

EXHIBIT D: PROCESSING GAIN INFORMATION [15.247(E)]

PRODUCT NAME: AIRONET 4800B RADIO

NAME OF TEST: The Processing Gain of a Direct Sequence System.

FCC Part 15.247 (e) specifies:

The processing gain of a direct sequence system shall be at least 10 dB.

Guidance on measurement by FCC

The processing gain may be measured using the CW jamming margin method. The test consists of stepping a signal generator in 50khz increments across the passband of the system. At each point, the generator level required to the produce the recommended Bit Error Rate (10-5) is recorded. This is the jammer level. The output power of the transmitting unit is measured at the same point. The Jammer to Signal (J/S) ratio is then calculated. Discard the worst 20% of the J/S data points. Total losses in a system including transmitter and receiver, should be assumed to be no more than 2 dB.

therefore, processing gain = S/N + Mj + Lsys

Where :

S/N = Signal to noise ratio required at the receiver output for 10-5 error rate of a ideal receiver for your demodulation scheme

Mj = Jammer to signal ratio Lsys = System losses (2dB max)

Test results :

for 1 mb data rate:

S/N = 13 dB ; taken from Wireless Information Networks by Pahlavan & Levesque Mj = - 4.2 dB ; worst case jamming margin from tests in lab Lsys = 2.0 dB ; system losses therefore the processing gain at 1mb is 13 dB - 4.2 dB + 2.0 dB = 10.8 dB

for 2 mb data rate:

S/N = 13 dB; taken from Wireless Information Networks by Pahlavan & Levesque Mj = -4.2 dB; worst case jamming margin from tests in lab Lsys = 2.0 dB; system losses

therefore the processing gain at 2mb is 13 dB - 4.2 dB + 2.0 dB = 10.8 dB

```
Aironet Confidential
```

1

03/15/00



for 5.5 mb data rate: S/N = 13.6 dB ; taken from Harris CCK encoding modulation Mj = - 4.4 dB ; worst case jamming margin from tests in lab (after 20% discard) Lsys = 2.0 dB ; system losses therefore the processing gain at 5.5mb is 13.6 dB - 4.4 dB + 2.0 dB = 11.2 dB

for 11 mb data rate:

S/N = 16.0 dB; taken from Harris CCK encoding modulation

 $M_j = -7.4 \text{ dB}$; worst case jamming margin from tests in lab (after 20% discarded)

Lsys = 2.0 dB; system losses

therefore the processing gain at 11mb is 16.0 dB - 7.4 dB + 2.0 dB = 10.6 dB



Aironet Confidential

80

Jamming margin at 11 mb (part1)

1.44

1 alt	. dis lighteterne		shandlare S	-	room term	D D S	in = #40, bx s	/n = #	27						
adin	conditions	- sup	pry voimige o	9. 901	TOOL MIT	1.00.00	CHILL PRINT AND A			-					
aste	sr neme : B	rian C	sato / Jim Pr	10Gm	arvn			_		_		_			
nal	date : 3/17/	96	_	(B	dio camer	req=	2463	-		_		-		-	
Gp ·	= 5/N + Mi	+ Lays	; where S/N	= 16	6 dB as pe	er Har	tis MBOK m	odulat	tion; Lsys *	2d8					
	i utical tain		n diam juma	nor le	wei = - 38.	1 dBr	, then Mi= -	8.1 di	3 for 10-5 E	BER			-		
npu	a and the state of the state		e anti, latiti	10.00			CALL THESE TREE		IN ALLONG						
Sp	= 16.6 dB,+	-7.1 (18 + 2 dB = 1	1.5	dB (worst o	ase p	oint after low	est 2	Une discard	00)	mast lottor	-	- 1	- 1	pass (em
	Frankline and a		pass (error	1	lammor		rate under		lammer		rate under		ammer		rate unde
14	jammer	Gen	ty1(L5)		freet	Ge	1x10-5)	1	freq	Gp	1x10-5)	1	freq	Gp	1x10-5)
-	insert.	99	pase /				pass /			2.5	pass /				pass
	MPtz	dB	FAILURE		MHz	dB	FAILURE		MHz	dB	FAILURE		MHZ	dB	FAILUR
1	2458.60	19	pass	41	2458.50	12	pass	81	2460.50	10.5	pass	121	2462.00	12.5	P888
2	2456.55	19	pass	42	2458.55	12	pass	82	2460.55	10.5	0855	122	2452.60	12.5	0245
3	2456.60	10	pass	43	2458.60	12	pass	83	2460.60	10.0	DASE	124	2462.65	12.5	0855
4	2456.05	19	pass	44	2458.55	14	COASE .	94	2460.00	10.0	noes	125	2462.70	12.5	pass
5	2456,70	19	pass	40	2430./0	12	0365	RA	2480.75	10.5	0855	126	2462.75	11.5	pasa
0	2400.70	19	pasa	40	2458 80	12	0.855	87	2460.80	10.5	0355	127	2462.80	11.5	pass
1	2400.00	10	pase	48	2458.85	12	Data	38	2460.85	10.5	0355	128	2462.85	11.5	pass
0	2400.00	10	Page .	49	2458.90	12	0668	89	2460.90	10.5	pass	129	2462.90	11.5	pass
10	2456 95	19	0855	50	2458.95	12	0365	90	2460.95	10.5	pass	130	2462.95	11.5	P855
11	2457.00	19	Dass Y	51	2459.00	10.5	pasa	91	2461.00	11.5	pass	131	2463.00	11.5	pass
12	2457.05	16	0855	52	2459.05	10.5	pass	92	2461.05	11	DBSS	132	2463.05	11.5	pass
13	2457.10	16	0355	53	2459.10	10.5	pass	93	2461.10	_11	pass	133	2463.10	11.5	pass
14	2457.15	16	pass	54	2459.15	10.5	pasa	94	2461.15	11	pass	134	2463.15	11.5	pass
15	2457.20	16	pass	55	2459 20	10.5	pass	95	2461.20	11	pass	135	2463.20	11.5	pass
16	2457.25	16	pass	50	2459.25	10.5	pasa	35	2461.25	11	pass	1.30	2463.25	11.0	rpass.
17	2457.30	16	pass	57	2458,30	10.5	pass	9/	2461.30	10.0	pass	430	2403.30	14 8	Date:
18	2457.35	16	pass	56	2459.35	10.5	pass	30	2461.30	10.2	peas	1.00	2463.40	11.0	nass
19	2457.40	10	pass	58	2459,49	10.5	pass	100	2401.40	10.5	PESS	140	2463.45	11.5	0955
20	2457.45	16	pess	60	2459.45	10.5	pass	100	2401.40	10.5	UASED	141	2463.50	11.5	Daks
21	2457.50	.16	pass	.61	2459.50	10.5	pase	4/72	2401.00	10.5	Inoce	142	2463 55	11.5	OBS
22	2457.55	16	pass	62	2409.00	10.0	pass	102	2451 60	10.5	neat	143	2463.60	11.5	pass
23	2457.50	16	pass	03	2409.00	10,0	pasa pasa	104	2461,00	10.	Sinasa	144	2463.65	11.	0355
24	2457.05	10	pess	01	2459,00	10.0	ana ana	105	2461 70	10.	pinsa	145	2463.70	11.8	pass
25	2457.70	10	pass	00	2408.70	10.0	Loose	106	2451 75	10.	cass	146	2463.75	11.8	D853
20	2457.75	16	pass	00	2408.70	10.1	Enass	107	2461.80	11.	Dasa	147	2463.80	11.	pasa
20	2407.80	10	pase .	0/	2460.00	10.4	S pasa	105	2451.85	11.	Spass	148	2463.85	11.8	pass
20	2467.00	10	Dees Inste	60	2450 00	10.	pass	109	2481.90	12.	phes	149	2463.90	11.	pass
20	2467.00	10	DODE .	70	2450 05	10.	Dass	110	2461.95	12	pass .	150	2463,95	11.8	pass
31	2458.00	10	0885	71	2460.00	10.	Spass	111	2462.00	12	5 pasa	151	2464.00	11.8	pass
32	2458.05	12	Coss /	72	2460.05	10.	pass	112	2462.05	12	5 pass	152	2464.05	11.6	pass
33	2458.10		pase	73	2460.10	10.5	pass	113	2462.10	12.	5 pase	153	2464.10	11.8	pase
34	2458 15	13	pass	74	2460.15	10.	pass	114	2462.15	12.	5 pass	154	2484 15	11.	pass
-	2458.20		20358	75	2460.20	10.	5 pass	115	2462.20	12.	5 pass	155	2464.20	11.	pass
38	2458 25	1	DASS	76	2460.25	10.	pass	116	2462.25	12	5 разв	156	2464.25	111	1 pass
37	2458,30	1	pase	77	2460.30	10.	5)pass	117	2462.30	1 12.	Spass	157	2464.30	11.	pass
38	2458.35	1	pasa	78	2480.35	10.	5 pasa	118	2462.35	5 12.	Spass	158	2464.35	11.	pass
39	2455.40	1	pasn	79	2460.40	10.	5 pass	1119	2462.40	1 12	Spass	159	2464.40	111.	pase
40	2458.45	1	2 0435	80	2460,48	10.	Spass	120	2482.45	12	5 pass	160	2464.45	11.	DESS

