.6	16.8	-0.4	1.8	17.9	16.9	-0.5	2.3	0.3
46	19.1	17.2	1.4	2.9	19.2	17.2	1.4	2.7	18.7	16.7	1.1	2.5	19.4	17.3	1.5	3.5	0.7
47	18.2	14.0	-0.9	2.9	18.2	14.1	-1.0	2.8	18.2	14.0	-0.5	3.0	18.4	13.9	-1.0	3.5	0.2
48	19.9	16.9	1.7	3.8	19.9	17.0	1.7	3.5	20.1	17.4	1.9	4.1	20.0	16.9	1.6	4.3	0.2
49	18.7	16.9	-1.2	2.7	18.5	16.7	-1.4	2.1	18.7	17.0	-1.4	2.7	19.0	17.0	-1.0	3.2	0.5
50	18.5	17.0	-0.2	2.5	18.6	16.9	0.1	2.2	18.5	16.9	-0.2	2.7	18.7	16.9	-0.3	3.2	0.2
51	18.4	17.2	-0.1	2.3	18.4	17.1	-0.2	2.0	18.5	17.2	0.0	2.5	18.8	17.4	0.1	3.0	0.4
52	18.7	17.1	0.3	3.0	18.6	17.0	0.2	2.7	18.6	17.1	0.1	2.9	18.8	17.0	0.0	3.3	0.2
53	18.3	16.8	-0.4	2.3	18.3	16.6	-0.3	2.0	18.1	16.5	-0.5	2.2	18.6	16.8	-0.2	2.9	0.5
54	18.8	17.4	0.5	2.9	18.6	17.1	0.3	2.4	18.6	17.1	0.5	2.8	18.8	17.0	0.2	3.2	0.2
55	19.1	17.2	0.3	3.2	19.3	17.5	0.7	3.0	19.0	17.2	0.4	3.1	19.2	17.1	0.4	3.6	0.3
56	18.8	16.7	-0.3	3.0	18.8	16.6	-0.5	2.5	18.9	16.7	-0.1	3.1	19.0	16.5	-0.2	3.3	0.2
57	19.3	16.6	0.5	2.3	19.2	16.7	0.4	1.9	19.1	16.6	0.2	2.2	19.5	16.6	0.5	2.8	0.4
58	19.5	14.7	0.2	2.8	19.3	14.3	0.1	2.4	19.0	14.2	-0.1	2.3	19.8	14.7	0.3	3.3	0.8
59	20.0	17.6	0.5	2.1	19.7	16.9	0.4	1.7	19.9	17.3	0.9	2.1	20.2	17.5	0.4	2.8	0.5
60	19.4	17.1	-0.6	2.1	19.7	17.4	0.0	2.1	19.5	17.2	-0.4	2.2	19.5	17.1	-0.7	2.4	0.3
61	19.0	16.6	-0.4	1.9	19.1	16.7	-0.6	1.8	19.0	16.6	-0.5	1.9	19.3	16.6	-0.2	2.5	0.3
62	20.3	17.6	1.3	2.2	20.2	17.7	1.1	1.8	20.0	17.6	1.0	2.0	20.2	17.4	0.9	2.5	0.3
63	20.1	16.7	-0.2	*2	19.9	16.6	-0.3	*2	19.9	16.8	-0.1	*2	20.1	16.6	-0.1	*2	0.2
64	20.4	16.8	1.0	3.9	20.3	16.7	0.6	3.3	19.9	16.4	0.4	3.3	20.5	16.7	1.0	4.0	0.6
65	21.1	17.4	0.7	3.0	20.8	17.1	0.5	2.4	20.6	17.1	0.7	2.6	21.3	17.3	0.8	3.7	0.7
66	20.9	17.0	-0.2	3.1	20.8	17.1	0.0	2.7	20.7	17.1	0.1	3.1	21.3	17.3	0.0	3.9	0.6
67	20.7	17.2	-0.2	2.7	20.6	17.1	-0.2	2.3	20.7	17.4	0.0	2.6	20.9	17.3	-0.4	3.1	0.3
68	20.5	16.6	-0.2	2.5	21.0	16.8	0.4	2.8	20.9	17.0	0.2	2.9	21.1	16.9	0.2	3.3	0.6
69	20.9	18.2	0.4	3.1	21.4	18.3	0.4	3.3	21.0	17.8	0.1	3.2	21.3	18.1	0.2	3.9	0.5
70	19.0	18.2	-1.9	2.3	19.3	18.4	-2.1	2.4	19.6	17.8	-1.4	2.9	19.3	17.6	-2.0	2.8	0.6
71	18.2	20.5	-0.8	0.4	18.3	21.0	-1.0	0.3	18.2	21.4	-1.4	0.3	17.7	21.0	-1.6	0.2	0.6
72	18.0	9.7	-0.2	2.2	18.1	10.0	-0.2	2.1	18.5	10.6	0.3	2.4	18.7	10.1	1.0	2.9	0.7

282

Test Point #9



418 Bashford Ln.
24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338;

Date: 02/17/05

Run	1				2				3				4				
	Time: 02:08:51				Time: 07:55:11				Time: 14:29:58				Time: 20:04:35				
Temp	86				86				89				84				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	19.1	16.1	1.1	3.5	19.0	16.2	0.9	3.3	18.0	15.6	-0.5	1.9	18.9	15.9	0.2	3.1	1.1
74	19.4	16.6	0.3	5.5	19.4	16.7	0.4	2.1	18.7	16.1	0.7	3.1	19.5	16.5	0.6	4.1	0.8
75	20.8	16.3	1.4	6.8	20.5	16.1	1.1	4.5	19.8	15.6	1.1	3.8	21.3	16.7	1.8	4.3	1.5
76	19.7	16.7	-1.1	3.9	20.2	17.1	-0.3	4.0	20.0	16.8	0.2	3.0	20.1	16.6	-1.2	3.1	0.5
77	19.9	16.6	0.2	1.9	20.1	16.8	-0.1	1.0	20.0	16.8	0.0	2.5	20.2	16.7	0.1	3.0	0.3
78	20.9	15.0	1.0	2.5	20.0	13.9	-0.1	1.2	20.8	14.9	0.8	1.7	20.0	13.8	-0.2	1.1	0.9
Min Value	13.9	9.7	-1.9	-1.4	13.7	10.0	-2.1	-1.5	13.8	10.6	-1.4	-1.7	14.0	10.1	-2.0	-1.2	0.1
Max Value	21.1	20.5	1.7	6.8	21.4	21.0	1.7	4.5	21.0	21.4	1.9	4.1	21.3	21.0	1.8	4.3	1.5

Notes:

- *1 - Station off air - standby by carrier in use
- *2 - New channel addition there is no 6 month reference

788



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 50,157 as of 01/01/05. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

Test Point #10



5465 Colfax Ave.
Alexandria, VA

FCC Distortion Measurements

EQUIPMENT USED:

H/P 8591C, S/N 3916A04384

Pre-Amplifier 85905A, S/N 6093-0551

TRILITHIC VF-4-88, S/N 9330002

Tektronix VITS200, S/N B020963

CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 02/14/05

Time: 10:00 am

Temp: 40

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	0.9	0.4	69.7	66.7	52.7	4.4998
95	0.6	0.4	73.7	63.7	51.2	4.5001
21	1.1	0.5	76.0	66.2	50.5	4.4999
8	0.9	0.3	67.2	61.1	51.3	4.5000
28	1.3	0.5	71.8	60.3	50.5	4.5000
32	0.9	0.4	75.9	67.7	51.1	4.5000
47	1.2	0.5	65.3	57.7	52.3	4.5000
58	0.7	0.4	73.0	61.5	50.6	4.5000
72	1.0	0.9	69.3	62.9	48.0	4.5001
Minimum values:			65.3	57.7	48.0	
Maximum values:	1.3	0.9				-0.0002

062

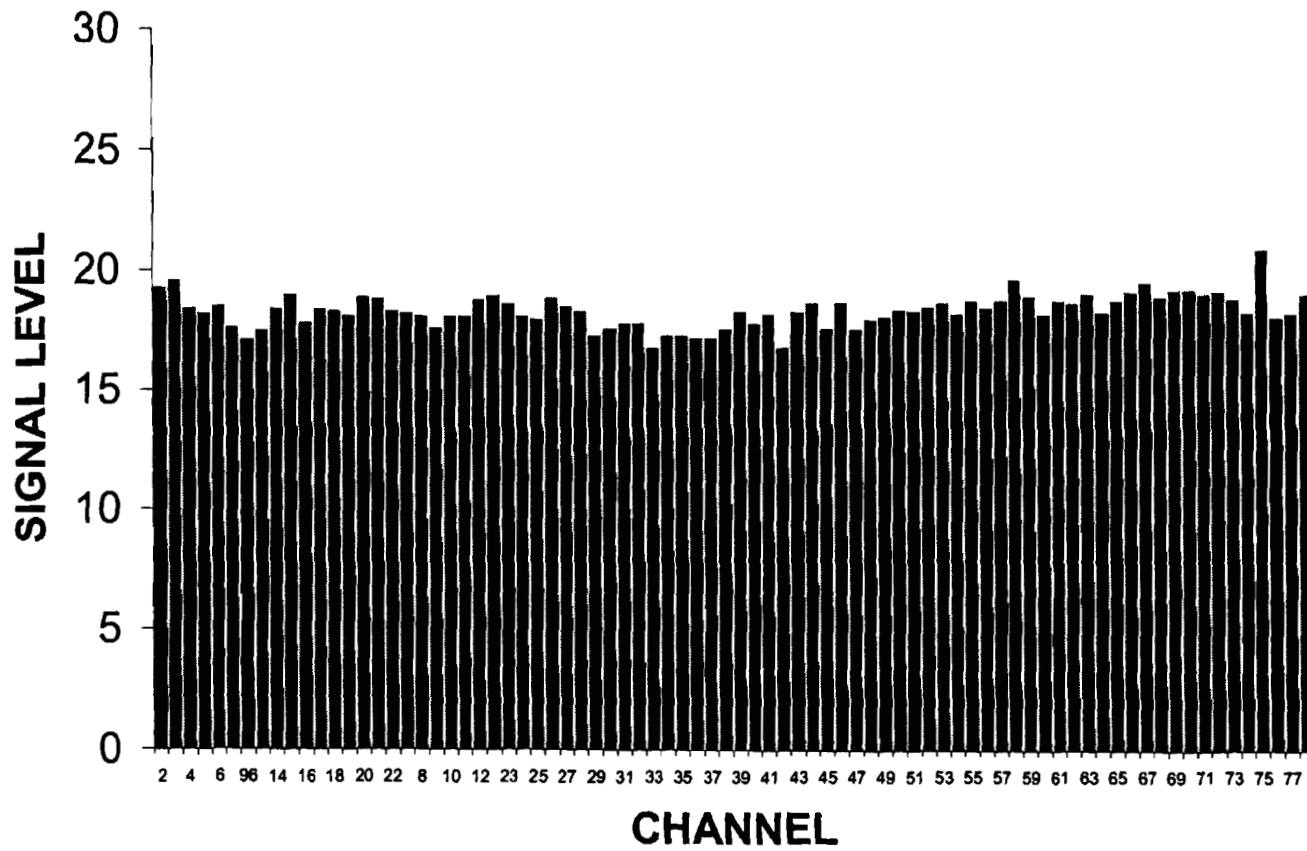


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #10



The maximum signal level is 21 dBmV

The maximum adjacent channel level difference is 2.9 dBmV
 The maximum level difference between the highest and lowest is 4.2 dBmV
 The maximum six month variance is 3.8 dBmV

292

Test Point #10



5465 Colfax Ave
24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338;

Date: 02/17/05

Run	1				2				3				4				
	Time: 01:13:33				Time: 07:03:50				Time: 13:47:47				Time: 19:07:54				
Temp	86				86				89				84				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	19.3	14.2		-1.0	19.1	14.0		-1.3	18.5	14.0		0.0	19.0	13.7		-1.2	0.8
3	19.6	17.1	0.3	-0.5	19.6	17.0	0.5	-0.7	18.9	16.9	0.4	0.1	19.4	16.8	0.4	-0.7	0.7
4	18.4	18.1	-1.2	-1.7	18.4	18.1	-1.2	-1.9	17.8	18.0	-1.1	-0.6	18.4	18.1	-1.0	-1.7	0.6
5	18.2	17.8	-0.2	-1.5	18.2	17.8	-0.2	-1.6	17.8	17.8	0.0	-0.2	18.5	17.8	0.1	-1.2	0.7
6	18.5	17.0	0.3	-1.0	18.3	16.9	0.1	-1.3	17.9	16.8	0.1	-0.2	18.6	17.0	0.1	-0.9	0.7
95	17.6	14.2	-0.9	-0.6	17.6	14.3	-0.7	-0.4	17.0	14.1	-0.9	-1.3	17.7	14.1	-0.9	-0.6	0.7
96	17.1	16.7	-0.5	-0.5	17.2	16.9	-0.4	-0.8	16.8	16.9	-0.2	0.7	17.2	16.7	-0.5	-0.5	0.4
99	17.5	17.1	0.4	-0.4	17.6	17.3	0.4	-0.4	17.0	17.0	0.2	0.6	17.6	16.9	0.4	0.0	0.6
14	18.4	16.8	0.9	-0.7	18.1	16.5	0.5	-1.2	17.8	16.6	0.8	-0.1	18.5	16.8	0.9	-0.6	0.7
15	19.0	16.7	0.6	-0.1	18.9	16.7	0.8	-0.4	18.3	16.6	0.5	0.4	19.1	16.7	0.6	0.1	0.8
16	17.8	20.3	-1.2	-1.5	17.7	20.2	-1.2	-1.1	17.2	20.2	-1.1	-1.9	17.8	20.1	-1.3	-1.3	0.6
17	18.4	16.7	0.6	-0.4	18.4	16.8	0.7	-0.5	17.9	16.7	0.7	0.3	18.4	16.5	0.6	-0.4	0.5
18	18.3	16.3	-0.1	-1.0	18.2	16.1	-0.2	-1.1	17.6	16.2	-0.3	-0.4	18.2	16.1	-0.2	-1.8	0.7
19	18.1	17.2	-0.2	0.1	18.4	17.4	0.2	0.3	18.0	17.6	0.4	0.8	18.4	17.3	0.2	-0.1	0.4
20	18.9	17.3	0.8	0.0	18.9	17.4	0.5	-0.1	18.2	17.3	0.2	0.6	18.8	17.1	0.4	-0.1	0.7
21	18.8	14.5	-0.1	-0.3	18.7	14.5	-0.2	-0.6	18.3	14.6	0.1	0.7	19.1	14.7	0.3	0.1	0.8
22	18.3	16.5	-0.5	-0.5	18.2	16.6	-0.5	-0.7	17.7	16.7	-0.6	0.0	18.4	16.6	-0.7	-0.3	0.7
7	18.2	17.1	-0.1	-0.9	17.9	16.9	-0.3	-1.4	17.4	16.8	-0.3	-0.4	18.1	16.7	-0.3	-1.0	0.8
8	18.1	14.5	-0.1	-0.3	18.2	14.5	0.3	-0.4	17.3	14.3	-0.1	-0.2	18.5	14.8	0.4	0.1	1.2
9	17.6	16.7	-0.5	-1.0	17.6	16.7	-0.6	-1.1	17.1	16.7	-0.2	-1.1	17.8	16.7	-0.7	-0.7	0.7
10	18.1	17.5	0.5	-0.5	18.0	17.3	0.4	-0.8	17.3	17.3	0.2	-0.7	18.0	17.2	0.2	-0.6	0.8
11	18.1	16.9	0.0	-0.4	18.0	16.7	0.0	-0.6	17.5	16.7	0.2	-0.5	18.1	16.6	0.1	-0.3	0.6
12	18.8	17.4	0.7	-0.4	18.9	17.5	0.9	-0.4	18.0	17.2	0.5	-0.1	18.9	17.3	0.8	-0.2	0.9
13	19.0	17.4	0.2	-0.4	19.1	17.5	0.2	-0.5	18.4	17.2	0.4	-0.2	19.0	17.1	0.1	-0.4	0.7
23	18.6	17.4	-0.4	0.2	18.5	17.3	-0.6	-0.1	18.1	17.2	-0.3	0.3	18.8	17.2	-0.2	0.4	0.7
24	18.1	17.1	-0.5	-0.3	18.1	17.1	-0.4	-0.4	17.5	17.0	-0.6	-0.3	18.1	16.9	-0.7	-0.1	0.6
25	18.0	16.8	-0.1	-0.8	18.0	16.7	-0.1	-0.9	17.2	16.3	-0.3	-1.8	18.2	16.7	0.1	-0.6	1.0
26	18.9	16.4	0.9	0.3	19.1	16.5	1.1	0.3	18.5	16.5	1.3	0.1	19.2	16.4	1.0	0.6	0.7
27	18.5	17.0	-0.4	1.2	18.8	17.2	-0.3	1.1	18.6	17.2	0.1	1.3	18.9	16.9	-0.3	0.9	0.4
28	18.3	14.8	-0.2	0.1	18.4	14.9	-0.4	0.0	17.8	14.8	-0.8	-0.4	18.5	14.7	-0.4	0.5	0.7
29	17.3	16.7	-1.0	-0.5	17.4	16.8	-1.0	-0.6	17.1	17.0	-0.7	-1.4	17.8	16.9	-0.7	0.4	0.7
30	17.6	16.9	0.3	-0.4	17.7	16.9	0.3	-0.6	17.4	17.0	0.3	-1.0	18.1	16.9	0.3	0.2	0.7
31	17.8	17.0	0.2	-0.1	18.0	17.1	0.3	-0.4	17.3	16.9	-0.1	-1.4	18.4	17.4	0.3	0.5	1.1
32	17.8	15.4	0.0	0.8	17.8	15.2	-0.2	1.5	17.5	15.4	0.2	0.6	18.4	15.6	0.0	1.4	0.9

293

Test Point #10



5465 Colfax Ave
24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338;

Date: 02/17/05

Run	1				2				3				4				
	Time: 01:13:33				Time: 07:03:50				Time: 13:47:47				Time: 19:07:54				
Temp	86				86				89				84				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	16.8	17.3	-1.0	-0.3	16.5	16.9	-1.3	-0.6	16.4	17.3	-1.1	-2.0	17.2	17.3	-1.2	0.1	0.8
34	17.3	16.9	0.5	0.2	17.1	16.5	0.6	-0.2	16.9	16.8	0.5	-1.5	17.6	16.7	0.4	0.4	0.7
35	17.3	17.2	0.0	1.4	17.4	17.2	0.3	1.4	17.0	17.3	0.1	0.0	17.8	17.3	0.2	1.5	0.8
36	17.2	16.7	-0.1	-0.6	17.3	16.6	-0.1	-0.5	16.9	16.6	-0.1	-2.4	17.6	16.8	-0.2	0.1	0.7
37	17.2	17.2	0.0	0.4	17.2	16.9	-0.1	0.4	17.0	17.2	0.1	-1.2	17.4	16.9	-0.2	0.7	0.4
38	17.6	16.8	0.4	0.5	17.7	16.8	0.5	0.5	17.5	17.2	0.5	-1.1	18.2	17.2	0.8	1.1	0.7
39	18.3	17.0	0.7	1.3	18.0	16.7	0.3	0.8	17.8	16.8	0.3	-0.8	18.5	16.9	0.3	1.6	0.7
40	17.8	16.9	-0.5	0.7	17.8	16.9	-0.2	0.5	17.2	16.8	-0.6	-1.6	18.2	17.0	-0.3	1.5	1.0
41	18.2	17.5	0.4	1.0	18.3	17.4	0.5	0.9	17.5	17.2	0.3	-2.1	18.3	17.3	0.1	1.5	0.8
42	16.8	16.2	-1.4	-0.2	16.7	16.0	-1.6	-0.6	16.3	16.2	-1.2	-2.9	17.0	16.2	-1.3	0.2	0.7
43	18.3	16.6	1.5	1.1	18.2	16.3	1.5	0.9	17.9	16.6	1.6	-1.6	18.3	16.3	1.3	1.4	0.4
44	18.7	16.8	0.4	0.9	19.0	17.1	0.8	1.0	18.3	16.9	0.4	-1.4	19.3	17.3	1.0	1.5	1.0
45	17.6	17.0	-1.1	-0.3	17.9	17.3	-1.1	-0.2	17.1	17.0	-1.2	-2.6	17.9	17.0	-1.4	0.1	0.8
46	18.7	17.3	1.1	1.1	18.6	17.2	0.7	0.8	18.0	17.1	0.9	-1.9	19.0	17.4	1.1	1.6	1.0
47	17.6	15.8	-1.1	1.2	17.9	16.0	-0.7	1.3	17.0	15.6	-1.0	-1.2	18.0	16.0	-1.0	2.6	1.0
48	18.0	15.7	0.4	1.3	17.9	15.5	0.0	1.0	17.5	15.6	0.5	-2.8	18.3	15.6	0.3	1.6	0.8
49	18.1	17.0	0.1	0.1	18.1	16.9	0.2	-0.1	17.7	17.1	0.2	-2.7	18.5	17.0	0.2	0.6	0.8
50	18.4	16.8	0.3	0.2	18.4	16.7	0.3	0.1	17.8	16.7	0.1	-2.5	18.3	16.4	-0.2	0.5	0.6
51	18.4	17.0	0.0	0.2	18.3	16.8	-0.1	0.0	17.6	16.5	-0.2	-3.0	18.3	16.5	0.0	0.4	0.8
52	18.5	17.0	0.1	0.5	18.9	17.4	0.6	0.7	18.4	17.4	0.8	-2.3	19.1	17.3	0.8	1.3	0.7
53	18.7	17.4	0.2	0.3	18.8	17.5	-0.1	0.1	18.1	17.2	-0.3	-2.5	19.0	17.5	-0.1	0.9	0.9
54	18.2	16.7	-0.5	0.5	18.5	16.9	-0.3	0.6	17.8	16.8	-0.3	-2.6	18.6	16.8	-0.4	1.1	0.8
55	18.8	17.5	0.6	1.0	18.9	17.6	0.4	0.9	18.5	17.8	0.7	-2.2	19.1	17.5	0.5	1.5	0.6
56	18.5	16.7	-0.3	0.7	18.6	16.8	-0.3	0.6	17.9	16.6	-0.6	-2.9	19.0	16.9	-0.1	1.3	1.1
57	18.8	16.5	0.3	0.0	18.8	16.5	0.2	-0.3	18.3	16.6	0.4	-2.7	19.2	16.5	0.2	0.6	0.9
58	19.7	15.4	0.9	0.9	19.6	15.3	0.8	0.4	18.9	15.2	0.6	-2.2	19.8	15.1	0.6	1.2	0.9
59	19.0	17.3	-0.7	-0.1	19.0	17.2	-0.6	-0.3	18.3	17.1	-0.6	-3.8	19.3	17.4	-0.5	0.7	1.0
60	18.2	16.6	-0.8	-0.1	18.3	16.5	-0.7	-0.1	17.7	16.6	-0.6	-3.7	18.5	16.5	-0.8	0.5	0.8
61	18.8	17.4	0.6	-0.1	18.6	17.1	0.3	-0.5	18.1	17.2	0.4	-3.1	19.1	17.3	0.6	0.5	1.0
62	18.7	16.5	-0.1	-0.4	18.8	16.6	0.2	-0.5	18.3	16.7	0.2	-2.8	19.4	16.8	0.3	0.7	1.1
63	19.1	17.2	0.4	*2	19.3	17.4	0.5	*2	18.6	17.3	0.3	*2	19.5	17.2	0.1	*2	0.9
64	18.3	16.9	0.1	1.2	18.5	17.1	0.2	1.2	17.7	16.9	0.0	-2.8	18.8	17.2	0.3	1.8	1.1
65	18.8	16.7	0.5	0.6	18.8	16.7	0.3	0.4	18.2	16.7	0.5	-2.4	19.0	16.5	0.2	1.1	0.8
66	19.2	16.5	0.4	0.5	19.3	16.7	0.5	0.3	18.8	16.9	0.6	-2.1	19.3	16.5	0.3	1.0	0.5
67	19.6	17.1	0.4	0.4	19.5	17.0	0.2	0.0	18.8	16.9	0.0	-2.3	19.8	16.9	0.5	0.7	1.0
68	19.0	16.6	-0.6	0.3	19.3	16.9	-0.2	0.3	18.5	16.6	-0.3	-2.3	19.6	16.9	-0.2	1.0	1.1
69	19.3	17.0	0.3	0.7	19.5	17.2	0.2	0.8	18.7	17.0	0.2	-1.4	19.6	16.9	0.0	1.4	0.9
70	19.3	17.3	0.0	1.2	19.4	17.3	-0.1	1.0	18.4	16.9	-0.3	-1.1	19.5	17.2	-0.1	1.5	1.1
71	19.1	16.9	-0.2	0.5	19.0	16.7	-0.4	0.3	18.5	16.9	0.1	-1.6	19.4	17.0	-0.1	1.2	0.9
72	19.2	14.9	0.1	0.6	19.1	14.8	0.1	0.3	18.5	14.9	0.0	-1.4	19.6	15.0	0.2	1.4	1.1

294

Test Point #10



5465 Colfax Ave
24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338:

Date: 02/17/05

Run	1				2				3				4				
	Time: 01:13:33				Time: 07:03:50				Time: 13:47:47				Time: 19:07:54				
Temp	86				86				89				84				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	18.9	16.8	-0.3	0.9	19.0	16.8	-0.1	0.8	18.3	16.8	-0.2	-1.2	19.1	16.8	-0.5	1.4	0.8
74	18.3	16.8	-0.6	0.3	18.3	16.6	-0.7	0.0	17.7	16.7	-0.6	-1.4	18.6	16.5	-0.5	0.8	0.9
75	21.0	18.2	2.7	3.8	18.6	15.9	0.3	1.7	18.7	16.5	1.0	0.2	20.8	17.8	2.2	3.5	2.4
76	18.1	16.7	-2.9	0.6	18.2	16.7	-0.4	0.4	17.5	16.7	-1.2	-1.3	18.5	16.8	-2.3	1.2	1.0
77	18.3	17.3	0.2	0.1	18.0	16.9	-0.2	-0.5	17.3	17.0	-0.2	-1.9	18.1	16.9	-0.4	0.1	1.0
78	19.1	15.4	0.8	0.9	19.0	15.1	1.0	1.1	18.6	15.6	1.3	-1.2	19.0	14.9	0.9	1.8	0.5
Min Value	16.8	14.2	-2.9	-1.7	16.5	14.0	-1.6	-1.9	16.3	14.0	-1.2	-3.8	17.0	13.7	-2.3	-1.8	0.4
Max Value	21.0	20.3	2.7	3.8	19.6	20.2	1.5	1.7	18.9	20.2	1.6	1.3	20.8	20.1	2.2	3.5	2.4

Notes:

*1 - Station off air - standby by carrier in use

*2 - New channel addition there is no 6 month reference

295



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 50,157 as of 01/01/05. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

296

Test Point #11



2357 N Early St.
 Alexandria, VA
 FCC Distortion Measurements
 EQUIPMENT USED:
 H/P 8591C, S/N 3916A04384
 Pre-Amplifier 85905A, S/N 6093-0551
 TRILITHIC VF-4-88, S/N 9330002
 Tektronix VITS200, S/N B020963
 CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 02/14/05

Time: 1:30 pm

Temp: 40

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	1.1	0.5	68.5	65.6	54.0	4.4998
95	1.0	0.3	69.3	64.7	51.9	4.5001
21	0.7	0.5	69.4	60.2	50.4	4.5001
8	0.8	0.5	70.3	61.1	51.5	4.4999
28	1.2	0.6	69.9	58.0	50.8	4.5000
32	1.0	0.4	68.0	60.1	51.3	4.5001
47	1.2	0.6	67.3	63.2	51.7	4.5000
58	0.9	0.4	69.1	60.6	51.8	4.5001
72	1.0	0.5	65.5	63.5	50.9	4.5001
Minimum values:			65.5	58.0	50.4	
Maximum values:	1.2	0.6				-0.0002

297

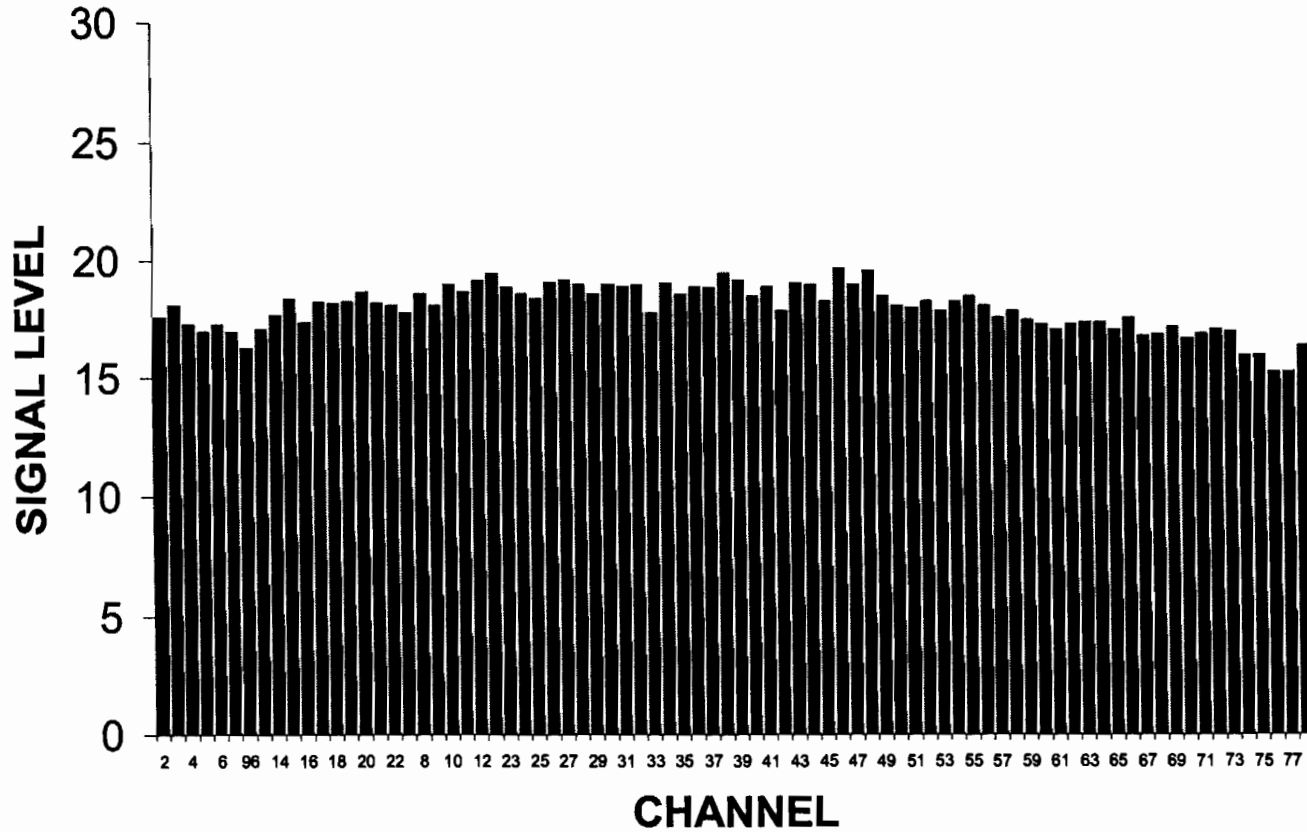


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #11



■ The maximum signal level is 20.1 dBmV

The maximum adjacent channel level difference is 2.9 dBmV
The maximum level difference between the highest and lowest is 4.6 dBmV
The maximum six month variance is 5.8 dBmV

