

T-2071-M (Derringer) RF Power Output:

Relevant FCC Chapter:

“§ 2.1046 Measurements required: RF power output.

(a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in § 2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

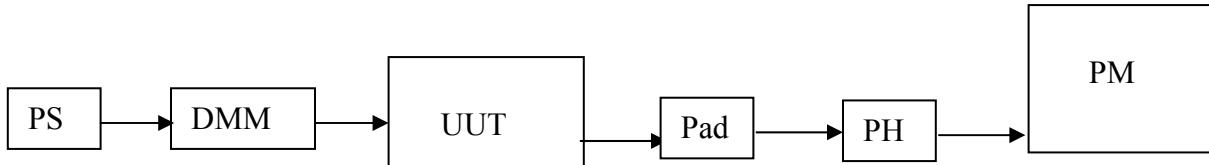
§ 2.1033 Application for certification.

(c) Applications for equipment other than that operating under parts 15 and 18 of the rules shall be accompanied by a technical report containing the following information:

(8) The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range.”

Test Setup:

The setup for this test is shown below.



PS – Power Supply – Hewlett-Packard HP6207B – SN 1149A01889

DMM – Digital Multi-Meter – HP 3478A – 2619A1605

UUT – T-2071-M Derringer

Pad – 20 dB Pad – Mini Circuits CAT20

PH – Power Head – HP 8481A – SN 2237A36110

PM – Power Meter - HP 437B - SN 2912A01688

Test Method:

The unit under test was powered at two voltages, 9.0 VDC and 5.5 VDC. At each voltage, the RF power output of the UUT was measured at three frequencies across the operating band. The power was measured with the 20 dB pad (50 ohms, pure resistive) connected directly to the RF output of the UUT.

Test Results:

The results of the test are shown in Figures 1 and 2.

Figure 1 - Power Output (Pursuant to FCC Requirement 2.1046a) – Raw Data

RF power output and current consumption as a function of frequency and supply voltage

Frequency (MHz)	9.0 VDC		5.5VDC	
	Pout (mW)	I (mA)	Pout (mW)	I (mA)
150	742	180	260	130
162	720	177	249	128
174	500	148	171	114

**Figure 2 - RF Power Output As A Function of Frequency and Supply Voltage
(Pursuant to FCC Requirement 2.1046a)**

