

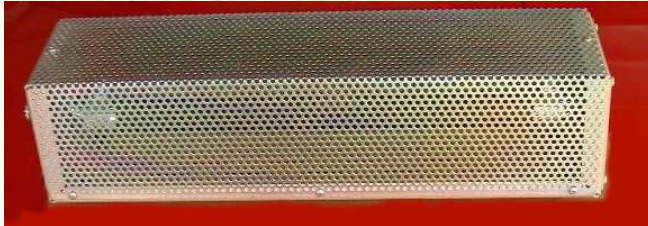
DRAKE DL-1000 Dummy Load Modifications

- Improves SWR, remains low up to 450 MHz
- Adds attenuator output (-30 dB and -40 dB with pad)

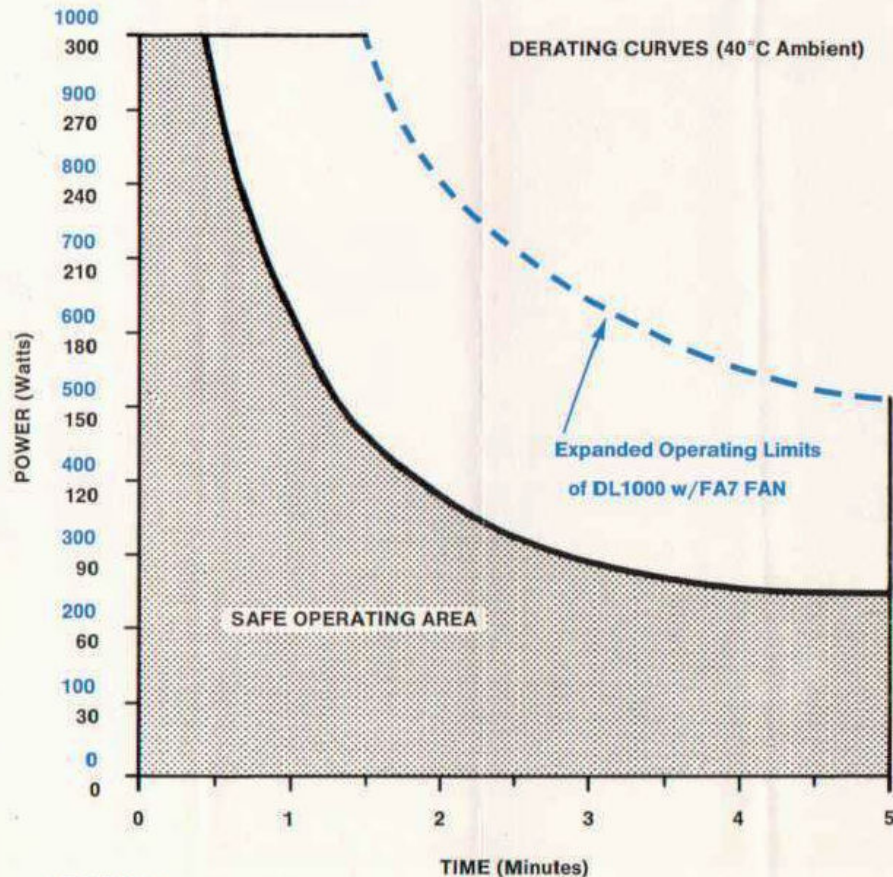
Jacques, VE2AZX
Oct. 2016

Drake DL-300 & DL-1000 Dummy Load

Derating Curve Information



**DL300/DL1000
DUMMY LOAD**



The DL300/DL1000 dummy loads should be used in conjunction with the derating curve shown if power is to be applied for a period exceeding 30 seconds. Allow adequate cooling-off periods when needed, to prevent exceeding the rating dictated by the derating curve. Failure to do this will drastically reduce the life of the resistive element. A good rule to follow is to allow one minute cooling-off periods between use.

The DL300 connects directly to a SO239 connector, eliminating the need for an interconnecting coax cable. **DO NOT ATTEMPT REMOVAL OF THE DL300 AFTER USE UNTIL IT HAS COOLED, OR A SEVERE BURN COULD RESULT.**

The DL1000 should be connected to the transceiver, transmitter, etc. using a convenient length of 50 ohm coaxial cable.

The broken curve shows the expanded rating limitations of the DL1000 when the MODEL 1529 (FA7) cooling fan is added to the DL1000 to provide forced-air cooling of the resistive element.

Impedance: 50 ohm Resistive, Nominal
(SWR 1.1:1 Max., 0-30 MHz)

SWR: DL300, Model 1550
1.1:1 max., 0-30 MHz
1.5:1 max., 30-160 MHz

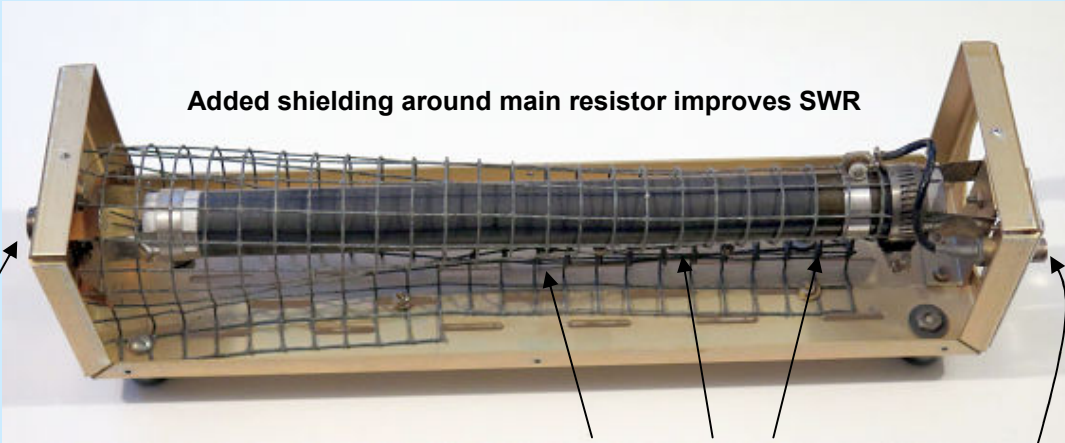
DL1000, Model 1551
1.5:1 max., 0-30 MHz

DL-1000
DL-300

DRAKE DL1000 Modified Dummy load

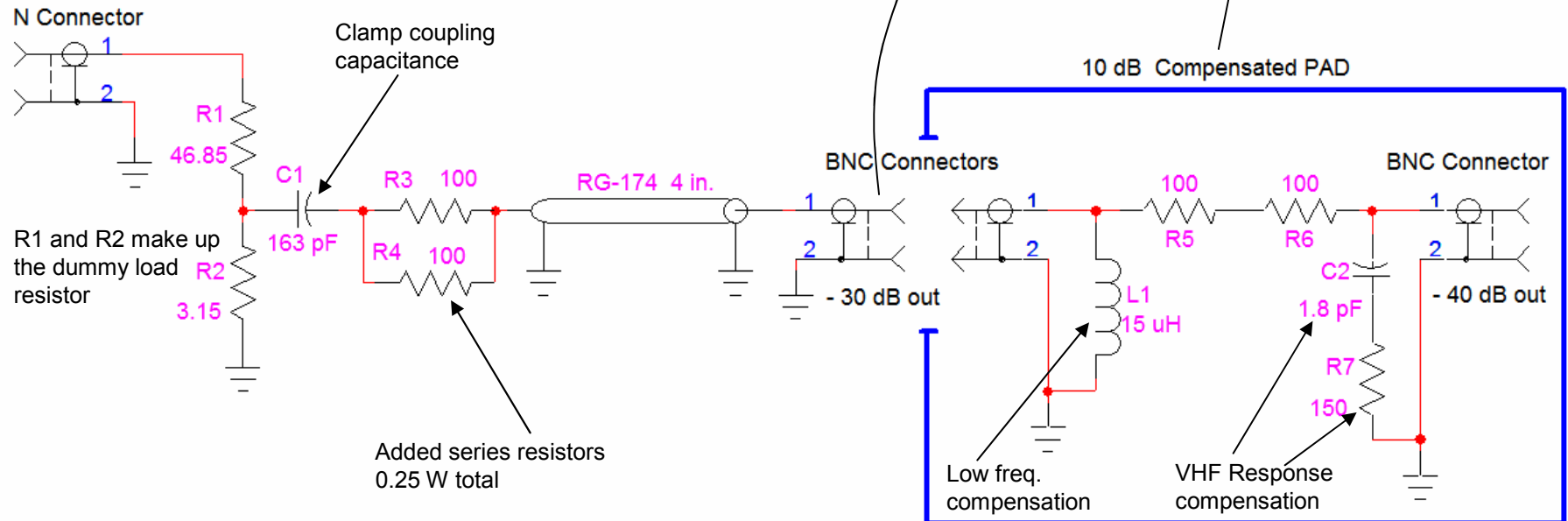
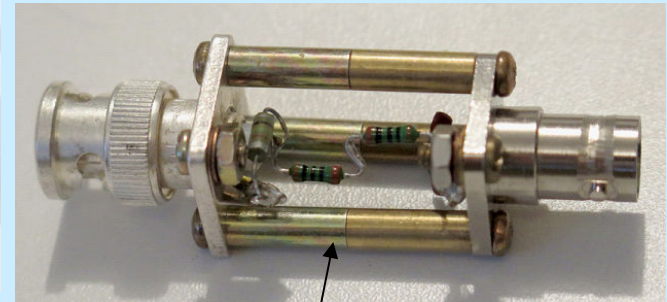
- Improved SWR, remains low up to 450 MHz
- Adds attenuator output (-30 dB and -40 dB with pad)

