

## Sherwood Engineering HF Test Results

Model Yaesu FT-991	Serial # 4N020453	Test Date: 08/04/2015		
IF BW 2400 –6 / -60, Hz: 2400 / 3560	Ultimate	(spurious)	80	dB
IF BW 500 –6 / -60, Hz: 490 / 1190 *	Ultimate		80*	dB
* Phase noise limited				
Front End Selectivity (A – F)				
First & second IF rejection +/- kHz				dB
Dynamic Range with radio, no preamp				
Dynamic Range 20 kHz			96	dB
Dynamic Range 10 kHz			89#	dB
Dynamic Range 5 kHz			81#	dB
Dynamic Range 2 kHz			72#	dB
# Combination of phase noise and 3 <sup>rd</sup> order product				
* Consisted of phase noise only				
Blocking above noise floor, 1uV signal, 100 kHz, AGC On, 500-Hz BW			133	dB
(Audio [noise] signal went up 3 dB. RMDR limited.)				
Phase noise (normalized) at 2.5 kHz spacing:			-104	dBc
Phase noise (normalized) at 5 kHz spacing:			-111	dBc
Phase noise (normalized) at 10 kHz spacing:			-120	dBc
Phase noise (normalized) at 20 kHz spacing:			-128	dBc
Phase noise (normalized) at 30 kHz spacing:			-132	dBc
Phase noise (normalized) at 40 kHz spacing:			-135	dBc
Phase noise (normalized) at 50 kHz spacing:			-137	dBc
Phase noise (normalized) at 80 kHz spacing:			-142	dBc
Phase noise (normalized) at 100 kHz spacing:			-143	dBc
Phase noise (normalized) at 200 kHz spacing:			-146	dBc
Phase noise (normalized) at 300 kHz spacing:			-146	dBc
Phase noise (normalized) at 400 kHz spacing:			-146	dBc
Phase noise (normalized) at 500 kHz spacing:			-147	dBc
Noise floor, SSB bandwidth 14 MHz, no preamp			-119	dBm
Noise floor, SSB bandwidth 14 MHz, Preamp 1 On			-131	dBm
Noise floor, SSB bandwidth 14 MHz, Preamp 2 On			-138	dBm
Sensitivity at 14 MHz, no preamp (10 dB S+N/N)			0.7	uV
Sensitivity at 14 MHz, Preamp 1 On			0.17	uV
Sensitivity at 14 MHz, Preamp 2 On			0.08	uV

Noise floor, 500 Hz, 14.2 MHz, no preamp	-123		dBm
Noise floor, 500 Hz, 14.2 MHz, Preamp 1 On	-135		dBm
Noise floor, 500 Hz, 14.2 MHz, Preamp 2 On	-143		dBm
Noise floor, 500 Hz, 50.125 MHz, no preamp			dBm
Noise floor, 500 Hz, 50.125 MHz, Preamp 1 On			dBm
Noise floor, 500 Hz, 50.125 MHz, Preamp 2 On			dBm
Noise floor, SSB, 50.125 MHz, no preamp			dBm
Noise floor, SSB, 50.125 MHz, Preamp 1			dBm
Noise floor, SSB, 50.125 MHz, Preamp 2			dBm
Signal for S9, no preamp	-65 dBm	126	uV
Signal for S9, Preamp 1	-77 dBm	32	uV
Signal for S9, Preamp 2	-88 dBm	9	uV
Gain of preamp(s)			
Preamp 1		12	dB
Preamp 2		23	dB
AGC threshold at 3 dB, no preamp		5	uV
AGC threshold at 3 dB, Preamp 1 On		1.2	uV
AGC threshold at 3 dB, Preamp 2 On		0.33	uV

Notes: