

~~AIRNET-CONFIDENTIAL~~

Jamming margin @11mb CCK part2

processing gain by method of jamming margin using Debugger Software Linktest												
radio conditions : supply voltage 5v, at room temp. rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3860B (CCK modulation)												
tester name : Jim Nahra / Jim Friedmann												
Gp = S/N + MJ + Lsys; where S/N = 16.0 dB as per CCK modulation; Lsys = 2dB												
input signal level = -50 dBm, jammer level = -67.3 dBm, then MJ = -7.3 dB for 10-5 BER												
Gp = 16.0 dB + -7.3 dB + 2 dB = 10.7 dB (worst case point after lowest 20% discarded)												
jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	pass (e rate un 1x10- 5)
MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	pass
161	2464.50	10.7 pass	206	2466.75	10.7 pass	251	2469.00	11.2 pass	296	2471.25	13.7 pass	pass
162	2464.55	10.7 pass	207	2466.80	10.7 pass	252	2469.05	11.2 pass	297	2471.30	14.2 pass	pass
163	2464.60	10.7 pass	208	2466.85	10.7 pass	253	2469.10	11.2 pass	298	2471.35	14.2 pass	pass
164	2464.65	10.7 pass	209	2466.90	10.7 pass	254	2469.15	11.2 pass	299	2471.40	14.2 pass	pass
165	2464.70	10.7 pass	210	2466.95	10.7 pass	255	2469.20	11.2 pass	300	2471.45	14.2 pass	pass
166	2464.75	10.7 pass	211	2467.00	10.7 pass	256	2469.25	11.2 pass	301	2471.50	14.2 pass	pass
167	2464.80	10.7 pass	212	2467.05	10.7 pass	257	2469.30	11.2 pass	302	2471.55	14.7 pass	pass
168	2464.85	10.7 pass	213	2467.10	10.7 pass	258	2469.35	11.2 pass	303	2471.60	14.7 pass	pass
169	2464.90	10.7 pass	214	2467.15	10.7 pass	259	2469.40	11.2 pass	304	2471.65	14.7 pass	pass
170	2464.95	10.7 pass	215	2467.20	10.7 pass	260	2469.45	11.2 pass	305	2471.70	14.7 pass	pass
171	2465.00	10.7 pass	216	2467.25	10.7 pass	261	2469.50	11.2 pass	306	2471.75	15.2 pass	pass
172	2465.05	10.7 pass	217	2467.30	10.2 pass-disc	262	2469.55	11.2 pass	307	2471.80	15.2 pass	pass
173	2465.10	10.7 pass	218	2467.35	10.2 pass-disc	263	2469.60	11.2 pass	308	2471.85	15.7 pass	pass
174	2465.15	10.7 pass	219	2467.40	10.2 pass-disc	264	2469.65	11.2 pass	309	2471.90	15.7 pass	pass
175	2465.20	10.7 pass	220	2467.45	9.2 Fail-discard	265	2469.70	11.2 pass	310	2471.95	15.7 pass	pass
176	2465.25	10.7 pass	221	2467.50	9.2 Fail-discard	266	2469.75	11.2 pass	311	2472.00	16.2 pass	pass
177	2465.30	10.7 pass	222	2467.55	9.2 Fail-discard	267	2469.80	11.2 pass	312	2472.05	16.2 pass	pass
178	2465.35	10.7 pass	223	2467.60	9.2 Fail-discard	268	2469.85	11.2 pass	313	2472.10	16.2 pass	pass
179	2465.40	10.7 pass	224	2467.65	9.2 Fail-discard	269	2469.90	11.2 pass	314	2472.15	16.7 pass	pass
180	2465.45	10.7 pass	225	2467.70	9.2 Fail-discard	270	2469.95	11.2 pass	315	2472.20	16.7 pass	pass
181	2465.50	10.7 pass	226	2467.75	9.2 Fail-discard	271	2470.00	11.2 pass	316	2472.25	16.7 pass	pass
182	2465.55	10.7 pass	227	2467.80	9.2 Fail-discard	272	2470.05	11.2 pass	317	2472.30	16.7 pass	pass
183	2465.60	10.7 pass	228	2467.85	9.7 Fail-discard	273	2470.10	11.7 pass	318	2472.35	16.7 pass	pass
184	2465.65	10.7 pass	229	2467.90	9.7 Fail-discard	274	2470.15	11.7 pass	319	2472.40	17.2 pass	pass
185	2465.70	10.7 pass	230	2467.95	9.7 Fail-discard	275	2470.20	11.7 pass	320	2472.45	17.2 pass	pass
186	2465.75	10.7 pass	231	2468.00	9.7 Fail-discard	276	2470.25	11.7 pass	321	2472.50	17.7 pass	pass
187	2465.80	10.7 pass	232	2468.05	10.2 pass-disc	277	2470.30	11.7 pass	322	2472.55	17.7 pass	pass
188	2465.85	10.7 pass	233	2468.10	10.2 pass-disc	278	2470.35	11.7 pass	323	2472.60	17.7 pass	pass
189	2465.90	10.7 pass	234	2468.15	10.2 pass-disc	279	2470.40	11.7 pass	324	2472.65	18.2 pass	pass
190	2465.95	10.7 pass	235	2468.20	10.2 pass-disc	280	2470.45	12.2 pass	325	2472.70	18.7 pass	pass
191	2466.00	10.7 pass	236	2468.25	10.2 pass-disc	281	2470.50	12.2 pass	326	2472.75	18.7 pass	pass
192	2466.05	10.7 pass	237	2468.30	10.2 pass-disc	282	2470.55	12.2 pass	327	2472.80	18.7 pass	pass
193	2466.10	10.7 pass	238	2468.35	10.2 pass-disc	283	2470.60	12.7 pass	328	2472.85	19.2 pass	pass
194	2466.15	10.7 pass	239	2468.40	10.2 pass-disc	284	2470.65	13.2 pass	329	2472.90	19.2 pass	pass
195	2466.20	10.7 pass	240	2468.45	10.2 pass-disc	285	2470.70	13.2 pass	330	2472.95	19.7 pass	pass
196	2466.25	10.7 pass	241	2468.50	10.2 pass-disc	286	2470.75	13.2 pass	331	2473.00	19.7 pass	pass
197	2466.30	10.7 pass	242	2468.55	10.2 pass-disc	287	2470.80	13.2 pass	332	2473.05	20.2 pass	pass
198	2466.35	10.7 pass	243	2468.60	10.2 pass-disc	288	2470.85	13.2 pass	333	2473.10	20.2 pass	pass
199	2466.40	10.7 pass	244	2468.65	10.2 pass-disc	289	2470.90	13.2 pass	334	2473.15	20.2 pass	pass
200	2466.45	10.7 pass	245	2468.70	10.2 pass-disc	290	2470.95	13.2 pass	335	2473.20	20.2 pass	pass
201	2466.50	10.7 pass	246	2468.75	10.7 pass	291	2471.00	13.2 pass	336	2473.25	20.7 pass	pass
202	2466.55	10.7 pass	247	2468.80	10.7 pass	292	2471.05	13.7 pass	337	2473.30	20.7 pass	pass
203	2466.60	10.7 pass	248	2468.85	10.7 pass	293	2471.10	13.7 pass	338	2473.35	21.7 pass	pass
204	2466.65	10.7 pass	249	2468.90	10.7 pass	294	2471.15	13.7 pass	339	2473.40	21.7 pass	pass
205	2466.70	10.7 pass	250	2468.95	11.2 pass	295	2471.20	13.7 pass	340	2473.45	22.2 pass	pass

drop 20% = 340 x 20% = 68 ; therefore can drop 68 lowest pts, next lowest pt is 10.7 dB, therefore unit passes proc gain test