Added shielding around main resistor improves SWR

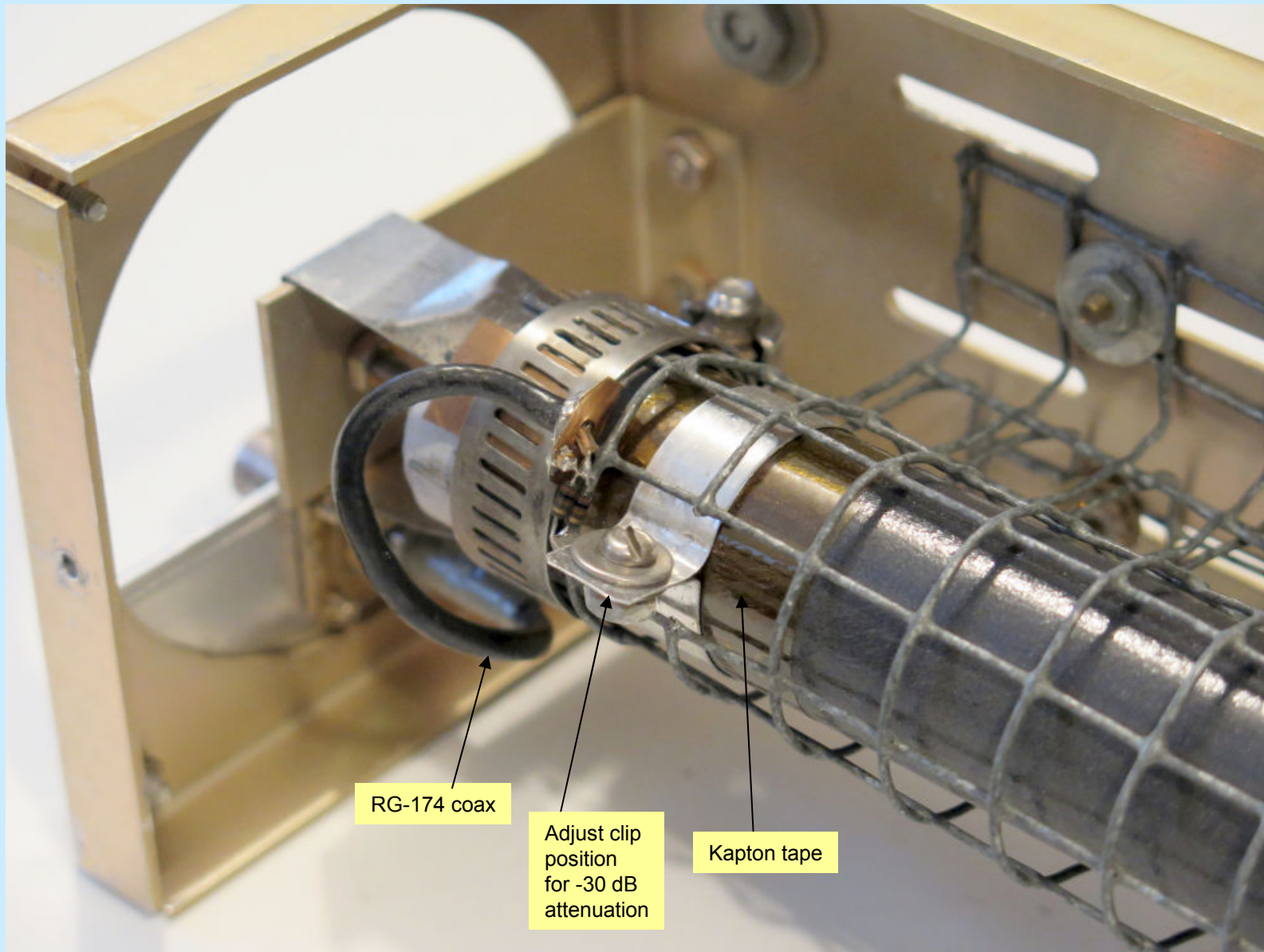


Shield to shield shorts

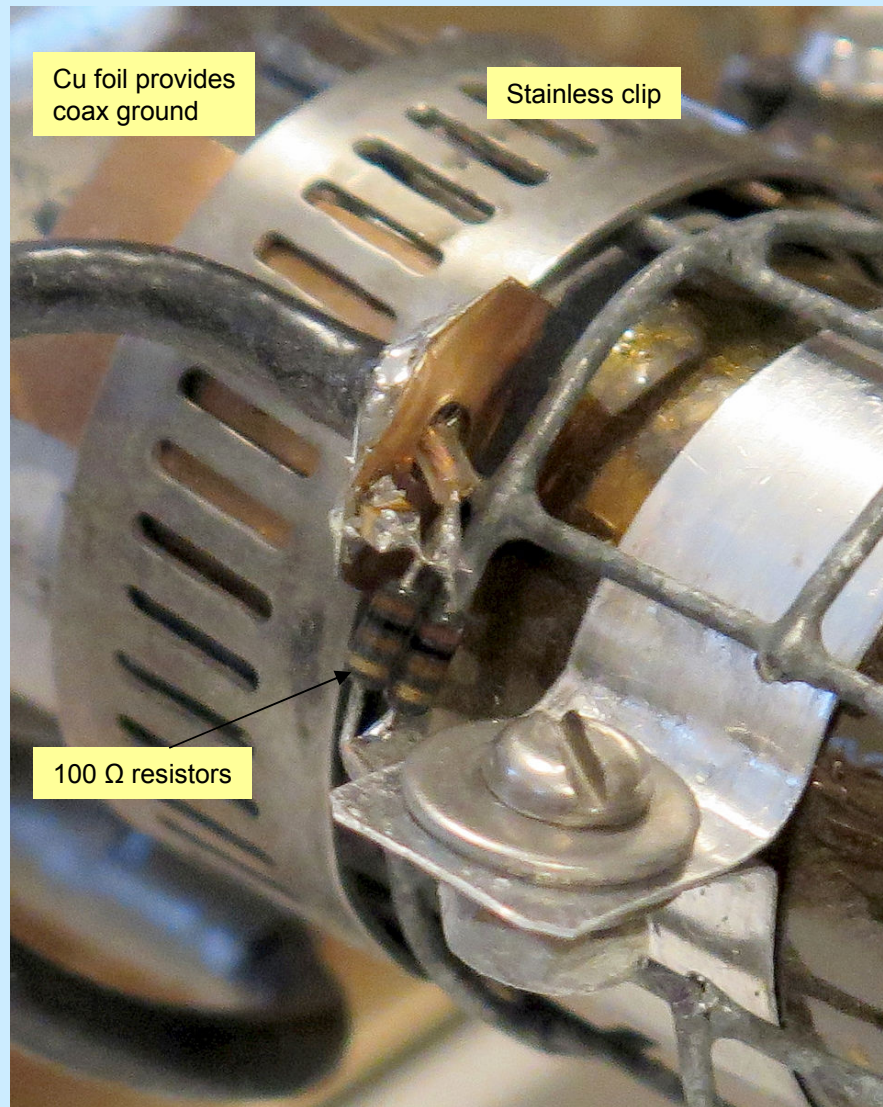
10 dB pad increases the max input power to 1000 W, instead of 250 W max at 30 dB attenuation