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

48pg_mok, JJF

67.52

Jamming margin at 11 mb (part2)

radio	conditions	: supp	ly voltage 5	v, atr	oom temp	-	_	_	_	_	_	_		_	
tester	name : Br	an Ca	isto / Jim Fri	ledina	nn.							_	_		_
Ge =	SAL MIL	Inve	where S/N	= 16.6	dill as on	Harri	MBOK mo	dulati	on: Lsvs =	2d8					
OP-	ond + ing +	Loyo.	WINDLY SITE	10.		dillar.	ince the .	1 40	for 10 d Bi						
Input	signal leve	1 = -30	dBm, jamm	INT NO	1.55.+= 19	aem,	men wit= . c	1.00	for 10-0 bi	CITS .			-	_	
Gp =	16.6 dB +-	7,1 di	3 + 2 dB = 1	1.5 di	8 (warst cr	ise po	nt after lowe	est 20	% discardo	d)		-	_	_	
	jammer		pass (error rate under		jammer	-	rate under		jammer		rate under		jammer		rate
	freg	Cp	1x10-5)		freq	Gp	1x10-5)		freq	Gp	1x10-5)		freq	Gp	1x
	MHz	dB	Pase /		MHz	dB	FAILURE		MHz	dB	FAILURE		MHz	dB	FA
161	2464.50	11.8	pass	206	2488.75	12	pass	251	2469.00	12	pass	296	2471.25	12.5	pasa
182	2454.55	11.6	5855	207	2466.80	12	pess	252	2469.05	12	p868	297	2475.30	12.5	paço
163	2464.60	11.B	pass	208	2468.85	12	pass	253	2469.10	12	pass	298	2471.35	12.5	pass
164	2464,65	11.8	pase	209	2468.90	12	pass	254	2469.15	12	pass	299	2471.40	12.5	past
185	2484.70	11.8	pass	210	2466.95	12	pass	255	2469.20	12	pass	300	2471.45	12.5	pass
166	2464.75	11.8	pass	211	2467.00	12	pass	256	2469.25	12	pass	301	2471,50	12.5	pass
167	2484.80	11.8	pass	212	2487.05	12	0855	257	2469.30	12	C355	302	2471.65	12.5	pass
168	2464.85	11.8	pass	213	2467 10	12	pass	258	2469.35	12	pass	303	2471 60	12.5	pass
169	2464.90	11.8	pass	214	2467.15	12	pass	259	2459.40	12	pass	304	2471.65	12.5	pass
170	2464.95	11.8	pass	215	2467.20	12	pass	260	2469.45	12	P855	305	2471.70	12.5	pass
171	2485.00	13.5	pass	218	2467.25	12	pass	261	2469.50	±12	pass	306	2471.75	12.5	pass
172	2465.05	13.5	0355	217	2467.30	12	p895	262	2469.55	12	pass	307	2471.80	12.5	pass
173	2465,10	13.5	9856	218	2467.36	12	pass	263	2459.60	12	pass	308	2471.85	12,5	pass
174	2465.15	13.5	pass	219	2467.40	12	pass	264	2469.65	12	pass	309	2471.90	12.5	pass
175	2465.20	13.5	pass	220	2467.45	12	pess	265	2469.70	12	pass	310	2471.95	12,5	pass
176	2465,25	13.5	pass	221	2467.50	12	pass	266	2459.75	12	pass	311	2472.00	15	pass
177	2485.30	13.5	pass.	222	2467.55	12	pass	267	2469.80	12	DB35	312	2472.05	15	pass
178	2465.35	13.5	pass	223	2467.60	12	pass	268	2459.85	12	pass	313	2472.10	15	pass
179	2465.40	13.5	pass	224	2467.65	12	p855	269	2469.90	m:12	pars	314	2472.15	15	pass
160	2465.45	13.5	pass	225	2487.70	12	pass	270	2459.95	12	pass	315	2472.20	15	pass
181	2465.50	13.5	pass	228	2467.75	12	DBSS	271	2470.00	≈ 12	pass	316	2472.25	15	p#35
182	2485.55	13.5	pass	227	2467.60	12	pass	272	2470.05	12	pass	317	2472.30	15	pass
183	2465.60	13.5	pass	228	2467.85	12	pass	273	2470.10	12	pass	315	2472.35	15	DB55
184	2485.65	13.5	pase	229	2467.90	12	pass	274	2470.15	12	2985	319	2472.40	15	pass
195	2465.70	13.5	pasa	230	2467.95	12	pass	275	2470.20	12	pass	320	24/2.45	15	pass
186	2465.75	13.5	pass	231	2468.00	12:5	pass	276	2470.25	12	pass	321	24/2.50	15	pass
187	2465.80	13.5	pass	232	2468.05	12.5	0835	277	2470.30	12	9855	322	2472.55	15	PASS
188	2465.85	13.5	pass	233	2468.10	12.5	pass	275	2470.35	12	pass	323	24/2.00	10	PASS
189	2465.00	13.5	pass	234	2468.15	12.5	pass	2/9	2470.40	12	pass	324	24/2.65	15	pasa
190	2465.95	13.5	pass	235	2468.20	12.5	pass	280	2470.45	12	base	325	24/2/0	15	pass
191	2455.00	12	pass	236	2468.25	12.5	pass	281	2470.50	12	pa55	326	24/2/5	15	0355
192	2466.05	12	pass	237	2468.30	12.5	pass	282	2470.55	12	pass	327	24/2.80	15	pass
193	2466.10	12	Pasa	238	2468.35	12.5	pass	283	2470.60	12	0855	328	2472.65	15	pass
194	2466,15	12	pace	239	2468.40	12.5	pass	284	2470.65	12	pass	329	2472.90	15	pasa
195	2466.20	12	pasa	240	2468.45	12.5	pass	285	2470.70	12	pass	330	2472.85	15	pass
198	2468.25	12	pass	241	2468.60	-12.5	pass	285	2470.75	12	pass	331	2473.00	18	Pess
197	2466.30	12	pass	242	2468.55	12.5	pass	287	2470.80	12	pasa	332	2473.05	18	pass
198	2466.35	12	pass	243	2468.60	12.5	pass	288	2470,85	12	pass.	333	2473.10	18	D 993
199	2466.40	12	pass	244	2468.65	12.5	2315	289	2470.90	12	pass	334	2473.15	18	pass
200	2466.45	12	pass	245	2468.70	12.5	pass	290	2470.95	12	pass	335	2473.20	18	pass
201	2466.50	12	2000 2	246	2468.75	12.5	pass	291	2471.00	12	pasa	338	2473.25	18	Dass
202	2466.55	12	0455	247	2468.80	12.5	pass	292	2471.05	12	pass	337	2473.30	18	pass
203	2466,60	12	pass	248	2468.85	12.5	pasa	293	2471.10	12	pasa	338	2473.35	18	pass
204	2466.65	12	pass	249	2468.90	12.5	pass	294	2471.15	12	pass	339	2473.40	18	pass
205	2468.70	12	0895	250	2458.95	12.5	pass	295	2471.20	12	pass	340	2473.45	18	pass

8:58 AM

48pg_mak, JJF

15.5

Jamming margin at 5.5mb (part1)

radi	in condition	s su	nety voltage	50 1	et mom ten		s/n = #40, b	x s/n	= #27	-					
		0 . 00	Parts I Kent		as rotants opti	44, 54				-					+.
test	er name ; e	srian (Jasto / Jim F	ued	mann	20.00	12020	-	-	-		-		-	_
test	date : 3/17	/98		12	dio carrier	freq=	2465	-		_	_	_		_	
Gp	= S/N + MJ	+ Lsy	s; where 5/M	4=1	3.6 dB as ;	per Ha	arria MOK m	odul	ation; Lsys	= 0.5	dB				
Inpl	ut signat lev	el = -:	30 dBm, jam	mer	lavel = - 31	1.1 dB	im, then Mj=	-1.1	dB for 10-	5 BEF	ł				
Go	= 13.6 dB +	-1.6	dB + 0.5 dB	= 12	5 dB (won	st cas	e point)			_					
		1	pass (error		Internation of		pass (error		Contrast of the second		pass (error	1			pass (e
	jammer	2.1	rate under		Jammer	100	rate under		jammer	-	rate under		jammer	-	rate una
	frog	Gp	1x10-5}		freq	Gp	1x10-5)		fröq	Gp	1x10-5)		freq	Gp	1x10-
	LIC		pass /			-	Pass /		L.I.L.		CAULUDE		10.00	-	pa
	MHZ	dB	PAILORE		MHZ	dB dB	PAILURE		MHZ	00	FAILURE	100	MHZ DARD RD	GL	FAILU
- 2	2400.00	10	pass	41	2430.00	10	pass	01	2460.00	10	DRVR	121	2402.30	13.3	рана
4	2400.00	19	pass	42	2455.00	10	pass	04	2460.00	13	baaa	422	2402.33	13.3	pass
3	2450,60	10	paçe	4.5	2458,60	10	pass	0.0	2400.00	13	pass	123	2462.00	13.0	pass
4	2400.00	13	pass	44	2458 70	+0	0853	04	2400.00	10	pass	164	2462.00	13.0	pasa
0	2456.70	10	Dates	10	2458.70	10	nass	30	2460.70	13	pase	120	2462.70	13.0	Dass
7	2455 80	10	nass	40	2455 80	10	Dalla	97	2400 80	13	0355	127	2462 80	13.0	0355
8	2458 85	10	0953	48	2458 85	18	0855	88	2460.85	13	Dassi	128	2462.85	13.5	0855
9	2456 90	10	0959	49	2458 90	18	nass	89	2460.90	13	nasa	120	2462 90	13.5	nags
10	2455 95	10	0000	50	2458 05	18	nass	90	2460 95	13	Dass	130	2462.95	13.5	nasa
11	2457.00	19	nass	51	2459.00	14	oats	91	2461.00	14	naisa	131	2483.00	13.5	0045
12	2457.05	10	0055	62	2459 05	14	0055	92	2461.05	14	Dase	132	2463.05	13.5	nase
13	2457.10	19	0395	63	2459 10	14	Dass	93	2451 10	14	nass	133	2463 10	13.6	nass
14	2457.15	19	Dass	54	2459.15	14	CRSS	94	2461.15	14	0485	134	2463 15	13.5	Dass
15	2457.20	19	0365	55	2459.20	14	Dass	95	2461.20	14	0855	135	2463.20	13.5	Dass
16	2457.25	19	Dass	56	2459.25	14	Desa	96	2461.25	14	0855	136	2463.25	13.5	pass
17	2457.30	19	pass	57	2459.30	14	0635	97	2461.30	14	pass I	137	2463.30	13.5	pass
18	2457.35	19	DIISS	58	2459.351	14	pass	98	2461.35	14	DESS	138	2463.35	13.5	Dass
19	2457.40	19	0855	59	2459.40	14	0855	99	2451.40	14	0855	139	2453.40	13.5	0895
20	2457.45	19	pass	60	2459.45	14	CIASS.	100	2461.45	14	D355	140	2453.45	13.5	Dass
21	2457.50	19	pass	61	2459.50	13	pass	101	2481.50	13	pass	141	2463.50	13.5	D366 .
22	2457.55	19	DBSS	62	2459.55	13	pass	102	2461.55	13	0365	142	2463.55	13,5	pass
23	2457.60	19	Dass	63	2459.60	13	pasa	103	2461.60	13	0885	143	2463.60	13.5	0855
24	2457.65	19	0865	64	2459.65	13	pass	104	2461.65	13	pass	144	2463.65	13.5	pass
25	2457.70	19	pass	65	2459.70	13	pass	105	2481,70	13	pasa	145	2463.70	13.5	Pass
26	2457.75	19	2883 I	66	2459.75	13	p.055	108	2461.75	13	pasa	146	2463.75	13.5	pess
27	2457.80	19	pass i	67	2459.80	13	pass	107	2461.80	13	Dasa	147	2463.80	13.5	pass
28	2457.85	19	pass	68	2459,85	13	0455	108	2461.85	13	pasa	148	2463.85	13.5	pasa
29	2457.90	10	pass	69	2459.90	13	òass 🛛	109	2461.90	13	pass	149	2463.90	13.5	pass
30	2457,95	19	pass	70	2459,95	13	pasa	110	2481,95	13	pass	150	2463.95	13.5	pass
31	2458.00	16	pase	71	2460.00	14	0855	111	2452,00	13	pess	151	2464.00	13.5	pass
32	2458.05	16	pase	72	2460.05	14	pass	112	2462.05	13	pass	152	2464.05	13.5	pass
33!	2458.10	16	pass	73	2460.10	14	pass	113	2462.10	16	pasa	153	2454.10	13,5	pass
34	2458.15	16	pass	74	2480.15	14	pass	114	2462.15	16	pass	154	2454.15	13.5	pass
35	2458.20	16	pass	75	2460.20	14	2055	115	2482.20	16	pass	155	2454.20	13.5	0855
36	2458.25	16	pass	76	2460.25	14	pass	116	2452.25	16	pass	158	2464.25	13.5	pass
37	2458.30	15	pass	77	2460.30	14	pasa	117	2462.30	16	Dass	157	2454.30	13.5	pass
38	2458.35	16	pass	78	2460.35	14	pasa	118	2462.35	15	pass	158	2464.35	13.5	0385
39	2458.40	16	pass	79	2460.40	14	pass	119	2452.40	16	Daes	159	2464,40	13.5	pass
40	2458.45	15	pass	80	2460.45	14	cass	120	2462.45	16	0999	160	2464.45	13.5	Dass