HIGHLY CONFIDENTIAL DOCUMENT
AIRNET INTERNAL USE ONLY

AIRMAIL CONFIDENTIAL

Jamming margin @11mb CCK part1

processing gain by method of jamming margin using Debugger Software Linktest											
radio conditions : supply voltage 5v. at room temp. rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3860B (CCK modulation)											
tester name : Jim Nahra / Jim Friedmann											
test date : 11/12/98 radio carrier freq=2485											
Gp = S/N + Mj + Lsys; where S/N = 16.0 dB as per CCK modulation; Lsys = 2dB											
input signal level = -80 dBm, jammer level = -67.3 dBm, then Mj = -7.3 dB for 10-5 BER											
Gp = 16.0 dB + -7.3 dB + 2 dB = 10.7 dB (worst case point after lowest 20% discarded)											
jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)
MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE
1 2456.50	19.7	pass	41 2458.50	13.7	pass	81 2460.50	11.7	pass	121 2462.50	10.7	pass
2 2456.55	19.7	pass	42 2458.55	13.7	pass	82 2460.55	11.7	pass	122 2462.55	10.7	pass
3 2456.60	19.7	pass	43 2458.60	13.7	pass	83 2460.60	11.2	pass	123 2462.60	10.7	pass
4 2456.65	19.2	pass	44 2458.65	13.7	pass	84 2460.65	11.2	pass	124 2462.65	10.7	pass
5 2456.70	19.2	pass	45 2458.70	13.7	pass	85 2460.70	11.2	pass	125 2462.70	10.7	pass
6 2456.75	19.2	pass	46 2458.75	13.2	pass	86 2460.75	11.2	pass	126 2462.75	10.7	pass
7 2456.80	19.2	pass	47 2458.80	13.2	pass	87 2460.80	11.2	pass	127 2462.80	10.7	pass
8 2456.85	19.2	pass	48 2458.85	13.2	pass	88 2460.85	11.2	pass	128 2462.85	10.7	pass
9 2456.90	18.7	pass	49 2458.90	13.2	pass	89 2460.90	11.2	pass	129 2462.90	10.7	pass
10 2456.95	18.7	pass	50 2458.95	13.2	pass	90 2460.95	11.2	pass	130 2462.95	10.7	pass
11 2457.00	18.7	pass	51 2459.00	13.2	pass	91 2461.00	11.2	pass	131 2463.00	10.7	pass
12 2457.05	18.7	pass	52 2459.05	12.7	pass	92 2461.05	11.2	pass	132 2463.05	10.7	pass
13 2457.10	18.7	pass	53 2459.10	12.7	pass	93 2461.10	11.2	pass	133 2463.10	10.7	pass
14 2457.15	18.7	pass	54 2459.15	12.7	pass	94 2461.15	11.2	pass	134 2463.15	10.7	pass
15 2457.20	18.2	pass	55 2459.20	12.7	pass	95 2461.20	11.2	pass	135 2463.20	10.7	pass
16 2457.25	18.2	pass	56 2459.25	12.7	pass	96 2461.25	11.2	pass	136 2463.25	10.7	pass
17 2457.30	18.2	pass	57 2459.30	12.7	pass	97 2461.30	11.2	pass	137 2463.30	10.7	pass
18 2457.35	17.7	pass	58 2459.35	12.7	pass	98 2461.35	11.2	pass	138 2463.35	10.7	pass
19 2457.40	17.2	pass	59 2459.40	12.2	pass	99 2461.40	11.2	pass	139 2463.40	10.7	pass
20 2457.45	17.2	pass	60 2459.45	12.2	pass	100 2461.45	11.2	pass	140 2463.45	10.7	pass
21 2457.50	17.2	pass	61 2459.50	11.7	pass	101 2461.50	11.2	pass	141 2463.50	10.7	pass
22 2457.55	17.2	pass	62 2459.55	11.7	pass	102 2461.55	11.2	pass	142 2463.55	10.7	pass
23 2457.60	16.7	pass	63 2459.60	11.7	pass	103 2461.60	11.2	pass	143 2463.60	10.7	pass
24 2457.65	16.7	pass	64 2459.65	11.7	pass	104 2461.65	11.2	pass	144 2463.65	10.7	pass
25 2457.70	16.2	pass	65 2459.70	11.7	pass	105 2461.70	11.2	pass	145 2463.70	10.7	pass
26 2457.75	15.7	pass	66 2459.75	11.7	pass	106 2461.75	11.2	pass	146 2463.75	10.7	pass
27 2457.80	15.7	pass	67 2459.80	11.7	pass	107 2461.80	11.2	pass	147 2463.80	10.7	pass
28 2457.85	15.7	pass	68 2459.85	11.7	pass	108 2461.85	11.2	pass	148 2463.85	10.7	pass
29 2457.90	15.2	pass	69 2459.90	11.7	pass	109 2461.90	11.2	pass	149 2463.90	10.7	pass
30 2457.95	14.7	pass	70 2459.95	11.7	pass	110 2461.95	11.2	pass	150 2463.95	10.7	pass
31 2458.00	14.7	pass	71 2460.00	11.7	pass	111 2462.00	11.2	pass	151 2464.00	10.7	pass
32 2458.05	14.7	pass	72 2460.05	11.7	pass	112 2462.05	11.2	pass	152 2464.05	10.7	pass
33 2458.10	13.7	pass	73 2460.10	11.7	pass	113 2462.10	11.2	pass	153 2464.10	10.7	pass
34 2458.15	13.7	pass	74 2460.15	11.7	pass	114 2462.15	11.2	pass	154 2464.15	10.7	pass
35 2458.20	13.7	pass	75 2460.20	11.7	pass	115 2462.20	11.2	pass	155 2464.20	10.7	pass
36 2458.25	13.7	pass	76 2460.25	11.7	pass	116 2462.25	10.7	pass	156 2464.25	10.7	pass
37 2458.30	13.7	pass	77 2460.30	11.7	pass	117 2462.30	10.7	pass	157 2464.30	10.7	pass
38 2458.35	13.7	pass	78 2460.35	11.7	pass	118 2462.35	10.7	pass	158 2464.35	10.7	pass
39 2458.40	13.7	pass	79 2460.40	11.7	pass	119 2462.40	10.7	pass	159 2464.40	10.7	pass
40 2458.45	13.7	pass	80 2460.45	11.7	pass	120 2462.45	10.7	pass	160 2464.45	10.7	pass