299

Test Point #11

Comcast

2357 N Early St
24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338;

Date: 02/17/05

Run	1				2				3				4				
	Time: 01:34:45				Time: 07:25:01				Time: 14:04:18				Time: 19:29:22				
Temp	86				86				89				84				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	17.6	13.7		-2.1	17.5	13.8		-2.4	17.4	13.7		-2.3	17.8	13.8		-1.7	0.4
3	18.1	16.5	0.5	-1.4	18.1	17.1	0.6	-1.7	18.2	16.9	0.8	-1.3	18.3	16.7	0.5	-1.2	0.2
4	17.3	18.1	-0.8	-2.2	16.4	19.1	-1.7	-3.2	17.0	18.0	-1.2	-2.5	17.5	18.2	-0.8	-2.0	1.1
5	17.0	17.3	-0.3	-2.1	16.3	17.3	-0.1	-2.8	16.7	17.4	-0.3	-2.3	17.1	17.5	-0.4	-2.0	0.8
6	17.3	16.4	0.3	-1.6	17.2	16.4	0.9	-2.0	17.1	16.4	0.4	-1.8	17.5	16.5	0.4	-1.3	0.4
95	17.0	14.3	-0.3	-0.1	16.6	14.2	-0.6	-0.6	16.7	14.4	-0.4	-0.3	16.9	14.2	-0.6	-0.1	0.4
96	16.3	16.4	-0.7	-2.9	16.4	16.6	-0.2	-1.2	16.1	16.4	-0.6	-1.4	16.7	16.7	-0.2	-0.2	0.6
99	17.1	17.1	0.8	-0.6	17.0	17.2	0.6	-1.0	16.9	17.2	0.8	-0.8	17.5	17.4	0.8	-0.1	0.6
14	17.7	16.7	0.6	-1.1	17.7	16.8	0.7	-1.2	17.5	16.7	0.6	-1.3	18.1	17.0	0.6	-0.6	0.6
15	18.4	16.6	0.7	-0.4	18.4	16.6	0.7	-0.6	18.2	16.6	0.7	-0.6	18.7	16.6	0.6	-0.1	0.5
16	17.4	20.1	-1.0	-0.6	17.1	19.9	-1.3	-2.2	17.2	20.1	-1.0	-1.7	17.4	19.9	-1.3	-2.3	0.3
17	18.3	16.8	0.9	-0.5	18.0	16.6	0.9	-0.8	18.0	16.8	0.8	-0.7	18.3	16.6	0.9	-0.3	0.3
18	18.2	17.3	-0.1	-0.9	18.0	17.1	0.0	-1.3	17.8	17.2	-0.2	-1.2	18.4	17.3	0.1	-0.6	0.6
19	18.3	17.0	0.1	0.1	18.0	16.6	0.0	-1.0	18.0	16.8	0.2	-0.7	18.4	16.8	0.0	-0.3	0.4
20	18.7	17.2	0.4	0.1	18.4	17.0	0.4	-0.4	18.2	17.0	0.2	-0.4	18.8	17.1	0.4	0.2	0.6
21	18.2	13.7	-0.5	-0.6	18.3	13.9	-0.1	-0.8	18.3	14.1	0.1	-0.5	18.8	14.1	0.0	0.0	0.6
22	18.1	16.6	-0.1	-0.8	18.3	17.0	0.0	-0.9	17.9	16.7	-0.4	-0.9	18.6	16.9	-0.2	-0.2	0.7
7	17.8	16.8	-0.3	-1.0	17.5	16.7	-0.8	-1.7	17.4	16.8	-0.5	-1.5	17.8	16.9	-0.8	-1.0	0.4
8	18.6	14.9	0.8	-0.2	18.4	14.9	0.9	-0.8	18.0	14.7	0.6	-0.8	18.6	14.8	0.8	-0.2	0.6
9	18.1	16.4	-0.5	-0.8	17.9	16.5	-0.5	-1.3	17.7	16.4	-0.3	-1.2	18.3	16.6	-0.3	-0.5	0.6
10	19.0	17.5	0.9	-0.4	18.4	17.2	0.5	-1.2	18.5	17.4	0.8	-0.9	19.0	17.5	0.7	-0.4	0.6
11	18.7	16.9	-0.3	-0.4	18.7	17.2	0.3	-0.6	18.5	17.1	0.0	-0.4	19.0	17.1	0.0	0.0	0.5
12	19.2	17.6	0.5	-0.3	18.7	17.2	0.0	-1.0	18.8	17.5	0.3	-0.6	19.2	17.3	0.2	-0.3	0.5
13	19.5	17.4	0.3	0.0	19.3	17.3	0.6	-0.5	18.7	16.9	-0.1	-0.8	19.2	16.9	0.0	-0.3	0.8
23	18.9	16.7	-0.6	0.2	18.8	16.8	-0.5	-0.3	18.8	16.9	0.1	0.0	19.3	16.9	0.1	0.5	0.5
24	18.6	16.9	-0.3	-0.2	18.6	17.1	-0.2	-0.4	18.6	17.1	-0.2	0.0	19.0	16.9	-0.3	0.3	0.4
25	18.4	16.8	-0.2	-0.9	18.1	16.8	-0.5	-1.4	18.2	16.8	-0.4	-1.1	18.8	17.0	-0.2	-0.5	0.7
26	19.1	16.4	0.7	0.3	19.3	16.9	1.2	0.3	18.9	16.5	0.7	0.2	19.8	16.8	1.0	1.2	0.9
27	19.2	16.9	0.1	1.9	18.8	16.6	-0.5	1.0	18.9	16.7	0.0	1.1	19.5	16.8	-0.3	1.3	0.7
28	19.0	14.6	-0.2	0.4	18.8	14.6	0.0	0.0	18.8	14.6	-0.1	0.3	19.2	14.4	-0.3	0.7	0.4
29	18.6	17.1	-0.4	0.0	18.2	16.7	-0.6	-0.6	18.4	17.0	-0.4	-0.1	18.9	16.9	-0.3	0.5	0.7
30	19.0	17.5	0.4	0.4	18.7	17.3	0.5	-0.2	18.5	17.1	0.1	0.0	19.2	17.3	0.3	0.7	0.7
31	18.9	17.1	-0.1	0.1	18.6	16.9	-0.1	-0.5	18.7	17.1	0.2	-0.1	19.0	16.7	-0.2	0.4	0.4
32	19.0	15.4	0.1	2.0	18.6	15.1	0.0	1.7	18.8	15.4	0.1	2.3	19.3	15.3	0.3	2.3	0.7

300

Test Point #11



2357 N Early St

24 Hour Level Variation

Equipment Used: 100' drop, Wavetek SDA-5000 Signal Level Meter S/N 041338:

Date: 02/17/05

Run	1				2				3				4				
	Time: 01:34:45				Time: 07:25:01				Time: 14:04:18				Time: 19:29:22				
Temp	86				86				89				84				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	17.8	16.9	-1.2	0.3	17.7	17.0	-0.9	-0.2	17.3	16.6	-1.5	-0.2	18.0	16.8	-1.3	0.6	0.7
34	19.1	17.1	1.3	1.3	18.6	16.9	0.9	0.4	18.6	16.8	1.3	0.6	19.1	16.8	1.1	1.1	0.5
35	18.6	16.7	-0.5	2.1	18.5	16.7	-0.1	1.6	18.3	16.6	-0.3	1.4	19.0	16.8	-0.1	2.1	0.7
36	18.9	16.6	0.3	0.1	18.6	16.5	0.1	-0.3	18.8	16.8	0.5	0.1	19.3	16.7	0.3	1.0	0.7
37	18.9	17.3	0.0	1.6	18.5	17.2	-0.1	1.0	18.4	16.8	-0.4	1.3	19.0	16.8	-0.3	1.9	0.6
38	19.5	17.5	0.6	1.4	18.8	17.2	0.3	0.4	19.0	17.4	0.6	1.0	19.6	17.3	0.6	1.7	0.8
39	19.2	17.4	-0.3	1.2	18.8	17.4	0.0	0.6	19.0	17.2	0.0	1.4	19.5	17.6	-0.1	2.0	0.7
40	18.5	16.8	-0.7	1.1	18.1	16.6	-0.7	0.4	18.2	16.7	-0.8	1.0	18.7	16.7	-0.8	1.6	0.6
41	18.9	17.1	0.4	1.1	18.8	17.1	0.7	0.8	18.6	17.1	0.4	1.0	19.5	17.5	0.8	2.0	0.9
42	17.9	16.5	-1.0	0.6	17.8	16.6	-1.0	0.3	17.5	16.3	-1.1	0.2	18.3	16.4	-1.2	1.2	0.8
43	19.1	17.1	1.2	1.8	18.7	16.9	0.9	1.4	18.6	17.0	1.1	1.5	19.1	16.8	0.8	2.0	0.5
44	19.0	16.7	-0.1	2.0	19.0	16.9	0.3	2.0	18.9	16.9	0.3	1.8	19.4	16.7	0.3	2.4	0.5
45	18.3	17.0	-0.7	1.2	18.2	17.0	-0.8	0.7	18.0	17.0	-0.9	0.9	18.7	17.1	-0.7	1.7	0.7
46	19.7	17.1	1.4	2.4	19.5	17.1	1.3	1.6	19.2	16.9	1.2	2.1	19.7	16.7	1.0	2.6	0.5
47	19.0	15.1	-0.7	2.3	18.6	15.0	-0.9	1.5	18.1	14.5	-1.1	1.6	19.2	15.0	-0.5	2.7	1.1
48	19.6	16.6	0.6	2.7	19.3	16.6	0.7	2.0	19.3	16.7	1.2	2.6	20.1	16.8	0.9	3.4	0.8
49	18.5	17.4	-1.1	1.1	18.0	17.1	-1.3	0.3	18.3	17.5	-1.0	1.2	18.7	17.2	-1.4	1.4	0.7
50	18.1	17.1	-0.4	0.9	17.7	17.1	-0.3	0.3	17.8	16.9	-0.5	1.1	18.4	17.1	-0.3	1.7	0.7
51	18.0	16.8	-0.1	1.2	17.3	16.8	-0.4	0.2	17.8	17.0	0.0	1.1	18.3	16.8	-0.1	1.6	1.0
52	18.3	17.2	0.3	1.6	18.0	17.2	0.7	1.1	18.3	17.4	0.5	1.7	18.4	16.9	0.1	1.8	0.4
53	17.9	16.9	-0.4	0.8	17.4	16.9	-0.6	0.0	17.7	17.0	-0.6	0.8	18.2	16.8	-0.2	1.3	0.8
54	18.3	17.3	0.4	1.7	17.8	17.2	0.4	0.9	17.9	17.2	0.2	1.4	18.7	17.6	0.5	2.3	0.9
55	18.5	17.6	0.2	1.9	17.8	17.8	0.0	0.9	18.2	17.7	0.3	1.6	18.7	17.7	0.0	2.2	0.9
56	18.1	17.3	-0.4	1.9	17.0	17.2	-0.8	0.5	17.6	17.1	-0.6	1.4	18.3	17.2	-0.4	2.3	1.3
57	17.6	16.7	-0.5	1.0	16.8	16.6	-0.2	0.0	17.2	16.6	-0.4	0.7	18.0	16.8	-0.3	1.5	1.2
58	17.9	15.3	0.3	1.4	16.9	15.0	0.1	0.2	17.4	15.2	0.2	0.9	18.2	15.3	0.2	1.8	1.3
59	17.5	17.0	-0.4	0.8	16.7	16.6	-0.2	-0.1	17.2	17.0	-0.2	0.8	17.8	17.1	-0.4	1.5	1.1
60	17.3	17.1	-0.2	1.1	16.8	17.3	0.1	0.3	16.6	16.9	-0.6	0.5	17.3	17.1	-0.5	1.2	0.7
61	17.1	17.4	-0.2	0.9	16.7	17.5	-0.1	0.2	16.9	17.4	0.3	0.9	17.0	16.9	-0.3	1.0	0.4
62	17.3	17.1	0.2	0.8	16.5	16.9	-0.2	-0.3	16.6	16.7	-0.3	0.5	17.4	17.0	0.4	1.3	0.9
63	17.4	16.7	0.1	*2	16.8	16.9	0.3	*2	17.0	16.8	0.4	*2	17.6	16.6	0.2	*2	0.8
64	17.4	17.6	0.1	2.4	16.7	17.2	-0.1	1.6	16.5	17.1	-0.1	2.1	17.4	17.2	0.1	2.6	0.9
65	17.1	16.8	-0.3	1.2	16.9	17.0	0.2	0.8	17.0	17.1	0.5	1.4	17.5	16.9	0.1	1.9	0.6
66	17.6	17.3	0.5	1.8	17.1	17.6	0.2	1.1	16.9	17.1	-0.1	1.3	17.5	17.1	0.0	2.0	0.7
67	16.8	16.7	-0.8	1.0	16.4	16.9	-0.7	0.3	16.7	17.0	-0.2	1.1	17.1	16.8	-0.4	1.5	0.7
68	16.9	16.8	0.1	1.4	16.5	17.2	0.1	0.8	16.6	17.0	-0.1	1.3	17.1	16.7	0.0	1.8	0.6
69	17.2	17.4	0.3	2.0	16.7	17.4	0.2	1.1	16.4	16.7	-0.2	1.4	17.5	17.2	0.4	2.5	1.1
70	16.7	16.9	-0.5	1.8	16.3	16.9	-0.4	1.2	16.5	17.1	0.1	1.8	17.0	16.9	-0.5	2.3	0.7
71	16.9	16.8	0.2	1.8	16.6	17.0	0.3	1.3	16.5	16.9	0.0	1.5	17.1	16.8	0.1	2.1	0.6
72	17.1	14.8	0.2	1.9	16.4	14.4	-0.2	0.8	16.1	14.2	-0.4	1.1	17.2	14.7	0.1	2.2	1.1

Comcast

3900 Wheeler Ave
Alexandria, VA

FCC Headend Video Test

EQUIPMENT USED:

H/P 8591C, S/N 3916A04384

Pre-Amplifier 85905A, S/N 6093-0551

TRILITHIC VF-4-88, S/N 9330002

Tektronix VITS200, S/N B020963

CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 2/20/05

Time: 10:30 am

Temp: 68

CH.	Differential Gain +/-20%	Differential Phase +/-10 Deg.	Chroma/Luma Delay <170nsec.
2	2.31	0.88	13.7
95	1.82	0.71	18.3
21	3.37	0.97	15.6
8	2.96	0.78	11.7
28	3.20	0.98	17.9
32	3.19	0.66	9.6
47	3.05	0.98	20.9
58	2.71	0.66	12.2
72	2.09	0.64	15.8
Maximum values:	3.37%	0.98 Deg.	20.90 nsec.



ALEXANDRIA

~~Arlington~~, Virginia

Summer 2004

Proof of

Performance



Comcast of Alexandria, VA performed an FCC Proof-of-Performance test during the period of July 1st through August 20th, 2004.

The purpose of the test was to adhere to FCC requirements as set forth in the Federal Code of Regulations, Subpart K, Sections 76.601 and 76.605. The documents that follow are the results of the tests, as well as the requirements set forth by the FCC.



System Test Data

System: Comcast Location: Alexandria, Va.

System Community ID#: VA0220

Physical System ID#: 004923

Statement of Qualifications

Scott Shelley Title: Senior Director of Operations

Experience: Scott has been in CATV for 25 years, with 19 years as technical manager. SCTE member since 1988. SCTE Chapter Board Member 1991 thru present. Chapter 2nd Vice-president 1992-1993. Chapter President for 1994-1995. Member of NCTA engineering Committee on plant maintenance and outage practices. Member of SCTE Committee on Signal Leakage and CLI in 1988. S/A Headend, Earth Station and Systems training in 1988. FCC proof testing 1980-1981 TCI of Kansas, 1982-1986 – Storer Communications. Proof testing 1988-1993 – Hauser Communications, 1994-1998 Southwestern Bell Media Ventures, 1998-2000 – Prime Communications, 2000-present - Comcast.

Greg Harmon Title: Senior System Technician

Experience: Greg has been a CATV Technician for 15 years, during which he has been a Service Technician for 3 years and a System Technician for 11 years. He has completed the NCTI Master Technician program. He has participated in 14 FCC Proof of Performance tests.

Jarret Baker Title: Headend Technician

Experience: Jarret has been a Headend Technician for 3 years, and has 6 years RF broadband experience. He has 2 Associate degrees in Electronics and Digital Media. He has participated in 4 FCC Proof of Performance tests.



Testing Procedures

C/N, CTB, CSO and HUM:

A 100' RG-6 drop was attached to a normal subscriber tap. A jumper was then connected from the tap to the input of the pre-amp, which was connected to the RF input of the spectrum analyzer. The measurements were done using the automated testing functions of the HP 8591C. The video modulation and the carrier were removed when instructed by the HP8591C automated testing functions.

4.5 Audio Difference:

This measurement was made by the spectrum analyzer with the entire channel intact.

In-band Frequency Response:

This test was done with the RG-6 drop connected to the input to the converter box, which the output was connected to the RF input of the spectrum analyzer. At the headend, the VITS 200 inserted the appropriate multiburst VITS.

24-Hour Level Test:

This test used the 100' RG-6 drop attached to the RF input of a Wavetek SDA5000 signal level meter.

Headend Color Test

These tests were conducted with a VITS inserter connected to the modulator under test using the FCC composite test signal. A jumper was then run from the headend test point to a signal down converter, which was connected to a precision demodulator. The video output of the precision demodulator was then connected to the video input on a VM700A. All color tests were done using the VM700A.



List of Equipment

<u>Equipment</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial #</u>	<u>Last cal</u>
Cybertek Examiner	Com Sonics	101129-001	N/A	N/A
Spectrum Analyzer	Hewlett-Packard	8591C	3916A04384	10/06/03
Tunable Filter	Trilithic	VF-4-88	9330002	N/A
Pre-Amplifier	Hewlett-Packard	85905A	6093-0551	N/A
Signal Level Meter	Avantron	AT2000RQ	3245-0701	10/06/03
Converter Box	Scientific Atlanta	8511300	GF505BFDN	N/A



Testing Procedures

C/N, CTB, CSO and HUM:

A 100' RG-6 drop was attached to a normal subscriber tap. A jumper was then connected from the tap to the input of the pre-amp, which was connected to the RF input of the spectrum analyzer. The measurements were done using the automated testing functions of the HP 8591C. The video modulation and the carrier were removed when instructed by the HP8591C automated testing functions.

4.5 Audio Difference:

This measurement was made by the spectrum analyzer with the entire channel intact.

In-band Frequency Response:

This test was done with the RG-6 drop connected to the input to the converter box, which the output was connected to the RF input of the spectrum analyzer. At the headend, the VITS 200 inserted the appropriate multiburst VITS.

24-Hour Level Test:

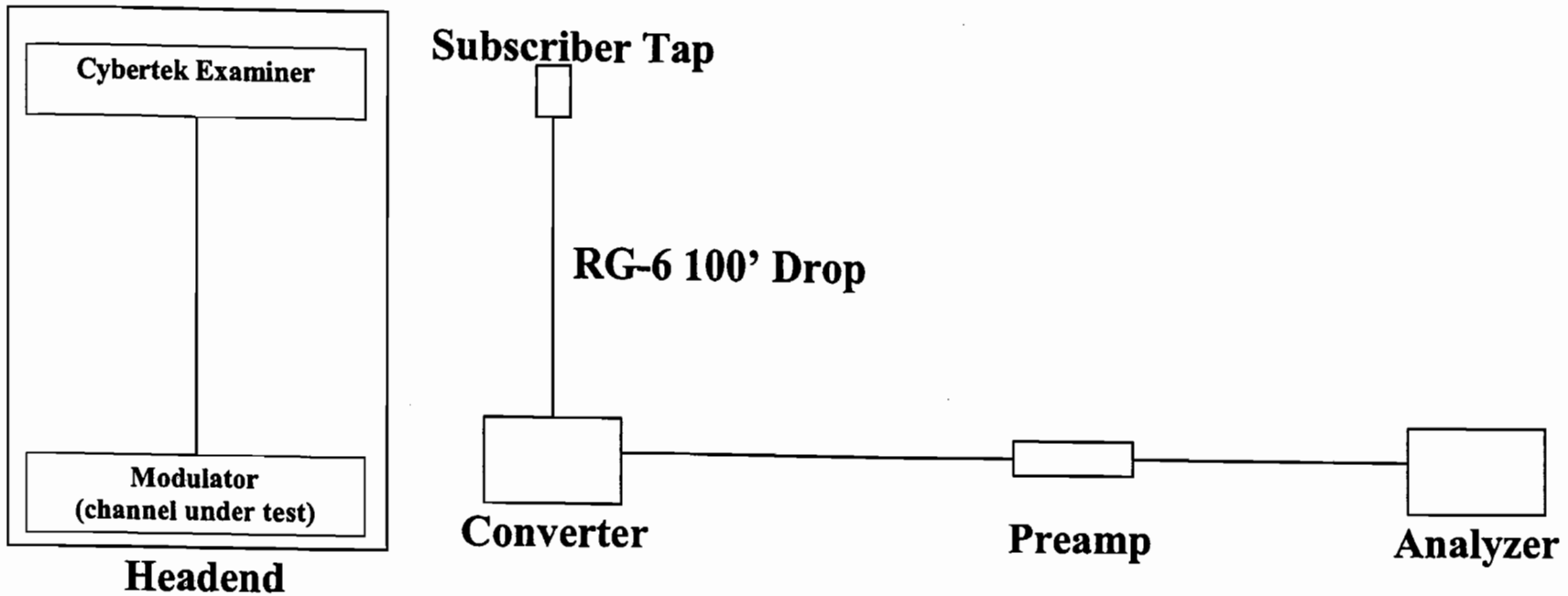
This test used the 100' RG-6 drop attached to the RF input of a Wavetek SDA5000 signal level meter.

Headend Color Test

These tests were conducted with a VITS inserter connected to the modulator under test using the FCC composite test signal. A jumper was then run from the headend test point to a signal down converter, which was connected to a precision demodulator. The video output of the precision demodulator was then connected to the video input on a VM700A. All color tests were done using the VM700A.

Comcast.

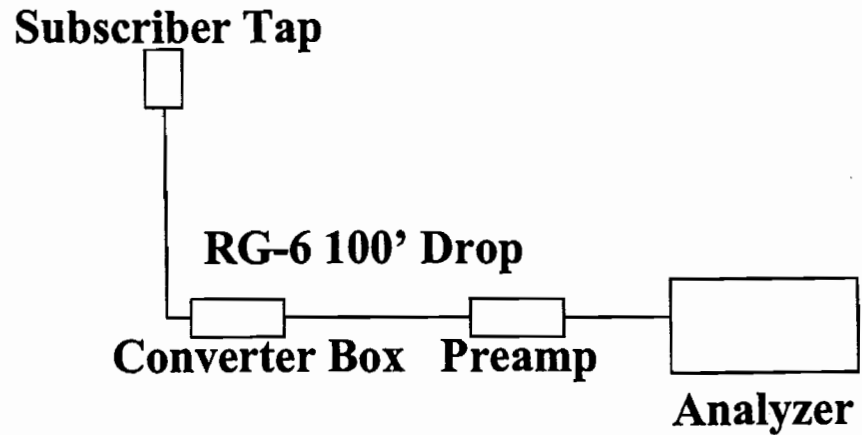
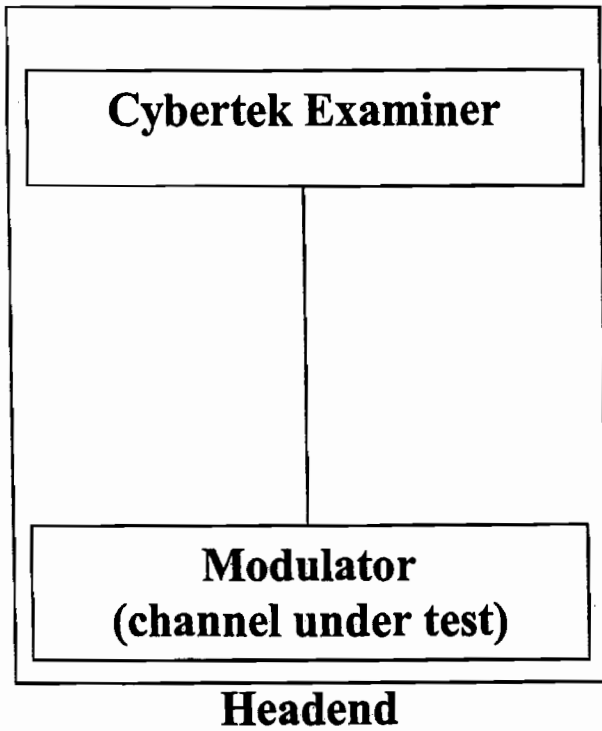
Figure 1
C/N, CTB, CSO



Comcast.

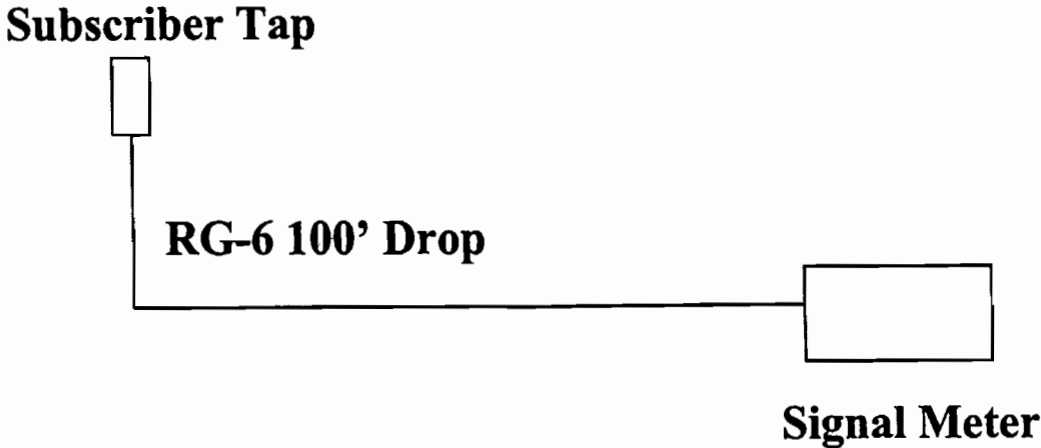
Figure 2

In-band Frequency Response, Hum and 4.5 Audio Diff



Comcast.