46pg_mok, JJF

L

P.04/10

Jamming margin at 5.5mb (part2)

				10000	any yam	-			Sector Barrow						
radio	conditions :	Supp	ly voltage 5	v, at n	oom temp	-	-	-	1100						
loater	namo : Bri	on Co	isto / Jim Fri	edmä	00			-		-	-	-			
Gp =	S/N + M +	Lsys:	where S/N	= 16.6	dB as per	Hani	s MOK mod	uiatio	n; Lsys = 0.	ő dB	-			-	-
metter	signal level	= -30	dBm iamm	er lov	el = - 31.1	dBm,	then Mi= - 1	.1 dB	for 10-5 BE	R	19 -	_		_	
Righen	anginar mani		0.0.0	10.5	AD Allowed a	- mining it	Anio	-		-					
Gp =	13.6 d8 +-	1,6 5	3 + 0.5 dB =	12.5	dB (worst e	idea i	Dass (error	1	S	- 11	pasa (error				pass (erro
	inconse		rate under		lammer		rate under		jammer	- 6	rate under		ammer	-	rate unde
	man	Go	1x10-51		freq	Go	1x10-5)		freq	Gp	1x10-5)		freq	Gp	1x10-6)
-	mard.	esp.	Dass /	-		-	pass /			-	pass /		112		pass
	MHz	dB	FAILURE		Mhiz	dB	FAILURE		MHz	dB	FAILURE	-	MHz	dB	FAILUR
161	2464.50	14	paso,	208	2468.75	13	pass	251	2469.00	13.5	pass	296	2471.25	13.0	pass
162	2464.55	14	0835	207	2465.80	13	pass	252	2469.05	13.5	p855	297	2471.30	13.0	pass
163	2464.60	14	D355	208	2466,85	13	pass	253	2489.10	13.5	pass	298	2471.30	13.0	pesa
164	2464.65	14	pass	209	2466.90	13	pass	254	2469.15	13.5	pass	299	24/1.40	13.0	pass
165	2464.70	14	0955	210	2465.95	13	pass	255	2469.20	13.5	pass	300	24/1.45	13.0	pass
168	2464.75	14	pass	211	2467.00	13	pass	256	2469.25	13.5	pass	301	2471.50	13.0	pass
167	2464,80	14	0855	212	2467.05	13	pass	257	2469.30	13.5	D835	302	2471.55	13.0	pass
168	2464.65	14	Dass	213	2467.10	13	pass	258	2469.35	13.5	pass	303	2471.60	13.0	pass
169	2464.90	14	pass	214	2467.15	13	pass	259	2459.40	13,5	pass	304	2471.00	13.0	Cesa
170	2484.95	14	pass	215	2467.20	13	ព្នននរ	260	2469.45	13.5	pasa	305	24/1./0	13.0	pass
171	2465.00	14	pass	215	2467.25	13	0855	261	2489.50	12.5	pasa	306	24/1./5	13.0	pasa
172	2465.05	14	pass	217	2467.30	13	pass	262	2469.55	12.5	pass	307	2471.80	13.0	pass
173	2465.10	14	pass	216	2467.35	13	P855	263	2469.60	12.5	pass	308	2471.85	13.0	pass
174	2465.15	14	Dass	219	2457.40	13	pase	264	2469.65	12.5	pass	309	24/1.90	13.0	pass
175	2465.20	13.5	Dass	220	2467.45	33	0855	255	2469.70	12.5	C855	310	2471.95	13.0	pass
176	2465.25	13.5	pass	221	2467.50	13	pass	265	2469.75	12.5	pass	311	2472.00	15	pass
177	2465.30	13.5	pass	222	2467.55	13	pass	287	2459.80	12.5	pass	312	2472.05	15	pass
178	2465.35	13.0	pass	223	2467,60	13	pase	258	2469.65	12.5	pass	313	2472.10	10	pass
179	2465.40	13.5	pass	224	2467.65	13	pass	269	2469.90	12.5	19485	314	2472.15	10	DN88
180	2465.45	13.5	pass	225	2467.70	13	pass	270	2460.05	12.5	2066	315	2472.20	10	pass
181	2465.50	13.6	pass	226	2467.75	13	pasa	271	2470.00	13	pass	316	2472.25	15	pass
182	2455.55	13.5	pass	227	2467.80	12	Pass	272	2470.05	13	pass	317	24/2.30	10	pass
183	2465.60	13,5	pass	228	2467.85	13	pass	273	2470.10	13	0850	318	2472.35	10	pass
184	2465.65	13,5	pess	229	2467.90	13	pass	274	2470.15	13	pass	218	29/2.40	10	pass
185	2485.70	13.5	pass	230	2487.95	13	pass	275	2470.20	13	Dass	320	2472.43	10	pass
186	2465.75	13.5	pass	231	2468.00	13.5	0055	276	2470.25	13	pass	321	24/2.50	12	paes
187	2465.80	13.5	pass	232	2468.05	13.5	0855	277	2470,30	13	pass	322	24/2.55	1.	pass
188	2465.85	13.5	pass	233	2468.10	13.5	pase	278	2470.35	13	pass	323	2472.60	10	page
189	2465.90	13.5	pass	234	2468.15	13.5	pasa	279	2470.40	12,5	pass	324	2472.65	15	pasa
190	2465.95	13.5	Pass	235	2468.20	13.5	pass	280	2470.45	12.5	pass	325	2472.70	15	pase
191	2466.00	13.5	DOGS	235	2468.25	13,5	pass	261	2470.50	12.5	pass	326	2472.75	15	pass
192	2468.05	13.5	pass	237	2468.30	13.5	pass	282	2470.65	12.5	pass	327	2472.60	15	pasa
193	2466.10	13.5	0998	238	2468.35	13.5	pass	283	2470.60	12.5	pass	328	2472.65	15	pass
194	2466.15	13.5	pass	239	2468.40	13.5	pass	254	2470.65	12.5	pass	329	2472.90	15	pass
195	2466.20	13.5	pass	240	2468.45	13.5	pasa	285	2470.70	12.6	pass	330	2472.95	15	pasa
196	2465.25	13.5	pass	241	2468,50	12.5	pass	288	2470.75	13	pass	331	2473.00	17	pass
197	2466.30	13.5	pass	242	2468.55	12.5	pass	287	2470.80	13	pasa	332	2473.05	17	pass
198	2465.35	13.5	pass	243	2465,60	12.5	pasa	288	2470.85	12	разъ	333	2473.10	17	pass
199	2466.40	13.5	pass	244	2468.85	12.8	pass	289	2470.90	12	pass	334	2473.15	17	Pass
200	2466.45	13.	pass	245	2458.70	12.	pass	290	2470.95	13	pass	335	2473.20	1 17	pass
201	2455 50	13.4	Dass	245	2468.75	12	pass	291	2471.00	12	poss	336	2473.25	17	Pass
202	2466 55	13	pass	247	2468.80	12.	pass	292	2471.05	13	pass	337	2473.30	1 17	pass
203	2455 60	13.	cass	248	2468.85	12	5 pass	293	2471.10	12	pass	338	2473.35	1	pass
204	2466.65	13.	pass	249	2468.90	12.	pass	294	2471.15	12	pass	339	2473.40	1	pass
205	2488 70	19.	S PLATER	250	2468.95	12	nass	205	2471 20	13	20255	340	2473.45	1 17	/lpass