drop 20% = 340 x 20% = 68 : therefore can drop up to 68 lowest pts

HIGHLY CONFIDENTIAL DOCUMENT
NO DISSEMINATION

processing gain by method of jamming margin using Debugger Software Linktest											
radio conditions : supply voltage 5v, at room temp, rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3860B (CCK modulation)											
tester name : Jim Nahra/ Jim Friedmann											
test date : 11/17/98		radio carrier freq= 2465									
Gp = S/N + Mj + Lsys; where S/N = 13 dB as per Wireless Information Networks by Pahlavan & Levesque; Lsys = 0.5 dB											
input signal level = -60 dBm, jammer level = - 62.5 dBm, then Mj= -2.5 dB											
Gp = 13 dB + -2.5 dB + .5 = 11.0 dB (worst case point)											
jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)
MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE
1 2456.50	17.6	pass	41 2458.50	12.5	pass	81 2460.50	11.5	pass	121 2462.50	11.5	pass
2 2456.55	17.6	pass	42 2458.55	12.5	pass	82 2460.55	11.5	pass	122 2462.55	11.5	pass
3 2456.60	17.1	pass	43 2458.60	12.5	pass	83 2460.60	11.5	pass	123 2462.60	11.5	pass
4 2456.65	17.1	pass	44 2458.65	12.5	pass	84 2460.65	11.5	pass	124 2462.65	11.5	pass
5 2456.70	16.5	pass	45 2458.70	12.5	pass	85 2460.70	11.5	pass	125 2462.70	11.5	pass
6 2456.75	16	pass	46 2458.75	12.5	pass	86 2460.75	11.5	pass	126 2462.75	11.5	pass
7 2456.80	16	pass	47 2458.80	12.5	pass	87 2460.80	11.5	pass	127 2462.80	11.5	pass
8 2456.85	15.5	pass	48 2458.85	12	pass	88 2460.85	11.5	pass	128 2462.85	12	pass
9 2456.90	15	pass	49 2458.90	12	pass	89 2460.90	11.5	pass	129 2462.90	12	pass
10 2456.95	15	pass	50 2458.95	12	pass	90 2460.95	11.5	pass	130 2462.95	12	pass
11 2457.00	15	pass	51 2459.00	12	pass	91 2461.00	11.5	pass	131 2463.00	12	pass
12 2457.05	15	pass	52 2459.05	12	pass	92 2461.05	11.5	pass	132 2463.05	12	pass
13 2457.10	15	pass	53 2459.10	12	pass	93 2461.10	11.5	pass	133 2463.10	12	pass
14 2457.15	14.5	pass	54 2459.15	12	pass	94 2461.15	11.5	pass	134 2463.15	12	pass
15 2457.20	14.5	pass	55 2459.20	12	pass	95 2461.20	11.5	pass	135 2463.20	12	pass
16 2457.25	14.5	pass	56 2459.25	12	pass	96 2461.25	11.5	pass	136 2463.25	12	pass
17 2457.30	14.5	pass	57 2459.30	12	pass	97 2461.30	11.5	pass	137 2463.30	12	pass
18 2457.35	14	pass	58 2459.35	12	pass	98 2461.35	11.5	pass	138 2463.35	12	pass
19 2457.40	14	pass	59 2459.40	12	pass	99 2461.40	11.5	pass	139 2463.40	12	pass
20 2457.45	14	pass	60 2459.45	12	pass	100 2461.45	11.5	pass	140 2463.45	12	pass
21 2457.50	14	pass	61 2459.50	12	pass	101 2461.50	11.5	pass	141 2463.50	12	pass
22 2457.55	14	pass	62 2459.55	12	pass	102 2461.55	11.5	pass	142 2463.55	12	pass
23 2457.60	14	pass	63 2459.60	12	pass	103 2461.60	11.5	pass	143 2463.60	12	pass
24 2457.65	14	pass	64 2459.65	12	pass	104 2461.65	11.5	pass	144 2463.65	12	pass
25 2457.70	14	pass	65 2459.70	12	pass	105 2461.70	11.5	pass	145 2463.70	12	pass
26 2457.75	13.5	pass	66 2459.75	12	pass	106 2461.75	11.5	pass	146 2463.75	12	pass
27 2457.80	13.5	pass	67 2459.80	12	pass	107 2461.80	11.5	pass	147 2463.80	12	pass
28 2457.85	13.5	pass	68 2459.85	12	pass	108 2461.85	11.5	pass	148 2463.85	12	pass
29 2457.90	13	pass	69 2459.90	12	pass	109 2461.90	11.5	pass	149 2463.90	12	pass
30 2457.95	13	pass	70 2459.95	12	pass	110 2461.95	11	pass	150 2463.95	12	pass
31 2458.00	13	pass	71 2460.00	12	pass	111 2462.00	11	pass	151 2464.00	12	pass
32 2458.05	13	pass	72 2460.05	11.5	pass	112 2462.05	11	pass	152 2464.05	12	pass
33 2458.10	13	pass	73 2460.10	11.5	pass	113 2462.10	11	pass	153 2464.10	12	pass
34 2458.15	13	pass	74 2460.15	11.5	pass	114 2462.15	11	pass	154 2464.15	12	pass
35 2458.20	13	pass	75 2460.20	11.5	pass	115 2462.20	11	pass	155 2464.20	12	pass
36 2458.25	13	pass	76 2460.25	11.5	pass	116 2462.25	11	pass	156 2464.25	12	pass
37 2458.30	13	pass	77 2460.30	11.5	pass	117 2462.30	11	pass	157 2464.30	12	pass
38 2458.35	12.5	pass	78 2460.35	11.5	pass	118 2462.35	11	pass	158 2464.35	12	pass
39 2458.40	12.5	pass	79 2460.40	11.5	pass	119 2462.40	11	pass	159 2464.40	12	pass
40 2458.45	12.5	pass	80 2460.45	11.5	pass	120 2462.45	11	pass	160 2464.45	12	pass

drop 20% = 340 x 20% = 68 ; therefore can drop 68 failures

drop 20% = 340 x 20% = 68 ; therefore can drop 68 failures

HIGHLY CONFIDENTIAL DOCUMENT
INTERNAL USE ONLY

Jamming margin @1 mb (part2)