Figure 3
24 Hour Level Test



312



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

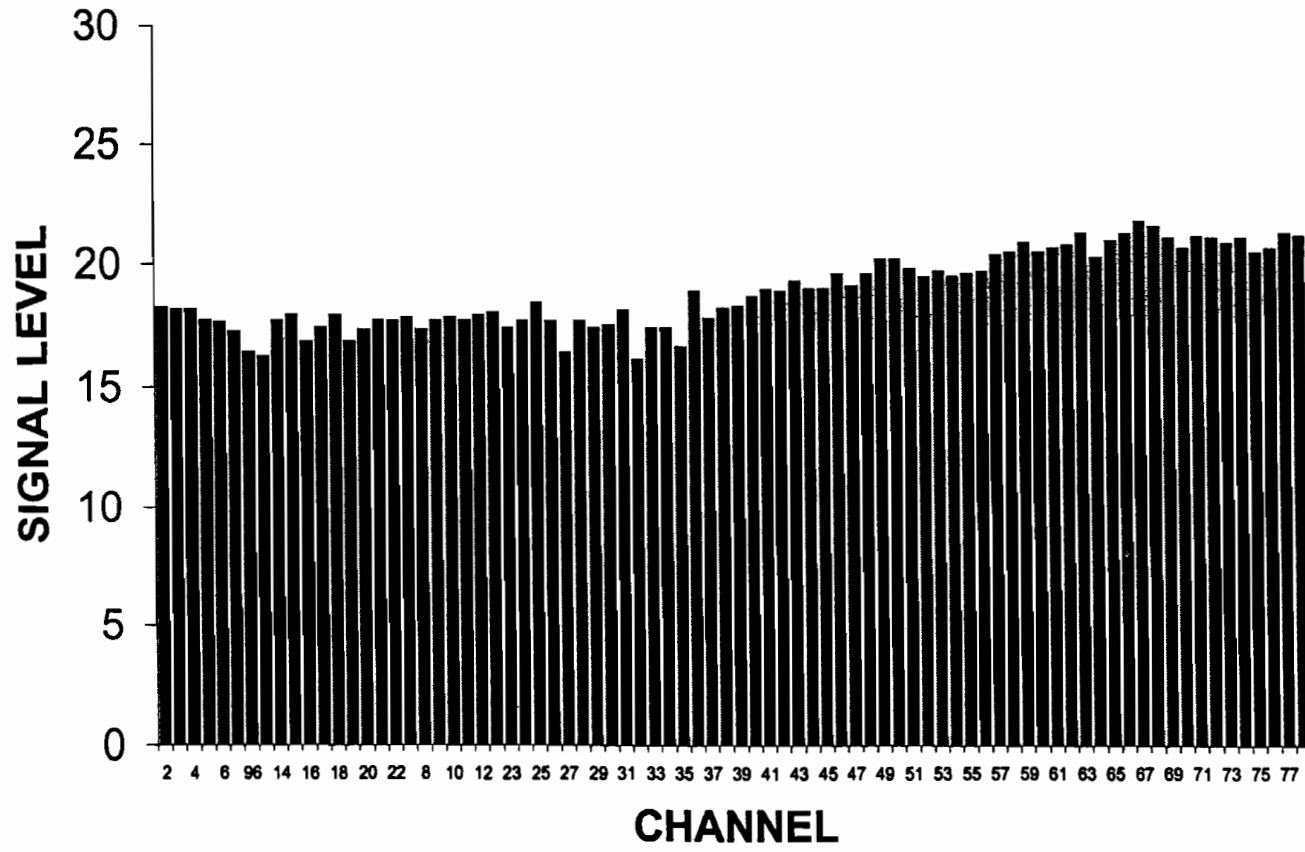
The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

313

TEST POINT #1



■ The maximum signal level is 22.1 dBmV

The maximum adjacent channel level difference is 2.5 dBmV
 The maximum level difference between the highest and lowest is 6 dBmV
 The maximum six month variance is 4.4 dBmV

316



Test Point #1

85 S Bragg St
24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:13 AM				7:14 AM				12:24 PM				7:32 PM				
Temp	21				23				25				21				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	18.3	15.4		1.5	18.3	15.4		1.6	18.0	15.4		1.1	18.3	15.4		1.5	0.3
3	18.2	15.5	-0.1	1.4	18.2	15.5	-0.1	1.3	17.9	15.5	-0.1	1.0	18.2	15.5	-0.1	1.5	0.3
4	18.2	16.4	0.0	1.0	18.2	16.4	0.0	1.0	18.0	16.4	0.1	0.8	18.2	16.3	0.0	1.2	0.2
5	17.8	15.7	-0.4	0.7	17.8	15.7	-0.4	0.6	17.5	15.7	-0.5	0.4	17.8	15.7	-0.4	0.8	0.3
6	17.7	16.2	-0.1	0.8	17.6	16.2	-0.2	0.5	17.3	16.2	-0.2	0.5	17.6	16.2	-0.2	1.0	0.4
95	17.3	9.5	-0.4	0.0	18.3	9.5	0.7	0.0	17.4	9.9	0.1	0.0	16.5	9.6	-1.1	0.0	1.8
96	16.5	15.9	-0.8	-2.8	16.5	16.0	-1.8	-2.9	15.9	15.9	-1.5	-3.1	16.5	16.1	0.0	-2.2	0.6
99	16.3	15.6	-0.2	-1.6	16.3	15.8	-0.2	-1.7	15.8	15.7	-0.1	-2.0	16.1	15.7	-0.4	-1.6	0.5
14	17.8	16.8	1.5	0.0	17.9	17.0	1.6	0.1	17.5	17.0	1.7	-0.2	17.8	16.8	1.7	0.2	0.4
15	18.0	16.2	0.2	0.2	18.1	16.3	0.2	0.2	17.8	16.4	0.3	0.0	18.0	16.2	0.2	0.2	0.3
16	16.9	17.8	-1.1	-0.5	17.9	17.6	-0.2	0.3	16.6	17.7	-1.2	-0.9	17.3	17.1	-0.7	0.0	1.3
17	17.5	15.9	0.6	0.0	17.5	15.9	-0.4	-0.1	17.1	15.9	0.5	-0.7	17.3	15.7	0.0	-0.2	0.4
18	18.0	15.5	0.5	0.2	17.9	15.5	0.4	0.1	17.5	15.5	0.4	-0.3	17.8	15.3	0.5	0.2	0.5
19	16.9	15.1	-1.1	-0.5	17.4	15.6	-0.5	-0.1	17.1	15.8	-0.4	-1.0	17.3	15.6	-0.5	-0.5	0.5
20	17.4	15.8	0.5	-0.8	17.5	15.9	0.1	-0.8	17.2	16.1	0.1	-1.0	17.5	15.9	0.2	-0.5	0.3
21	17.8	15.6	0.4	-0.6	17.9	15.7	0.4	-0.5	17.4	15.6	0.2	-0.4	17.6	15.4	0.1	-0.4	0.5
22	17.8	16.5	0.0	-0.6	17.9	16.6	0.0	-0.6	17.5	16.6	0.1	-1.2	17.8	16.5	0.2	-0.9	0.4
7	17.9	16.3	0.1	-0.5	18.1	16.4	0.2	-0.3	17.6	16.5	0.1	-0.8	18.0	16.4	0.2	-0.4	0.5
8	17.4	15.7	-0.5	-1.0	17.6	15.8	-0.5	-0.8	17.2	16.0	-0.4	-1.4	17.5	15.7	-0.5	-0.9	0.4
9	17.8	15.8	0.4	-0.6	18.0	16.0	0.4	-0.5	17.6	16.2	0.4	-0.8	17.9	15.9	0.4	-0.5	0.4
10	17.9	15.5	0.1	-0.9	18.0	15.6	0.0	-0.9	17.5	15.5	-0.1	-1.4	18.0	15.6	0.1	-0.7	0.5
11	17.8	15.4	-0.1	-1.1	18.0	15.6	0.0	-1.0	17.5	15.5	0.0	-1.4	17.8	15.4	-0.2	-1.1	0.5
12	18.0	15.6	0.2	-0.9	18.2	15.5	0.2	-0.9	17.6	15.6	0.1	-1.7	18.0	15.6	0.2	-1.2	0.6
13	18.1	15.9	0.1	-0.8	18.4	16.2	0.2	-0.8	17.7	16.0	0.1	-1.5	18.2	15.9	0.2	-0.9	0.7
23	17.5	15.8	-0.6	-1.0	17.8	15.9	-0.6	-0.8	17.2	16.0	-0.5	-1.0	17.6	15.8	-0.6	-1.0	0.6
24	17.8	16.1	0.3	-0.9	17.8	16.0	0.0	-0.9	17.2	16.0	0.0	-1.8	17.8	16.1	0.2	-1.1	0.6
25	18.5	16.1	0.7	-0.7	18.6	16.2	0.8	-0.7	18.2	16.2	1.0	-1.3	18.6	16.2	0.8	-0.6	0.4
26	17.8	16.0	-0.7	-0.4	17.9	15.8	-0.7	-0.4	17.5	15.9	-0.7	-0.9	17.8	16.2	-0.8	-0.6	0.4
27	16.5	15.8	-1.3	-3.5	16.7	15.9	-1.2	-3.3	16.4	16.1	-1.1	-3.8	17.4	16.3	-0.4	-2.6	1.0
28	17.8	16.4	1.3	-1.6	17.8	16.3	1.1	-1.7	17.3	16.4	0.9	-2.4	17.7	16.3	0.3	-2.0	0.5
29	17.5	16.2	-0.3	-2.4	17.7	16.4	-0.1	-2.3	17.2	16.5	-0.1	-2.5	17.5	16.2	-0.2	-2.2	0.5
30	17.6	16.3	0.1	-2.2	17.7	16.4	0.0	-2.0	17.2	16.5	0.0	-3.0	17.5	16.2	0.0	-2.5	0.5
31	18.2	16.2	0.6	-2.2	18.3	16.4	0.6	-2.2	17.8	16.3	0.6	-2.6	18.2	16.3	0.7	-2.2	0.5
32	16.2	15.9	-2.0	-2.0	16.1	18.4	-2.2	-2.3	15.7	16.0	-2.1	-2.5	17.0	15.6	-1.2	-1.1	1.3



Test Point #1

85 S Bragg St

24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070

Date: 8/6/04

Run	1				2				3				4				
Time	1:13 AM				7:14 AM				12:24 PM				7:32 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	17.5	17.5	1.3	-1.8	17.5	17.5	1.4	-1.8	17.1	17.6	1.4	-2.2	17.4	17.4	0.4	-1.9	0.4
34	17.5	15.7	0.0	-2.2	17.6	15.7	0.1	-2.1	17.3	15.7	0.2	-2.4	17.8	15.8	0.4	-1.6	0.5
35	16.7	15.2	-0.8	-2.5	16.6	15.2	-1.0	-2.7	16.5	15.3	-0.8	-2.9	17.1	15.2	-0.7	-2.2	0.6
36	19.0	16.1	2.3	-1.2	19.1	16.1	2.5	-1.1	18.7	16.1	2.2	-1.5	18.8	15.8	1.7	-1.2	0.4
37	17.9	16.3	-1.1	-1.9	17.9	16.3	-1.2	-2.0	17.2	16.1	-1.5	-2.8	17.7	16.2	-1.1	-2.1	0.7
38	18.3	16.1	0.4	-2.6	18.4	16.2	0.5	-2.6	18.0	16.3	0.8	-3.2	18.1	16.1	0.4	-3.1	0.4
39	18.4	16.0	0.1	-2.4	18.5	16.1	0.1	-2.3	18.0	16.2	0.0	-2.6	18.2	16.0	0.1	-2.4	0.5
40	18.8	16.4	0.4	-2.9	18.8	16.5	0.3	-2.8	18.0	16.4	0.0	-3.2	18.4	16.3	0.2	-2.7	0.8
41	19.1	16.0	0.3	-2.2	19.1	16.1	0.3	-2.2	18.4	16.0	0.4	-2.7	18.8	16.0	0.4	-2.2	0.7
42	19.0	15.5	-0.1	-1.6	19.0	15.6	-0.1	-1.6	18.6	15.7	0.2	-2.0	18.8	15.5	0.0	-1.8	0.4
43	19.4	15.5	0.4	-2.3	19.4	15.6	0.4	-2.3	18.8	15.5	0.2	-3.1	19.1	15.4	0.3	-2.6	0.6
44	19.1	16.5	-0.3	-3.0	19.1	16.6	-0.3	-3.1	18.7	16.4	-0.1	-3.6	19.1	16.4	0.0	-3.2	0.4
45	19.1	15.8	0.0	-2.8	19.1	15.8	0.0	-2.8	18.8	16.0	0.1	-3.1	19.1	15.8	0.0	-2.7	0.3
46	19.7	15.5	0.6	-2.0	19.7	15.5	0.6	-2.0	19.3	15.6	0.5	-2.4	19.7	15.5	0.6	-2.0	0.4
47	19.2	15.8	-0.5	-0.7	19.1	15.8	-0.6	-0.8	18.6	15.8	-0.7	-1.2	18.8	15.6	-0.9	-0.9	0.6
48	19.7	15.2	0.5	-2.4	19.7	15.3	0.6	-2.3	19.4	15.5	0.8	-2.7	19.7	15.3	0.9	-2.3	0.3
49	20.3	16.4	0.6	-2.0	20.3	16.5	0.6	-1.8	19.7	16.4	0.3	-2.6	20.0	16.3	0.3	-2.5	0.6
50	20.3	15.9	0.0	-2.4	20.4	16.1	0.1	-2.3	19.5	15.4	-0.2	-2.7	19.7	15.3	-0.3	-2.7	0.9
51	19.9	15.5	-0.4	-3.4	19.9	15.6	-0.5	-3.4	19.5	15.6	0.0	-3.4	19.8	15.6	0.1	-3.1	0.4
52	19.6	16.1	-0.3	-3.7	19.5	16.2	-0.4	-3.7	19.2	16.3	-0.3	-3.8	19.5	16.2	-0.3	-3.3	0.4
53	19.8	16.5	0.2	-2.1	19.8	16.6	0.3	-2.0	19.5	16.8	0.3	-1.8	19.7	16.6	0.2	-1.6	0.3
54	19.6	15.2	-0.2	-2.9	19.7	15.3	-0.1	-2.8	19.3	15.4	-0.2	-2.4	19.5	15.1	-0.2	-2.2	0.4
55	19.7	16.3	0.1	-3.2	19.7	16.3	0.0	-3.1	19.4	16.5	0.1	-3.5	19.7	16.3	0.2	-3.1	0.3
56	19.8	17.2	0.1	-4.0	19.8	17.3	0.1	-4.0	19.5	17.4	0.1	-4.4	19.9	17.3	0.2	-3.7	0.4
57	20.5	15.1	0.7	-2.5	20.5	15.1	0.7	-2.4	19.9	14.9	0.4	-2.9	20.4	15.0	0.5	-2.6	0.6
58	20.6	16.4	0.1	-3.5	20.6	16.4	0.1	-3.4	19.9	16.3	0.0	-3.7	20.5	16.5	0.1	-3.2	0.7
59	21.0	16.3	0.4	-2.2	20.9	16.3	0.3	-2.2	20.6	16.2	0.7	-2.4	20.6	16.2	0.1	-2.6	0.4
60	20.6	16.2	-0.4	-2.9	20.8	16.6	-0.1	-2.7	20.2	16.5	-0.4	-3.0	20.5	16.5	-0.1	-2.6	0.6
61	20.8	16.5	0.2	-2.3	21.0	16.6	0.2	-2.1	20.4	16.7	0.2	-3.0	20.8	16.6	0.3	-2.4	0.6
62	20.9	15.4	0.1	-2.6	21.0	15.3	0.0	-2.4	20.4	15.3	0.0	-2.8	20.8	15.4	0.0	-2.2	0.6
63	21.4	15.4	0.5	-3.1	21.6	15.5	0.6	-2.8	20.8	15.4	0.4	-3.3	21.2	15.5	0.4	-2.7	0.8
64	20.4	16.3	-0.2	-2.4	20.3	16.1	-0.5	-2.5	20.1	16.4	-0.1	-2.6	20.1	16.1	-0.4	-2.6	0.3
65	21.1	15.4	0.7	-3.0	21.2	15.5	0.9	-2.8	20.6	15.6	0.5	-3.2	21.0	15.5	0.9	-2.7	0.6
66	21.4	15.3	0.3	-3.4	21.6	15.4	0.4	-3.1	21.0	15.6	0.4	-3.5	21.2	15.4	0.2	-3.1	0.6
67	21.9	16.0	0.5	-2.9	22.0	15.9	0.4	-2.8	21.5	16.1	0.5	-3.1	21.8	15.9	0.6	-2.7	0.5
68	21.7	14.7	-0.2	-2.8	21.8	14.7	-0.2	-2.6	21.2	14.6	-0.3	-3.0	21.7	14.8	-0.1	-2.4	0.6
69	21.2	15.8	-0.5	-2.9	21.5	15.9	-0.3	-2.6	20.8	15.8	-0.4	-3.0	21.2	15.8	-0.5	-2.5	0.7
70	20.8	15.2	-0.4	-2.8	20.9	15.3	-0.6	-2.8	20.6	15.4	-0.2	-2.9	20.8	15.4	-0.4	-2.6	0.3
71	21.3	15.7	0.5	-2.7	21.6	15.9	0.7	-2.4	21.0	15.8	0.4	-2.8	21.3	15.7	0.5	-2.5	0.6
72	21.2	15.7	-0.1	-2.9	21.5	15.8	-0.1	-2.6	20.8	15.7	-0.2	-3.1	21.1	15.7	-0.2	-2.7	0.7

3/8/04



Test Point #1

85 S Bragg St
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:13 AM				7:14 AM				12:24 PM				7:32 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	21.0	16.0	-0.2	-2.6	21.1	16.0	-0.4	-2.5	20.6	16.2	-0.2	-3.0	20.8	16.0	-0.3	-2.7	0.5
74	21.2	27.9	0.2	-3.2	21.5	28.0	0.4	-3.2	20.8	27.8	0.2	-3.5	21.1	27.9	0.3	-3.3	0.7
75	20.6	14.9	-0.6	-2.9	20.6	14.6	-0.9	-3.7	19.9	14.7	-0.9	-3.4	20.8	15.4	-0.3	-1.8	0.9
76	20.8	15.4	0.2	-3.4	20.9	15.4	0.3	-3.3	20.3	15.3	0.4	-3.6	20.7	15.4	-0.1	-3.1	0.6
77	21.4	15.8	0.6	-2.9	21.7	16.0	0.8	-2.6	21.0	16.0	0.7	-2.1	21.4	15.9	0.7	-2.4	0.7
78	21.3	14.4	-0.1	-3.3	21.5	14.5	-0.2	-3.1	21.0	14.7	0.0	-2.2	22.1	15.3	0.7	-1.1	1.1
Min Value	16.2	9.5	-2.0	-4.0	16.1	14.5	-2.2	-4.0	15.7	9.9	-2.1	-4.4	16.1	9.6	-1.2	-3.7	0.2
Max Value	21.9	27.9	2.3	1.5	22.0	28.0	2.5	1.6	21.5	27.8	2.2	1.1	22.1	27.9	1.7	1.5	1.8

Notes:

*1 - Station off air - standby by carrier in use

*2 - New channel addition there is no 6 month reference

319



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

320

Test Point #3

Comcast

1 N. Donelson St.
Alexandria, VA

FCC Distortion Measurements

EQUIPMENT USED:

H/P 8591C, S/N 3916A04384

Pre-Amplifier 85905A, S/N 6093-0551

TRILITHIC VF-4-88, S/N 9330002

Tektronix VITS200, S/N B020963

CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 08/17/04

Time: 3:00 pm

Temp: 70

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	0.4	0.8	65.5	66.3	49.2	4.5002
95	0.9	0.8	78.2	57.0	51.4	4.5001
21	1.4	0.8	70.7	60.1	49.2	4.5001
8	0.9	0.7	69.9	64.2	52.9	4.5000
28	1.4	0.7	64.7	60.2	49.9	4.5000
32	1.9	0.9	76.6	56.3	50.1	4.4999
47	1.5	0.8	66.8	61.2	50.6	4.5000
58	0.8	0.8	64.4	60.2	50.0	4.5000
72	0.9	1.2	59.5	60.6	48.0	4.5001
Minimum values:			59.5	56.3	48.0	
Maximum values:	1.9	1.2				0.0002

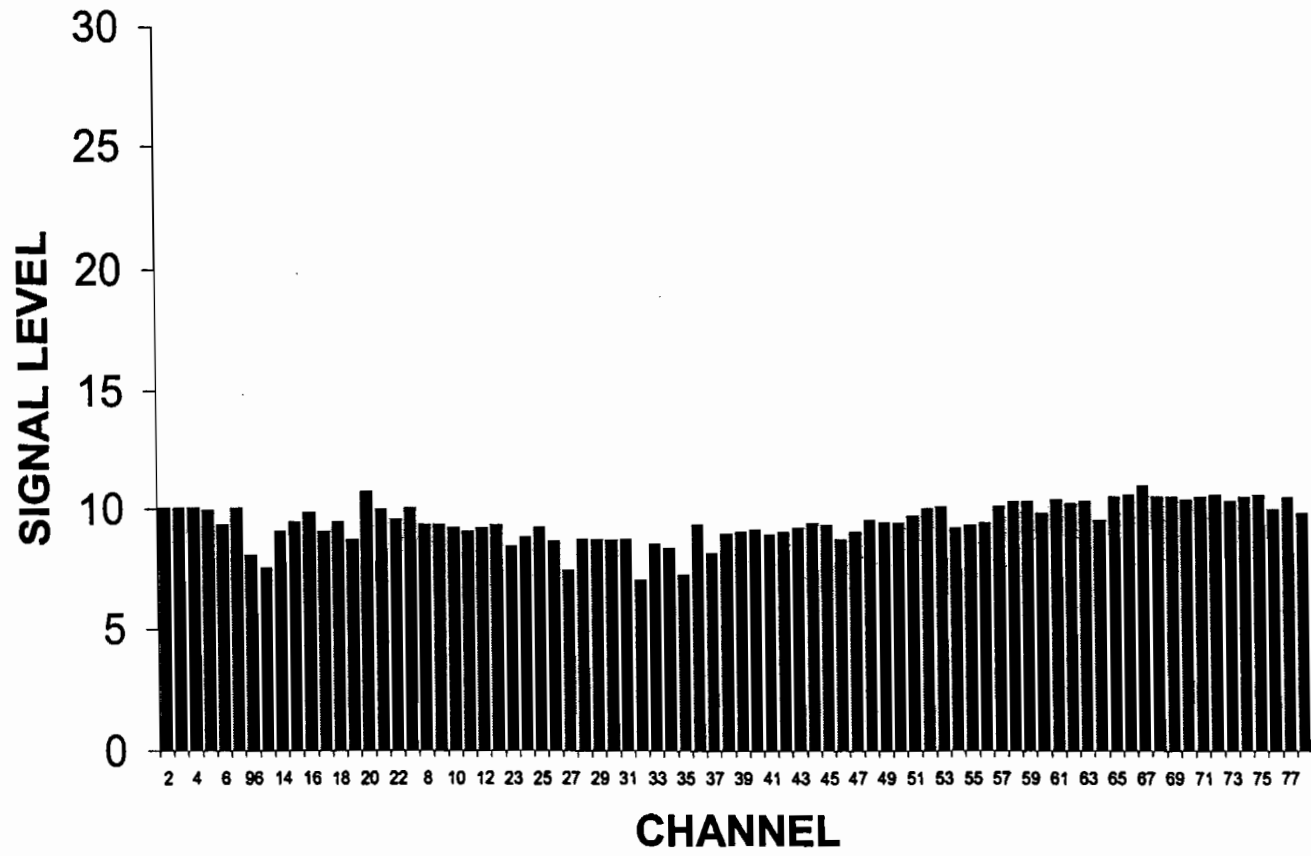


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #3



■ The maximum signal level is 11.5 dBmV

The maximum adjacent channel level difference is 2.9 dBmV
 The maximum level difference between the highest and lowest is 4.4 dBmV
 The maximum six month variance is 3.8 dBmV

324



Test Point #3

1 n Donelson Dr
24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:54 AM				6:54 AM				1:51 PM				7:51 PM				
Temp	21				23				25				21				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	10.1	15.5		1.4	10.4	15.6		1.7	10.1	15.5		1.4	10.1	15.5		1.3	0.3
3	10.1	15.5	0.0	1.2	10.4	15.8	0.0	1.4	10.1	15.5	0.0	1.4	10.1	15.5	0.0	1.2	0.3
4	10.1	16.4	0.0	0.7	10.4	16.5	0.0	0.9	10.2	16.5	0.1	0.9	10.1	16.4	0.0	0.7	0.3
5	10.0	16.1	-0.1	0.5	10.1	16.1	-0.3	0.6	9.9	16.0	-0.3	0.6	10.0	16.0	-0.1	0.5	0.2
6	9.4	16.1	-0.6	0.3	9.5	16.2	-0.6	0.3	9.5	16.1	-0.4	0.8	9.5	16.0	-0.5	0.6	0.1
95	10.1	9.7	0.7	0.7	10.6	9.4	1.1	1.1	10.0	4.8	0.5	0.0	10.1	10.0	0.6	0.7	0.6
96	8.1	17.6	-2.0	-3.4	8.4	16.2	-2.2	-3.3	7.1	15.4	-2.9	-3.8	8.0	18.5	-2.1	-3.1	1.3
99	7.6	15.5	-0.5	-1.9	8.2	15.7	-0.2	-1.8	10.0	15.7	2.9	0.0	7.7	15.6	-0.3	-3.5	2.4
14	9.1	16.4	1.5	1.3	9.7	16.6	1.5	2.0	10.0	16.7	0.0	0.0	9.4	16.6	1.7	-1.6	0.9
15	9.5	15.7	0.4	1.7	9.9	15.9	0.2	2.4	9.5	16.0	-0.5	0.8	9.6	16.0	0.2	0.8	0.4
16	9.9	18.7	0.4	1.5	10.5	18.6	0.6	2.0	8.7	17.6	-0.8	-0.2	8.5	17.9	-1.1	-0.5	2.0
17	9.1	16.0	-0.8	0.5	9.6	16.1	-0.9	0.7	10.8	16.6	2.1	1.9	9.1	16.0	0.6	0.0	1.7
18	9.5	15.6	0.4	0.3	10.0	15.6	0.4	0.7	10.6	16.0	-0.2	1.5	9.6	15.4	0.5	0.3	1.1
19	8.8	13.8	-0.7	0.0	9.7	16.0	-0.3	0.7	9.7	16.1	-0.9	0.4	10.3	15.7	0.7	0.8	1.5
20	10.8	16.9	2.0	1.1	9.7	16.2	0.0	-0.2	9.5	16.0	-0.2	0.0	10.1	16.4	-0.2	0.3	1.3
21	10.1	16.2	-0.7	0.7	9.9	15.9	0.2	0.4	9.9	16.2	0.4	1.3	9.9	16.0	-0.2	0.8	0.2
22	9.6	16.5	-0.5	0.5	9.9	16.2	0.0	0.6	9.5	16.6	-0.4	0.4	9.5	16.4	-0.4	0.0	0.4
7	10.1	16.8	0.5	0.7	10.6	16.6	0.7	1.1	9.9	16.8	0.4	-2.0	10.1	16.6	0.6	0.7	0.7
8	9.4	16.3	-0.7	0.2	10.1	16.6	-0.5	1.0	11.5	16.3	1.6	0.0	10.5	16.4	0.4	0.0	2.1
9	9.4	16.1	0.0	-1.5	9.9	16.0	-0.2	-1.8	10.7	16.0	-0.8	0.0	9.5	16.0	-1.0	-0.7	1.3
10	9.3	15.6	-0.1	-1.4	9.8	15.6	-0.1	-1.2	9.3	15.6	-1.4	-0.7	9.4	15.6	-0.1	-1.0	0.5
11	9.1	15.5	-0.2	-1.5	9.5	15.5	-0.3	-1.3	9.1	15.5	-0.2	-1.2	9.1	15.4	-0.3	-1.4	0.4
12	9.3	15.7	0.2	-1.3	9.7	15.8	0.2	-1.1	9.3	15.8	0.2	-1.4	9.5	16.0	0.4	-1.3	0.4
13	9.4	16.3	0.1	-1.0	9.9	16.3	0.2	-0.7	9.5	16.2	0.2	-0.7	9.5	16.0	0.0	-1.3	0.5
23	8.5	15.8	-0.9	-1.3	9.1	16.0	-0.8	-0.9	8.6	15.7	-0.9	-0.8	10.7	15.8	1.2	0.0	2.2
24	8.9	16.5	0.4	-1.5	9.4	16.5	0.3	-1.0	8.8	16.4	0.2	-1.2	9.1	16.5	-1.6	-1.3	0.6
25	9.3	16.0	0.4	-1.1	9.9	16.2	0.5	-1.1	9.5	16.0	0.7	-0.9	9.7	16.0	0.6	-0.7	0.6
26	8.7	16.0	-0.6	-0.4	9.2	16.3	-0.7	-0.2	8.8	16.3	-0.7	-0.5	9.0	16.4	-0.7	-0.6	0.5
27	7.5	16.0	-1.2	-3.3	8.2	16.2	-1.0	-2.9	8.2	16.6	-0.6	-2.7	8.5	16.4	-0.5	-2.7	1.0
28	8.8	16.4	1.3	-1.5	9.3	16.7	1.1	-1.2	8.8	16.5	0.6	-1.6	9.0	16.5	0.5	-1.6	0.5
29	8.8	16.4	0.0	-2.1	9.2	16.6	-0.1	-1.9	8.8	16.6	0.0	-1.8	9.0	16.6	0.0	-1.8	0.4
30	8.8	16.4	0.0	-1.8	9.1	16.5	-0.1	-1.6	8.6	16.3	-0.2	-2.3	8.8	16.3	-0.2	-2.2	0.5
31	8.8	16.2	0.0	-2.2	9.2	16.4	0.1	-1.9	8.8	16.3	0.2	-2.1	8.9	16.2	0.1	-2.1	0.4
32	7.1	16.0	-1.7	-2.0	9.0	16.0	-0.2	-0.2	10.8	16.0	2.0	0.0	8.0	15.7	-0.9	-1.1	3.7