8:58 AM

48pg_mok, JJF

Jamming margin at 2 mb (part1)

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

66 2459.75 14.5 pass

2459.85

2459.90

2459.95

2460.00

2460.05

2480.10

2460.15

2460.20

2480.25

2460.30

2460.35

2459.80 14.5 pase

14.5 pass

14 pass

14 pass

14 pass

14 pans

14 pass

14 pass

14 pass

14 pass

14 pass

14 pass

67

68

69

70

71

72

73

74

75

78

77

78

2481.75

2461.60

2461.85 13.5 pass

2461.90 13.5 pass

2461.95 13.5 pass

2462.00 13.5 pasa

2462.05 13.5 pass

2452.10 13.5 pass

2462.15 13.5 pass

2462.20 13.5 pass

2462.25 13.5 pass

2462.30 13.5 pass

2462.35 13.5 pass

2462.40 13.5 pasa

2462.45 13.5 pass

14 pass

14 0855

14 pnss

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

2462 50 13 5 pass

2462.55 13.5 pass

2462.60 13.5 pass

2462.65 13.5 pass 2462.70 13.5 pass

2462.75 13.6 pass 2462.80 13.5 pass

2462.85 13.5 pass

2452.90 13.5 pass 2462,96 13.5 pass

2463.00 13.0 pass

2463.05 13.0 pass

2463.10 13.0 pass

2463.15 13.0 pess

2463.20 13.0 pass

2463.25 13.0 pass

2463.30 13.0 pass 2463.35 13.0 pass

2463.40 13.0 pass 2463.45 13.0 pass

2463.50 13.0 pass 2463.55 13.0 pess

2463.60 13.0 pase

2463 65 13.0 pass

2463.70 13.0 pass

2463.75 13.0 pass

2453.60 13.0 pass

2463.65 13.0 pass

2463.90 13.0 pass

2463.95 13.0 pass

2464.00 12.5 pass

2464.05 12.5 pass

2454.10 12.5 pass

2464.15 12.5 pass

2454.20 12.5 pass

2464.25 12.5 pass

2464.30 12.5 past

2484.35 12.5 pass

2484.40 12.5 pass

2464.45 12.5 pass

dB

	00	1.24	2
· • •	ωı	24	0

pass (error

rate under

1x10-5)

FAILURE

pass /

rađ	ic condition	6 : 6U	oply voltage	5v.	at room ter	mp, ne	s/n = #40, b	s/n	= #27			_	0.6	
test	er name : 6	Brian (Casto / Jim I	Fried	mann									
test	date : 3/17	//98		1	dio carrier	freq=	2465		-					
Gp	= S/N + Mj	+Lsy	s; where SA	N = 1	3 dB as pe	er Wire	eless Inform	ation	Networks b	y Pal	ntavan & Lev	esqu	e; Lays = 0	5dB
inpl	ut signal lev	nel =	30 dBm, jan	mer	tevel = - 3	1.5 dB	im, then Mj=	-1.5	dB				1000	1
Ĝp	= 13.0 dB +	+ -1.5	d8 + 0.5 d8	= 12	2.0 dB (wor	rst cas	e point)							
	jammer freq	Gp	pass (error rate under 1x10-5)		jammer freq	Gp	pass (error rate under 1x10-5)		jammer freg	Gp	pass (error rate under 1x10-5)	100	jammor freq	Gp
	MHz	dB	FAILURE		MHz	dB	FAILURE	10.00	MHz	dB	Pasa /		MHz	dB
1	2455.50	18	Dass	41	2458.50	16	pass	81	2460.50	14	pass	121	2462.50	13.5
2	2456.55	18	pass	42	2458.55	18	pass	82	2480.55	14	pase	122	2462.55	13.5
3	2455.60	18	pass	43	2458.60	16	pess	83	2460.60	14	pass	123	2462.60	13.5
4	2456 65	18	pass	44	2458.65	16	pass	84	2460.65	14	pass	124	2462.65	13.5
5	2456.70	18	nass	45	2458,70	16	pass	85	2450.70	14	pass	125	2462.70	13.5
ő	2456.75	18	pass	46	2458.75	16	pass	85	2480.75	14	pass	126	2462.75	13.6
7	2456.80	18	pass	47	2458.80	16	pass	87	2480.80	14	pasa	127	2462.80	13.5
8	2455.85	18	pass	48	2458.85	16	pasa	66	2480.85	14	pass	128	2462.85	13.5
9	2456.90	18	pass	49	2458.90	16	0885	89	2480.90	14	pass	129	2452.90	13.5
10	2456.95	18	pass	50	2458.95	16	pass	90	2460,95	14	pass	130	2462.95	13,5
11	2457.00	+ 18	pass	51	2459.00	34.5	pesa	91	2451.00	0.14	pass	131	2463.00	13.0
12	2457.05	18	pass	52	2459.05	14.5	pasa	92	2461.05	14	0055	132	2463.05	13.0
13	2457.10	18	pass	53	2459.10	14.5	pasa	93	2461.10	14	pass	133	2463.10	13.0
14	2457.15	18	pass	54	2459.15	14.5	pass	94	2461.15	14	pace	134	2463.15	13.0
15	2457.20	18	pass	55	2459.20	14.5	pasa	95	2461.20	14	pass	135	2463.20	13.0
16	2457.25	18	pasa	56	2459.25	14.5	pasa	96	2461.25	14	P855	136	2463.25	13.0
17	2457.30	18	pass	57	2459.30	14.5	Dasa	97	2461.30	14	DHES	137	2463.30	13.0
18	2457.35	15	pass	58	2459.35	14.5	Dass	98	2461.35	14	p 9ss	138	2463.35	13.0
19	2457.40	18	pess	59	2455.40	14.5	0855	99	2461.40	14	pass	139	2463.40	13.0
20	2457,45	18	pass	60	2459.45	14.5	pass	100	2481.45	14	pass	140	2463.45	13.0
21	2457.50	+18	pass	61	2459.50	14,5	pass	101	2461.50	14	pass	141	2463.50	13.0
22	2457.55	18	pass	62	2459.55	14.5	pasa	102	2461.55	14	pass	142	2463.55	13.0
23	2457.80	18	pass	63	2459.60	14.5	pnaa	103	2461.60	14	pass	143	2463.80	13.0
24	2457.65	18	2035	64	2459.65	14.5	pass	104	2461.65	14	0055	144	2463 65	13.0
25	2457.70	18	Dass	65	2459.70	14.5	pass	105	2461.70	14	0998	145	2463.70	13.0