processing gain by method of jamming margin using Debugger Software Linktest											
radio conditions : supply voltage 5v, at room temp, rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3860B (CCK modulation)											
tester name : Jim Nahra/ Jim Friedmann											
Gp = S/N + Mj + Lsys; where S/N = 13 dB as per Wireless Information Networks by Pahlavan & Levesque; Lsys = 0.5 dB											
input signal level = -80 dBm, jammer level = -62.5 dBm, then Mj = -2.5 dB											
Gp = 13 dB + -2.5 dB + .5 = 11.0 dB (worst case point)											
jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)
MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE
161	2464.50	12 pass	206	2466.75	11.5 pass	251	2469.00	11.5 pass	296	2471.25	12.5 pass
162	2464.55	12 pass	207	2466.80	11.5 pass	252	2469.05	11.5 pass	297	2471.30	12.5 pass
163	2464.60	12 pass	208	2466.85	11.5 pass	253	2469.10	11.5 pass	298	2471.35	12.5 pass
164	2464.65	11.5 pass	209	2466.90	11.5 pass	254	2469.15	11.5 pass	299	2471.40	13 pass
165	2464.70	11.5 pass	210	2466.95	11.5 pass	255	2469.20	11.5 pass	300	2471.45	13 pass
166	2464.75	11.5 pass	211	2467.00	12 pass	256	2469.25	11.5 pass	301	2471.50	13 pass
167	2464.80	11.5 pass	212	2467.05	12 pass	257	2469.30	11.5 pass	302	2471.55	13 pass
168	2464.85	11.5 pass	213	2467.10	12 pass	258	2469.35	11.5 pass	303	2471.60	13 pass
169	2464.90	11.5 pass	214	2467.15	12 pass	259	2469.40	11.5 pass	304	2471.65	13.5 pass
170	2464.95	11.5 pass	215	2467.20	12 pass	260	2469.45	11.5 pass	305	2471.70	13.5 pass
171	2465.00	11 pass	216	2467.25	12 pass	261	2469.50	11.5 pass	306	2471.75	13.5 pass
172	2465.05	11 pass	217	2467.30	12 pass	262	2469.55	11.5 pass	307	2471.80	13.5 pass
173	2465.10	11 pass	218	2467.35	12 pass	263	2469.60	11.5 pass	308	2471.85	14 pass
174	2465.15	11 pass	219	2467.40	12 pass	264	2469.65	11.5 pass	309	2471.90	14 pass
175	2465.20	11 pass	220	2467.45	12 pass	265	2469.70	11.5 pass	310	2471.95	14 pass
176	2465.25	11 pass	221	2467.50	12 pass	266	2469.75	11.5 pass	311	2472.00	14 pass
177	2465.30	11 pass	222	2467.55	12 pass	267	2469.80	11.5 pass	312	2472.05	14 pass
178	2465.35	11 pass	223	2467.60	12 pass	268	2469.85	11.5 pass	313	2472.10	14 pass
179	2465.40	11 pass	224	2467.65	12 pass	269	2469.90	11.5 pass	314	2472.15	14 pass
180	2465.45	11 pass	225	2467.70	12 pass	270	2469.95	11.5 pass	315	2472.20	14 pass
181	2465.50	11 pass	226	2467.75	12 pass	271	2470.00	12 pass	316	2472.25	14 pass
182	2465.55	11 pass	227	2467.80	12 pass	272	2470.05	12 pass	317	2472.30	14 pass
183	2465.60	11 pass	228	2467.85	12 pass	273	2470.10	12 pass	318	2472.35	14 pass
184	2465.65	11 pass	229	2467.90	12 pass	274	2470.15	12 pass	319	2472.40	14.5 pass
185	2465.70	11 pass	230	2467.95	12 pass	275	2470.20	12 pass	320	2472.45	14.5 pass
186	2465.75	11 pass	231	2468.00	12 pass	276	2470.25	12 pass	321	2472.50	14.5 pass
187	2465.80	11 pass	232	2468.05	12 pass	277	2470.30	12 pass	322	2472.55	14.5 pass
188	2465.85	11 pass	233	2468.10	12 pass	278	2470.35	12 pass	323	2472.60	14.5 pass
189	2465.90	11 pass	234	2468.15	12 pass	279	2470.40	12 pass	324	2472.65	14.5 pass
190	2465.95	11 pass	235	2468.20	12 pass	280	2470.45	12 pass	325	2472.70	14.5 pass
191	2466.00	11.5 pass	236	2468.25	12 pass	281	2470.50	12 pass	326	2472.75	14.5 pass
192	2466.05	11.5 pass	237	2468.30	12 pass	282	2470.55	12 pass	327	2472.80	14.5 pass
193	2466.10	11.5 pass	238	2468.35	12 pass	283	2470.60	12 pass	328	2472.85	15 pass
194	2466.15	11.5 pass	239	2468.40	12 pass	284	2470.65	12 pass	329	2472.90	15 pass
195	2466.20	11.5 pass	240	2468.45	12 pass	285	2470.70	12 pass	330	2472.95	15 pass
196	2466.25	11.5 pass	241	2468.50	12 pass	286	2470.75	12 pass	331	2473.00	15.5 pass
197	2466.30	11.5 pass	242	2468.55	12 pass	287	2470.80	12 pass	332	2473.05	15.5 pass
198	2466.35	11.5 pass	243	2468.60	12 pass	288	2470.85	12 pass	333	2473.10	16 pass
199	2466.40	11.5 pass	244	2468.65	12 pass	289	2470.90	12 pass	334	2473.15	16 pass
200	2466.45	11.5 pass	245	2468.70	12 pass	290	2470.95	12 pass	335	2473.20	16 pass
201	2466.50	11.5 pass	246	2468.75	12 pass	291	2471.00	12.5 pass	336	2473.25	16.5 pass
202	2466.55	11.5 pass	247	2468.80	12 pass	292	2471.05	12.5 pass	337	2473.30	17 pass
203	2466.60	11.5 pass	248	2468.85	12 pass	293	2471.10	12.5 pass	338	2473.35	17.5 pass
204	2466.65	11.5 pass	249	2468.90	12 pass	294	2471.15	12.5 pass	339	2473.40	17.5 pass
205	2466.70	11.5 pass	250	2468.95	12 pass	295	2471.20	12.5 pass	340	2473.45	18 pass

HIGHLY CONFIDENTIAL DOCUMENT
NIRONET INTERNAL USE ONLY

Jamming margin @2 mb (part1)

processing gain by method of jamming margin using Debugger Software Linktest

radio conditions : supply voltage 5v, at room temp, rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3860B (CCK modulation)

tester name : Jim Nahra / Jim Friedmann

test date : 11/17/98 radio carrier freq = 2465

Gp = S/N + Mj + Lsys; where S/N = 13 dB as per Wireless Information Networks by Pahlavan & Levesque; Lsys = 1.0dB

input signal level = -60 dBm, jammer level = -62.9 dBm, then Mj = -2.9 dB

Gp = 13.0 dB + -2.9 dB + 1.0 dB = 11.1 dB (worst case point)

jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)
MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE
1	2456.50	19.1 pass	41	2458.50	13.6 pass	81	2460.50	11.2 pass	121	2462.50	11.1 pass
2	2456.55	19.1 pass	42	2458.55	13.6 pass	82	2460.55	11.2 pass	122	2462.55	11.1 pass
3	2456.60	19.1 pass	43	2458.60	13.6 pass	83	2460.60	11.2 pass	123	2462.60	11.1 pass
4	2456.65	19.1 pass	44	2458.65	13.6 pass	84	2460.65	11.2 pass	124	2462.65	11.1 pass
5	2456.70	18.6 pass	45	2458.70	13.1 pass	85	2460.70	11.2 pass	125	2462.70	11.1 pass
6	2456.75	18.6 pass	46	2458.75	13.1 pass	86	2460.75	11.2 pass	126	2462.75	11.1 pass
7	2456.80	18.1 pass	47	2458.80	13.1 pass	87	2460.80	11.2 pass	127	2462.80	11.1 pass
8	2456.85	18.1 pass	48	2458.85	12.6 pass	88	2460.85	11.2 pass	128	2462.85	11.1 pass
9	2456.90	17.6 pass	49	2458.90	12.6 pass	89	2460.90	11.2 pass	129	2462.90	11.1 pass
10	2456.95	17.6 pass	50	2458.95	12.6 pass	90	2460.95	11.2 pass	130	2462.95	11.1 pass
11	2457.00	17.1 pass	51	2459.00	12.6 pass	91	2461.00	11.2 pass	131	2463.00	11.1 pass
12	2457.05	17.1 pass	52	2459.05	12.6 pass	92	2461.05	11.2 pass	132	2463.05	11.1 pass
13	2457.10	17.1 pass	53	2459.10	12.6 pass	93	2461.10	11.2 pass	133	2463.10	11.1 pass
14	2457.15	17.1 pass	54	2459.15	12.6 pass	94	2461.15	11.2 pass	134	2463.15	11.1 pass
15	2457.20	17.1 pass	55	2459.20	12.6 pass	95	2461.20	11.2 pass	135	2463.20	11.1 pass
16	2457.25	17.1 pass	56	2459.25	12.6 pass	96	2461.25	11.2 pass	136	2463.25	11.1 pass
17	2457.30	16.6 pass	57	2459.30	12.6 pass	97	2461.30	11.2 pass	137	2463.30	11.1 pass
18	2457.35	16.6 pass	58	2459.35	12.6 pass	98	2461.35	11.2 pass	138	2463.35	11.1 pass
19	2457.40	16.6 pass	59	2459.40	12.6 pass	99	2461.40	11.2 pass	139	2463.40	11.1 pass
20	2457.45	16.1 pass	60	2459.45	12.6 pass	100	2461.45	11.2 pass	140	2463.45	11.1 pass
21	2457.50	16.1 pass	61	2459.50	12.6 pass	101	2461.50	11.2 pass	141	2463.50	11.1 pass
22	2457.55	15.6 pass	62	2459.55	12.6 pass	102	2461.55	11.2 pass	142	2463.55	11.1 pass
23	2457.60	15.6 pass	63	2459.60	12.6 pass	103	2461.60	11.2 pass	143	2463.60	11.1 pass
24	2457.65	15.6 pass	64	2459.65	12.6 pass	104	2461.65	11.2 pass	144	2463.65	11.1 pass
25	2457.70	15.6 pass	65	2459.70	12.6 pass	105	2461.70	11.2 pass	145	2463.70	11.1 pass
26	2457.75	15.1 pass	66	2459.75	12.6 pass	106	2461.75	11.2 pass	146	2463.75	11.1 pass
27	2457.80	15.1 pass	67	2459.80	12.6 pass	107	2461.80	11.2 pass	147	2463.80	11.1 pass
28	2457.85	14.6 pass	68	2459.85	12.6 pass	108	2461.85	11.2 pass	148	2463.85	11.1 pass
29	2457.90	14.6 pass	69	2459.90	12.6 pass	109	2461.90	11.2 pass	149	2463.90	11.1 pass
30	2457.95	14.6 pass	70	2459.95	12.6 pass	110	2461.95	11.2 pass	150	2463.95	11.1 pass
31	2458.00	14.6 pass	71	2460.00	12.6 pass	111	2462.00	11.2 pass	151	2464.00	11.1 pass
32	2458.05	14.6 pass	72	2460.05	12.1 pass	112	2462.05	11.2 pass	152	2464.05	11.5 pass
33	2458.10	14.1 pass	73	2460.10	12.1 pass	113	2462.10	11.2 pass	153	2464.10	11.5 pass
34	2458.15	14.1 pass	74	2460.15	12.1 pass	114	2462.15	11.2 pass	154	2464.15	11.5 pass
35	2458.20	14.1 pass	75	2460.20	11.6 pass	115	2462.20	11.2 pass	155	2464.20	11.5 pass
36	2458.25	14.1 pass	76	2460.25	11.6 pass	116	2462.25	11.1 pass	156	2464.25	11.5 pass
37	2458.30	14.1 pass	77	2460.30	11.1 pass	117	2462.30	11.1 pass	157	2464.30	11.5 pass
38	2458.35	14.1 pass	78	2460.35	11.1 pass	118	2462.35	11.1 pass	158	2464.35	11.5 pass
39	2458.40	13.6 pass	79	2460.40	11.1 pass	119	2462.40	11.1 pass	159	2464.40	11.5 pass
40	2458.45	13.6 pass	80	2460.45	11.1 pass	120	2462.45	11.1 pass	160	2464.45	11.5 pass

drop 20% = 340 x 20% = 68 : therefore can drop 68 failures

HIGHLY CONFIDENTIAL DOCUMENT
AIRNET INTERNAL USE ONLY

Jamming margin @2mb (part2)

processing gain by method of jamming margin using Debugger Software Linktest

radio conditions : supply voltage 5v, at room temp, rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3860B (CCK modulation)

tester name : Jim Nahra/ Jim Friedmann

Gp = S/N + Mj + Lsys; where S/N = 13 dB as per Wireless Information Networks by Pahlavan & Levesque; Lsys = 1.0dB

input signal level = -60 dBm, jammer level = -62.9 dBm, then Mj = -2.9 dB

Gp = 13.0 dB + -2.9 dB + 1.0 dB = 11.1 dB (worst case point)

jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)
MHz	dB	pass/ FAILURE	MHz	dB	pass/ FAILURE	MHz	dB	pass/ FAILURE	MHz	dB	pass/ FAILURE
161	2464.50	11.1 pass	206	2466.75	11.6 pass	251	2469.00	11.6 pass	296	2471.25	13.1 pass
162	2464.55	11.1 pass	207	2466.80	11.6 pass	252	2469.05	11.6 pass	297	2471.30	13.1 pass
163	2464.60	11.1 pass	208	2466.85	11.6 pass	253	2469.10	11.6 pass	298	2471.35	13.6 pass
164	2464.65	11.1 pass	209	2466.90	11.6 pass	254	2469.15	11.6 pass	299	2471.40	13.6 pass
165	2464.70	11.1 pass	210	2466.95	11.6 pass	255	2469.20	11.6 pass	300	2471.45	13.6 pass
166	2464.75	11.1 pass	211	2467.00	11.6 pass	256	2469.25	11.6 pass	301	2471.50	13.6 pass
167	2464.80	11.1 pass	212	2467.05	11.6 pass	257	2469.30	11.6 pass	302	2471.55	14.1 pass
168	2464.85	11.1 pass	213	2467.10	11.6 pass	258	2469.35	11.6 pass	303	2471.60	14.1 pass
169	2464.90	11.1 pass	214	2467.15	11.6 pass	259	2469.40	11.6 pass	304	2471.65	14.1 pass
170	2464.95	11.1 pass	215	2467.20	11.6 pass	260	2469.45	11.6 pass	305	2471.70	14.1 pass
171	2465.00	11.1 pass	216	2467.25	11.6 pass	261	2469.50	11.6 pass	306	2471.75	14.1 pass
172	2465.05	11.1 pass	217	2467.30	11.6 pass	262	2469.55	11.6 pass	307	2471.80	14.1 pass
173	2465.10	11.6 pass	218	2467.35	11.6 pass	263	2469.60	11.6 pass	308	2471.85	14.1 pass
174	2465.15	11.6 pass	219	2467.40	11.6 pass	264	2469.65	11.6 pass	309	2471.90	14.1 pass
175	2465.20	11.6 pass	220	2467.45	11.6 pass	265	2469.70	11.6 pass	310	2471.95	14.6 pass
176	2465.25	11.6 pass	221	2467.50	11.6 pass	266	2469.75	11.6 pass	311	2472.00	14.6 pass
177	2465.30	11.6 pass	222	2467.55	11.6 pass	267	2469.80	11.6 pass	312	2472.05	15.1 pass
178	2465.35	11.6 pass	223	2467.60	11.6 pass	268	2469.85	11.6 pass	313	2472.10	15.1 pass
179	2465.40	11.6 pass	224	2467.65	11.6 pass	269	2469.90	12.1 pass	314	2472.15	15.1 pass
180	2465.45	11.6 pass	225	2467.70	11.6 pass	270	2469.95	12.6 pass	315	2472.20	15.1 pass
181	2465.50	11.6 pass	226	2467.75	11.6 pass	271	2470.00	13.1 pass	316	2472.25	15.6 pass
182	2465.55	11.6 pass	227	2467.80	11.6 pass	272	2470.05	13.1 pass	317	2472.30	15.6 pass
183	2465.60	11.6 pass	228	2467.85	11.6 pass	273	2470.10	13.1 pass	318	2472.35	15.6 pass
184	2465.65	11.6 pass	229	2467.90	11.6 pass	274	2470.15	13.1 pass	319	2472.40	16.1 pass
185	2465.70	11.6 pass	230	2467.95	11.6 pass	275	2470.20	13.1 pass	320	2472.45	16.1 pass
186	2465.75	11.6 pass	231	2468.00	11.6 pass	276	2470.25	13.1 pass	321	2472.50	16.1 pass
187	2465.80	11.6 pass	232	2468.05	11.6 pass	277	2470.30	13.1 pass	322	2472.55	16.6 pass
188	2465.85	11.6 pass	233	2468.10	11.6 pass	278	2470.35	13.1 pass	323	2472.60	17.1 pass
189	2465.90	11.6 pass	234	2468.15	11.6 pass	279	2470.40	13.1 pass	324	2472.65	17.1 pass
190	2465.95	11.6 pass	235	2468.20	11.6 pass	280	2470.45	13.1 pass	325	2472.70	17.1 pass
191	2466.00	11.6 pass	236	2468.25	11.6 pass	281	2470.50	13.1 pass	326	2472.75	17.1 pass
192	2466.05	11.6 pass	237	2468.30	11.6 pass	282	2470.55	13.1 pass	327	2472.80	17.6 pass
193	2466.10	11.6 pass	238	2468.35	11.6 pass	283	2470.60	13.1 pass	328	2472.85	18.1 pass
194	2466.15	11.6 pass	239	2468.40	11.6 pass	284	2470.65	13.1 pass	329	2472.90	18.1 pass
195	2466.20	11.6 pass	240	2468.45	11.6 pass	285	2470.70	13.1 pass	330	2472.95	18.1 pass
196	2466.25	11.6 pass	241	2468.50	11.6 pass	286	2470.75	13.1 pass	331	2473.00	18.6 pass
197	2466.30	11.6 pass	242	2468.55	11.6 pass	287	2470.80	13.1 pass	332	2473.05	18.6 pass
198	2466.35	11.6 pass	243	2468.60	11.6 pass	288	2470.85	13.1 pass	333	2473.10	19.1 pass
199	2466.40	11.6 pass	244	2468.65	11.6 pass	289	2470.90	13.1 pass	334	2473.15	19.6 pass
200	2466.45	11.6 pass	245	2468.70	11.6 pass	290	2470.95	13.1 pass	335	2473.20	19.6 pass
201	2466.50	11.6 pass	246	2468.75	11.6 pass	291	2471.00	13.1 pass	336	2473.25	20.1 pass
202	2466.55	11.6 pass	247	2468.80	11.6 pass	292	2471.05	13.1 pass	337	2473.30	20.1 pass
203	2466.60	11.6 pass	248	2468.85	11.6 pass	293	2471.10	13.1 pass	338	2473.35	20.6 pass
204	2466.65	11.6 pass	249	2468.90	11.6 pass	294	2471.15	13.1 pass	339	2473.40	21.1 pass
205	2466.70	11.6 pass	250	2468.95	11.6 pass	295	2471.20	13.1 pass	340	2473.45	21.6 pass