325



Test Point #3

1 n Donelson Dr
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:54 AM				6:54 AM				1:51 PM				7:51 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	8.6	17.7	1.5	-1.6	9.0	17.8	0.0	-1.4	10.3	17.9	-0.5	0.0	8.8	17.8	0.8	-1.6	1.7
34	8.4	15.9	-0.2	-2.1	8.8	16.0	-0.2	-1.8	8.4	15.8	-1.9	-1.9	8.6	15.7	-0.2	-1.6	0.4
35	7.3	15.7	-1.1	-2.7	7.7	16.0	-1.1	-2.3	7.5	15.9	-0.9	-2.3	8.0	15.8	-0.6	-2.0	0.7
36	9.4	15.9	2.1	-1.0	9.6	15.9	1.9	-1.0	9.2	15.8	1.7	-1.2	9.2	15.7	1.2	-1.0	0.4
37	8.2	16.0	-1.2	-2.0	8.5	16.0	-1.1	-1.7	7.9	15.8	-1.3	-2.1	8.2	15.9	-1.0	-2.0	0.6
38	9.0	16.3	0.8	-2.4	9.5	16.5	1.0	-2.0	8.8	16.2	0.9	-2.6	9.1	16.3	0.9	-2.6	0.7
39	9.1	16.6	0.1	-2.3	9.4	16.8	-0.1	-2.1	8.9	16.9	0.1	-1.8	9.1	16.7	0.0	-1.9	0.5
40	9.2	16.8	0.1	-2.2	9.3	16.7	-0.1	-2.3	8.3	16.5	-0.6	-2.6	8.7	16.5	-0.4	-2.4	1.0
41	9.0	15.9	-0.2	-2.4	9.7	16.5	0.4	-1.8	8.8	15.6	0.5	-2.1	9.2	16.3	0.5	-1.9	0.9
42	9.1	15.5	0.1	-1.7	9.2	15.4	-0.5	-1.8	9.2	15.7	0.4	-1.6	8.9	15.3	-0.3	-2.1	0.3
43	9.3	15.1	0.2	-2.4	9.5	15.2	0.3	-2.2	9.1	15.2	-0.1	-2.3	9.1	14.9	0.2	-2.5	0.4
44	9.5	16.7	0.2	-2.4	9.7	16.9	0.2	-2.3	9.4	16.9	0.3	-2.4	9.5	16.6	0.4	-2.6	0.3
45	9.4	17.0	-0.1	-2.3	9.7	16.7	0.0	-2.1	9.2	15.9	-0.2	-2.1	9.5	16.2	0.0	-2.1	0.5
46	8.8	14.8	-0.6	-3.0	8.9	14.8	-0.8	-2.9	8.8	15.5	-0.4	-2.5	8.6	14.9	-0.9	-3.2	0.3
47	9.1	16.0	0.3	-1.3	9.3	16.1	0.4	-1.2	8.5	15.9	-0.3	-1.5	8.7	15.8	0.1	-1.6	0.8
48	9.6	15.4	0.5	-0.4	9.8	15.0	0.5	-0.4	9.4	15.5	0.9	-0.2	9.6	15.4	0.9	-0.4	0.4
49	9.5	16.1	-0.1	-1.8	9.7	16.2	-0.1	-1.6	9.4	16.3	0.0	-1.9	9.6	16.3	0.0	-2.0	0.3
50	9.5	15.8	0.0	-2.0	9.9	15.8	0.2	-1.6	9.3	15.4	-0.1	-2.1	9.3	15.2	-0.3	-1.5	0.6
51	9.8	15.2	0.3	-3.0	10.2	15.4	0.3	-2.6	9.6	15.2	0.3	-2.5	9.7	15.1	0.4	-2.7	0.6
52	10.1	16.4	0.3	-3.3	10.3	16.4	0.1	-3.3	10.0	16.7	0.4	-2.8	10.1	16.5	0.4	-3.1	0.3
53	10.2	17.0	0.1	-1.6	10.4	17.0	0.1	-1.4	9.7	16.8	-0.3	-1.4	10.0	16.9	-0.1	-1.3	0.7
54	9.3	15.4	-0.9	-2.4	9.5	15.3	-0.9	-2.2	9.1	15.4	-0.6	-1.7	9.3	15.4	-0.7	-1.7	0.4
55	9.4	16.3	0.1	-2.8	9.6	16.3	0.1	-2.7	9.3	16.4	0.2	-2.6	9.4	16.3	0.1	-2.7	0.3
56	9.5	16.9	0.1	-3.7	9.7	16.8	0.1	-3.5	9.4	16.9	0.1	-3.4	9.6	16.9	0.2	-3.3	0.3
57	10.2	15.2	0.7	-2.4	10.5	15.3	0.8	-2.1	10.1	15.3	0.7	-1.2	10.2	15.4	0.6	-2.4	0.4
58	10.4	16.9	0.2	-3.0	10.5	16.6	0.0	-2.9	9.9	16.5	-0.2	-2.6	10.3	16.8	0.1	-2.6	0.6
59	10.4	16.1	0.0	-1.5	10.6	15.9	0.1	-1.3	10.0	16.0	0.1	-1.9	10.2	16.1	-0.1	-1.7	0.6
60	9.9	16.2	-0.5	-3.1	10.4	16.3	-0.2	-2.7	9.7	16.0	-0.3	-2.8	9.9	16.3	-0.3	-2.9	0.7
61	10.5	16.7	0.6	-2.7	10.8	16.6	0.4	-2.4	10.4	16.9	0.7	-2.7	10.4	16.7	0.5	-2.7	0.4
62	10.3	15.5	-0.2	-3.1	10.6	15.6	-0.2	-2.8	10.2	15.7	-0.2	-2.4	10.4	15.7	0.0	-2.4	0.4
63	10.4	15.9	0.1	-3.1	10.6	15.8	0.0	-2.9	10.1	15.9	-0.1	-2.8	10.4	16.0	0.0	-2.6	0.5
64	9.6	16.3	-0.3	-1.8	9.9	16.4	-0.5	-2.0	8.8	15.7	-0.9	-2.0	9.4	16.2	-0.5	-1.6	1.1
65	10.6	15.5	1.0	-2.7	10.8	15.4	0.9	-2.7	10.1	15.2	1.3	-2.7	10.5	15.5	1.1	-2.6	0.7
66	10.7	15.4	0.1	-3.5	11.0	15.4	0.2	-3.2	10.6	15.5	0.5	-3.0	10.6	15.4	0.1	-3.2	0.4
67	11.1	15.9	0.4	-3.0	11.5	16.1	0.5	-2.6	10.9	15.9	0.3	-2.6	11.1	16.0	0.5	-2.5	0.6
68	10.6	14.3	-0.5	-3.0	11.0	14.3	-0.5	-2.6	10.6	14.4	-0.3	-2.4	10.7	14.4	-0.4	-2.5	0.4
69	10.6	15.5	0.0	-3.0	11.0	15.6	0.0	-2.7	10.5	15.5	-0.1	-2.5	10.6	15.6	-0.1	-2.6	0.5
70	10.5	15.5	-0.1	-3.0	10.6	15.4	-0.4	-3.0	10.4	15.6	-0.1	-2.5	10.5	15.6	-0.1	-2.5	0.2
71	10.6	15.4	0.1	-3.0	11.1	15.5	0.5	-2.5	10.6	15.4	0.2	-2.3	10.6	15.3	0.1	-2.5	0.5
72	10.7	15.8	0.1	-3.1	11.2	16.0	0.1	-2.6	10.6	16.0	0.0	-2.5	10.7	15.8	0.1	-2.7	0.6

326



Test Point #3

1 n Donelson Dr

24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:54 AM				6:54 AM				1:51 PM				7:51 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	10.4	16.1	-0.3	-2.6	10.6	15.8	-0.6	-2.4	10.0	16.0	-0.6	-2.6	10.4	16.2	-0.3	-2.4	0.6
74	10.6	27.6	0.2	-3.3	11.0	28.0	0.4	-3.0	10.4	27.9	0.4	-2.9	10.6	28.0	0.2	-2.9	0.6
75	10.7	15.5	0.1	-2.5	10.1	14.7	-0.9	-2.3	10.6	15.6	0.2	-0.7	10.8	15.7	0.2	-1.1	0.7
76	10.1	15.3	-0.6	-3.5	10.7	15.5	0.6	-2.9	10.0	15.6	-0.6	-2.8	10.2	15.5	-0.6	-2.9	0.7
77	10.6	16.3	0.5	-2.6	10.9	16.2	0.2	-2.3	10.2	16.3	0.2	-2.2	10.6	16.3	0.4	-2.1	0.7
78	9.9	14.6	-0.7	-3.0	10.7	15.0	-0.2	-2.2	9.9	14.7	-0.3	-2.6	10.0	14.7	-0.6	-1.7	0.8
Min Value	7.1	9.7	-2.0	-3.7	7.7	14.3	-2.2	-3.5	7.1	4.8	-2.9	-3.8	7.7	10.0	-2.1	-3.5	0.1
Max Value	11.1	27.6	2.1	1.7	11.5	28.0	1.9	2.4	11.5	27.9	2.9	1.9	11.1	28.0	1.7	1.3	3.7

Notes:

*1 - Station off air - standby by carrier in use

*2 - New channel addition there is no 6 month reference

327



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

Test Point #4

Comcast

Kenwood St. & Fern St.
 Alexandria, VA

FCC Distortion Measurements
 EQUIPMENT USED:
 H/P 8591C, S/N 3916A04384
 Pre-Amplifier 85905A, S/N 6093-0551
 TRILITHIC VF-4-88, S/N 9330002
 Tektronix VITS200, S/N B020963
 CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 08/18/04

Time: 2:30 pm

Temp: 71

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	0.5	0.9	74.4	64.2	49.4	4.5000
95	0.6	1	68.5	63.1	50.4	4.5001
21	1.0	1.0	69.3	61.0	49.6	4.5003
8	0.5	1	75.2	65.9	51.4	4.5004
28	0.8	1.2	68.1	61.1	50.1	4.5000
32	1.1	1.4	70.9	63.0	50.0	4.5000
47	0.8	1	67.7	65.1	50.1	4.5002
58	0.5	1.1	67.7	68.6	49.6	4.4999
72	0.4	1.0	66.3	65.6	49.2	4.5001
Minimum values:			66.3	61.0	49.2	
Maximum values:	1.1	1.4				0.0004

329



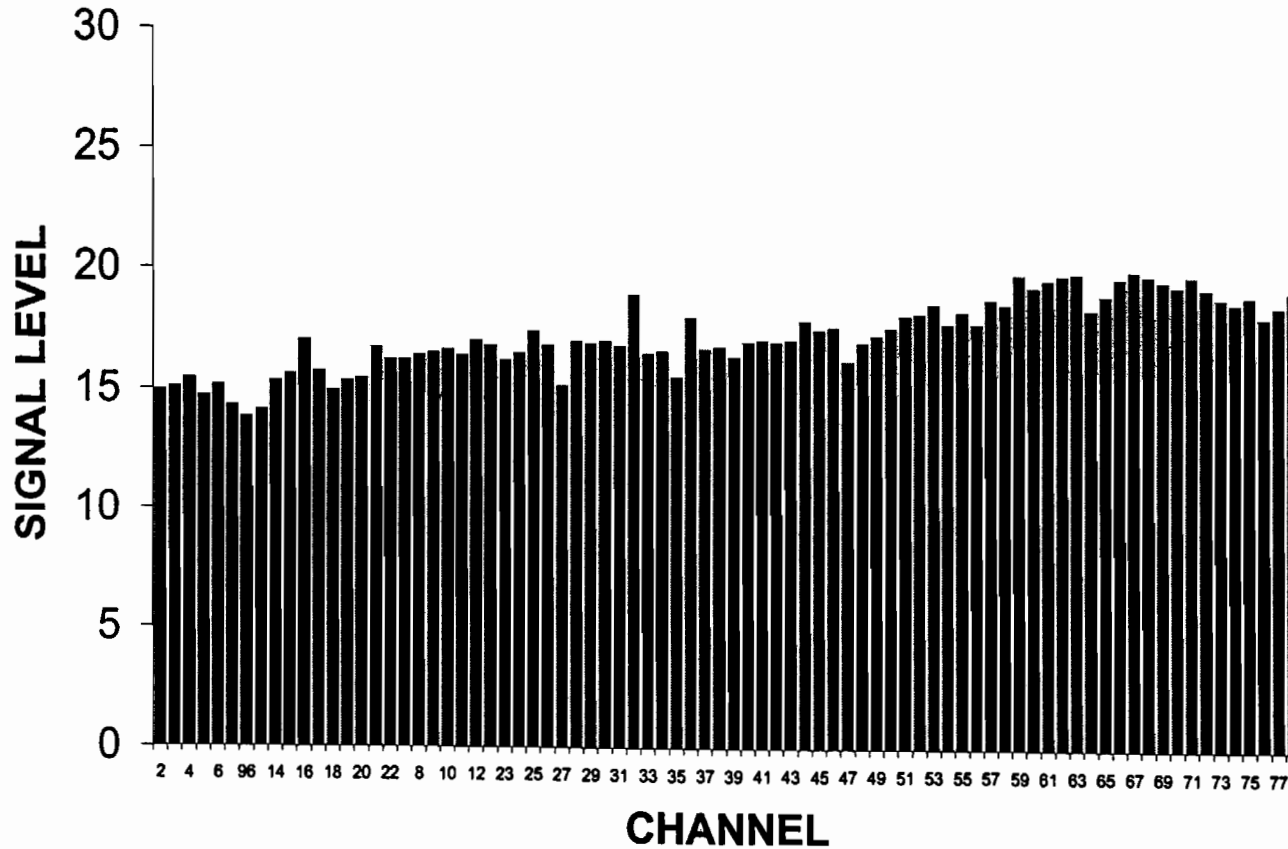
Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

330

TEST POINT #4



The maximum signal level is 20.4 dBmV

The maximum adjacent channel level difference is 2.5 dBmV
The maximum level difference between the highest and lowest is 6.8 dBmV
The maximum six month variance is 3.7 dBmV

331



Test Point #4

Kenwood St & Fern St
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070

Date: 8/6/04

Run	1				2				3				4				
Time	12:22 AM				6:18 AM				1:20 PM				6:54 PM				
Temp	20				22				24				21				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	15.0	15.4		1.4	15.2	15.6		1.6	15.2	15.4		2.1	15.2	15.5		1.8	0.2
3	15.1	15.4	0.1	1.2	15.3	15.5	0.1	1.4	15.4	15.5	0.2	1.8	15.3	15.5	0.1	1.6	0.3
4	15.5	16.5	0.4	0.8	15.6	16.5	0.3	0.9	15.7	16.5	0.3	1.6	15.6	16.5	0.3	1.3	0.2
5	14.8	15.4	-0.7	0.6	15.0	15.5	-0.6	0.9	15.2	15.6	-0.5	1.3	15.0	15.4	-0.6	1.0	0.4
6	15.2	16.1	0.4	0.7	15.4	16.2	0.4	0.8	15.4	16.2	0.2	1.3	15.4	16.2	0.4	1.3	0.2
95	14.4	9.3	-0.8	0.0	14.0	9.3	-1.4	0.0	13.5	9.4	-1.9	0.0	14.6	9.4	-0.8	0.0	1.1
96	13.9	15.8	-0.5	-2.8	14.0	15.7	0.0	-2.7	13.7	15.5	0.2	-1.8	13.6	15.3	-1.0	-3.1	0.4
99	14.2	15.8	0.3	-1.5	14.4	15.8	0.4	-1.4	14.3	15.8	0.6	-0.9	14.3	15.8	0.7	-1.1	0.2
14	15.4	16.4	1.2	0.2	15.7	16.5	1.3	0.5	15.7	16.5	1.4	1.1	15.7	16.5	1.4	0.7	0.3
15	15.7	16.2	0.3	0.5	16.0	16.3	0.3	0.8	15.8	16.2	0.1	1.0	15.8	16.2	0.1	0.8	0.3
16	17.1	18.6	1.4	1.8	16.9	18.1	0.9	1.6	17.4	18.7	1.6	2.4	17.3	18.6	1.5	2.1	0.5
17	15.8	13.3	-1.3	0.5	16.4	15.8	-0.5	1.1	16.0	14.7	-1.4	1.0	15.9	14.1	-1.4	0.5	0.6
18	15.0	16.7	-0.8	-0.2	16.5	15.2	0.1	1.3	18.2	16.1	2.2	3.7	18.4	16.4	2.5	3.4	3.4
19	15.4	15.2	0.4	0.4	16.0	15.6	-0.5	1.1	16.3	15.8	-1.9	1.3	16.2	15.7	-2.2	0.7	0.9
20	15.5	15.9	0.1	0.0	15.6	16.0	-0.4	0.0	16.6	15.9	0.3	-1.3	16.5	15.9	0.3	-1.7	1.1
21	16.8	16.1	1.3	-0.5	17.2	16.2	1.6	-0.1	17.0	16.1	0.4	0.5	16.9	16.0	0.4	0.0	0.4
22	16.3	16.6	-0.5	0.0	16.5	16.6	-0.7	0.2	16.5	16.6	-0.5	0.4	16.5	16.5	-0.4	-0.2	0.2
7	16.3	16.2	0.0	0.2	16.7	16.5	0.2	0.4	16.5	16.2	0.0	0.9	16.5	16.2	0.0	0.3	0.4
8	16.5	16.0	0.2	-0.3	16.7	16.0	0.0	-0.1	16.7	16.0	0.2	0.2	16.7	16.0	0.2	-0.1	0.2
9	16.6	15.4	0.1	0.3	16.9	15.6	0.2	0.7	16.9	15.7	0.2	0.9	16.9	15.7	0.2	0.5	0.3
10	16.7	15.7	0.1	0.2	16.9	15.8	0.0	0.4	16.9	15.7	0.0	0.6	16.9	15.6	0.0	0.2	0.2
11	16.5	15.6	-0.2	-0.5	16.7	15.6	-0.2	-0.4	16.6	15.5	-0.3	0.1	16.5	15.4	-0.4	-0.6	0.2
12	17.1	15.8	0.6	-0.2	17.2	15.8	0.5	-0.2	17.2	15.6	0.6	0.1	17.2	15.5	0.7	-0.5	0.1
13	16.9	15.8	-0.2	-0.1	17.1	15.9	-0.1	0.0	17.1	15.8	-0.1	0.4	17.3	16.0	0.1	0.0	0.4
23	16.3	15.9	-0.6	0.0	16.5	15.9	-0.6	0.1	16.5	15.8	-0.6	1.1	16.5	15.8	-0.8	0.0	0.2
24	16.6	16.2	0.3	-0.2	16.9	16.3	0.4	0.1	16.7	16.2	0.2	0.1	16.7	16.2	0.2	-0.4	0.3
25	17.5	15.6	0.9	0.1	17.8	15.8	0.9	0.3	17.8	15.7	1.1	0.7	17.8	15.6	1.1	0.3	0.3
26	16.9	16.0	-0.6	0.6	17.1	16.0	-0.7	0.7	17.1	16.0	-0.7	0.8	17.0	15.9	-0.8	0.3	0.2
27	15.2	15.7	-1.7	-2.5	15.8	16.0	-1.3	-2.0	16.3	16.4	-0.8	-1.0	16.4	16.3	-0.6	-1.5	1.2
28	17.1	16.4	1.9	-0.5	17.1	16.4	1.3	-0.6	17.2	16.4	0.9	-0.2	17.1	16.4	0.7	-0.9	0.1
29	17.0	16.5	-0.1	-1.4	17.4	16.7	0.3	-1.0	17.2	16.6	0.0	-0.7	17.1	16.6	0.0	-1.1	0.4
30	17.1	16.6	0.1	-0.9	17.1	16.6	-0.3	-0.9	17.1	16.6	-0.1	-0.8	17.2	16.7	0.1	-1.3	0.1
31	16.9	16.4	-0.2	-1.3	17.3	16.6	0.2	-1.0	17.1	16.2	0.0	-0.9	17.0	16.4	-0.2	-1.3	0.4
32	19.0	15.6	2.1	2.5	15.2	15.8	-2.1	-1.3	15.4	16.0	-1.7	-0.6	17.0	15.5	0.0	0.8	3.8

332



Test Point #4

Kenwood St & Fern St
24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:22 AM				6:18 AM				1:20 PM				6:54 PM				
Temp	20				22				24				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	16.6	17.0	-2.4	-0.7	16.9	17.1	1.7	-0.4	16.9	17.2	1.5	-0.1	16.8	17.1	-0.2	-0.7	0.3
34	16.7	15.6	0.1	-1.3	17.1	15.9	0.2	-0.9	17.1	15.6	0.2	-0.5	17.1	15.6	0.3	-0.4	0.4
35	15.6	15.8	-1.1	-1.8	16.0	15.9	-1.1	-1.3	16.1	15.8	-1.0	-1.1	16.1	15.6	-1.0	-1.3	0.5
36	18.1	15.9	2.5	-0.5	18.2	16.0	2.2	-0.3	18.3	16.1	2.2	0.4	18.0	16.1	1.9	-0.2	0.3
37	16.8	16.4	-1.3	-1.2	17.0	16.5	-1.2	-1.0	16.9	16.4	-1.4	-0.6	16.9	16.4	-1.1	-1.1	0.2
38	16.9	16.4	0.1	-1.5	17.0	16.4	0.0	-1.3	17.1	16.5	0.2	-0.9	16.9	16.3	0.0	-1.7	0.2
39	16.5	16.1	-0.4	-1.3	16.7	16.2	-0.3	-1.1	16.7	16.2	-0.4	-0.5	16.5	16.1	-0.4	-0.8	0.2
40	17.1	16.4	0.6	-1.5	17.2	16.5	0.5	-1.4	17.1	16.4	0.4	-1.1	16.9	16.3	0.4	-1.2	0.3
41	17.2	15.6	0.1	-1.0	17.4	15.7	0.2	-0.8	17.2	15.5	0.1	-0.6	17.2	15.5	0.3	-0.8	0.2
42	17.1	15.7	-0.1	-0.5	17.3	15.7	-0.1	-0.3	17.3	15.8	0.1	0.0	17.3	15.8	0.1	-0.5	0.2
43	17.2	14.8	0.1	-1.7	17.6	15.2	0.3	-1.3	17.3	15.0	0.0	-0.9	17.1	14.9	-0.2	-1.6	0.5
44	18.0	16.9	0.8	-1.9	18.2	16.9	0.6	-1.6	18.2	16.8	0.9	-1.9	18.1	16.8	1.0	-2.0	0.2
45	17.6	15.8	-0.4	-1.0	17.8	15.8	-0.4	-0.8	17.8	15.8	-0.4	-0.3	17.8	16.0	-0.3	-0.5	0.2
46	17.7	16.8	0.1	-0.7	17.6	16.2	-0.2	-0.9	18.0	16.9	0.2	0.0	17.8	16.8	0.0	-0.6	0.4
47	16.3	15.4	-1.4	-0.3	16.7	15.7	-0.9	0.1	16.4	15.5	-1.6	0.7	16.3	15.6	-1.5	-0.2	0.4
48	17.1	14.9	0.8	-1.5	17.5	15.1	0.8	-1.1	17.5	15.2	1.1	-0.8	17.3	15.0	1.0	-1.3	0.4
49	17.4	15.6	0.3	-0.6	17.6	15.6	0.1	-0.4	17.6	15.6	0.1	0.0	17.5	15.6	0.2	-0.7	0.2
50	17.7	15.8	0.3	-0.9	17.8	15.7	0.2	-0.8	17.6	15.4	0.0	-0.5	17.5	15.3	0.0	-0.4	0.3
51	18.2	15.3	0.5	-1.8	18.4	15.3	0.6	-1.6	18.3	15.3	0.7	-0.5	18.2	15.4	0.7	-1.4	0.2
52	18.3	15.9	0.1	-2.2	18.5	15.9	0.1	-1.9	18.4	16.0	0.1	-1.4	18.3	16.1	0.1	-2.0	0.2
53	18.7	16.7	0.4	-0.7	18.9	16.7	0.4	-0.5	18.8	16.7	0.4	0.2	18.7	16.7	0.4	-0.1	0.2
54	17.9	15.2	-0.8	-1.6	18.2	15.2	-0.7	-1.3	18.1	15.2	-0.7	-0.3	17.9	15.2	-0.8	-0.7	0.3
55	18.4	16.6	0.5	-1.8	18.6	16.6	0.4	-1.6	18.6	16.7	0.5	-1.0	18.4	16.6	0.5	-1.7	0.2
56	17.9	16.6	-0.5	-2.5	18.2	16.9	-0.4	-2.2	18.2	16.6	-0.4	-1.9	18.1	16.9	-0.3	-2.0	0.3
57	18.9	15.0	1.0	-1.0	19.3	15.3	1.1	-0.6	19.2	15.1	1.0	0.6	19.1	15.1	1.0	-0.8	0.4
58	18.7	16.1	-0.2	-2.0	19.0	16.1	-0.3	-1.6	18.8	16.1	-0.4	-0.5	18.8	16.3	-0.3	-1.5	0.3
59	19.9	16.2	1.2	-0.8	20.4	16.2	1.4	-0.3	20.1	16.2	1.3	0.6	19.8	16.1	1.0	-0.8	0.6
60	19.4	16.1	-0.5	-1.7	19.9	16.5	-0.5	-1.2	19.7	16.4	-0.4	-1.1	19.5	16.4	-0.3	-1.4	0.5
61	19.7	16.5	0.3	-1.2	20.0	16.6	0.1	-1.0	19.9	16.6	0.2	-2.3	19.7	16.4	0.2	-1.3	0.3
62	19.9	16.0	0.2	-1.4	20.1	15.9	0.1	-1.2	19.9	16.0	0.0	-0.9	19.8	16.1	0.1	-1.2	0.3
63	20.0	15.4	0.1	-1.7	20.2	15.5	0.1	-1.5	20.0	15.6	0.1	-0.9	19.9	15.5	0.1	-1.4	0.3
64	18.5	16.1	-0.9	-0.8	18.8	16.2	-1.1	-0.3	18.6	16.0	-1.1	0.6	18.8	16.2	-0.7	0.0	0.3
65	19.1	15.3	0.6	-1.4	19.3	15.2	0.5	-1.2	19.3	15.4	0.7	-0.4	19.2	15.3	0.4	-0.9	0.2
66	19.8	15.8	0.7	-2.1	20.3	15.9	1.0	-1.6	19.9	15.7	0.6	-1.1	19.8	15.9	0.6	-1.2	0.5
67	20.1	15.9	0.3	-1.4	20.4	15.8	0.1	-1.1	20.3	15.9	0.4	-0.1	20.1	15.8	0.3	-0.3	0.3
68	19.9	14.4	-0.2	-1.3	20.2	14.5	-0.2	-1.0	20.1	14.4	-0.2	0.1	20.1	14.5	0.0	0.2	0.3
69	19.7	15.8	-0.2	-1.4	20.0	15.7	-0.2	-1.1	19.9	15.7	-0.2	0.8	19.8	15.7	-0.3	-0.9	0.3
70	19.5	15.6	-0.2	-1.6	19.8	15.4	-0.2	-1.4	19.7	15.5	-0.2	-0.3	19.5	15.4	-0.3	-1.3	0.3
71	19.9	15.8	0.4	-1.1	20.1	15.7	0.3	-0.9	20.1	15.7	0.4	-0.7	20.0	15.8	0.5	-0.9	0.2
72	19.4	15.7	-0.5	-1.5	19.9	16.0	-0.2	-1.0	19.9	15.9	-0.4	-0.9	19.6	15.9	-0.4	-1.2	0.5

333

**Test Point #4**Kenwood St & Fern St
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:22 AM				6:18 AM				1:20 PM				6:54 PM				
Temp	20				22				24				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	19.0	16.6	-0.4	-1.3	19.3	16.7	-0.6	-1.0	19.1	16.5	-0.6	-0.9	19.1	16.6	-0.5	-1.1	0.3
74	18.8	27.7	-0.2	-2.3	19.1	27.8	-0.2	-2.0	19.0	27.8	-0.1	-1.1	18.8	27.6	-0.3	-2.0	0.3
75	19.1	15.7	0.3	-0.6	18.1	14.4	-1.0	-2.7	18.6	14.8	-0.4	-2.0	19.1	15.5	0.3	-0.4	1.0
76	18.2	15.3	-0.9	-2.2	18.5	15.4	0.4	-1.8	18.5	15.2	-0.1	-1.5	18.5	15.2	-0.6	-1.7	0.3
77	18.7	16.1	0.5	-2.1	19.0	16.2	0.5	-1.8	19.1	16.1	0.6	-0.9	19.1	16.1	0.6	-1.3	0.4
78	19.3	15.2	0.6	-1.6	18.8	14.5	-0.2	-2.6	19.1	14.6	0.0	-1.3	18.9	14.6	-0.2	-1.2	0.5
Min Value	13.9	9.3	-2.4	-2.8	14.0	14.4	-2.1	-2.7	13.5	9.4	-1.9	-2.3	13.6	9.4	-2.2	-3.1	0.1
Max Value	20.1	27.7	2.5	2.5	20.4	27.8	2.2	1.6	20.3	27.8	2.2	3.7	20.1	27.6	2.5	3.4	3.8

Notes:

*1 - Station off air - standby by carrier in use

*2 - New channel addition there is no 6 month reference



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

Test Point #5



1121 Allison St.
Alexandria, VA

FCC Distortion Measurements

EQUIPMENT USED:

H/P 8591C, S/N 3916A04384

Pre-Amplifier 85905A, S/N 6093-0551

TRILITHIC VF-4-88, S/N 9330002

Tektronix VITS200, S/N B020963

CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 08/18/04

Time: 12:00 pm

Temp: 78

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	0.2	1.0	78.4	65.6	50.2	4.4999
95	0.7	1.0	68.1	67.4	51.1	4.5000
21	0.8	1.1	75.0	62.8	48.9	4.5000
8	0.6	0.8	68.3	64.0	50.7	4.5001
28	1.1	1.1	63.8	57.0	50.3	4.5001
32	1.3	0.9	71.2	61.3	49.9	4.4999
47	0.9	1.0	67.7	62.7	50.7	4.5001
58	0.9	0.9	69.3	63.0	50.1	4.5000
72	0.7	0.7	65.8	61.1	49.1	4.4999
Minimum values:			63.8	57	48.9	
Maximum values:	1.3	1.1				-0.0001

336

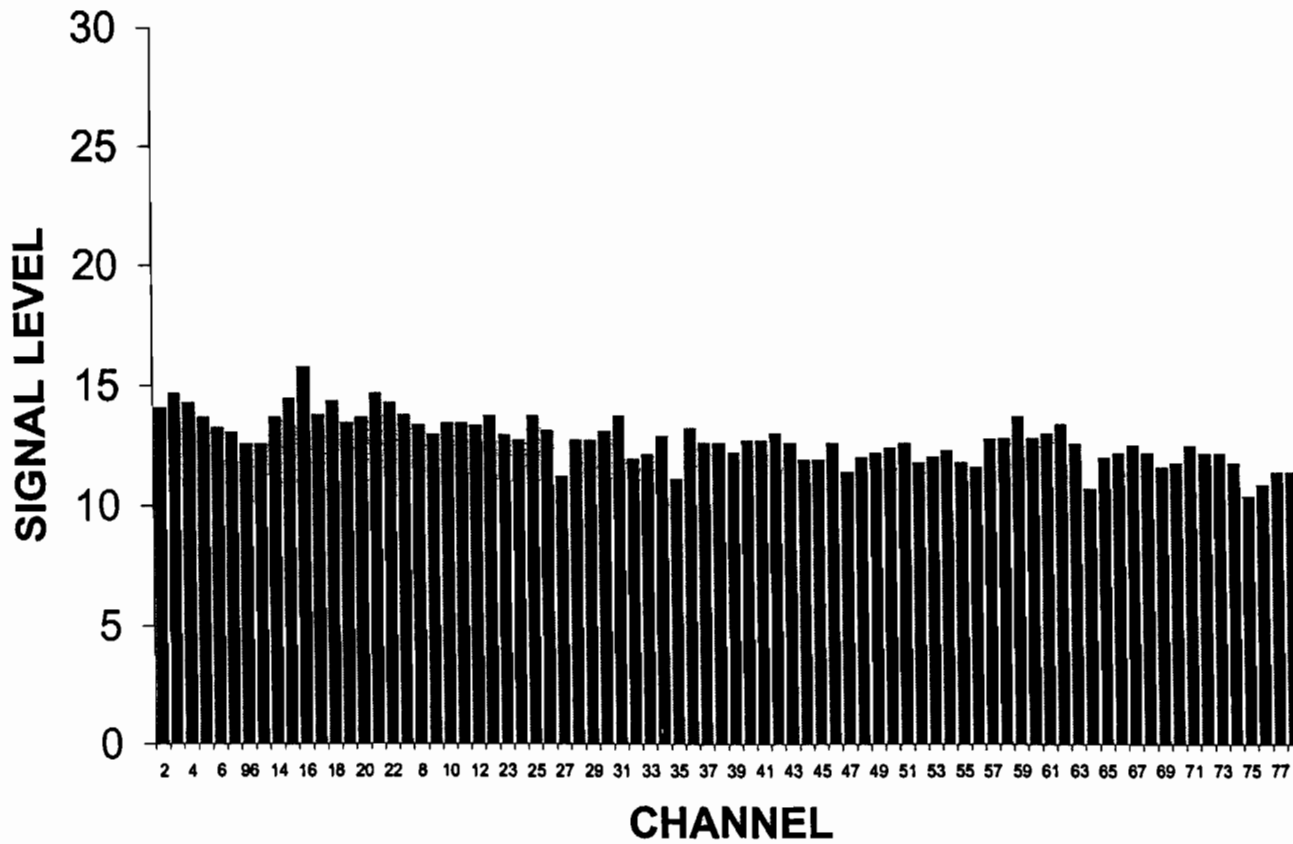


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #5



■ The maximum signal level is 15.8 dBmV

The maximum adjacent channel level difference is 2.1 dBmV
 The maximum level difference between the highest and lowest is 5.4 dBmV
 The maximum six month variance is 3.5 dBmV



Test Point #11

2357 N Early St
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070

Date: 8/6/04

Run	1				2				3				4				
Time	12:16 AM				6:12 AM				1:12 PM				7:02 PM				
Temp	20				22				24				19				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	17.5	17.0	0.5	-1.1	17.9	17.3	1.0	-0.6	17.5	17.2	1.0	-0.5	17.4	17.1	0.4	-1.0	0.5
34	17.8	15.9	0.3	-1.5	18.2	16.2	0.3	-1.0	18.0	16.1	0.5	-0.8	18.0	16.1	0.6	-0.8	0.4
35	16.5	15.4	-1.3	-1.9	16.9	15.7	-1.3	-1.5	16.9	15.9	-1.1	-1.2	16.9	15.4	-1.1	-1.3	0.4
36	18.8	16.1	2.3	-0.3	18.9	16.0	2.0	-0.1	18.7	16.1	1.8	0.1	18.3	15.8	1.4	-0.4	0.6
37	17.3	16.0	-1.5	-1.2	17.5	16.1	-1.4	-0.9	17.1	16.1	-1.6	-0.9	17.1	16.1	-1.2	-1.1	0.4
38	18.1	16.3	0.8	-1.4	18.4	16.4	0.9	-1.1	18.0	16.4	0.9	-0.8	17.9	16.3	0.8	-1.4	0.5
39	18.0	17.1	-0.1	-1.1	18.2	17.2	-0.2	-0.9	17.6	16.7	-0.4	-0.5	17.5	16.6	-0.4	-0.9	0.7
40	17.4	16.2	-0.6	-1.7	17.7	16.4	-0.5	-1.5	17.2	16.2	-0.4	-1.3	17.1	16.1	-0.4	-1.5	0.6
41	17.8	16.1	0.4	-1.3	18.0	16.2	0.3	-1.1	17.6	16.0	0.4	-0.6	17.5	15.9	0.4	-1.0	0.5
42	17.3	15.5	-0.5	-0.8	17.5	15.7	-0.5	-0.5	17.3	15.7	-0.3	0.1	17.1	15.5	-0.4	-0.7	0.4
43	17.3	15.3	0.0	-1.6	17.3	15.4	-0.2	-1.6	17.1	15.4	-0.2	-1.3	17.1	15.4	0.0	-1.5	0.2
44	17.0	16.5	-0.3	-2.3	17.0	16.3	-0.3	-2.3	17.1	16.4	0.0	-1.9	17.0	16.4	-0.1	-2.1	0.1
45	17.1	15.8	0.1	-2.4	17.5	15.9	0.5	-2.0	17.1	16.0	0.0	-1.7	17.0	15.9	0.0	-2.1	0.5
46	17.3	15.3	0.2	-1.8	17.9	15.7	0.4	-1.1	17.1	15.5	0.0	-1.1	17.1	15.3	0.1	-1.5	0.8
47	16.7	15.9	-0.6	-0.3	17.1	16.1	-0.8	0.1	16.5	16.0	-0.6	0.5	16.5	16.0	-0.6	-0.1	0.6
48	16.9	15.1	0.2	-1.8	17.3	15.2	0.2	-1.4	16.7	15.1	0.2	-1.2	16.7	15.1	0.2	-1.7	0.6
49	17.4	16.5	0.5	-1.0	17.7	16.6	0.4	-0.7	17.1	16.4	0.4	-0.5	17.3	16.6	0.6	-1.0	0.6
50	17.2	15.9	-0.2	-1.2	17.4	16.1	-0.3	-0.9	16.7	15.6	-0.4	-0.9	16.7	15.6	-0.6	-0.8	0.7
51	16.8	15.1	-0.4	-2.1	17.1	15.2	-0.3	-1.7	16.7	15.3	0.0	-1.2	16.7	15.3	0.0	-1.5	0.4
52	16.7	15.8	-0.1	-2.7	16.9	15.9	-0.2	-2.4	16.6	16.0	-0.1	-1.7	16.6	15.9	-0.1	-2.1	0.3
53	17.1	16.4	0.4	-1.1	17.4	16.5	0.5	-0.8	16.9	16.4	0.3	-0.4	16.9	16.4	0.3	-0.2	0.5
54	16.6	15.4	-0.5	-1.8	16.9	15.6	-0.5	-1.5	16.5	15.4	-0.4	-0.3	16.4	15.4	-0.5	-0.9	0.5
55	16.6	16.5	0.0	-2.1	16.9	16.6	0.0	-1.7	16.6	16.6	0.1	-1.6	16.5	16.6	0.1	-1.8	0.4
56	16.2	17.2	-0.4	-3.0	16.5	17.3	-0.4	-2.6	16.2	17.3	-0.4	-2.0	16.0	17.1	-0.5	-2.4	0.5
57	16.6	15.1	0.4	-1.5	16.8	15.1	0.3	-1.1	16.5	15.2	0.3	0.0	16.5	15.2	0.5	-1.1	0.3
58	16.5	16.5	-0.1	-2.3	16.7	16.5	-0.1	-2.1	16.5	16.7	0.0	-0.2	16.4	16.6	-0.1	-1.6	0.3
59	16.7	16.4	0.2	-0.9	16.8	16.3	0.1	-0.7	16.4	16.3	-0.1	0.4	16.3	16.3	-0.1	-0.7	0.5
60	16.2	16.4	-0.5	-2.2	16.5	16.5	-0.3	-1.9	16.1	16.4	-0.3	-1.3	16.1	16.5	-0.2	-1.5	0.4
61	16.2	16.4	0.0	-1.8	16.5	16.4	0.0	-1.4	16.0	16.4	-0.1	-2.9	16.0	16.4	-0.1	-1.6	0.5
62	16.5	15.8	0.3	-1.8	16.8	15.8	0.3	-1.4	16.1	15.7	0.1	-1.0	16.1	15.7	0.1	-1.5	0.7
63	16.1	15.1	-0.4	-2.5	16.5	15.3	-0.3	-2.1	15.9	15.4	-0.2	-1.5	15.8	15.2	-0.3	-1.9	0.7
64	15.0	16.1	-1.2	-1.3	15.1	15.9	-1.4	-1.4	14.4	15.7	-1.7	-0.3	14.8	16.0	-1.3	-1.0	0.7
65	15.9	15.5	0.9	-2.1	16.1	15.5	1.0	-1.8	15.6	15.6	1.2	-1.1	15.6	15.6	0.8	-1.5	0.5
66	15.8	15.4	-0.1	-2.6	16.0	15.3	-0.1	-2.4	15.6	15.6	0.0	-1.7	15.5	15.4	-0.1	-2.1	0.5
67	15.8	15.6	0.0	-2.0	16.1	15.7	0.1	-1.7	15.6	15.6	0.0	-1.1	15.6	15.6	0.1	-1.4	0.5
68	15.5	14.5	-0.3	-2.2	15.7	14.6	-0.4	-1.9	15.3	14.6	-0.3	-1.4	15.3	14.6	-0.3	-1.6	0.4
69	15.2	15.6	-0.3	-1.9	15.6	15.7	-0.1	-1.5	15.0	15.6	-0.3	-1.0	15.0	15.6	-0.3	-1.6	0.6
70	14.9	15.5	-0.3	-2.1	15.1	15.5	-0.5	-1.9	14.7	15.4	-0.3	-1.3	14.7	15.4	-0.3	-1.6	0.4
71	15.1	15.5	0.2	-1.9	15.3	15.4	0.2	-1.6	15.0	15.5	0.3	-1.3	15.0	15.6	0.3	-1.4	0.3
72	15.2	15.6	0.1	-1.9	15.6	15.8	0.3	-1.5	15.0	15.6	0.0	-1.0	15.0	15.6	0.0	-1.4	0.6

**Test Point #11**2357 N Early St
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:16 AM				6:12 AM				1:12 PM				7:02 PM				
Temp	20				22				24				19				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	14.7	16.0	-0.5	-1.9	15.0	16.1	-0.6	-1.5	14.5	16.1	-0.5	-1.1	14.5	16.2	-0.5	-1.4	0.5
74	14.5	27.0	-0.2	-2.5	14.9	27.1	-0.1	-2.0	14.5	27.2	0.0	-0.4	14.4	27.2	-0.1	-1.9	0.5
75	13.1	14.4	-1.4	-2.2	13.4	14.3	-1.5	-2.5	14.1	15.6	-0.4	-1.1	13.0	14.1	-1.4	-2.7	1.1
76	13.6	15.5	0.5	-2.6	14.0	15.3	0.6	-2.2	13.7	15.4	-0.4	-1.4	13.4	15.1	0.4	-2.2	0.6
77	14.1	16.0	0.5	-2.6	14.7	16.2	0.7	-2.0	14.2	16.1	0.5	-1.0	14.1	16.0	0.7	-1.7	0.6
78	13.3	14.1	-0.8	-2.8	14.6	15.1	-0.1	-1.6	14.1	14.9	-0.1	-1.1	13.9	14.9	-0.2	-0.9	1.3
Min Value	13.1	9.5	-1.8	-3.0	13.4	14.3	-2.2	-2.6	13.7	9.7	-2.3	-2.9	13.0	9.6	-1.8	-2.7	0.1
Max Value	19.7	27.0	2.3	1.8	19.9	27.1	2.0	2.0	19.7	27.2	1.8	2.3	19.7	27.2	1.4	1.9	2.3

Notes:

- *1 - Station off air - standby by carrier in use
- *2 - New channel addition there is no 6 month reference



Test Point #5

1121 Allison St
24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:24 AM				6:20 AM				1:23 PM				6:50 PM				
Temp	20				23				25				22				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	14.1	15.2		2.2	11.4	14.9		0.0	14.1	15.1		3.2	13.8	15.0		2.1	2.7
3	14.7	16.4	0.6	1.9	12.7	16.3	1.3	0.0	14.7	16.4	0.6	3.0	14.4	16.3	0.6	1.9	2.0
4	14.3	16.8	-0.4	1.5	14.6	16.8	1.9	-0.3	14.1	16.5	-0.6	2.6	14.1	16.9	-0.3	1.7	0.5
5	13.7	15.7	-0.6	1.2	14.1	15.9	-0.5	-0.2	13.6	15.7	-0.5	2.1	13.5	15.7	-0.6	1.2	0.6
6	13.3	15.5	-0.4	1.1	13.0	15.7	-1.1	0.0	13.3	15.6	-0.3	2.4	13.2	15.8	-0.3	1.6	0.3
95	13.1	9.0	-0.2	0.0	13.0	9.1	0.0	0.0	13.1	9.0	-0.2	0.0	12.1	9.0	-1.1	0.0	1.0
96	12.6	16.1	-0.5	-2.3	13.4	16.6	0.4	0.0	12.8	16.4	-0.3	-0.8	12.3	16.0	0.2	-2.2	1.1
99	12.6	16.0	0.0	-1.0	13.0	16.2	-0.4	1.0	12.6	16.4	-0.2	0.4	12.3	16.0	0.0	-0.9	0.7
14	13.7	16.1	1.1	0.7	14.0	16.1	1.0	2.7	13.8	16.2	1.2	2.3	13.4	16.0	1.1	1.1	0.6
15	14.5	16.4	0.8	0.9	14.9	16.4	0.9	2.8	14.5	16.5	0.7	2.3	14.3	16.5	0.9	1.2	0.6
16	15.8	18.9	1.3	2.2	15.3	18.5	0.4	3.1	15.8	18.8	1.3	3.5	14.5	18.0	0.2	1.3	1.3
17	13.8	15.7	-2.0	0.6	14.2	15.8	-1.1	2.3	13.8	15.9	-2.0	1.8	13.5	15.7	-1.0	0.5	0.7
18	14.4	16.2	0.6	0.9	14.9	16.4	0.7	2.6	14.4	16.3	0.6	2.3	14.3	16.3	0.8	1.3	0.6
19	13.5	15.7	-0.9	0.1	14.5	16.4	-0.4	2.3	14.1	16.4	-0.3	1.6	13.9	16.3	-0.4	0.4	1.0
20	13.7	15.2	0.2	-0.1	14.1	15.2	-0.4	1.3	13.7	15.2	-0.4	1.3	13.5	15.2	-0.4	0.2	0.6
21	14.7	16.5	1.0	0.2	15.1	16.6	1.0	1.7	14.7	16.6	1.0	2.0	14.5	16.4	1.0	0.9	0.6
22	14.3	16.7	-0.4	0.4	14.6	16.6	-0.5	1.7	14.1	16.9	-0.6	1.3	13.9	16.5	-0.6	0.1	0.7
7	13.8	16.0	-0.5	0.8	14.3	16.2	-0.3	0.9	12.8	15.5	-1.3	1.1	13.6	17.4	-0.3	0.9	1.5
8	13.4	16.8	-0.4	-0.2	13.9	16.7	-0.4	1.3	13.4	16.5	0.6	2.2	12.6	15.8	-1.0	-0.6	1.3
9	13.0	15.3	-0.4	0.2	13.6	15.7	-0.3	1.5	13.4	15.8	0.0	2.0	13.0	15.5	0.4	1.5	0.6
10	13.5	15.6	0.5	1.4	13.8	15.7	0.2	3.0	13.5	15.7	0.1	1.4	13.4	15.7	0.4	0.5	0.4
11	13.5	15.7	0.0	-0.2	13.8	15.7	0.0	0.9	13.4	15.7	-0.1	0.9	13.4	15.9	0.0	0.0	0.4
12	13.4	15.3	-0.1	0.0	13.8	15.5	0.0	1.2	13.4	15.4	0.0	1.2	13.2	15.2	-0.2	-0.2	0.6
13	13.8	16.4	0.4	0.2	14.3	16.4	0.5	1.5	13.8	16.5	0.4	1.3	13.6	16.4	0.4	0.0	0.7
23	13.0	16.5	-0.8	0.0	13.6	16.6	-0.7	1.4	13.2	16.7	-0.6	1.9	12.9	16.6	-0.7	0.1	0.7
24	12.8	15.8	-0.2	0.3	13.2	15.9	-0.4	1.5	12.7	15.9	-0.5	1.2	12.5	15.8	-0.4	0.0	0.7
25	13.8	16.1	1.0	0.4	14.3	16.2	1.1	1.7	13.8	16.0	1.1	1.6	13.6	16.0	1.1	0.4	0.7
26	13.2	16.2	-0.6	0.5	13.8	16.5	-0.5	1.9	13.2	16.2	-0.6	1.5	13.0	16.2	-0.6	0.5	0.8
27	11.3	15.4	-1.9	-2.3	12.1	15.6	-1.7	-0.9	11.9	15.9	-1.3	-0.6	12.0	15.9	-1.0	-1.5	0.8
28	12.8	16.2	1.5	-0.5	13.4	16.5	1.3	0.8	12.8	16.5	0.9	0.6	12.5	16.4	0.5	-0.6	0.9
29	12.8	16.0	0.0	-1.3	13.4	16.4	0.0	-0.2	12.8	16.2	0.0	0.0	12.6	16.2	0.1	-1.0	0.8
30	13.2	16.4	0.4	-1.0	13.6	16.6	0.2	0.1	12.9	16.3	0.1	-0.3	12.8	16.4	0.2	-1.3	0.8
31	13.8	17.1	0.6	-1.3	14.2	17.3	0.6	-0.2	13.6	17.1	0.7	-0.2	13.4	16.9	0.6	-1.1	0.8
32	12.0	15.2	-1.8	-0.2	13.0	15.2	-1.2	1.5	11.5	15.6	-2.1	0.0	12.0	15.2	-1.4	0.0	1.5



Test Point #5

1121 Allison St

24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:24 AM				6:20 AM				1:23 PM				6:50 PM				
Temp	20				23				25				22				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	12.2	16.6	0.2	-1.0	12.6	16.7	-0.4	0.1	12.1	16.8	0.6	0.6	12.0	16.9	0.0	-0.6	0.6
34	13.0	16.8	0.8	-1.2	13.4	16.8	0.8	-0.1	13.0	16.8	0.9	0.3	12.8	16.7	0.8	-0.6	0.6
35	11.2	15.6	-1.8	-1.8	11.6	15.7	-1.8	-0.7	11.4	15.8	-1.6	-0.3	11.3	15.5	-1.5	-1.0	0.4
36	13.3	15.6	2.1	-0.3	13.7	15.7	2.1	0.7	13.2	15.6	1.8	1.3	12.8	15.5	1.5	0.1	0.9
37	12.7	16.6	-0.6	-1.1	13.1	16.6	-0.6	-0.1	12.4	16.5	-0.8	0.3	12.3	16.6	-0.5	-0.9	0.8
38	12.7	16.1	0.0	-1.5	13.1	16.1	0.0	-0.5	12.4	15.9	0.0	-0.5	12.2	15.9	-0.1	-1.6	0.9
39	12.3	16.4	-0.4	-1.3	12.8	16.6	-0.3	-0.4	12.2	16.7	-0.2	0.2	12.0	16.5	-0.2	-0.8	0.8
40	12.8	16.7	0.5	-1.3	13.1	16.8	0.3	-0.5	12.3	16.6	0.1	-0.1	12.1	16.5	0.1	-1.0	1.0
41	12.8	15.4	0.0	-1.0	13.1	15.4	0.0	-0.4	12.4	15.2	0.1	0.3	12.3	15.2	0.2	-0.8	0.8
42	13.1	16.2	0.3	-0.5	13.6	16.4	0.5	0.2	13.0	16.4	0.6	0.8	12.8	16.2	0.5	-0.3	0.8
43	12.7	15.5	-0.4	-1.1	13.0	15.6	-0.6	-0.5	12.3	15.3	-0.7	0.0	12.2	15.4	-0.6	-0.9	0.8
44	12.0	16.8	-0.7	-1.6	12.5	17.2	-0.5	-0.6	12.1	17.1	-0.2	0.1	11.8	16.7	-0.4	-1.5	0.7
45	12.0	15.8	0.0	-2.0	12.2	15.9	-0.3	-1.4	11.7	15.8	-0.4	-0.6	11.7	16.0	-0.1	-1.4	0.5
46	12.7	16.1	0.7	-1.1	13.0	16.0	0.8	-0.5	12.4	16.1	0.7	0.4	12.3	16.1	0.6	-0.8	0.7
47	11.5	15.6	-1.2	0.0	11.9	15.7	-1.1	0.9	11.3	15.8	-1.1	1.9	11.0	15.5	-1.3	0.3	0.9
48	12.1	15.2	0.6	-1.5	12.8	15.5	0.9	-0.5	11.9	15.3	0.6	-0.1	11.7	15.3	0.7	-1.5	1.1
49	12.3	16.0	0.2	-1.0	12.8	16.1	0.0	-0.1	12.0	15.9	0.1	0.7	11.8	15.8	0.1	-1.0	1.0
50	12.5	15.9	0.2	-1.3	12.9	15.9	0.1	-0.5	12.0	15.4	0.0	0.3	11.8	15.4	0.0	-0.7	1.1
51	12.7	15.9	0.2	-1.9	13.1	16.0	0.2	-1.2	12.5	16.2	0.5	-0.3	12.3	16.0	0.5	-1.5	0.8
52	11.9	15.7	-0.8	-2.5	12.3	15.7	-0.8	-1.7	11.7	15.6	-0.8	-0.7	11.5	15.6	-0.8	-2.0	0.8
53	12.1	16.0	0.2	-1.1	12.8	16.2	0.5	0.0	12.0	15.9	0.3	0.6	11.9	16.0	0.4	0.1	0.9
54	12.4	15.8	0.3	-1.3	12.9	15.9	0.1	-0.6	12.3	15.7	0.3	0.7	12.2	15.9	0.3	-0.5	0.7
55	11.9	16.2	-0.5	-1.7	12.5	16.4	-0.4	-0.9	11.9	16.4	-0.4	-0.4	11.7	16.4	-0.5	-1.2	0.8
56	11.7	16.7	-0.2	-2.7	12.2	16.9	-0.3	-1.9	11.5	16.9	-0.4	-1.1	11.4	17.0	-0.3	-1.8	0.8
57	12.9	14.9	1.2	-1.3	13.2	14.9	1.0	-0.6	12.5	15.0	1.0	0.8	12.3	14.9	0.9	-1.0	0.9
58	12.9	15.8	0.0	-2.4	13.4	16.2	0.2	-1.5	12.6	15.8	0.1	0.4	12.5	15.9	0.2	-1.4	0.9
59	13.8	16.9	0.9	-0.9	14.1	16.9	0.7	-0.2	13.6	16.8	1.0	1.8	13.4	16.8	0.9	-0.2	0.7
60	12.9	16.3	-0.9	-2.0	13.2	16.5	-0.9	-1.4	12.8	16.1	-0.8	-0.1	12.7	15.9	-0.7	-1.0	0.5
61	13.1	16.1	0.2	-1.5	13.3	16.0	0.1	-1.1	13.2	16.2	0.4	-1.0	13.0	16.1	0.3	-0.8	0.3
62	13.5	16.5	0.4	-1.5	14.0	16.3	0.7	-0.7	13.4	16.4	0.2	1.1	13.4	16.5	0.4	-0.4	0.6
63	12.7	15.9	-0.8	-2.2	13.5	16.0	-0.5	-1.3	12.8	15.9	-0.6	0.3	12.5	15.9	-0.9	-1.3	1.0
64	10.8	15.6	-2.1	-2.0	11.9	16.1	-1.3	-0.9	12.4	16.5	-0.4	0.0	10.8	15.6	-1.9	-0.9	1.6
65	12.1	15.4	1.3	-2.9	13.0	15.8	1.1	-1.8	12.1	15.5	-0.3	-0.2	11.9	15.6	1.1	-1.8	1.1
66	12.3	15.1	0.2	-2.9	13.1	15.5	0.1	-1.9	12.1	15.3	0.0	-0.9	12.0	15.2	0.1	-2.2	1.1
67	12.6	15.9	0.3	-2.4	13.2	16.0	0.1	-1.7	12.3	16.0	0.2	-0.6	12.3	15.8	0.3	-1.6	0.9
68	12.3	14.9	-0.3	-2.4	13.0	15.1	-0.2	-1.5	12.0	15.0	-0.3	-0.3	12.1	15.1	-0.2	-1.3	1.0
69	11.7	15.0	-0.6	-2.4	12.2	15.0	-0.8	-1.7	11.3	15.2	-0.7	-0.6	11.3	15.1	-0.8	-1.8	0.9
70	11.9	15.2	0.2	-2.5	12.5	15.3	0.3	-1.7	11.3	15.2	0.0	-1.0	11.4	15.3	0.1	-2.1	1.2
71	12.6	15.4	0.7	-1.8	13.2	15.6	0.7	-1.0	11.9	15.3	0.6	-0.5	11.9	15.5	0.5	-1.3	1.3
72	12.3	15.2	-0.3	-1.8	13.0	15.6	-0.2	-0.8	11.5	15.3	-0.2	-0.1	11.5	15.3	-0.4	-1.5	1.5

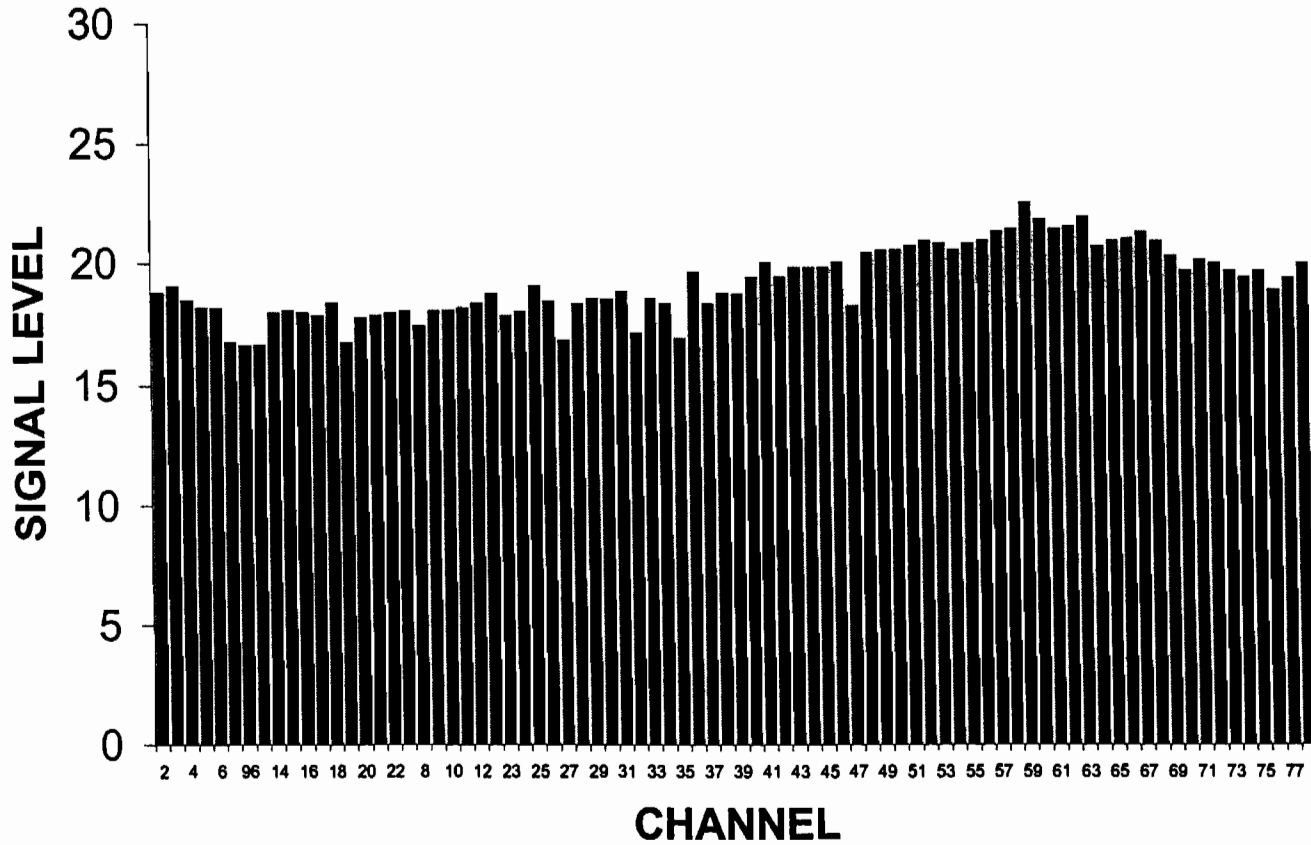


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #2



■ The maximum signal level is 22.7 dBmV

The maximum adjacent channel level difference is 2.9 dBmV
 The maximum level difference between the highest and lowest is 6 dBmV
 The maximum six month variance is 4.3 dBmV