39 2458.40 70 2460.40 14 pass 16 pass 40 2458.45 60 2460.45 15 pass 14 pass

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

8:58 AM

26

27

28

29

30

31

32

34

35

38

37

38

2457.75

2457.80

2457.85

2457.90

2457.95

2458.05

2458.15

2458.20

2458.25

2458.30

2458.35

33 2458.10

2458.00 +

18 pass

18 pass

18 pass

18 pass

18 pass

16 pass

16 pass

16 pass

16 pass

15 pass

16 pass

16 pass

16 pass

48pg_mok, JJF

÷,

Jamming margin at 2 mb (part2)

1000

	24		P	-	ssing gain	by m	ethode of ja	mmi	ng margin	using	BER tests	r .			
radio	conditions	supp	ly voltage 5	v, at i	com temp	1154		_							
teste	r name : Bd	an Ca	sto / Jim Fri	edmi	unti		1000								
Gn =	R/N + Mi +	Leve	Where S/N	= 13	A as nor	Menie	ss Informatio	n Ne	tworks by P	ables	an & Leves	ave: E	svs = 0.5d	B	
- 40	alan at facat	Luys,	Wither Transie			dDate	iban Mm. 1	E all	in an inter of the			1			
nput	signal love	= -30	ann, jarnin	HOT AD	/01=-31.3	gipm,	1000 M(++1	2.00	-				0.000		_
Ģp =	13.0 dB +	1.5 di	B + 0.5 dB =	12.0	dB (worst	case (Doint)	-		_	naes (error			-	Cass (erro
	iemmor		rate under		iammer		rate under		iammer		rate under	1.4	lammer		rate under
	frad	Go	1x10-51		fred	Gp	1x10-5)		freq	Gp	1x10-5)		treg	Gp	1x10-5)
-	0.004	49	pass/				pass /				pass /				pass
	MHz	dB	FAILURE		MHz	dB	FAILURE		MHz	dB	FAILURE	1.	MHz	dB	FAILUR
161	2484.50	12.5	pass	206	2468.75	13	pess	251	2469.00	13.5	pasa	206	2471.25	13.0	pass
162	2464.55	12.5	0855	207	2465.80	13	pass	252	2469.05	13.5	pass	297	2471.30	13.0	pass
163	2464.60	12.5	pass	208	2486.85	13	pass	253	2469.10	13.5	D933	298	2471.35	13.0	pass
164	2464.65	12.5	D355	209	2466.90	13	pass	254	2469 15	13.5	pass	799	2471.40	13.0	pass
165	2464.70	12.5	peas	210	2466.95	13	pass	255	2469 20	13.5	pass	300	24/1,45	13.0	pass
166	2464.75	12.5	pass	211	2457.00	13	pass	206	2469.25	13.5	paus	301	24/1.00	13.0	Sher.
167	2464.60	12.5	pess	212	2467.05	13	pass	207	2459.30	13.5	2088	302	2471.00	13.0	pesa
168	2464.85	12.5	pess	213	2487.10	12.0	pass	200	2409.30	10.0	pass	200	5474.85	44.0	LIANS
109	2404.90	12.5	pass	214	2401.10	12.0	pass	209	2460.46	13.0	2855	305	2471 1.00	10.0	0.000
170	2464.95	12.5	pass	210	2467 20	12.5	pass	261	2409.40	13.3	pasa Nate	305	2471.74	13.0	Logice
475	2466.05	12.0	pass	210	2407.20	12.5	DOCK	267	2469 55	13.6	0255	307	2471.80	13.0	Enser
172	2465 10	125	pass	218	2467.35	12.5	0.955	263	2463.60	13.5	0035	208	2471.85	13.0	0050
174	2465 15	12 6	nase	219	2467 40	12.5	0833	264	2469.65	13.5	DOSS	309	2471.90	13.0	0458
175	2465 20	12	0255	220	2467 45	12.5	0855	265	2469.70	13.5	DE38	310	2471.95	14.5	0005
178	2485 25	12	0355	221	2467.50	12.5	Dass	266	2469.75	13.5	pass	311	2472.00	14.5	pass
177	2465 30	12	Dass	222	2467.55	12.5	0885	267	2459.80	13.5	0938	312	2472.05	14.5	Dets
178	2465.35	12	pase	223	2467.80	12.5	pass	268	2469.85	13.5	pass	313	2472.10	14.5	0985
179	2465.40	12	pass	224	2467.65	12.5	pass	289	2469.90	13.5	pass	314	2472.15	14.5	2055
180	2465.45	12	pass	225	2467.70	12.5	pass	270	2469.95	13.5	pass	315	2472.20	14.5	pass
161	2465.50	12	pass	226	2467.75	12.5	puss	271	2470.00	14	pass	316	2472.25	14.5	2055
182	2465.55	12	pass	227	2457.80	12.5	(2883	272	2470.05	14	2055	317	2472.30	14.5	D958
183	2465.60	12	pass	228	2467.85	12.5	pass	273	2470.10	14	0355	318	2472.35	14.5	0383
184	2465.65	12	pass	229	2467.90	12.5	pass	274	2470.15	14	2955	319	2472.40	14.5	pass
185	2465.70	12	pess	230	2467.95	12.5	pass	276	2470.20	14	pass	320	2472.45	14.5	pass
186	2465.75	12	pass	231	2468.00	13.3	pass	276	2470.25	14	pass	321	2472.50	14.5	pasa
187	2465.60	12	pass	232	2468.05	13,3	pass	277	2470.30	14	pass	322	2472.55	14,5	pess
158	2465.85	12	pass	233	2468.10	13.3	pass	278	2470.35	14	pass	323	2472.60	14.5	pass
189	2465.90	12	pass	234	2468.15	13.3	pass	279	2470.40	14	pass	324	2472.65	14.5	D355
190	2465.95	12	pass	235	2468.20	13.3	pass	280	2470.45	14	pass	325	2472.70	14,5	pass
191	2466.00	12	pass	236	2468.25	13.3	pass	281	2470.50	.14	pasa	326	2472.75	14.5	pasa
192	2468.05	13	pasa	237	2466.30	13,3	pass	282	2470.55	14	pass	327	2472.80	14.5	pass
193	2465.10	13	pass	238	2468.35	13.3	pass	283	2470.60	14	pass	328	2472.85	14.5	pass
194	2465 15	13	pase	239	2468.40	13.3	pass	284	2470.65	14	pass	329	2472.90	14.5	0395
195	2468.20	13	paas	240	2468.45	13,3	pass	285	2470.70	14	pass	330	2472.95	14.5	pass
195	2466.25	13	pass	241	2468.50	13.3	pass	286	2470.75	14	Dess	331	2473.00	17	ipass .
197,	2466.30	13	pass	242	2468.55	13.3	D365	287	2470.80	14	PBSS	332	2473.05	17	pass
198	2466.35	13	pass	243	2468.00	13.3	pass	288	2470.85	13	pasa	333	2473.10	17	0855
199	2466.40	13	pass	244	2468.65	13.3	pass	280	2470.90	13	pass	334	24/3,15	17	pass .
200	2466.45	13	pass	245	2468,70	13.3	pass	580	2470.95	13	DR55	335	24/3.20	17	0853
201	2466.50	13	pass	246	2468.75	13.3	pass	291	24/1.00	13	pass	330	24/3.25	17	pasa
2132	2466.55	13	pass	247	2468.80	13.3	pass	292	2471.05	13	pass	337	24/3.30	17	pass
203	2456.60	13	pass	248	2468.85	13.3	pasa	283	2471.10	13	pass	338	24/3.35	17	pass
	2000 00	13	0866	249	2468.90	13.3	pass	294	24/1.15	13	DASS	238	24/3.40	17	pass