HIGHLY CONFIDENTIAL DOCUMENT
- EXACT INTERNAL USE ONLY

Jamming margin @5.5mb CCK part1

processing gain by method of jamming margin using Debugger Software Linktest

radio conditions : supply voltage 5v, at room temp. rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3560B (CCK modulation)

tester name : Jim Nagra / Jim Friedmann

test date : 11/16/98 radio carrier freq = 2465

 $G_p = S/N + M_j + L_{sys}$; where $S/N = 13.6$ dB as per CCK modulation; $L_{sys} = 2.0$ dBinput signal level = -50 dBm, jammer level = -65.2 dBm, then $M_j = -5.2$ dB for 10-5 BER $G_p = 13.6$ dB + -5.2 dB + 2.0 dB = 10.4 dB (worst case point after lowest 20% discarded)

jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)
MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE
1 2456.50	17.5	pass	41 2458.50	12.5	pass	81 2460.50	11	pass	121 2462.50	10.4	pass
2 2456.55	17.5	pass	42 2458.55	12.5	pass	82 2460.55	11	pass	122 2462.55	10.4	pass
3 2456.60	17	pass	43 2458.60	12.5	pass	83 2460.60	11	pass	123 2462.60	10.4	pass
4 2456.65	17	pass	44 2458.65	12.5	pass	84 2460.65	11	pass	124 2462.65	10.4	pass
5 2456.70	17	pass	45 2458.70	12.5	pass	85 2460.70	11	pass	125 2462.70	10.4	pass
6 2456.75	17	pass	46 2458.75	12.5	pass	86 2460.75	11	pass	126 2462.75	10.4	pass
7 2456.80	16.5	pass	47 2458.80	12.5	pass	87 2460.80	11	pass	127 2462.80	10.4	pass
8 2456.85	16.5	pass	48 2458.85	12.5	pass	88 2460.85	11	pass	128 2462.85	10.4	pass
9 2456.90	16.5	pass	49 2458.90	12.5	pass	89 2460.90	10.5	pass	129 2462.90	10.4	pass
10 2456.95	16.5	pass	50 2458.95	12	pass	90 2460.95	10.5	pass	130 2462.95	10.4	pass
11 2457.00	16.5	pass	51 2459.00	12	pass	91 2461.00	10.5	pass	131 2463.00	10.4	pass
12 2457.05	16.5	pass	52 2459.05	12	pass	92 2461.05	10.5	pass	132 2463.05	10.4	pass
13 2457.10	16.5	pass	53 2459.10	12	pass	93 2461.10	10.5	pass	133 2463.10	10.4	pass
14 2457.15	16	pass	54 2459.15	12	pass	94 2461.15	10.5	pass	134 2463.15	10.4	pass
15 2457.20	16	pass	55 2459.20	12	pass	95 2461.20	10.5	pass	135 2463.20	10.4	pass
16 2457.25	16	pass	56 2459.25	12	pass	96 2461.25	10.5	pass	136 2463.25	10.4	pass
17 2457.30	16	pass	57 2459.30	11.5	pass	97 2461.30	10.5	pass	137 2463.30	10.4	pass
18 2457.35	15.5	pass	58 2459.35	11.5	pass	98 2461.35	10.5	pass	138 2463.35	9.5	Fail-discard
19 2457.40	15.5	pass	59 2459.40	11.5	pass	99 2461.40	10.5	pass	139 2463.40	10.4	pass
20 2457.45	15	pass	60 2459.45	11.5	pass	100 2461.45	10.5	pass	140 2463.45	10.4	pass
21 2457.50	15	pass	61 2459.50	11.5	pass	101 2461.50	10.5	pass	141 2463.50	10.4	pass
22 2457.55	16	pass	62 2459.55	11.5	pass	102 2461.55	10.5	pass	142 2463.55	10.4	pass
23 2457.60	15	pass	63 2459.60	11.5	pass	103 2461.60	10.5	pass	143 2463.60	10.4	pass
24 2457.65	14.5	pass	64 2459.65	11.5	pass	104 2461.65	10.5	pass	144 2463.65	10.4	pass
25 2457.70	14.5	pass	65 2459.70	11.5	pass	105 2461.70	10.5	pass	145 2463.70	10.4	pass
26 2457.75	14.5	pass	66 2459.75	11.5	pass	106 2461.75	10.5	pass	146 2463.75	10.4	pass
27 2457.80	14	pass	67 2459.80	11.5	pass	107 2461.80	10	pass-disc	147 2463.80	10.4	pass
28 2457.85	14	pass	68 2459.85	11.5	pass	108 2461.85	10	pass-disc	148 2463.85	10.4	pass
29 2457.90	13.5	pass	69 2459.90	11.5	pass	109 2461.90	10	pass-disc	149 2463.90	10.4	pass
30 2457.95	13	pass	70 2459.95	11.5	pass	110 2461.95	10	pass-disc	150 2463.95	10.4	pass
31 2458.00	13	pass	71 2460.00	11.5	pass	111 2462.00	9.5	Fail-discard	151 2464.00	10.4	pass
32 2458.05	13	pass	72 2460.05	11.5	pass	112 2462.05	10	pass-disc	152 2464.05	10.4	pass
33 2458.10	13	pass	73 2460.10	11.5	pass	113 2462.10	9.5	Fail-discard	153 2464.10	10.4	pass
34 2458.15	13	pass	74 2460.15	11.5	pass	114 2462.15	10	pass-disc	154 2464.15	10.4	pass
35 2458.20	13	pass	75 2460.20	11.5	pass	115 2462.20	9.5	Fail-discard	155 2464.20	10.4	pass
36 2458.25	13	pass	76 2460.25	11.5	pass	116 2462.25	10	pass-disc	156 2464.25	10.4	pass
37 2458.30	13	pass	77 2460.30	11.5	pass	117 2462.30	9.5	Fail-discard	157 2464.30	10.4	pass
38 2458.35	13	pass	78 2460.35	11.5	pass	118 2462.35	10	pass-disc	158 2464.35	10.4	pass
39 2458.40	12.5	pass	79 2460.40	11.5	pass	119 2462.40	9.5	Fail-discard	159 2464.40	9.5	Fail-discard
40 2458.45	12.5	pass	80 2460.45	11.5	pass	120 2462.45	10	pass-disc	160 2464.45	10.4	pass