244



Test Point #2

Tower Ct & S Whitting St
24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:08 AM				7:08 AM				12:33 PM				7:38 PM				
Temp	21				23				25				21				
Chan	Vld Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vld Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vld Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vld Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vld Diff
2	18.8	15.4		1.8	18.9	15.4		1.8	18.5	15.3		1.5	18.6	15.4		1.6	0.4
3	19.1	16.0	0.3	1.6	19.1	16.0	0.2	1.4	18.8	15.9	0.3	1.4	18.9	15.9	0.3	1.5	0.3
4	18.5	16.5	-0.6	1.1	18.6	16.6	-0.5	1.1	18.4	16.6	-0.4	1.1	18.4	16.4	-0.5	1.2	0.2
5	18.2	15.9	-0.3	0.8	18.2	15.8	-0.4	0.8	18.0	15.9	-0.4	0.9	18.1	15.9	-0.3	1.0	0.2
6	18.2	16.2	0.0	0.7	18.3	16.3	0.1	0.8	18.1	16.4	0.1	0.9	18.2	16.4	0.1	1.1	0.2
95	16.8	9.6	-1.4	0.0	17.0	9.6	-1.3	0.0	16.5	9.7	-1.6	0.0	16.8	9.5	-1.4	0.0	0.5
96	16.7	16.0	-0.1	-3.0	16.7	16.0	-0.3	-2.6	16.1	15.9	-0.4	-2.7	16.5	16.1	-0.3	-2.5	0.6
99	16.7	15.6	0.0	-1.4	16.8	15.7	0.1	-1.3	16.4	15.9	0.3	-1.5	16.5	15.8	0.0	-1.3	0.4
14	18.0	16.7	1.3	0.2	18.2	16.9	1.4	0.3	17.9	16.8	1.5	0.3	18.0	16.8	1.5	0.3	0.3
15	18.1	16.2	0.1	0.3	18.2	16.2	0.0	0.4	17.9	16.2	0.0	0.1	18.0	16.2	0.0	0.3	0.3
16	18.0	17.3	-0.1	0.3	18.6	18.1	0.4	0.9	19.1	18.7	1.2	1.6	18.0	17.7	0.0	0.6	1.1
17	17.9	16.1	-0.1	0.1	17.9	16.1	-0.7	0.1	17.6	16.2	-1.5	-0.2	17.7	16.1	-0.3	-0.1	0.3
18	18.4	15.7	0.5	0.6	18.2	15.2	0.3	0.4	18.0	15.5	0.4	0.4	18.2	15.6	0.5	0.7	0.4
19	16.8	15.1	-1.6	-0.3	17.4	15.7	-0.8	0.3	17.2	15.8	-0.8	-0.7	17.3	15.7	-0.9	-0.5	0.6
20	17.8	15.9	1.0	-0.6	17.9	15.9	0.5	-0.5	17.6	16.0	0.4	-0.5	17.7	15.9	0.4	-0.4	0.3
21	17.9	15.7	0.1	-0.5	18.2	15.9	0.3	-0.2	17.6	15.6	0.0	-0.1	17.8	15.6	0.1	-0.1	0.6
22	18.0	16.4	0.1	-0.4	18.1	16.4	-0.1	-0.3	17.7	16.5	0.1	-0.7	17.8	16.5	0.0	-0.7	0.4
7	18.1	16.4	0.1	-0.3	18.3	16.5	0.2	0.1	17.8	16.5	0.1	-0.2	18.0	16.4	0.2	-0.1	0.5
8	17.5	15.5	-0.6	-0.9	17.7	15.6	-0.6	-0.7	17.5	15.7	-0.3	-0.9	17.5	15.5	-0.5	-0.9	0.2
9	18.1	15.7	0.6	-0.4	18.4	15.9	0.7	-0.2	18.2	16.1	0.7	-0.3	18.3	16.0	0.8	-0.2	0.3
10	18.1	15.6	0.0	-0.7	18.4	15.8	0.0	-0.5	18.0	15.7	-0.2	-0.8	18.0	15.6	-0.3	-0.7	0.4
11	18.2	15.3	0.1	-0.8	18.4	15.5	0.0	-0.8	18.0	15.6	0.0	-0.8	18.0	15.2	0.0	-0.9	0.4
12	18.4	15.5	0.2	-0.7	18.6	15.6	0.2	-0.6	18.1	15.7	0.1	-1.2	18.4	15.5	0.4	-0.9	0.5
13	18.8	16.0	0.4	-0.7	19.0	16.1	0.4	-0.6	18.6	16.2	0.5	-0.9	18.8	16.2	0.4	-0.7	0.4
23	17.9	15.9	-0.9	-0.8	18.2	16.0	-0.8	-0.5	17.8	16.0	-0.8	-0.6	17.9	15.9	-0.9	-0.8	0.4
24	18.1	15.9	0.2	-0.8	18.4	16.0	0.2	-0.6	17.8	15.8	0.0	-1.4	18.0	15.8	0.1	-1.1	0.6
25	19.1	16.0	1.0	-0.6	19.4	16.2	1.0	-0.3	19.0	16.1	1.2	-0.8	19.3	16.2	1.3	-0.4	0.4
26	18.5	16.2	-0.6	-0.2	18.6	16.4	-0.8	-0.1	18.4	16.6	-0.6	-0.3	18.4	16.4	-0.9	-0.5	0.2
27	16.9	15.6	-1.6	-3.2	17.3	15.7	-1.3	-2.9	17.3	16.2	-1.1	-2.9	17.7	16.0	-0.7	-2.5	0.8
28	18.4	16.2	1.5	-1.4	18.5	16.3	1.2	-1.4	18.2	16.3	0.9	-1.7	18.3	16.3	0.6	-1.6	0.3
29	18.6	16.2	0.2	-2.2	18.9	16.5	0.4	-1.9	18.5	16.5	0.3	-2.0	18.5	16.3	0.2	-2.0	0.4
30	18.6	16.7	0.0	-1.9	18.8	16.8	-0.1	-1.7	18.4	16.8	-0.1	-2.4	18.6	16.7	0.1	-2.2	0.4
31	18.9	16.2	0.3	-2.3	19.0	16.2	0.2	-2.2	18.7	16.1	0.3	-2.3	18.8	16.1	0.2	-2.2	0.3
32	17.2	15.9	-1.7	-2.1	17.1	15.9	-1.9	-2.2	16.9	16.0	-1.8	-2.0	18.0	15.6	-0.8	-1.1	1.1

345



Test Point #2

Tower Ct & S Whitting St
24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:08 AM				7:08 AM				12:33 PM				7:38 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	18.6	17.5	1.4	-1.8	18.8	17.8	1.7	-1.6	18.4	17.7	1.5	-1.8	18.4	17.5	0.4	-2.0	0.4
34	18.4	16.1	-0.2	-2.1	18.6	16.1	-0.2	-1.9	18.4	16.1	0.0	-2.0	18.5	16.0	0.1	-1.7	0.2
35	17.0	15.2	-1.4	-2.6	17.1	15.2	-1.5	-2.4	17.0	15.3	-1.4	-2.5	17.3	15.2	-1.2	-2.3	0.3
36	19.7	16.0	2.7	-1.2	19.9	16.2	2.8	-1.0	19.3	15.8	2.3	-1.5	19.3	15.9	2.0	-1.3	0.6
37	18.4	16.3	-1.3	-2.2	18.6	16.4	-1.3	-2.0	18.2	16.5	-1.1	-2.2	18.2	16.4	-1.1	-2.2	0.4
38	18.8	16.4	0.4	-2.7	18.9	16.3	0.3	-2.6	18.6	16.4	0.4	-2.7	18.6	16.3	0.4	-2.9	0.3
39	18.8	15.7	0.0	-2.1	18.8	15.7	-0.1	-2.2	18.6	16.0	0.0	-1.8	18.6	15.9	0.0	-1.9	0.2
40	19.5	16.2	0.7	-2.6	19.6	16.3	0.8	-2.7	18.8	16.2	0.2	-2.8	18.9	16.0	0.3	-2.7	0.8
41	20.1	16.4	0.6	-2.0	20.1	16.4	0.5	-2.2	19.6	16.3	0.8	-2.1	19.7	16.2	0.8	-2.0	0.5
42	19.5	15.8	-0.6	-1.5	19.6	15.9	-0.5	-1.5	19.2	15.8	-0.4	-1.6	19.3	15.8	-0.4	-1.5	0.4
43	19.9	15.2	0.4	-2.1	19.9	15.2	0.3	-1.8	19.5	15.3	0.3	-2.4	19.5	15.1	0.2	-2.3	0.4
44	19.9	16.6	0.0	-2.9	20.0	16.6	0.1	-2.5	19.7	16.6	0.2	-3.1	19.9	16.6	0.4	-3.0	0.3
45	19.9	16.0	0.0	-2.6	20.1	16.1	0.1	-2.2	19.7	16.1	0.0	-2.7	19.8	16.0	-0.1	-2.5	0.4
46	20.1	16.8	0.2	-1.7	20.2	15.5	0.1	-1.5	19.9	15.6	0.2	-2.0	20.0	16.4	0.2	-1.9	0.3
47	18.3	14.2	-1.8	-2.2	18.7	15.0	-1.5	-1.9	18.2	14.8	-1.7	-2.4	17.5	14.0	-2.5	-3.1	1.2
48	20.5	15.4	2.2	-2.8	20.4	15.3	1.7	-2.9	20.3	15.3	2.1	-1.4	20.4	15.5	2.9	-1.1	0.2
49	20.6	16.4	0.1	-2.2	20.6	16.4	0.2	-2.2	20.4	16.6	0.1	-1.9	20.4	16.5	0.0	-2.4	0.2
50	20.6	15.7	0.0	-2.2	20.8	15.8	0.2	-2.0	20.3	15.4	-0.1	-2.2	20.3	15.4	-0.1	-1.5	0.5
51	20.8	15.0	0.2	-3.0	21.0	15.1	0.2	-2.8	20.6	15.2	0.3	-2.7	20.6	15.2	0.3	-2.7	0.4
52	21.0	16.0	0.2	-3.7	21.2	16.2	0.2	-3.5	20.7	16.1	0.1	-3.6	20.7	16.0	0.1	-3.6	0.5
53	20.9	16.6	-0.1	-2.2	21.0	16.7	-0.2	-2.0	20.6	16.8	-0.1	-1.7	20.6	16.7	-0.1	-1.7	0.4
54	20.6	15.4	-0.3	-3.0	20.7	15.4	-0.3	-2.9	20.4	15.4	-0.2	-2.4	20.4	15.3	-0.2	-2.4	0.3
55	20.9	16.1	0.3	-3.4	21.2	16.4	0.5	-3.1	20.7	16.3	0.3	-3.3	20.7	16.2	0.3	-3.2	0.5
56	21.0	17.5	0.1	-4.3	21.2	17.7	0.0	-4.1	20.8	17.5	0.1	-4.1	20.9	17.5	0.2	-3.8	0.4
57	21.4	15.0	0.4	-2.7	21.4	15.0	0.2	-2.6	21.0	15.1	0.2	-2.6	21.1	15.2	0.2	-2.7	0.4
58	21.5	16.2	0.1	-3.5	21.7	16.3	0.3	-3.3	21.1	16.1	0.1	-3.1	21.0	16.0	-0.1	-3.4	0.7
59	22.6	16.7	1.1	-2.1	22.7	16.6	1.0	-2.0	22.1	16.7	1.0	-3.0	22.0	16.5	1.0	-2.5	0.7
60	21.9	16.8	-0.7	-2.8	22.1	16.8	-0.6	-2.6	21.4	16.7	-0.7	-2.8	21.4	16.6	-0.6	-2.7	0.7
61	21.5	16.5	-0.4	-2.6	21.8	16.6	-0.3	-2.4	21.2	16.5	-0.2	-2.9	21.2	16.5	-0.2	-2.8	0.6
62	21.6	15.5	0.1	-2.7	21.8	15.6	0.0	-2.5	21.1	15.4	-0.1	-2.6	21.0	15.3	-0.2	-2.6	0.8
63	22.0	15.6	0.4	-3.0	22.2	15.7	0.4	-2.8	21.7	15.9	0.6	-2.8	21.7	15.9	0.7	-2.9	0.5
64	20.8	16.4	-1.1	-2.2	20.8	16.4	-1.3	-2.9	20.5	16.6	-0.9	-2.2	20.4	16.4	-1.0	-1.9	0.4
65	21.0	15.6	0.2	-2.8	21.1	15.5	0.3	-2.7	20.6	15.6	0.1	-2.8	20.6	15.6	0.2	-2.7	0.5
66	21.1	15.4	0.1	-3.4	21.2	15.5	0.1	-3.3	20.9	15.6	0.3	-3.2	20.8	15.5	0.2	-3.2	0.4
67	21.4	16.0	0.3	-3.0	21.5	16.1	0.3	-2.9	21.1	16.1	0.2	-2.8	21.0	15.9	0.2	-2.8	0.5
68	21.0	14.9	-0.4	-3.0	21.2	15.0	-0.3	-2.8	20.8	15.0	-0.3	-2.8	20.8	15.1	-0.2	-2.7	0.4
69	20.4	15.6	-0.6	-3.0	20.6	15.6	-0.6	-2.6	20.1	15.6	-0.7	-2.7	20.1	15.5	-0.7	-2.7	0.5
70	19.8	15.3	-0.6	-3.2	19.9	15.3	-0.7	-3.1	19.5	15.4	-0.6	-3.0	19.6	15.4	-0.5	-2.9	0.4
71	20.2	15.6	0.4	-2.8	20.6	15.9	0.7	-2.4	20.1	15.8	0.6	-2.5	20.0	15.6	0.4	-2.5	0.6
72	20.1	16.2	-0.1	-3.0	20.5	16.3	-0.1	-2.5	19	16.3	-0.2	-2.7	19.9	16.3	-0.1	-2.7	0.6

346

Comcast

Test Point #2

Tower Ct & S Whitting St
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:08 AM				7:08 AM				12:33 PM				7:38 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	19.8	16.3	-0.3	-2.4	19.9	16.3	-0.6	-2.3	19.5	16.4	-0.4	-2.4	19.4	16.3	-0.5	-2.5	0.5
74	19.5	27.4	-0.3	-3.3	19.7	27.8	-0.2	-2.7	19.1	27.7	-0.4	-3.3	19.1	27.6	-0.3	-3.3	0.6
75	19.8	15.5	0.3	-3.0	19.6	15.2	-0.1	-3.2	18.5	14.6	-0.6	-1.9	19.5	15.7	0.4	-1.5	1.3
76	19.0	15.5	-0.8	-3.1	19.2	15.7	-0.4	-2.9	18.8	15.9	0.3	-2.9	18.7	15.7	-0.8	-3.0	0.5
77	19.5	15.6	0.5	-3.0	19.7	15.8	0.5	-2.9	19.2	15.9	0.4	-3.3	19.2	15.7	0.5	-2.7	0.5
78	20.1	14.8	0.6	-2.9	19.7	14.3	0.0	-3.4	19.8	15.0	0.6	-1.8	19.5	14.5	0.3	-1.9	0.6
Min Value	16.7	9.6	-1.8	-4.3	16.7	14.3	-1.9	-4.1	16.1	9.7	-1.8	-4.1	16.5	9.5	-2.5	-3.8	0.2
Max Value	22.6	27.4	2.7	1.8	22.7	27.8	2.8	1.8	22.1	27.7	2.3	1.6	22.0	27.6	2.9	1.6	1.3

Notes:

*1 - Station off air - standby by carrier in use

*2 - New channel addition there is no 6 month reference

347



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

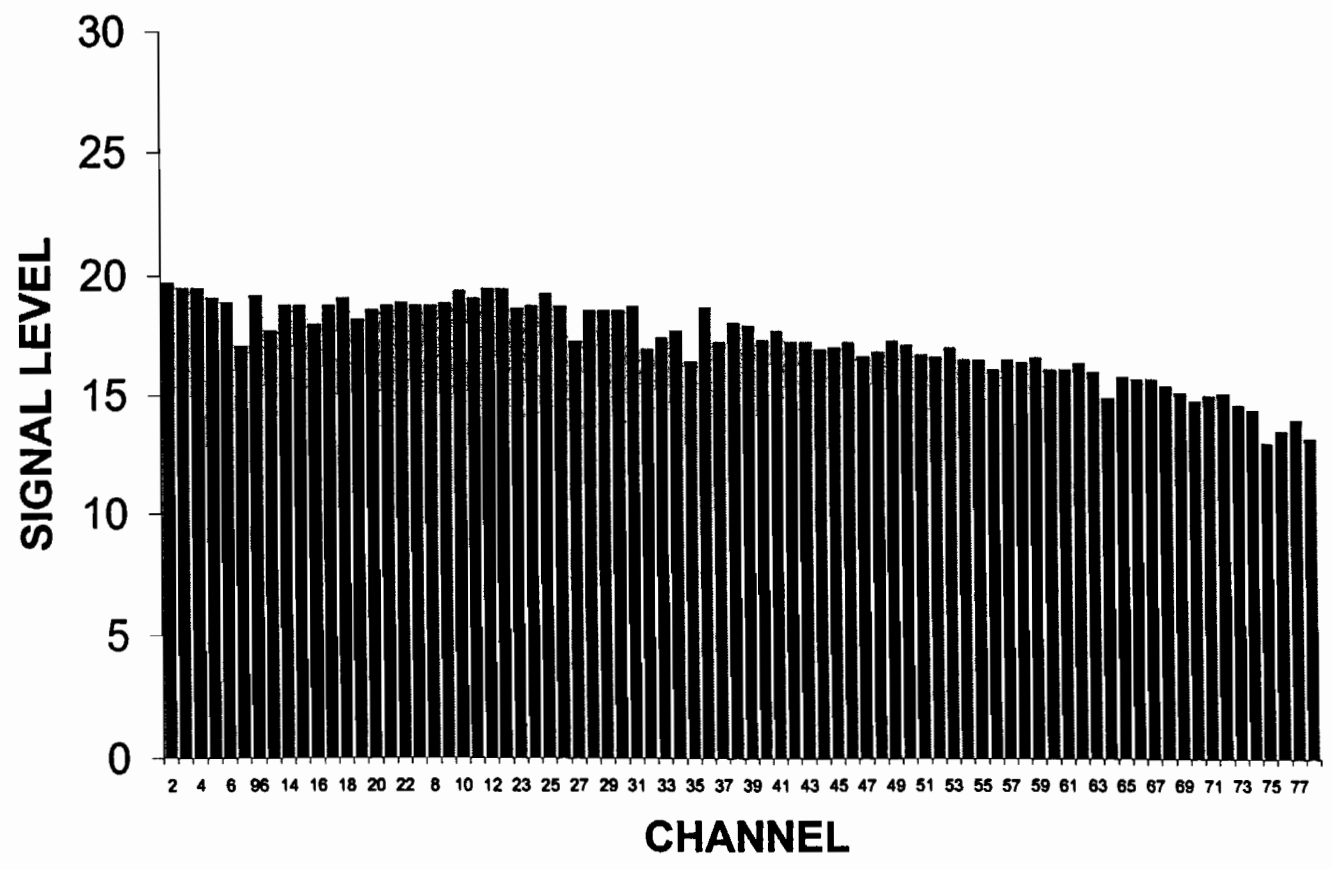
The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

TEST POINT #11



■ The maximum signal level is 19.9 dBmV

The maximum adjacent channel level difference is 2.3 dBmV
The maximum level difference between the highest and lowest is 6.7 dBmV
The maximum six month variance is 3 dBmV



Test Point #11

2357 N Early St
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:16 AM				6:12 AM				1:12 PM				7:02 PM				
Temp	20				22				24				19				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	19.7	15.8		1.8	19.9	15.8		2.0	19.7	15.8		2.3	19.5	15.6		1.9	0.4
3	19.5	15.4	-0.2	1.4	19.8	15.6	-0.1	1.6	19.5	15.4	-0.2	2.0	19.5	15.5	0.0	1.8	0.3
4	19.5	16.6	0.0	1.1	19.6	16.6	-0.2	1.1	19.5	16.6	0.0	1.5	19.5	16.6	0.0	1.5	0.1
5	19.1	15.8	-0.4	0.9	19.1	15.8	-0.5	0.9	19.0	15.8	-0.5	1.4	19.1	15.8	-0.4	1.4	0.1
6	18.9	16.4	-0.2	0.6	19.2	16.6	0.1	1.0	18.9	16.5	-0.1	1.4	18.8	16.3	-0.3	1.3	0.4
95	17.1	9.5	-1.8	0.0	17.2	9.8	-2.0	0.0	17.0	9.7	-1.9	0.0	17.0	9.6	-1.8	0.0	0.2
96	19.2	15.8	2.1	0.0	17.6	15.6	0.4	-2.3	17.5	15.9	0.5	-1.6	16.9	15.3	-0.1	-2.3	2.3
99	17.7	16.1	-1.5	-1.4	18.0	16.4	0.4	-1.1	17.7	16.3	0.2	-0.8	17.6	16.2	0.7	-1.0	0.4
14	18.8	16.8	1.1	0.4	18.9	16.7	0.9	0.5	18.8	16.8	1.1	1.3	18.7	16.7	1.1	0.7	0.2
15	18.8	16.1	0.0	0.4	19.0	16.2	0.1	0.6	18.8	16.2	0.0	1.0	18.8	16.2	0.1	0.8	0.2
16	18.0	17.2	-0.8	-0.1	19.3	18.4	0.3	1.2	18.9	17.8	0.1	1.4	19.7	18.4	0.9	1.9	1.7
17	18.8	16.1	0.8	0.5	18.8	16.0	-0.5	0.5	18.7	16.0	-0.2	0.9	18.6	15.9	-1.1	0.4	0.2
18	19.1	15.9	0.3	0.7	19.3	16.0	0.5	0.9	19.0	15.9	0.3	1.4	19.0	15.9	0.4	0.8	0.3
19	18.2	15.3	-0.9	-0.2	19.0	15.9	-0.3	0.7	18.7	15.8	-0.3	0.5	18.7	15.8	-0.3	0.1	0.8
20	18.6	15.9	0.4	-0.5	18.8	16.0	-0.2	-0.3	18.6	16.0	-0.1	0.3	18.6	15.9	-0.1	0.0	0.2
21	18.8	15.7	0.2	0.0	19.1	15.8	0.3	0.3	18.8	15.7	0.2	0.9	18.8	15.7	0.2	0.5	0.3
22	18.9	16.7	0.1	0.1	19.2	16.8	0.1	0.4	18.8	16.6	0.0	0.4	18.8	16.6	0.0	-0.1	0.4
7	18.8	16.0	-0.1	0.3	19.2	16.4	0.0	0.7	18.9	16.5	0.1	1.1	18.8	16.2	0.0	0.4	0.4
8	18.8	16.2	0.0	-0.3	19.2	16.4	0.0	0.1	18.8	16.3	-0.1	0.2	18.8	16.2	0.0	0.0	0.4
9	18.9	15.3	0.1	0.4	19.2	15.7	0.0	0.8	18.9	15.6	0.1	0.9	18.8	15.5	0.0	0.2	0.4
10	19.4	15.8	0.5	0.0	19.6	15.8	0.4	0.2	19.4	15.9	0.5	0.6	19.4	15.8	0.6	0.1	0.2
11	19.1	15.6	-0.3	-0.4	19.3	15.7	-0.3	-0.1	18.9	15.6	-0.5	0.1	19.0	15.5	-0.4	-0.3	0.4
12	19.5	16.0	0.4	-0.2	19.7	16.1	0.4	0.0	19.4	16.0	0.5	0.0	19.5	16.0	0.5	-0.4	0.3
13	19.5	16.3	0.0	-0.1	19.8	16.5	0.1	0.2	19.5	16.4	0.1	0.4	19.5	16.3	0.0	-0.1	0.3
23	18.7	15.9	-0.8	-0.1	19.1	16.1	-0.7	0.2	18.8	16.0	-0.7	1.0	18.8	16.0	-0.7	0.0	0.4
24	18.8	16.3	0.1	0.0	19.0	16.2	-0.1	0.2	18.6	16.2	-0.2	0.1	18.7	16.3	-0.1	-0.2	0.4
25	19.3	16.0	0.5	0.3	19.5	16.0	0.5	0.5	19.3	16.0	0.7	0.7	19.3	15.9	0.6	0.3	0.2
26	18.8	16.2	-0.5	0.6	19.0	16.3	-0.5	0.8	18.7	16.2	-0.6	0.7	18.6	16.2	-0.7	0.2	0.4
27	17.3	15.8	-1.5	-2.4	17.8	16.1	-1.2	-2.0	17.8	16.3	-0.9	-1.5	18.2	16.4	-0.4	-1.6	0.9
28	18.6	16.5	1.3	-0.6	18.8	16.6	1.0	-0.4	18.5	16.5	0.7	-0.6	18.5	16.5	0.3	-0.8	0.3
29	18.6	16.6	0.0	-1.1	18.8	16.6	0.0	-0.9	18.5	16.6	0.0	-0.7	18.4	16.4	-0.1	-1.1	0.4
30	18.6	16.7	0.0	-1.1	18.9	16.9	0.1	-0.8	18.5	16.8	0.0	-1.0	18.5	16.7	0.1	-1.6	0.4
31	18.8	16.4	0.2	-1.4	19.1	16.5	0.2	-1.1	18.8	16.4	0.3	-1.0	18.6	16.3	0.1	-1.4	0.5
32	17.0	15.9	-1.8	-1.0	16.9	16.4	-2.2	-1.2	16.5	16.2	-2.3	-0.8	17.0	15.9	-1.6	-0.5	0.5

Test Point #11

Comcast

2357 N Early St.
Alexandria, VA

FCC Distortion Measurements

EQUIPMENT USED:

H/P 8591C, S/N 3916A04384

Pre-Amplifier 85905A, S/N 6093-0551

TRILITHIC VF-4-88, S/N 9330002

Tektronix VITS200, S/N B020963

CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 08/19/04

Time: 11:00 am

Temp: 78

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	1.2	1	70.3	61.6	50.1	4.5002
95	1.1	0.9	73.2	59.1	51.3	4.5001
21	1.0	1.0	67.1	60.1	49.8	4.5000
8	0.8	1.2	73.6	65.2	52.5	4.4998
28	1.2	1	70.7	60.3	50.7	4.5000
32	0.5	1	65.8	61.7	50.7	4.5002
47	0.8	0.9	68.9	60.6	49.6	4.5001
58	0.5	1	67.5	63.2	49.7	4.5000
72	0.4	1.1	63.6	63.2	49.0	4.5001
Minimum values:			63.6	59.1	49.0	
Maximum values:	1.2	1.2				-0.0002

351



Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.