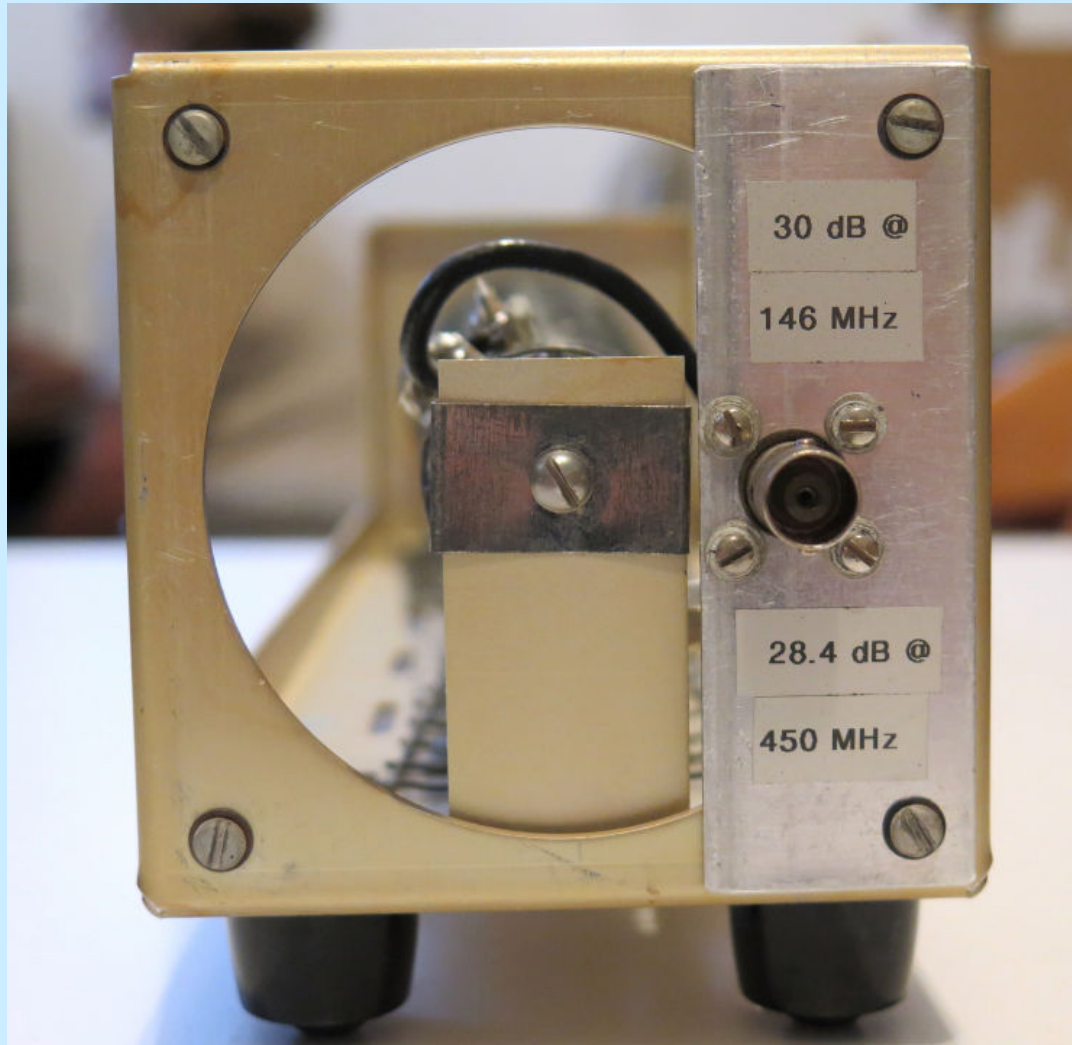
SIGNAL PICK UP



SIGNAL PICK UP close up

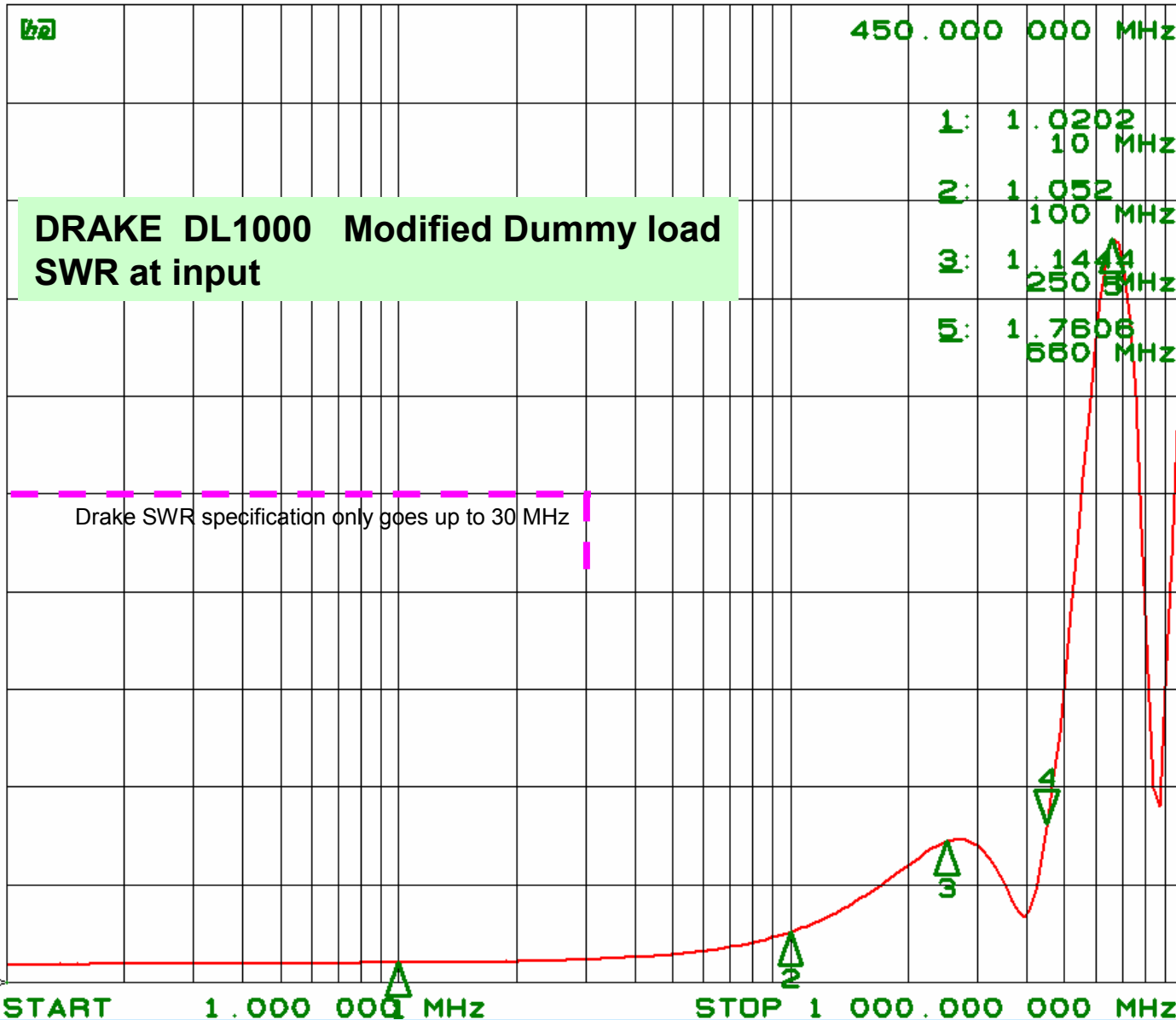