HIGHLY CONFIDENTIAL DOCUMENT
ALCONET 11/16/98

AIRNET CONFIDENTIAL

Jamming margin @5.5mb CCK part2

processing gain by method of jamming margin using Debugger Software Linktest											
radio conditions : supply voltage 5v, at room temp. rx s/n = #2000, tx s/n = #2003, Rev AC2 with Harris HFA3880B (CCK modulation)											
tester name : Jim Nagra / Jim Friedmann											
Gp = S/N + Mj + Lsys, where S/N = 13.6 dB as per CCK modulation; Lsys = 2.0 dB											
input signal level = -80 dBm, jammer level = -65.2 dBm, then Mj = -5.2 dB for 10-5 BER											
Gp = 13.6 dB + -5.2 dB + 2.0 dB = 10.4 dB (worst case point after lowest 20% discarded)											
jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)	jammer freq	Gp	pass (error rate under 1x10-5)
MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE	MHz	dB	pass / FAILURE
161: 2464.50	10.4	pass-disc	206: 2466.75	10.4	pass	251: 2469.00	10.4	pass	296: 2471.25	13.0	pass
162: 2464.55	10.4	pass-disc	207: 2466.80	10.4	pass	252: 2469.05	10.5	pass	297: 2471.30	13.0	pass
163: 2464.60	10.4	pass-disc	208: 2466.85	10.4	pass	253: 2469.10	11	pass	298: 2471.35	13.0	pass
164: 2464.65	9.5	Fail-discard	209: 2466.90	10.4	pass	254: 2469.15	11	pass	299: 2471.40	13.5	pass
165: 2464.70	9.5	Fail-discard	210: 2466.95	10.4	pass	255: 2469.20	11	pass	300: 2471.45	13.5	pass
166: 2464.75	9.5	Fail-discard	211: 2467.00	10.4	pass	256: 2469.25	11	pass	301: 2471.50	13.5	pass
167: 2464.80	10	pass-disc	212: 2467.05	10.4	pass	257: 2469.30	11	pass	302: 2471.55	13.5	pass
168: 2464.85	9.5	Fail-discard	213: 2467.10	10.4	pass	258: 2469.35	11	pass	303: 2471.60	14.0	pass
169: 2464.90	9.5	Fail-discard	214: 2467.15	10.4	pass	259: 2469.40	11	pass	304: 2471.65	14.0	pass
170: 2464.95	10	pass-disc	215: 2467.20	10.4	pass	260: 2469.45	11	pass	305: 2471.70	14.0	pass
171: 2465.00	10.4	pass	216: 2467.25	10.4	pass	261: 2469.50	11	pass	306: 2471.75	14.0	pass
172: 2465.05	10.4	pass	217: 2467.30	10	pass-disc	262: 2469.55	11	pass	307: 2471.80	14.5	pass
173: 2465.10	10.4	pass	218: 2467.35	9.5	Fail-discard	263: 2469.60	11	pass	308: 2471.85	14.5	pass
174: 2465.15	10.4	pass	219: 2467.40	9.5	Fail-discard	264: 2469.65	11	pass	309: 2471.90	14.5	pass
175: 2465.20	10.4	pass	220: 2467.45	9.5	Fail-discard	265: 2469.70	11	pass	310: 2471.95	14.5	pass
176: 2465.25	10.4	pass	221: 2467.50	9.5	Fail-discard	266: 2469.75	11	pass	311: 2472.00	14.5	pass
177: 2465.30	10.4	pass	222: 2467.55	9.5	Fail-discard	267: 2469.80	11	pass	312: 2472.05	15	pass
178: 2465.35	10.4	pass	223: 2467.60	9.5	Fail-discard	268: 2469.85	11	pass	313: 2472.10	15.5	pass
179: 2465.40	10.4	pass	224: 2467.65	9.5	Fail-discard	269: 2469.90	11	pass	314: 2472.15	15.5	pass
180: 2465.45	10.4	pass	225: 2467.70	9.5	Fail-discard	270: 2469.95	11	pass	315: 2472.20	15.5	pass
181: 2465.50	10.4	pass	226: 2467.75	10	pass-disc	271: 2470.00	11	pass	316: 2472.25	15.5	pass
182: 2465.55	10.4	pass	227: 2467.80	10	pass-disc	272: 2470.05	11	pass	317: 2472.30	15.5	pass
183: 2465.60	10.4	pass	228: 2467.85	9.5	Fail-discard	273: 2470.10	11	pass	318: 2472.35	16	pass
184: 2465.65	10.4	pass	229: 2467.90	9.5	Fail-discard	274: 2470.15	11.5	pass	319: 2472.40	16.5	pass
185: 2465.70	10.4	pass	230: 2467.95	9.5	Fail-discard	275: 2470.20	11.5	pass	320: 2472.45	16.5	pass
186: 2465.75	10.4	pass	231: 2468.00	10.5	pass	276: 2470.25	11.5	pass	321: 2472.50	16.5	pass
187: 2465.80	10.4	pass	232: 2468.05	10.5	pass	277: 2470.30	11.5	pass	322: 2472.55	16.5	pass
188: 2465.85	10.4	pass	233: 2468.10	10.5	pass	278: 2470.35	11.5	pass	323: 2472.60	17	pass
189: 2465.90	10.4	pass	234: 2468.15	10.5	pass	279: 2470.40	12	pass	324: 2472.65	17	pass
190: 2465.95	10.4	pass	235: 2468.20	10.5	pass	280: 2470.45	12	pass	325: 2472.70	17.5	pass
191: 2466.00	10.4	pass	236: 2468.25	10.5	pass	281: 2470.50	12	pass	326: 2472.75	17.5	pass
192: 2466.05	10	pass-disc	237: 2468.30	10.5	pass	282: 2470.55	12	pass	327: 2472.80	17.5	pass
193: 2466.10	9.5	Fail-discard	238: 2468.35	10.5	pass	283: 2470.60	12	pass	328: 2472.85	18	pass
194: 2466.15	9.5	Fail-discard	239: 2468.40	10.5	pass	284: 2470.65	12	pass	329: 2472.90	18	pass
195: 2466.20	10	pass-disc	240: 2468.45	10.5	pass	285: 2470.70	12	pass	330: 2472.95	18	pass
196: 2466.25	10	pass-disc	241: 2468.50	10.5	pass	286: 2470.75	12.5	pass	331: 2473.00	18.5	pass
197: 2466.30	10.4	pass	242: 2468.55	10.5	pass	287: 2470.80	12.5	pass	332: 2473.05	18.5	pass
198: 2466.35	10.4	pass	243: 2468.60	10.5	pass	288: 2470.85	12.5	pass	333: 2473.10	19	pass
199: 2466.40	10.4	pass	244: 2468.65	10.5	pass	289: 2470.90	12.5	pass	334: 2473.15	19	pass
200: 2466.45	10.4	pass	245: 2468.70	10.5	pass	290: 2470.95	12.5	pass	335: 2473.20	19	pass
201: 2466.50	10.3	pass	246: 2468.75	10.5	pass	291: 2471.00	12.5	pass	336: 2473.25	19	pass
202: 2466.55	10.2	pass	247: 2468.80	10.5	pass	292: 2471.05	12.5	pass	337: 2473.30	19	pass
203: 2466.60	10.4	pass	248: 2468.85	10.5	pass	293: 2471.10	12.5	pass	338: 2473.35	19	pass
204: 2466.65	10.4	pass	249: 2468.90	10.4	pass	294: 2471.15	13	pass	339: 2473.40	20	pass
205: 2466.70	10.4	pass	250: 2468.95	10.5	pass	295: 2471.20	13	pass	340: 2473.45	20.5	pass

HIGHLY CONFIDENTIAL DOCUMENT