Test Point #10

5465 Colfax Ave
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:03 AM				6:00 AM				12:33 PM				7:19 PM				
Temp																	
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	20.3	15.6		1.5	20.4	15.6		1.6	18.5	15.3		0.7	20.2	15.5		1.4	1.9
3	20.1	15.5	-0.2	1.1	20.3	15.7	-0.1	1.2	18.8	15.9	0.3	0.9	20.1	15.5	-0.1	1.2	1.5
4	20.1	16.6	0.0	0.8	20.3	16.8	0.0	1.0	18.4	16.6	-0.4	0.2	20.1	16.7	0.0	1.0	1.9
5	19.7	16.0	-0.4	0.6	19.8	16.1	-0.5	0.7	18.0	15.9	-0.4	-0.2	19.7	16.0	-0.4	0.9	1.8
6	19.5	16.6	-0.2	0.6	19.6	16.7	-0.2	0.8	18.1	16.4	0.1	0.3	19.5	16.7	-0.2	0.9	1.5
95	18.2	9.4	-1.3	0.0	18.0	9.4	-1.6	0.0	18.3	9.7	0.2	0.0	18.3	9.8	-1.2	0.0	0.3
96	17.6	15.6	-0.6	-3.0	18.0	16.0	0.0	-2.6	16.1	15.9	-2.2	-3.4	17.7	16.0	-0.6	-2.3	1.9
99	17.9	16.1	0.3	-1.6	18.0	16.0	0.0	-1.3	16.4	15.9	0.3	-1.8	17.6	15.8	-0.1	-1.5	1.6
14	19.1	16.9	1.2	0.0	19.3	16.9	1.3	0.3	17.9	16.8	1.5	0.3	19.1	16.9	1.5	0.3	1.4
15	19.1	16.1	0.0	0.3	19.3	16.1	0.0	0.5	17.9	16.2	0.0	0.4	19.0	16.1	-0.1	0.3	1.4
16	19.3	18.0	0.2	0.7	18.8	17.4	-0.5	0.2	19.1	18.7	1.2	1.8	19.1	18.2	0.1	0.7	0.5
17	18.8	16.0	-0.5	0.0	18.9	16.1	0.1	0.1	17.6	16.2	-1.5	0.1	18.8	16.1	-0.3	0.1	1.3
18	19.3	15.7	0.5	0.4	19.3	15.7	0.4	0.4	18.0	15.5	0.4	0.6	20.0	16.6	1.2	1.3	2.0
19	18.0	15.6	-1.3	-1.2	18.1	15.5	-1.2	-0.4	17.2	15.8	-0.8	-0.6	18.5	16.1	-1.5	-0.4	1.3
20	18.9	16.2	0.9	-0.7	19.0	16.3	0.9	-0.5	17.6	16.0	0.4	-0.7	18.9	16.3	0.4	-0.3	1.4
21	19.1	16.2	0.2	-0.2	19.3	16.4	0.3	0.0	17.6	15.6	0.0	0.0	19.0	16.1	0.1	0.2	1.7
22	18.8	16.4	-0.3	-0.4	18.9	16.5	-0.4	-0.3	17.7	16.5	0.1	-0.3	18.7	16.3	-0.3	-0.6	1.2
7	19.1	16.3	0.3	-0.1	19.3	16.6	0.4	0.2	17.8	16.5	0.1	-0.2	19.1	16.4	0.4	0.2	1.5
8	18.4	15.9	-0.7	-0.7	18.6	16.0	-0.7	-0.3	17.5	15.7	-0.3	-0.3	18.4	15.9	-0.7	-0.5	1.1
9	18.6	15.7	0.2	-0.1	18.7	15.9	0.1	0.1	18.2	16.1	0.7	0.7	18.5	15.9	0.1	-0.3	0.5
10	18.6	15.7	0.0	-0.5	18.8	15.8	0.1	-0.2	18.0	15.7	-0.2	0.1	18.6	15.7	0.1	-0.5	0.8
11	18.5	15.3	-0.1	-0.9	18.6	15.3	-0.2	-0.8	18.0	15.6	0.0	0.0	18.4	15.2	-0.2	-1.0	0.6
12	19.2	15.9	0.7	-0.7	19.3	16.0	0.7	-0.6	18.1	15.7	0.1	-0.7	19.1	15.8	0.7	-1.0	1.2
13	19.4	16.5	0.2	-0.7	19.6	16.6	0.3	-0.3	18.6	16.2	0.5	-0.2	19.4	16.5	0.3	-0.7	1.0
23	18.4	16.3	-1.0	-0.8	18.6	16.4	-1.0	-0.5	17.8	16.0	-0.8	0.5	18.4	16.2	-1.0	-0.8	0.8
24	18.4	16.3	0.0	-0.5	18.5	16.3	-0.1	-0.3	17.8	15.8	0.0	-0.2	18.2	16.2	-0.2	-1.0	0.7
25	18.8	15.5	0.4	-0.5	18.9	15.6	0.4	-0.4	19.0	16.1	1.2	0.8	18.8	15.5	0.6	-0.7	0.2
26	18.6	15.8	-0.2	-0.2	18.8	16.2	-0.1	0.1	18.4	16.6	-0.6	0.6	18.6	16.2	-0.2	-0.2	0.4
27	17.3	16.3	-1.3	-3.2	17.7	16.5	-1.1	-2.7	17.3	16.2	-1.1	-2.0	18.0	16.5	-0.6	-2.6	0.7
28	18.2	16.6	0.9	-1.2	18.4	16.8	0.7	-1.1	18.2	16.3	0.9	-0.3	18.0	16.9	0.0	-1.5	0.4
29	17.8	16.3	-0.4	-1.8	18.0	16.4	-0.4	-1.6	18.5	16.5	0.3	0.0	17.4	16.1	-0.6	-2.0	1.1
30	18.0	16.4	0.2	-1.7	18.3	16.5	0.3	-1.3	18.4	16.8	-0.1	-0.7	17.9	16.5	0.5	-2.1	0.5
31	17.9	16.0	-0.1	-2.3	18.4	16.5	0.1	-1.8	18.7	16.1	0.3	-0.4	17.9	16.1	0.0	-2.2	0.8
32	17.0	16.1	-0.9	-1.2	16.3	16.5	-2.1	-1.9	16.9	16.0	-1.8	0.0	17.0	15.9	-0.9	-0.9	0.7

353



Test Point #10

5465 Colfax Ave
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	12:03 AM				6:00 AM				12:33 PM				7:19 PM				
Temp																	
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	17.1	17.5	0.1	-1.6	17.1	17.2	0.8	-1.5	18.4	17.7	1.5	1.0	17.1	17.4	0.1	-1.6	1.3
34	17.1	15.8	0.0	-1.9	17.3	16.0	0.2	-1.6	18.4	16.1	0.0	0.6	17.2	15.9	0.1	-1.4	1.3
35	15.9	15.9	-1.2	-2.5	16.0	16.1	-1.3	-2.3	17.0	15.3	-1.4	-0.3	16.3	15.8	-0.9	-1.9	1.1
36	17.8	16.0	1.9	-0.9	17.8	16.1	1.8	-0.9	19.3	15.8	2.3	1.9	17.5	15.7	1.2	-0.6	1.8
37	16.8	16.3	-1.0	-1.9	16.8	16.5	-1.0	-1.9	18.2	16.5	-1.1	0.8	16.7	16.3	-0.8	-1.6	1.5
38	17.1	16.2	0.3	-2.5	17.2	16.3	0.4	-2.3	18.6	16.4	0.4	0.2	17.1	16.4	0.4	-2.5	1.5
39	17.0	16.1	-0.1	-2.3	17.2	16.3	0.0	-1.9	18.6	16.0	0.0	0.5	16.9	16.3	-0.2	-1.9	1.7
40	17.1	16.4	0.1	-2.4	17.3	16.4	0.1	-2.0	18.8	16.2	0.2	0.4	16.7	16.4	-0.2	-2.4	2.1
41	17.2	15.9	0.1	-1.9	17.4	15.9	0.1	-1.7	19.6	16.3	0.8	1.6	16.8	15.7	0.1	-2.1	2.8
42	17.0	15.4	-0.2	-1.0	17.3	15.5	-0.1	-0.7	19.2	15.8	-0.4	2.2	16.8	15.3	0.0	-1.3	2.4
43	17.2	14.8	0.2	-2.0	17.3	14.8	0.0	-1.8	19.5	15.3	0.3	1.3	16.9	14.7	0.1	-2.1	2.6
44	17.8	16.6	0.6	-2.8	18.0	16.7	0.7	-2.3	19.7	16.6	0.2	0.2	17.8	16.5	0.9	-2.6	1.9
45	17.9	16.3	0.1	-2.7	18.1	16.5	0.1	-2.2	19.7	16.1	0.0	0.6	17.8	16.3	0.0	-2.3	1.9
46	17.6	15.8	-0.3	-1.9	17.8	15.8	-0.3	-1.7	19.9	15.6	0.2	1.7	17.4	16.0	-0.4	-1.9	2.5
47	16.4	16.4	-1.2	-1.1	16.6	16.5	-1.2	-0.7	18.2	14.8	-1.7	2.3	15.4	15.4	-2.0	-1.3	2.8
48	16.7	14.3	0.3	-2.1	16.9	14.5	0.3	-1.7	20.3	15.3	2.1	2.6	16.7	14.5	1.3	-2.3	3.6
49	18.0	16.2	1.3	-1.6	18.2	16.4	1.3	-1.3	20.4	16.6	0.1	1.6	17.9	16.1	1.2	-1.7	2.5
50	18.2	15.7	0.2	-1.9	18.3	15.9	0.1	-1.6	20.3	15.4	-0.1	1.7	17.8	15.3	-0.1	-1.5	2.5
51	18.2	15.1	0.0	-2.4	18.3	15.2	0.0	-2.3	20.6	15.2	0.3	1.2	17.9	15.1	0.1	-2.5	2.7
52	18.0	15.9	-0.2	-3.2	18.2	16.0	-0.1	-2.8	20.7	16.1	0.1	1.2	17.8	16.0	-0.1	-2.8	2.9
53	18.4	16.7	0.4	-2.0	18.7	16.9	0.5	-1.6	20.6	16.8	-0.1	1.8	18.1	16.8	0.3	-1.3	2.5
54	17.7	15.3	-0.7	-2.6	17.9	15.3	-0.8	-2.4	20.4	15.4	-0.2	2.2	17.5	15.1	-0.6	-1.9	2.9
55	17.8	16.6	0.1	-2.8	18.0	16.7	0.1	-2.5	20.7	16.3	0.3	1.2	17.6	16.6	0.1	-2.9	3.1
56	17.8	16.9	0.0	-3.6	18.0	16.9	0.0	-3.3	20.8	17.5	0.1	0.9	17.7	16.9	0.1	-3.1	3.1
57	18.8	15.1	1.0	-2.2	19.1	15.4	1.1	-1.7	21.0	15.1	0.2	2.1	18.6	15.2	0.9	-2.0	2.4
58	18.8	16.4	0.0	-3.3	19.2	16.8	0.1	-2.6	21.1	16.1	0.1	1.6	18.6	16.4	0.0	-2.5	2.5
59	19.1	16.7	0.3	-1.5	19.3	16.7	0.1	-1.3	22.1	16.7	1.0	3.4	18.6	16.5	0.0	-1.8	3.5
60	18.3	16.1	-0.8	-2.7	18.4	16.1	-0.9	-2.5	21.4	16.7	-0.7	1.7	18.0	16.1	-0.6	-2.4	3.4
61	18.9	16.5	0.6	-2.3	19.1	16.6	0.7	-2.0	21.2	16.5	-0.2	-0.5	18.6	16.5	0.6	-2.5	2.6
62	19.1	15.7	0.2	-2.6	19.3	15.8	0.2	-2.2	21.1	15.4	-0.1	1.1	18.7	15.8	0.1	-2.3	2.4
63	19.0	16.1	-0.1	-3.0	19.2	16.1	-0.1	-2.7	21.7	15.9	0.6	1.4	18.6	16.1	-0.1	-2.7	3.1
64	17.1	15.9	-1.2	-2.0	17.3	15.9	-1.1	-2.0	20.5	16.6	-0.9	3.4	17.0	16.1	-1.0	-2.0	3.5
65	18.2	15.3	1.1	-2.8	18.4	15.4	1.1	-2.4	20.6	15.6	0.1	1.4	17.9	15.3	0.9	-2.4	2.7
66	18.7	15.1	0.5	-3.0	19.0	15.3	0.6	-2.6	20.9	15.6	0.3	0.7	18.3	15.0	0.4	-2.9	2.6
67	19.2	15.9	0.5	-2.7	19.5	15.9	0.5	-2.3	21.1	16.1	0.2	0.9	19.1	16.0	0.8	-2.2	2.0
68	18.7	14.3	-0.5	-2.5	19.0	14.4	-0.5	-2.1	20.8	15.0	-0.3	0.9	18.6	14.6	-0.5	-2.2	2.2
69	18.6	15.8	-0.1	-2.4	18.7	15.6	-0.3	-2.2	20.1	15.6	-0.7	0.6	18.2	15.6	-0.4	-2.5	1.9
70	18.1	15.5	-0.5	-2.7	18.4	15.7	-0.3	-2.2	19.5	15.4	-0.6	0.0	18.0	15.6	-0.2	-2.3	1.5
71	18.6	15.5	0.5	-2.2	18.7	15.5	0.3	-2.0	20.1	15.8	0.6	0.4	18.2	15.4	0.2	-2.3	1.9
72	18.6	16.1	0.0	-2.4	18.8	16.2	0.1	-2.0	20.1	16.3	-0.2	0.3	18.2	16.0	0.0	-2.4	1.7

354



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

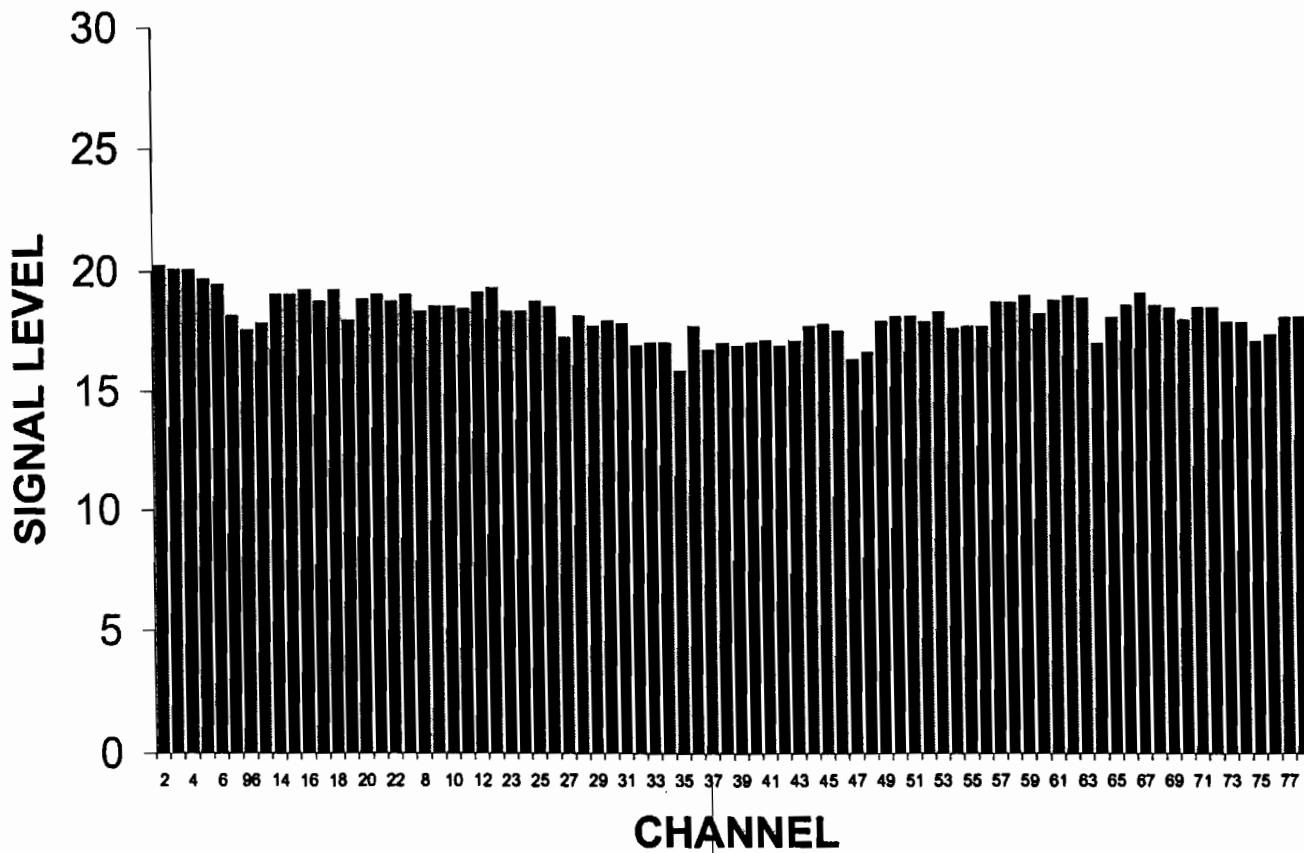


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #10



■ The maximum signal level is 22.1 dBmV

The maximum adjacent channel level difference is 2.3 dBmV
The maximum level difference between the highest and lowest is 6 dBmV
The maximum six month variance is 3.6 dBmV



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

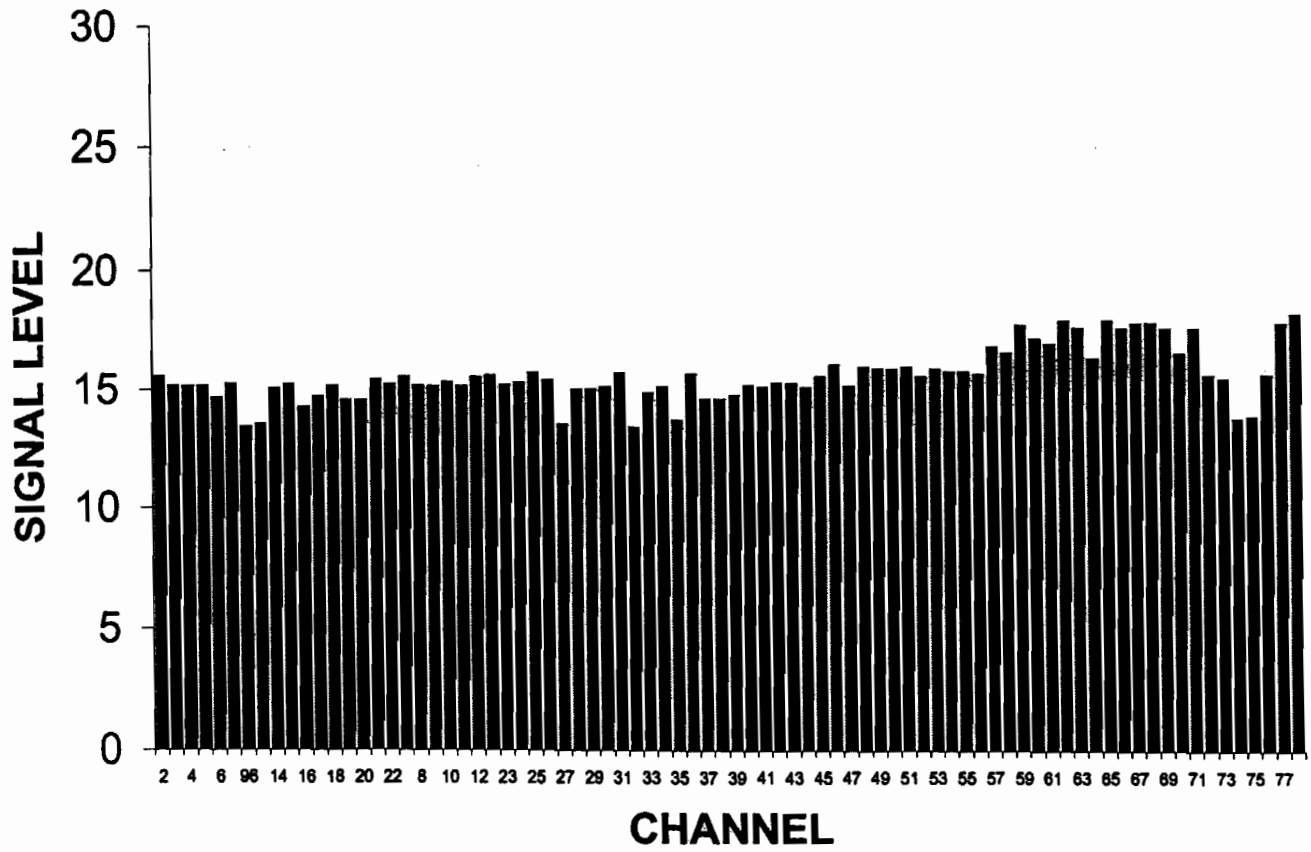
Test Point #10

Comcast
 5465 Colfax Ave.
 Alexandria, VA
 FCC Distortion Measurements
 EQUIPMENT USED:
 H/P 8591C, S/N 3916A04384
 Pre-Amplifier 85905A, S/N 6093-0551
 TRILITHIC VF-4-88, S/N 9330002
 Tektronix VITS200, S/N B020963
 CONVERTER BOX SA 8511, S/N GF505BFDN

Date:08/19/04 Time: 2:00 pm Temp: 78

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	0.9	0.9	73.5	66.1	52.2	4.4999
95	1.3	1	67.3	65.4	52.5	4.5001
21	1.4	1.1	74.0	66.6	50.3	4.5000
8	0.7	1	71.3	66.6	54.0	4.5003
28	1.1	1.1	69.7	62.5	51.4	4.5000
32	1.3	1.1	67.0	71.2	51.4	4.5000
47	1.1	0.9	68.8	64.5	51.2	4.5001
58	0.7	0.8	68.7	66.4	52.7	4.5000
72	0.8	0.9	68.5	65.4	50.0	4.5001
Minimum values:			67.0	62.5	50.0	
Maximum values:	1.4	1.1				0.0003

TEST POINT #9



■ The maximum signal level is 19.1 dBmV

The maximum adjacent channel level difference is 2.9 dBmV
The maximum level difference between the highest and lowest is 5.7 dBmV
The maximum six month variance is 5 dBmV

361

**Test Point #9**

418 Bashford Ln.

24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT200 RQ Spectrum Analyzer S/N 3245-070

Date: 8/6/04

Run	1				2				3				4				
	12:40 AM				6:33 AM				1:33 PM				6:30 PM				
Temp									89				84				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	15.6	15.6		0.9	16.0	15.6		1.3	15.6	15.3		1.7	15.4	15.4		0.7	0.6
3	15.2	15.4	-0.4	0.9	15.4	15.4	-0.6	1.0	15.3	15.4	-0.3	1.6	15.1	15.4	-0.3	0.8	0.3
4	15.2	16.2	0.0	0.3	15.5	16.3	0.1	0.6	15.3	16.1	0.0	1.2	15.2	16.2	0.1	0.5	0.3
5	15.2	16.0	0.0	0.2	15.4	16.0	-0.1	0.4	15.2	16.0	-0.1	0.9	15.1	15.9	-0.1	0.3	0.3
6	14.7	15.7	-0.5	0.1	15.0	15.8	-0.4	0.3	14.8	15.8	-0.4	1.1	14.6	15.8	-0.5	0.3	0.4
95	15.3	8.8	0.6	0.0	15.4	9.0	0.4	0.0	15.5	8.9	0.7	0.0	15.0	8.9	0.4	0.0	0.5
96	13.5	15.6	-1.8	-3.3	13.7	15.8	-1.7	-3.4	13.4	15.7	-2.1	-2.3	13.4	15.9	-1.6	-3.1	0.3
99	13.6	15.9	0.1	-2.0	13.9	15.9	0.2	-1.7	13.6	16.1	0.2	-1.0	13.2	15.7	-0.2	-2.0	0.7
14	15.1	16.6	1.5	-0.4	15.3	16.3	1.4	-0.2	15.2	16.6	1.6	0.7	15.0	16.7	1.8	-0.2	0.3
15	15.3	16.0	0.2	-0.1	15.7	16.1	0.4	0.3	15.5	16.2	0.3	0.8	15.2	16.0	0.2	0.0	0.5
16	14.3	17.5	-1.0	-0.9	14.7	17.4	-1.0	-0.6	14.7	18.0	-0.8	0.1	13.5	17.8	-1.7	-1.6	1.2
17	14.8	15.9	0.5	-0.2	14.9	15.7	0.2	-0.1	14.8	15.8	0.1	0.5	14.6	15.9	1.1	-0.4	0.3
18	15.2	15.4	0.4	-0.1	15.4	15.4	0.5	0.0	15.2	15.3	0.4	0.8	15.0	15.2	0.4	-0.2	0.4
19	14.6	15.6	-0.6	-0.8	15.4	16.1	0.0	-0.1	15.2	16.2	0.0	0.0	15.0	16.2	0.0	-1.0	0.8
20	14.6	15.2	0.0	-1.2	15.0	15.4	-0.4	-0.9	14.9	15.5	-0.3	-0.1	14.5	15.3	-0.5	-1.1	0.5
21	15.5	16.1	0.9	-0.8	15.9	16.3	0.9	-0.4	15.6	16.2	0.7	0.4	15.4	16.1	0.9	-0.4	0.5
22	15.3	16.4	-0.2	-0.8	15.6	16.4	-0.3	-0.6	15.4	16.4	-0.2	-0.2	15.2	16.4	-0.2	-1.2	0.4
7	15.6	16.2	0.3	-0.5	15.9	16.3	0.3	-0.2	15.6	16.3	0.2	0.2	15.4	16.2	0.2	-0.5	0.5
8	15.2	16.5	-0.4	-1.1	15.5	16.7	-0.4	-0.8	15.3	16.7	-0.3	-0.3	15.2	16.6	-0.2	-1.1	0.3
9	15.2	15.8	0.0	-0.5	15.4	15.6	-0.1	-0.3	15.3	15.7	0.0	0.1	15.2	15.8	0.0	-0.6	0.2
10	15.4	15.6	0.2	-1.1	15.8	15.8	0.4	-0.8	15.6	15.7	0.3	-0.3	15.4	15.6	0.2	-1.1	0.4
11	15.2	15.4	-0.2	-1.4	15.5	15.4	-0.3	-1.2	15.4	15.6	-0.2	-0.6	15.2	15.5	-0.2	-1.4	0.3
12	15.6	15.6	0.4	-1.5	15.9	15.7	0.4	-1.3	15.6	15.6	0.2	-1.0	15.5	15.5	0.3	-2.0	0.4
13	15.7	16.0	0.1	-1.3	16.2	16.2	0.3	-0.9	16.0	16.2	0.4	-0.4	15.6	15.9	0.1	-1.5	0.6
23	15.3	16.3	-0.4	-1.4	15.6	16.2	-0.6	-1.3	15.4	16.2	-0.6	-0.2	15.3	16.3	-0.3	-1.6	0.3
24	15.4	16.2	0.1	-1.4	15.8	16.2	0.2	-1.1	15.5	16.2	0.1	-1.0	15.4	16.3	0.1	-1.8	0.4
25	15.8	15.7	0.4	-1.3	16.3	15.9	0.5	-0.9	16.1	15.8	0.6	-0.5	15.8	15.6	0.4	-1.3	0.5
26	15.5	16.5	-0.3	-1.0	15.8	16.6	-0.5	-0.7	15.6	16.4	-0.5	-0.3	15.4	16.7	-0.4	-1.2	0.4
27	13.6	15.6	-1.9	-3.9	14.2	15.7	-1.6	-3.4	14.3	16.0	-1.3	-2.7	14.5	16.0	-0.9	-3.1	0.9
28	15.1	16.4	1.5	-2.1	15.4	16.5	1.2	-1.9	15.2	16.5	0.9	-1.5	15.0	16.5	0.5	-2.4	0.4
29	15.1	16.4	0.0	-2.6	15.4	16.4	0.0	-2.3	15.1	16.3	-0.1	-1.9	15.0	16.4	0.0	-2.4	0.4
30	15.2	16.0	0.1	-2.7	15.5	16.1	0.1	-2.4	15.2	16.0	0.1	-2.2	15.0	16.1	0.0	-3.2	0.5
31	15.8	16.5	0.6	-2.9	16.0	16.5	0.5	-2.8	15.8	16.5	0.6	-2.4	15.5	16.3	0.5	-3.2	0.5
32	13.5	15.4	-2.3	-3.0	13.7	15.5	-2.3	-2.8	13.5	15.5	-2.3	-1.9	14.0	15.4	-1.5	-2.3	0.5

362

Test Point #9

Comcast

418 Bashford Ln.
Alexandria, VA

FCC Distortion Measurements

EQUIPMENT USED:

H/P 8591C, S/N 3916A04384

Pre-Amplifier 85905A, S/N 6093-0551

TRILITHIC VF-4-88, S/N 9330002

Tektronix VITS200, S/N B020963

CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 08/18/04

Time: 11:00 am

Temp: 71

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	1.1	0.7	75.9	64.9	53.5	4.4999
95	1.9	1.3	70.0	61.2	52.6	4.4997
21	1.4	0.8	72.9	66.7	50.6	4.5000
8	1.0	0.8	72.3	60.1	54.9	4.5001
28	1.4	1.0	66.3	59.0	51.5	4.5001
32	1.0	1.0	73.4	55.6	51.5	4.5004
47	1.8	1.2	69.2	62.9	51.5	4.5002
58	0.8	0.9	67.2	65.9	52.7	4.5003
72	0.6	0.9	65.0	63.4	50.4	4.5000
Minimum values:			65.0	55.6	50.4	
Maximum values:	1.9	1.3				0.0004

Minimum values:

Maximum values:

363



Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.