Rear Output

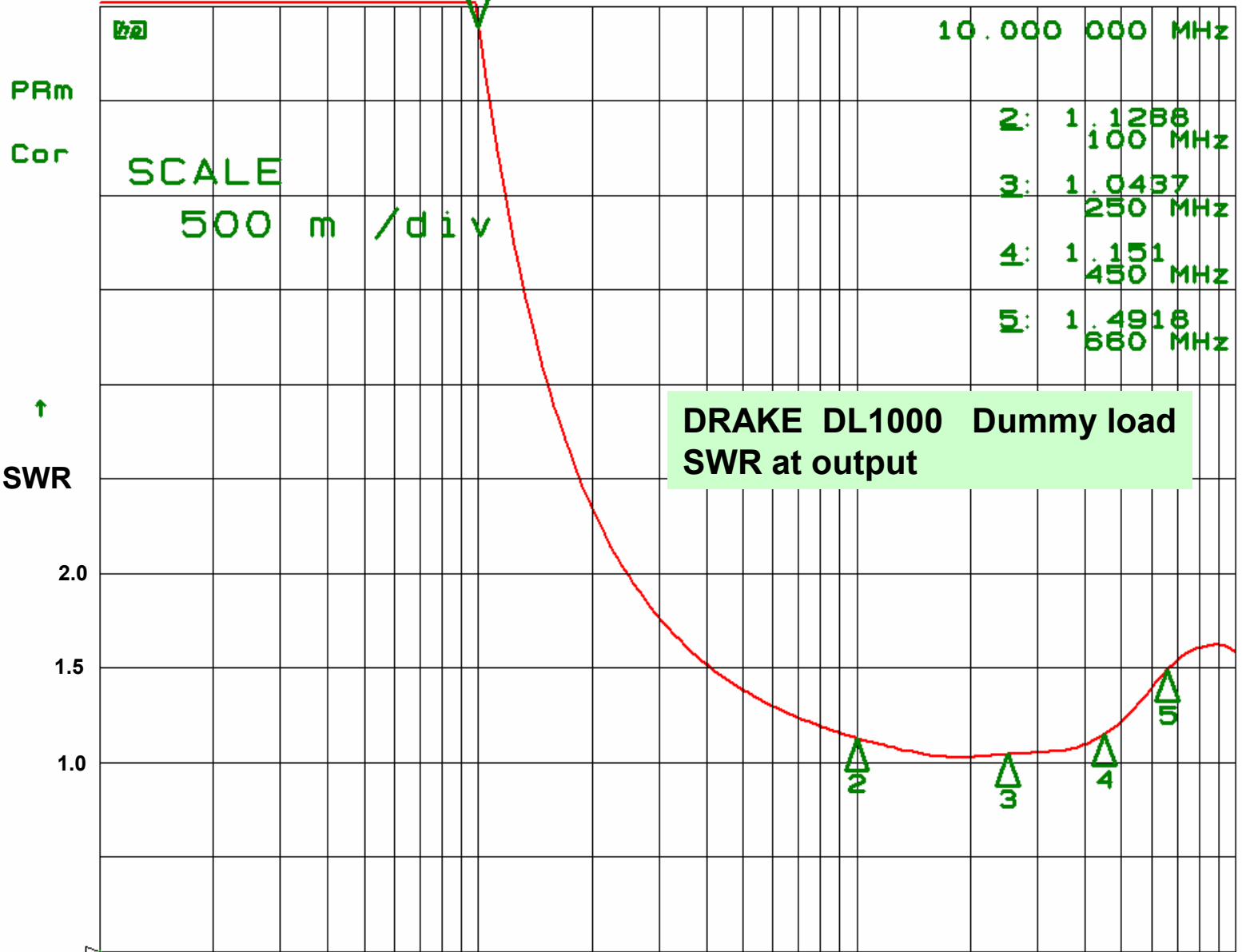


CH1 S₁₁ SWR 100 