

## 36th CSVHFS Conference

Milwaukee, WI

July 26, 2002

Testing by: W5LUA, WA8WZG, KA0RYT, VE4MA, W5ZN, WA8RJF and N2CEI

Equipment supplied by Agilent Technologies, W5LUA and W9GA

Compiled by WA8RJF

HP 346A Noise Source through 10 GHz, HP 346C on 24 GHz

Measurement Accuracy +/- 0.2 dB at 10 GHz and below

Band	Call	Design	Device	Noise Figure (dB)	Gain (dB)
<b>50 MHz</b>					
	WA5VJB	Cavity	MGF 1801	0.18	21.94
	N4SC	Mirage KP-2		1.02	23.81
<b>144 MHz</b>					
	KA0RYT	Cavity	2@NE334S01 parallel	0.14	29.65
	KA0RYT	Cavity	MGF1801	0.18	23.94
	KA0RYT	Tapped LC	MGF 1801	0.20	21.55
	KA0RYT	Tapped LC	ATF33143	0.23	21.58
	K5DYY	ARR P144VDG		0.39	23.84
	W7XU	Homebrew	MGF 1302	0.41	25.56
	WB9OWN	Demi 144LNA	ATF21136	0.49	21.22
	K5DYY	ARR P144VDG		0.50	21.88
	N0IS	LC	MGF 1402	0.55	23.80
	KO2R	Demi 144LNA	ATF 21186	0.58	21.20
	WA5VJB	Tapped L	MGF 1801	0.60	16.80
	K9CA	ARR P144VDG	GaAsFet	0.63	22.19
	W7XU	ARR SP144VDG	MGF 1302	0.97	20.98
	N8KWX	DB6NT MKU 24	NEC??	1.01	26.53
	K0VSV	RFC 2-117		1.25	17.01
	K0TLM	ARR SP144VDA	?	1.35	12.90
<b>222 MHz</b>					
	WA5VJB	Tapped L	MGF 1801	0.19	21.50
<b>432 MHz</b>					
	KA0RYT	Tapped Cavity	FHC40LG	0.15	28.44
	KA0RYT	Cavity	FHC40LG	0.24	25.70
	KA0RYT	Cavity	FHC40LG	0.25	24.04
	KA0RYT	SSB LNA435	?	0.42	20.87
	KA0RYT	L Match	ATF-10136	0.59	17.30
	W7XU	Homebrew	MGF 1402	0.65	22.77
	N4SC	Demi 70 LNAWP	ATF-21186	0.70	18.87
	K5DYY	ARR P432VDG		0.75	18.36
	NS7N	Demi		1.82	15.24
	K0VSV	TE 4412G		3.09	11.80
<b>902/903 MHz</b>					
	N4SC	Demi 33 LNAWP	ATF-10136	0.68	18.57

Band	Call	Design	Device	Noise Figure (dB)	Gain (dB)
<b>1296 MHz</b>					
	N0IS	W6PO H.B.	MGF 1402	0.48	17.40
	WA9FWD	Demi 23LNAH	ATF-10136	0.50	18.55
	K5LLL	Series L	ATF-10136	0.54	14.70
	W9IIX	Demi	ATF-10136	0.69	18.30
	N0AKC	Demi	ATF-10136	0.71	16.95
	N0IS	WB5LUA Design	ATF-10136	1.30	14.02
	W7VX	Surplus Amp	?	2.14	19.01
<b>2304 MHz</b>					
	WA5VJB	HB DB6NT	NE326	0.64	13.94
	W7VX	Surplus Amp	?	2.26	21.20
<b>3456 MHz</b>			No entry		
<b>5760 MHz</b>					
	W0AUS	Commercial	?	3.23	19.20
<b>10368 MHz</b>					
	WB0LJC	Lau Dec 92 QEX	ATF 36077	0.99	12.20
	N2CEI	Demi	ATF 36077	1.09	12.44
	N2CEI	Demi	ATF 36077	1.16	12.11
	WB0LJC	Lau Dec 92 QEX	ATF 36077	1.18	9.74
	WA2VOI	DSS LNA	?	1.59	19.84
	WA2VOI	DSS LNA	?	1.59	19.90
	WA2VOI	DSS LNA	?	1.73	22.58
	N0UK	Commercial LNA	?	1.83	29.30
	WA2VOI	DSS LNA	?	1.83	20.01
	N0UK	Demi XVTR	FMM5701 MMIC	2.08	23.70
	N0UK	Commercial LNA	?	3.54	8.91
	WB0LJC	LJC	MGA 86576	7.10	0.4**
	N0UK	Commercial PA	?	12.00	8.50
<b>24192 MHz</b>					
	W5LUA	LNA	NE32584C	2.15	16.11
	W5LUA	LNA	Avantek SMW 94-1044	2.55	27.08
	VE4MA	H.B./DB6NT	NE32584C	2.70	22.93
	W5LUA	W0EOM LNA		4.05	19.00
	W5LUA	W5LUA HB	Pair of ATF 36077	4.09	11.08
	VE4MA	RX converter w/DB6NT LNA	NE32584C	2.44	50.22
	W5LUA	RX converter w/Avantek LNA		3.37	38.42
<b>47 GHz</b>	VE4MA	HB Receive converter w/LNA		5.0	*****
	W5LUA	HB Receive converter w/LNA		5.7	*****

For 47 GHz: HP342A Noise Figure Meter with 33 - 50 GHz Gas tube Noise head & 10 dB attenuator

\*\* Not a typo

\*\*\*\*\*Not measured