Jamming margin at 1 mb (part1)

12/7/96

_			p	roce	saing gain	by m	ethode of j	Amm	ing margin	usin	g BER test	r.	-	-	_
rədi	o conditions	s : su	ply voltage	Sv, a	t room tem	p, rx i	s/n = ≢40, tx	a/is =	#27		_			_	
test	er name : B	Idan C	Casto / Jim F	riedr	กลณา										
test	date : 3/17	/98		10	dio carrier	frog-	2465								_
Gn	S/N + MI	+ Lav	: where S/N	= 1	dB as pe	- Wine	less Informa	tion I	Networks by	Pah	avan & Leve	esque	Lays = 00	18	
inn	t signal lev	ol = .1	D dDay lam	mor	munt = - 30	1 dB	m then Mi=	-0.1 0	19	COLUMN A					
mp	C BHURN HOV		xi abin, jami	iner i	ever 50		the transferrend			-				172.5	
Gp	= 13.0 dB +	0.1	dB = 12.9 dl	B (W	orst case p	cinty	one larer	-			cass (error	0.11			cass (err
	iammar-		rate under		inmer		rate under		lammer		rate under		jammer-		rate unde
	freq	Go	1x10-5)		fred	Gp	1x10-5)		freq	Gp	1x10-5)	8.1	treg	Gp	1x10-5
			pass /	27			pass /		2 (ANA)		pass /		w.a		pest
	MHz	dB	FAILURE		MHz	dB	FAILURE		MHz	dB	FAILURE		MHz	68	FAILUR
1	2455.50	19	p835	41	2458.50	17	pass	81	2460.50	15	pess	121	2462.50	- 14	pasa
2	2456.55	19	pa35	42	2458.55	17	pase	82	2460.65	15	pass	122	2462.55	14	pass
3	2456.80	19	pass	43	2458.60	17	pass	83	2460.60	15	p655	123	2452.50	14	pass
4	2456.65	19	pass	44	2458.65	17	Dasa.	84	2450.65	15	çass	124	2452.65	- 34	pass
5	2458.70	19	pass	45	2458.70	17	pass	85	2460.70	15	pass	125	2452.70	14	pass
.6	2456,75	10	0695	46	2458.75	17	pase	85	2450.75	15	pass	125	2452.75	14	pasa
7	2458.80	19	pass	47	2458.80	17	pass	8/	2450.80	15	pass	121	2402.00	14	pese
8	2456.85	19	pass	48	2458.85	_1/	pass	88	2460.85	15	pass	128	2462.00	34	poss
9	2458.90	19	pass	49	2458.90	1/	pass	59	2460.90	10	basa	129	2402.30	. 24	pasa
10	2456.95	19	pass	50	2458.95	1/	pass	30	2450,95	15	pass	1.30	2402.30	14	pasa
11	2457.00	19	0053	51	2459.00	15	page	91	2461.00	10	pass	131	2463.00	14	2455
12	2457.05	19	pass	32	2459.00	15	pass	92	2451.00	10	pass	132	2463.00		pesa
13	2457.10	19	pass	53	2458.10	15	peas	93	2451.10	10	pass	133	2403.10	1.0	
14	2457.15	19	pass	54	2459,15	10	pans	94	2401.10	10	pars	134	2402.70	14	
10	2401.20	19	pass	00	2400.20	10	pasa	20	2401.40	16	puse .	136	2403.49	1.0	
19	2457 20	10	pass	671	2450 30	15	Page	67	2451 30	16	president (137	2453 30	14	Fanta
	2457.35	10	6322	68	2450 35	15	0000	GHI	2451 35	15	1922	134	2463 35	14	0355
10	2467 40	10	P000	60	2460 40	15	nase	00	2451.40	(5	Date	130	2463.40	4.6	2148
20	2457 45	10	0355	60	2450 45	45	0355	100	2481 45	15	0005	140	2463 45	14	otes
21	2457.50	10	0000	61	2459 50	15	0955	101	2461 50	15	nace	141	2463 50	14	mass
22	2457 65	10	mass	65	2459.55	15	CARS.	102	2461.55	16	naee	142	2463.55	14	DARK
23	2457 80	+0	nant	69	2459 60	15	0.065	103	2461 60	15	0055	1430	2463.60	14	11835
24	2457 65	10	0355	64	2459 85	15	0855	104	2481 85	15	0888	144	2463 65	14	Dass
긆	2457 70	10	1955	RE	2459 70	15	0855	105	2451 70	15	dass	145	2463.70	14	0000
28	2457 75	10	0855	64	2459 75	15	0885	106	2451.75	15	2000	146	2453 75	14	2005
27	2457 80	10	0888	67	2459 80	15	0855	107	2451 80	15	pass	147	2463 80	14	Dáss
28	2457 85	10	0355	68	2459 85	15	0365	108	2451 65	15	0855	148	2463.85	14	pass
29	2457 90	10	Dass	69	2459.90	15	Dass	109	2451.90	15	0558	149	2453.90	14	Dass
30	2457.95	16	0355	70	2459.95	15	Dass	110	2451.95	15	Daus	150	2483.95	14	pass
31	2458 00	17	Cass	71	2460.00	15	DSSS	151	2452.00	15	Dass	151	2464.00	14	Dass
32	2458.05	17	Case	72	2460.05	15	pass	112	2452.05	15	pass	152	2454 05	14	pass
33	2458.10	17	Dass	73	2450 10	15	Dass	113	2462 10	15	pass	153	2454.10	14	CUSS
34	2458.15	17	0855	74	2460.15	15	0000	114	2452.15	15	0855	154	2464.15	14	pass
35	2458.20	17	Dass	75	2460.20	15	0855	115	2452.20	15	0835	155	2454 20	14	DASS
36	2458.25	17	pass	78	2460.25	15	0855	116	2452 25	15	0835	158	2454.25	14	0355
37	2458.30	17	0355	77	2460.30	15	0885	117	2462.30	15	0835	157	2464.30	14	pass
38	2458 35	17	0855	78	2460 35	15	0855	118	2482 35	15	Dass	158	2464 35	14	Dass
39	2458.40	17	Dass	79	2460.40	15	pass	119	2482 40	15	0055	159	2464.40	14	pase
40	2498 45	- 17	0285	80	2460 45	15	Cass	120	2402 45	15	DHSS	160	7484 45	14	DARS

nis Bili

Jamming margin at 1 mb (part2)

17:50

			P	roces	using gain	by m	ethode of ja	mmi	ng margin	using	BER tests	r	_	-	
radio	conditions	: supp	bly voltage 5	v. et r	noom temp	<u> </u>	- 11 - 1			-		_	_	_	
ente	r aama : Bri	ian Ga	ista / Jim Fr	iedmt	nn	-	_	_				_			_
Go =	S/N + Mj +	Loys:	where S/N	= 13	B as per	Virela	ss Informatio	n Na	tworks by P	in talan	an & Leves	que; L	sys = 0dB		
nout	einnui leve		dim jamm	ner les	ml = - 33.0	dem.	then Mi= -3	0 dB			and the second se				
	13.0 .00.		0 - 12 0 - 19	1		1.11	and the case					-		-	
Gp =	13.0 00 +	0.1.0	Dass (error	(wor	at case pu	ing	pess (error				pass (error			1	pass (erro
	jammer		rate under		jammer		rate under		jammer		rate under		jammer		rate unde
2	freq	Gp	1x10-5)		freq	Gp	1x10-5)	Č.	frog	Gp	1x10-5)		freq	Gp	1x10-5)
			pass /			- 17	pass/			10.03	pass /			100	pass
1.1	MHz	dB	FAILURE	m	MHz	dB	FAILURE		MHz	dB	FAILURE		MHz	dB	FAILUR
161	2464.50	13	pass	206	2466.75	14	pass	261	2469.00	14	pass	296	2471.25	14	pass
102	2464.55	13	pass	207	2465.80	14	p355	252	2469.05	- 14	pass	297	2471.30	14	pess
163	2464.60	13	pass .	208	2466.85	14	9855	253	2469.10	14	pasa	298	2471.35	14	p835
164	2464.65	13	pass	209	2465.90	14	P43 8	254	2469.15	14	pass	289	24/1.40	14	pass
165	2464.70	12.9	pass	210	2468.95	14	pass	255	2469.20	14	pass	300	2471.45	14	pass
166	2464.75	12.9	pass	211	2467.00	14	pass 1	255	2469.25	14	pacs	301	24/1.50	14	pass
167	2464.80	12.9	pass	212	2487.05	14	p335	257	2469.30	14	DB\$5	302	2471.55	14	p888
168	2464.85	13	pase	213	2467 10	14	pass	258	2469.35	14	pass	303	24/1.60	14	paae
169	2464,90	13	Dasa	214	2487.15	14	0838	259	2469.40	14	p633	304	24/1.65	14	pasa
170	2464.95	13	pass	215	2467.20	14	Dase	260	2469,45	14	pass	305	2471.70	14	pasa
171	2465.00	13	pass	216	2467.20	14	0353	261	2469.50	34	pass	308	2471.75	14	pass
172	2465.05	13	p366	217	2467.30	- 14	0366	262	2489.55	14	pass	307	24/1.80	14	pass
173	2465.10	13	pass	218	2467.35	14	0858	263	2469.60	14	pess	308	24/1.83	14	pasa
174	2465.15	13	pass	219	2467.40	14	pass	254	2465.65	14	DG\$5	306	24/1.90	14	CHAN
175	2465.20	13	pass	220	2467.45	14	P853	205	2409.70	14	pass	310	24/1.90	14	pess
176	2465.25	14	pass	221	2467.50	14	0855 1	266	2469.75	14	0988	311	2472.00	15	C835
1//	2465.30	14	pass	222	2467.55	14	pass	267	2469.80	14	pass	374	2472.90	15	pass
178	2465.35	14	pass	223	2467.60	. 14	pass	268	2469.85	14	2250	313	24/2.10	15	pass
179	2465.40	14	pasa	224	2467.65	14	pass	269	2469,90	14	pass	314	2472.15	15	pase
180	2465.45	14	Dass	225	2457.70	14	pass	270	2469.95	14	PASS	315	2472.20	15	pass
181	2465.50	14	pass	226	2467 75	14	pass	2/1	2470.00	14	pass	316	2412.63	15	2800
182	2465.55	14	pass	227	2457.80	14	pass	272	2470.05	14	pass	317	2472.30	15	pass
183	2465.60	14	pess	228	2457 85	14	beaa	2/3	2470.10	14	CE33	318	2472.35	15	pass
184	2465.65	14	pass	229	2457.90	14	pass	274	2470.15	14	pass	375	2472.40	15	pass
185	2465.70	14	paas	230	2467.05	14	pase	275	2470.20	14	pass	320	2472.48	15	bote
186	2465.75	14	pass	231	2455.00	14	pass	276	2470.25	14	pass	321	2472.50	15	pass
187	2465.80	15	pass	232	2468.05	14	pass	277	2470.30	14	pass	322	2472.55	15	pass
188	2485.85	15	pass	233	2488.10	14	pass	278	2470.35	14	pass	323	2472.60	15	pass
189	2465.90	15	pass	234	2468.15	14	pass	279	2470.40	14	pass	324	2472.85	15	pass
190,	2465.95	15	pass	235	2468.20	14	pasa	280	2470.45	14	pass	325	2472.70	15	pass
191	2466.00	15	pass	236	2468.25	14	pass	281	2470.50	:44	p655	326	2472.75	15	pasa
192	2466.05	15	pass	237	2468.30	14	pass	282	2470,55	14	pass	327	2472.80	15	pass
193	2466.10	15	pasa	238	2468.35	14	pana	283	2470.60	14	pass	328	2472.85	15	pass
194	2466.15	15	pass	239	2468.40	14	pass	284	2470.65	14	PRSS	329	2472.90	15	pase
195	2466.20	15	pass	240	2468.45	14	pass	285	2470.70	14	peas	330	2472.95	15	pass
195	2466.25	15	pass	241	2468.50	14	P885	286	2470.75	14	0855	331	2473.00	18	pass
197	2466.30	15	pess	242	2468.55	14	P655	287	2470.80	14	P858	332	2473.05	18	2253
198	2466.35	15	pass	243	2468.60	14	pass	288	2470.85	14	pass	333	2473.10	18	CHES
189	2466.40	15	D855	244	2468.65	14	pass	289	2470.90	14	pass	334	2473.15	18	pasa
200	2466.45	15	pass	245	2468.70	14	2955	290	2470.95	14	pass	335	2473.20	18	pass
201	2466.50	15	pasa	245	2468.75	14	pass	291	2471.00	14	pess	336	2473.25	18	pass
202	2466.55	15	pass	247	2468.80	14	pass	292	2471.05	14	pass	337	2473.30	18	P055
203	2466,60	15	pass	248	2458,85	14	pass	293	2471.10	14	pass	338	2473,35	18	p4668
204	2466.65	15	pass	249	2468.90	14	pass	294	2471.15	14	P885	339	2473.40	18	pass
205	2466.70	16	pass	250	2458.95	14	poss	295	2471.20	14	DASS	340	2473.45	18	pasa