

Checking Wattmeter Accuracy

Here is a way I used to check the accuracy of my Drake MN-4C tuner with Wattmeter. The check was only done on 20 meters at 170 and 20 Watts.



The equipment used was a Ballantine HF voltmeter and a good dummy load. The counter and the oscilloscope shown above were not used. The idea was to measure the voltage across the 50 Ω load and do the calculation. For example, if you measure 92.2 volts across the dummy load the power would be 170 Watts (V^2/R). At 20 watts the voltage would be 31.6 Volts. The Drake Wattmeter readings were surprisingly close to the calculated values.

The dummy load shown is rated at 60 Watts continuous but would easily handle 170 Watts for a short period of time. I do have a Bird 43 Wattmeter that I could use for comparison but thought that this approach would be more accurate.

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