Test Point #9

418 Bashford Ln.

24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT200 RQ Spectrum Analyzer S/N 3245-070

Date: 8/6/04

Run	1				2				3				4				
	12:40 AM				6:33 AM				1:33 PM				6:30 PM				
Temp									89				84				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	15.0	17.2	1.5	-2.3	15.2	17.3	1.5	-2.1	14.8	17.1	1.3	-1.2	14.8	17.3	0.8	-2.4	0.4
34	15.2	16.1	0.2	-2.9	15.6	16.2	0.4	-2.5	15.4	16.2	0.6	-1.9	15.2	16.1	0.4	-2.3	0.4
35	13.8	15.3	-1.4	-3.3	14.1	15.6	-1.5	-3.0	14.1	15.6	-1.3	-2.3	13.9	15.2	-1.3	-3.2	0.3
36	15.8	15.7	2.0	-1.7	15.8	15.6	1.7	-1.7	15.7	15.6	1.6	-0.8	15.2	15.4	1.3	-1.9	0.6
37	14.7	16.6	-1.1	-3.0	14.9	16.6	-0.9	-2.8	14.6	16.5	-1.1	-2.3	14.3	16.3	-0.9	-3.2	0.6
38	14.7	15.6	0.0	-3.3	15.0	15.7	0.1	-3.0	14.7	15.6	0.1	-2.7	14.5	15.7	0.2	-3.5	0.5
39	14.9	16.1	0.2	-3.3	15.2	16.2	0.2	-3.0	14.8	16.1	0.1	-2.4	14.6	16.1	0.1	-3.1	0.6
40	15.3	16.5	0.4	-3.4	15.6	16.5	0.4	-3.1	15.1	16.2	0.3	-2.7	14.8	16.3	0.2	-3.4	0.8
41	15.2	15.4	-0.1	-2.7	15.8	16.2	0.2	-2.1	15.5	16.1	0.4	-1.5	15.1	15.7	0.3	-2.3	0.7
42	15.4	15.8	0.2	-2.2	15.3	15.7	-0.5	-2.3	15.0	15.7	-0.5	-2.0	14.7	15.5	-0.4	-2.8	0.7
43	15.4	15.4	0.0	-2.8	15.6	15.4	0.3	-2.5	15.1	15.3	0.1	-2.5	14.9	15.3	0.2	-3.1	0.7
44	15.2	15.9	-0.2	-3.8	15.5	16.1	-0.1	-3.5	15.2	15.8	0.1	-3.0	15.0	15.8	0.1	-4.0	0.5
45	15.7	15.7	0.5	-3.4	16.0	15.8	0.5	-3.1	15.8	16.0	0.6	-2.4	15.6	15.9	0.6	-3.2	0.4
46	16.2	15.7	0.5	-2.9	16.5	15.8	0.5	-2.6	16.2	15.9	0.4	-2.0	15.9	15.7	0.3	-2.9	0.6
47	15.3	15.5	-0.9	-1.5	15.4	15.5	-1.1	-1.3	15.2	15.5	-1.0	-0.5	14.9	15.5	-1.0	-1.7	0.5
48	16.1	15.5	0.8	-3.3	16.4	15.6	1.0	-2.9	16.0	15.6	0.8	-2.6	15.7	15.4	0.8	-3.6	0.7
49	16.0	15.9	-0.1	-2.8	16.4	16.1	0.0	-2.4	16.0	16.0	0.0	-1.8	15.8	16.0	0.1	-3.0	0.6
50	16.0	15.7	0.0	-2.8	16.4	15.9	0.0	-2.4	15.8	15.4	-0.2	-1.8	15.5	15.3	-0.3	-2.7	0.9
51	16.1	15.5	0.1	-3.8	16.4	15.7	0.0	-3.5	16.0	15.5	0.2	-2.8	15.8	15.5	0.3	-3.8	0.6
52	15.7	15.6	-0.4	-4.1	15.9	15.7	-0.5	-3.8	15.7	15.7	-0.3	-2.9	15.5	15.7	-0.3	-4.0	0.4
53	16.0	16.2	0.3	-2.6	16.3	16.3	0.4	-2.2	15.9	16.2	0.2	-1.8	15.7	16.3	0.2	-2.1	0.6
54	15.9	15.6	-0.1	-3.4	16.2	15.6	-0.1	-3.1	15.8	15.6	-0.1	-1.9	15.6	15.5	-0.1	-2.8	0.6
55	15.9	16.1	0.0	-3.6	16.3	16.4	0.1	-3.1	15.9	16.2	0.1	-2.7	15.6	16.2	0.0	-3.7	0.7
56	15.8	16.8	-0.1	-4.6	16.3	16.9	0.0	-4.0	15.8	16.8	-0.1	-3.5	15.7	16.8	0.1	-4.0	0.6
57	17.0	15.0	1.2	-2.7	17.3	15.2	1.0	-2.4	16.9	15.1	1.1	-1.3	16.7	15.0	1.0	-2.8	0.6
58	16.7	15.8	-0.3	-3.9	16.9	15.8	-0.4	-3.7	16.7	15.9	-0.2	-2.0	16.5	16.0	-0.2	-3.4	0.4
59	17.9	16.6	1.2	-2.2	18.0	16.6	1.1	-2.0	17.8	16.4	1.1	-0.6	17.4	16.5	0.9	-2.3	0.6
60	17.3	16.4	-0.6	-3.6	17.6	16.5	-0.4	-3.2	17.3	16.5	-0.5	-2.6	17.1	16.5	-0.3	-3.1	0.5
61	17.1	15.5	-0.2	-2.6	17.3	15.5	-0.3	-2.4	17.1	15.5	-0.2	-3.7	16.8	15.5	-0.3	-2.9	0.5
62	18.1	16.3	1.0	-2.9	18.4	16.4	1.1	-2.5	18.0	16.4	0.9	-1.9	17.7	16.4	0.9	-2.9	0.7
63	17.8	15.4	-0.3	-3.4	18.0	15.4	-0.4	-3.2	17.6	15.4	-0.4	-2.5	17.3	15.5	-0.4	-3.5	0.7
64	16.5	15.2	-0.8	-2.7	17.0	15.5	-0.6	-2.1	16.6	15.5	-0.7	-1.4	16.5	15.6	-0.6	-2.1	0.5
65	18.1	15.9	1.6	-3.1	18.4	16.0	1.4	-2.8	18.0	16.0	1.4	-2.0	17.6	15.8	1.1	-3.2	0.8
66	17.8	15.3	-0.3	-3.4	18.1	15.5	-0.3	-3.1	17.6	15.2	-0.4	-2.5	17.4	15.3	-0.2	-3.4	0.7
67	18.0	15.9	0.2	-3.4	18.3	16.1	0.2	-3.1	18.1	16.1	0.5	-2.0	17.8	16.0	0.4	-3.0	0.5
68	18.0	14.5	0.0	-3.0	18.2	14.5	-0.1	-2.9	18.0	14.5	-0.1	-2.1	17.8	14.6	0.0	-3.0	0.4
69	17.8	15.9	-0.2	-3.0	18.1	16.0	-0.1	-2.6	17.8	15.9	-0.2	-1.7	17.4	15.8	-0.4	-2.7	0.7
70	16.7	15.1	-1.1	-3.0	16.9	15.1	-1.2	-2.7	16.7	15.1	-1.1	-2.1	16.5	15.1	-0.9	-2.8	0.4
71	17.8	17.0	1.1	-1.7	18.0	17.0	1.1	-1.1	17.9	16.8	1.2	-1.3	17.5	16.6	1.0	-2.2	0.5
72	15.8	15.6	-2.0	-1.7	16.0	15.7	-2.0	-0.7	16.1	15.4	-1.8	-1.7	15.8	15.4	-1.7	-2.8	0.3

36

Comcast

Test Point #9

418 Bashford Ln.

24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT200 RQ Spectrum Analyzer S/N 3245-070

Date: 8/6/04

Run	1				2				3				4				
	12:40 AM				6:33 AM				1:33 PM				6:30 PM				
Temp									89				84				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	15.6	16.8	-0.2	0.4	15.7	16.7	-0.3	1.1	16.1	16.2	0.0	-0.3	15.8	16.2	0.0	-1.2	0.5
74	13.9	28.9	-1.7	-2.8	17.3	29.3	1.6	0.0	15.6	29.2	-0.5	-0.9	15.4	29.2	-0.4	-2.4	3.4
75	14.0	12.0	0.1	-4.1	16.0	12.1	-1.3	-2.5	16.0	15.4	0.4	0.0	17.0	14.5	1.6	0.0	3.0
76	15.8	13.4	1.8	-5.0	16.2	13.5	0.2	-4.6	17.0	12.1	1.0	-0.2	17.0	12.2	0.0	-0.3	1.2
77	18.0	15.5	2.2	-2.8	19.1	15.5	2.9	-1.3	17.5	13.6	0.5	-2.0	17.2	13.4	0.2	-2.9	1.9
78	18.4	14.7	0.4	-2.4	18.8	14.9	-0.3	-1.4	19.1	15.2	1.6	-1.7	18.9	15.2	1.7	-2.0	0.7
Min Value	13.5	8.8	-2.3	-5.0	13.7	12.1	-2.3	-4.6	13.4	8.9	-2.3	-3.7	13.2	8.9	-1.7	-4.0	0.2
Max Value	18.4	28.9	2.2	0.9	19.1	29.3	2.9	1.3	19.1	29.2	1.6	1.7	18.9	29.2	1.8	0.8	3.4

Notes:

*1 - Station off air - standby by carrier in use

*2 - New channel addition there is no 6 month reference

366



Test Point #8

5109 Gardner Dr
24 Hour Level Variation

Equipment Used: 100' drop, Avantron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:00 AM				7:00 AM				12:41 PM				7:45 PM				
Temp	21				23				25				21				
Chan	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	Vid Lvl	Aud Diff	Adjcnt Diff	6 Mth Diff	24 HR Vid Diff
2	8.4	15.4		0.0	5.5	13.3		-3.4	12.3	15.5		4.0	12.5	15.3		3.6	7.0
3	8.5	15.5	0.1	0.0	7.1	15.7	1.6	-2.2	12.4	15.6	0.1	3.7	12.6	15.7	0.1	3.3	5.5
4	8.2	16.4	-0.3	0.0	4.8	13.1	-2.3	-4.8	12.1	16.4	-0.3	3.3	12.3	16.4	-0.3	3.0	7.5
5	8.8	15.2	0.6	0.0	6.7	15.4	1.9	-3.1	12.3	15.3	0.2	3.2	12.5	15.3	0.2	3.0	5.8
6	8.6	15.9	-0.2	0.0	5.0	15.2	-1.7	-4.8	12.5	15.9	0.2	3.6	12.7	15.9	0.2	3.4	7.7
95	10.8	9.3	2.2	0.0	6.0	8.7	1.0	-5.0	10.4	9.3	-2.1	0.0	10.4	9.5	-2.3	0.0	4.8
96	11.7	15.9	0.9	2.9	5.5	15.1	-0.5	-7.0	11.7	16.2	1.3	-0.1	11.9	16.0	1.5	-0.2	6.4
99	11.8	15.7	0.1	3.3	8.1	15.5	2.6	-3.6	11.9	15.9	0.2	1.2	11.9	15.8	0.0	0.6	3.8
14	13.2	16.5	1.4	5.0	10.1	16.3	2.0	-0.9	13.2	16.6	1.3	3.1	13.4	16.6	1.5	2.6	3.3
15	13.4	16.2	0.2	5.3	10.6	16.0	0.5	-0.7	13.4	16.2	0.2	3.0	13.6	16.2	0.2	2.6	3.0
16	14.7	18.9	1.3	6.9	10.4	19.0	-0.2	-0.9	12.1	18.2	-1.3	1.6	14.3	18.2	0.7	3.2	4.3
17	13.0	15.9	-1.7	5.6	10.2	15.4	-0.2	-1.0	13.1	16.1	1.0	2.5	13.3	15.9	-1.0	2.3	3.1
18	13.4	15.5	0.4	5.8	10.5	15.2	0.3	-0.7	13.4	15.5	0.3	3.0	13.7	15.5	0.4	2.7	3.2
19	12.5	15.6	-0.9	4.5	10.2	16.3	-0.3	-0.9	13.3	16.4	-0.1	2.3	13.4	16.3	-0.3	1.9	3.2
20	12.7	15.5	0.2	3.7	9.8	15.4	-0.4	-1.8	12.9	15.7	-0.4	2.1	13.0	15.4	-0.4	1.7	3.2
21	13.3	16.0	0.6	3.8	10.4	16.1	0.6	-1.3	13.3	16.0	0.4	2.9	13.5	15.9	0.5	2.2	3.1
22	13.1	16.3	-0.2	3.5	10.3	16.3	-0.1	-1.2	13.1	16.5	-0.2	2.0	13.4	16.4	-0.1	1.7	3.1
7	13.3	16.3	0.2	3.8	10.7	15.5	0.4	-0.8	13.3	16.5	0.2	2.9	13.6	16.5	0.2	2.3	2.9
8	13.0	16.1	-0.3	3.2	10.8	15.8	0.1	-0.9	13.0	16.0	-0.3	1.9	13.3	16.1	-0.3	1.8	2.5
9	13.0	15.6	0.0	3.7	11.4	15.8	0.6	0.0	13.3	16.0	0.3	2.5	13.4	15.8	0.1	2.0	2.0
10	13.0	15.6	0.0	3.5	11.3	15.5	-0.1	-0.5	13.2	15.7	-0.1	1.9	13.5	15.6	0.1	1.9	2.2
11	12.9	15.5	-0.1	3.2	11.3	15.7	0.0	-0.7	12.9	15.6	-0.3	1.6	13.2	15.5	-0.3	1.5	1.9
12	12.9	15.5	0.0	3.4	11.3	15.4	0.0	-0.5	12.8	15.5	-0.1	1.5	13.2	15.2	0.0	1.3	1.9
13	13.4	16.4	0.5	3.7	11.6	16.3	0.3	-0.3	13.3	16.3	0.5	2.1	13.6	16.3	0.4	1.7	2.0
23	12.7	15.9	-0.7	3.3	11.0	16.0	-0.6	-0.3	12.8	16.0	-0.5	2.5	13.0	15.9	-0.6	2.0	2.0
24	12.8	16.0	0.1	3.1	11.0	16.1	0.0	-0.3	12.8	16.0	0.0	2.0	13.0	15.9	0.0	1.6	2.0
25	13.6	15.9	0.8	3.1	11.7	15.8	0.7	-0.1	13.8	16.0	1.0	2.3	14.1	16.0	1.1	2.4	2.4
26	13.0	15.9	-0.6	3.3	11.3	15.8	-0.4	0.3	13.2	16.3	-0.6	2.7	13.4	16.2	-0.7	2.4	2.1
27	11.7	16.0	-1.3	0.4	10.2	16.1	-1.1	-2.5	12.5	16.6	-0.7	0.2	12.9	16.3	-0.5	0.3	2.7
28	12.8	16.5	1.1	2.2	11.1	16.4	0.9	-1.0	12.9	16.6	0.4	1.2	13.2	16.6	0.3	1.0	2.1
29	12.7	16.1	-0.1	1.6	11.1	16.2	0.0	-1.4	12.8	16.3	-0.1	1.1	13.1	16.3	-0.1	0.9	2.0
30	12.8	16.1	0.1	1.7	11.4	16.1	0.3	-1.0	12.8	16.1	0.0	0.7	13.0	16.1	-0.1	0.5	1.6
31	13.5	16.7	0.7	1.4	12.3	16.8	0.9	-1.1	13.4	16.7	0.6	0.8	13.7	16.7	0.7	0.5	1.4
32	11.1	15.8	-2.4	1.4	10.0	15.7	-2.3	-0.9	11.0	15.8	-2.4	1.0	13.0	15.6	-0.7	2.4	3.0

367



Test Point #8

5109 Gardner Dr
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:00 AM				7:00 AM				12:41 PM				7:45 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
33	12.3	17.0	1.2	1.7	11.5	17.2	1.5	-0.4	12.4	17.3	1.4	1.5	12.5	17.0	-0.5	0.7	1.0
34	12.8	16.3	0.5	1.3	12.0	16.5	0.5	-0.6	13.0	16.3	0.6	0.9	13.3	16.4	0.8	1.0	1.3
35	11.3	15.2	-1.5	0.9	10.2	15.2	-1.8	-1.3	11.5	15.3	-1.5	0.4	12.0	15.1	-1.3	0.5	1.8
36	13.4	15.8	2.1	2.3	12.1	15.8	1.9	-0.2	13.4	15.8	1.9	1.5	13.3	15.7	1.3	1.4	1.3
37	12.5	16.6	-0.9	1.3	11.2	16.7	-0.9	-1.1	12.4	16.7	-1.0	0.5	12.8	16.7	-0.5	0.6	1.6
38	12.7	15.9	0.2	1.2	11.3	15.7	0.1	-1.5	12.8	16.1	0.4	0.5	12.8	15.8	0.0	0.0	1.5
39	12.8	16.2	0.1	1.2	11.7	16.2	0.4	-1.1	12.8	16.2	0.0	1.1	13.0	16.2	0.2	0.9	1.3
40	13.2	16.4	0.4	1.1	12.1	16.4	0.4	-1.2	13.0	16.4	0.2	0.9	13.1	16.4	0.1	0.3	1.1
41	13.6	15.7	0.4	1.6	12.6	15.6	0.5	-0.5	13.3	15.7	0.3	1.3	13.4	15.5	0.3	0.7	1.0
42	13.6	16.2	0.0	1.9	12.8	16.0	0.2	0.3	13.6	16.2	0.3	1.7	13.7	16.1	0.3	1.3	0.9
43	13.6	15.7	0.0	1.2	12.8	15.6	0.0	-0.6	13.6	16.0	0.0	0.7	13.6	15.7	-0.1	0.5	0.8
44	13.0	16.0	-0.6	0.5	12.3	16.0	-0.5	-1.1	13.1	16.0	-0.5	0.1	13.2	15.8	-0.4	-0.4	0.9
45	13.6	16.1	0.6	0.8	12.9	16.1	0.6	-0.8	13.6	16.2	0.5	0.6	13.8	16.2	0.6	0.3	0.9
46	13.6	15.6	0.0	1.3	13.0	16.0	0.1	-0.2	13.7	15.8	0.1	1.2	13.8	15.6	0.0	0.7	0.8
47	13.1	15.9	-0.5	2.8	12.0	15.9	-1.0	0.6	13.0	16.0	-0.7	2.6	13.0	15.8	-0.8	2.0	1.1
48	13.5	15.4	0.4	1.4	12.5	15.4	0.5	-0.6	13.7	15.5	0.7	1.1	13.7	15.5	0.7	0.5	1.2
49	13.8	15.9	0.3	1.5	13.1	16.1	0.6	-0.1	13.8	16.0	0.1	1.5	14.0	16.0	0.3	0.7	0.9
50	13.8	15.6	0.0	1.5	13.1	15.7	0.0	-0.1	13.6	15.3	-0.2	1.6	13.6	15.0	-0.4	1.3	0.7
51	14.1	15.6	0.3	0.6	13.4	15.6	0.3	-0.9	14.1	15.8	0.5	0.8	14.2	15.7	0.6	0.4	0.8
52	13.6	16.0	-0.5	-0.1	13.0	15.9	-0.4	-1.4	13.6	16.2	-0.5	0.2	13.6	16.0	-0.6	-0.3	0.6
53	13.9	16.7	0.3	1.4	13.4	16.6	0.4	0.2	13.8	16.8	0.2	1.7	13.9	16.7	0.3	1.4	0.5
54	13.4	15.5	-0.5	0.8	12.8	15.4	-0.6	-0.4	13.4	15.5	-0.4	1.5	13.4	15.3	-0.5	1.0	0.6
55	13.3	16.3	-0.1	0.2	12.8	16.2	0.0	-0.8	13.3	16.3	-0.1	0.3	13.4	16.2	0.0	-0.1	0.6
56	13.2	17.0	-0.1	-0.5	12.8	17.3	0.0	-1.7	13.4	17.3	0.1	-0.2	13.6	17.3	0.2	-0.5	0.8
57	14.3	15.3	1.1	1.1	13.6	15.3	0.8	-0.2	14.3	15.4	0.9	2.2	14.3	15.1	0.7	0.6	0.7
58	14.0	15.9	-0.3	0.3	13.4	16.0	-0.2	-1.1	14.0	16.0	-0.3	0.6	14.1	16.0	-0.2	0.2	0.7
59	14.9	16.5	0.9	1.5	14.4	16.5	1.0	0.4	14.9	16.6	0.9	0.9	14.8	16.5	0.7	0.9	0.5
60	14.1	16.5	-0.8	0.5	13.6	16.5	-0.8	-0.6	14.2	16.3	-0.7	0.7	14.2	16.6	-0.6	0.4	0.6
61	14.2	16.1	0.1	0.8	13.7	16.1	0.1	-0.4	14.3	16.2	0.1	0.5	14.3	16.0	0.1	0.3	0.6
62	14.6	16.3	0.4	0.7	14.1	16.1	0.4	-0.4	14.5	16.4	0.2	0.8	14.6	16.4	0.3	0.5	0.5
63	14.4	15.3	-0.2	0.1	14.1	15.3	0.0	-0.8	14.3	15.5	-0.2	0.4	14.3	15.4	-0.3	-0.1	0.3
64	12.8	15.6	-1.3	0.9	12.4	15.5	-1.2	-0.1	13.0	15.8	-1.2	1.6	12.8	15.6	-1.4	0.8	0.6
65	14.5	15.8	1.7	0.2	14.3	15.9	1.9	-0.6	14.5	16.0	1.5	0.7	14.5	15.9	1.7	0.2	0.2
66	14.3	15.1	-0.2	0.1	14.0	15.2	-0.3	-0.7	14.2	15.2	-0.3	0.5	14.2	15.0	-0.3	0.0	0.3
67	14.9	15.5	0.6	0.3	14.6	15.7	0.6	-0.5	15.1	15.6	0.9	1.0	15.0	15.5	0.8	0.3	0.5
68	14.9	15.1	0.0	0.7	14.6	15.4	0.0	-0.3	15.0	15.3	-0.1	0.9	15.1	15.3	0.1	0.5	0.5
69	14.2	15.4	-0.7	0.6	13.8	15.3	-0.8	-0.5	14.3	15.6	-0.7	0.7	14.3	15.4	-0.8	0.4	0.5
70	13.6	15.5	-0.6	0.6	13.1	15.5	-0.7	-0.5	13.7	15.6	-0.6	0.7	13.7	15.5	-0.6	0.5	0.6
71	14.5	16.0	0.9	0.7	14.1	16.0	1.0	-0.3	14.6	16.1	0.9	1.0	14.6	16.0	0.9	0.5	0.5
72	13.7	15.4	-0.8	0.7	13.4	15.3	-0.7	-0.2	15.4	-1.0	0.9	13.6	15.3	-1.0	0.4	0.3	

368



Test Point #8

5109 Gardner Dr
24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070 Date: 8/6/04

Run	1				2				3				4				
Time	1:00 AM				7:00 AM				12:41 PM				7:45 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	14.1	16.0	0.4	0.9	13.8	15.9	0.4	0.1	14.1	16.2	0.5	1.1	14.1	16.0	0.5	0.5	0.3
74	14.1	27.6	0.0	0.2	13.9	27.7	0.1	-0.6	14.1	27.9	0.0	0.5	14.1	27.7	0.0	0.1	0.2
75	13.8	14.2	-0.3	1.5	13.6	14.1	-0.3	0.4	13.0	13.4	-1.1	0.9	13.6	14.0	-0.5	0.5	0.8
76	14.1	15.8	0.3	0.3	14.1	16.0	0.5	-0.2	14.1	15.8	1.1	0.5	14.1	15.7	0.5	0.0	0.0
77	14.8	16.5	0.7	0.5	14.7	16.6	0.6	-0.2	14.9	16.6	0.8	0.6	14.9	16.6	0.8	0.4	0.2
78	14.2	15.0	-0.6	1.0	13.4	14.2	-1.3	-0.3	13.6	14.2	-1.3	0.6	14.2	14.8	-0.7	1.7	0.8
Min Value	8.2	9.3	-2.4	-0.5	4.8	13.1	-2.3	-4.8	10.4	9.3	-2.4	-0.2	10.4	9.5	-2.3	-0.5	0.0
Max Value	14.9	27.6	2.2	6.9	14.7	27.7	2.6	0.6	15.1	27.9	1.9	4.0	15.1	27.7	1.7	3.6	7.7

Notes:

- *1 - Station off air - standby by carrier in use
- *2 - New channel addition there is no 6 month reference

369



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

370

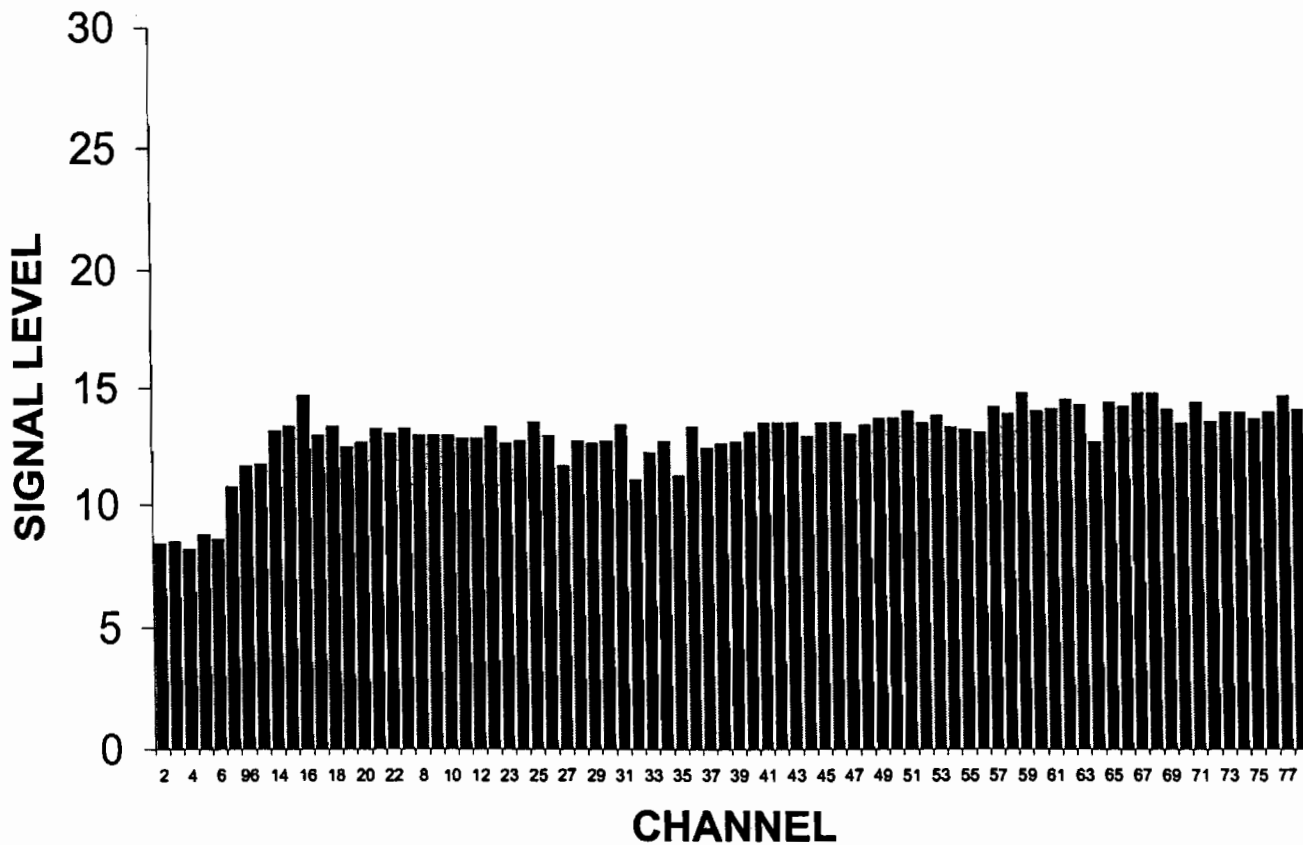


Signal Level Variance

The ranges allowed by the FCC (76.605 (a)(4)(i,ii,iii)) are as follows:

4. Each level shall not vary by more than 8dB within any 6-month interval.
 - i. Adjacent channel level to be within 3dB of each other.
 - ii. Visual signal level on any other channel on a cable television system should be less than 10dB for systems of up to 300 MHz; for each additional 100 MHz, add 1dB to maximum difference level.
 - iii. A maximum level such that signal degradation due to overload in the subscriber's Receiver or terminal does not occur.

TEST POINT #8



■ The maximum signal level is 15.1 dBmV

The maximum adjacent channel level difference is 2.6 dBmV
 The maximum level difference between the highest and lowest is 9.9 dBmV
 The maximum six month variance is 6.9 dBmV

372



Test Point #7

528 Bellvue Pl

24 Hour Level Variation

Equipment Used: 100' drop, Avatron AT2000 RQ Spectrum Analyzer S/N 3245-070

Date: 8/6/04

Run	1				2				3				4				
Time	12:42 AM				6:36 AM				12:41 PM				6:26 PM				
Temp	21				23				25				21				
Chan	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	Vid	Aud	Adjcnt	6 Mth	24 HR
73	10.8	16.7	-0.3	-0.2	10.9	16.8	-0.2	0.4	14.1	16.2	0.5	2.4	11.3	16.3	-0.1	-1.1	3.3
74	9.3	29.3	-1.5	-3.5	12.3	29.5	1.4	0.0	14.1	27.9	0.0	2.4	10.8	29.3	-0.5	-2.5	4.8
75	10.0	12.0	0.7	-2.4	11.0	11.2	-1.3	-3.7	12.2	13.4	-1.9	0.0	11.0	14.8	0.2	0.0	2.2
76	11.0	13.6	1.0	-3.4	11.5	13.6	0.5	-4.4	14.1	15.8	1.9	1.1	11.0	12.3	0.0	-1.3	3.1
77	13.6	15.5	2.6	-2.3	13.6	15.5	2.1	-2.1	14.9	16.6	0.8	0.1	11.8	13.1	0.8	-3.1	3.1
78	13.2	14.7	-0.4	-2.6	13.2	14.7	-0.4	-2.1	13.6	14.2	-1.3	-1.7	13.9	15.2	2.1	-1.3	0.7
Min Value	9.3	8.9	-2.4	-4.3	10.9	11.2	-2.2	-4.4	11.0	9.3	-2.4	-4.0	10.8	9.1	-2.1	-3.6	0.2
Max Value	15.6	29.3	2.6	0.7	15.8	29.5	2.1	1.0	15.1	27.9	1.9	2.4	15.6	29.3	2.1	0.8	4.8

Notes:

*1 - Station off air - standby by carrier in use

*2 - New channel addition there is no 6 month reference

374



Distortion Measurements

Comcast of Alexandria, VA performed distortion tests at 11 test points, as required by the FCC (76.601 (c)(1)), which states that at least 6 test points for the first 12,500 subscribers, adding 1 test point for each additional 12,500 subscribers. Comcast of Alexandria's subscriber count is 49,893 as of 08/30/04. All of Comcast's test points are distributed through the outer edges of the county at its farthest node locations, with the test points being at the end-of-line. Which meets the requirement that all geographic areas be represented and at least 1/3 of the test points being the most distant points in the system.

At each test point, 9 channels were tested for distortions as required by the FCC (76.601(c)(2)), which states at least 4 channels must be tested at each test point, adding 1 channel for each 100 MHz block above 100 MHz. Comcast of Arlington's analog bandwidth is 550 MHz.

Current FCC distortion specifications are as follows:

The C/N measurement (76.605 (a)(7)(ii)) shall not be less than 43dB.

The CTB, CSO and X-mod measurements (76.605 (a)(8)(I)) shall not be less than 51dB.

The HUM measurement (76.605(a)(10)) shall not exceed 3.0%.

The Aural Carrier Difference (4.5 Difference)(76.605 (a)(2)) must be 4.5 MHz above the Visual Carrier, +/- 5KHz.

The In-Channel Frequency Response (In-Band Frequency Response) (76.605 (a)(6)) should not vary by more than +/- 2dB.

Test Point #8



5109 Gardner Dr.
 Alexandria, VA
 FCC Distortion Measurements
 EQUIPMENT USED:
 H/P 8591C, S/N 3916A04384
 Pre-Amplifier 85905A, S/N 6093-0551
 TRILITHIC VF-4-88, S/N 9330002
 Tektronix VITS200, S/N B020963
 CONVERTER BOX SA 8511, S/N GF505BFDN

Date: 08/17/04

Time: 12:30 pm

Temp: 70

CH.	FREQ. RSP 2dB Max	HUM% 3% Max	CSO 51dB Min	CTB 51dB Min	C/N 43dB Min	4.5 DIFF 5KHz Max
2	1.0	0.9	69.4	62.0	51.3	4.5000
95	0.9	0.9	72.6	60.8	51.7	4.5001
21	0.7	0.9	70.8	61.0	48.7	4.5004
8	1.1	0.8	73.4	60.2	52.8	4.5000
28	0.8	1.1	67.1	62.1	50.7	4.5000
32	1.0	1.1	68.3	62.9	51.2	4.5001
47	1.1	0.9	69.0	64.2	50.6	4.5003
58	0.5	0.9	71.2	61.8	51.2	4.4999
72	0.7	1.4	65.2	66.3	49.7	4.5000
Minimum values:			65.2	60.2	48.7	
Maximum values:	1.1	1.4				0.0004