m / REF 1

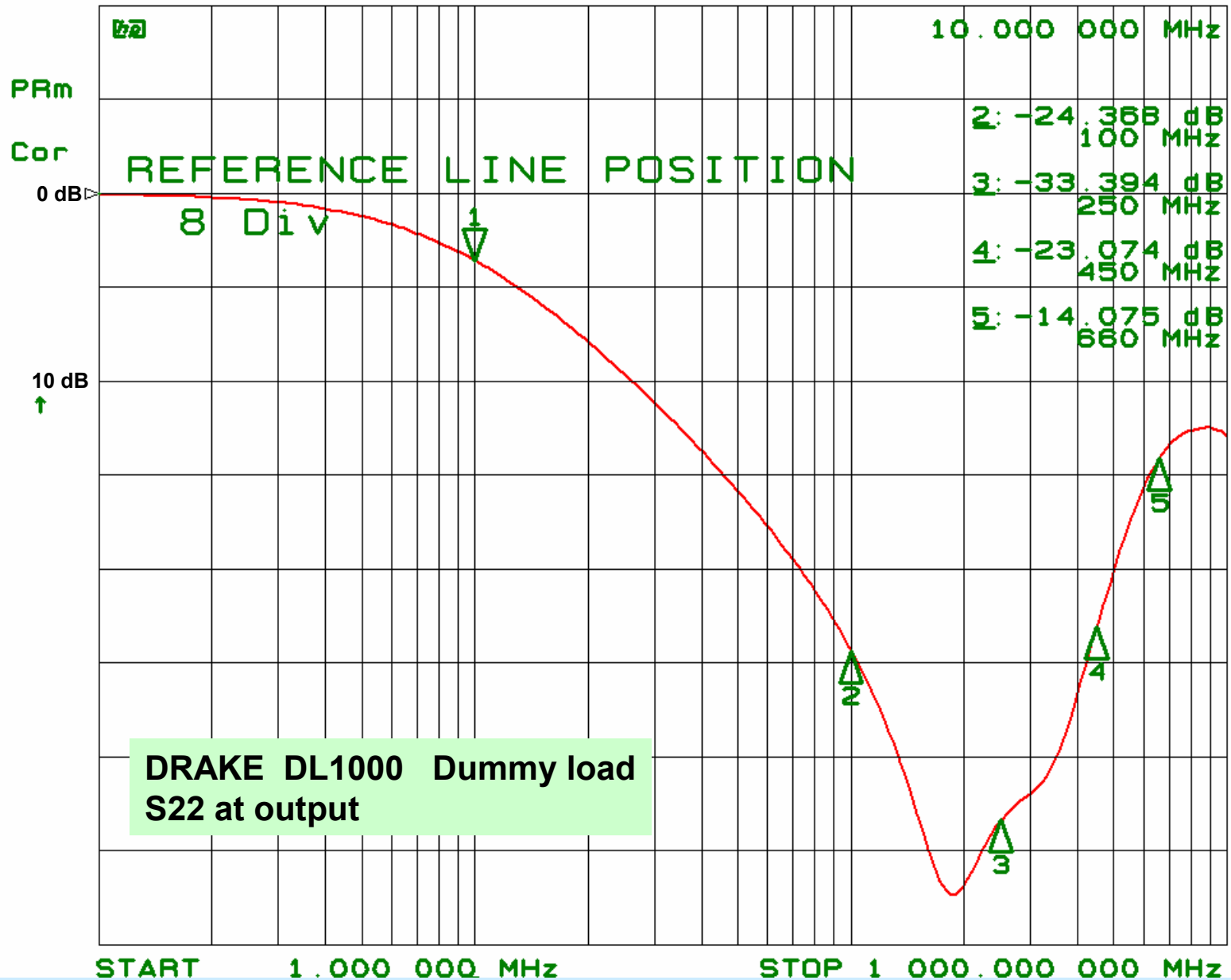
4: 1.1631



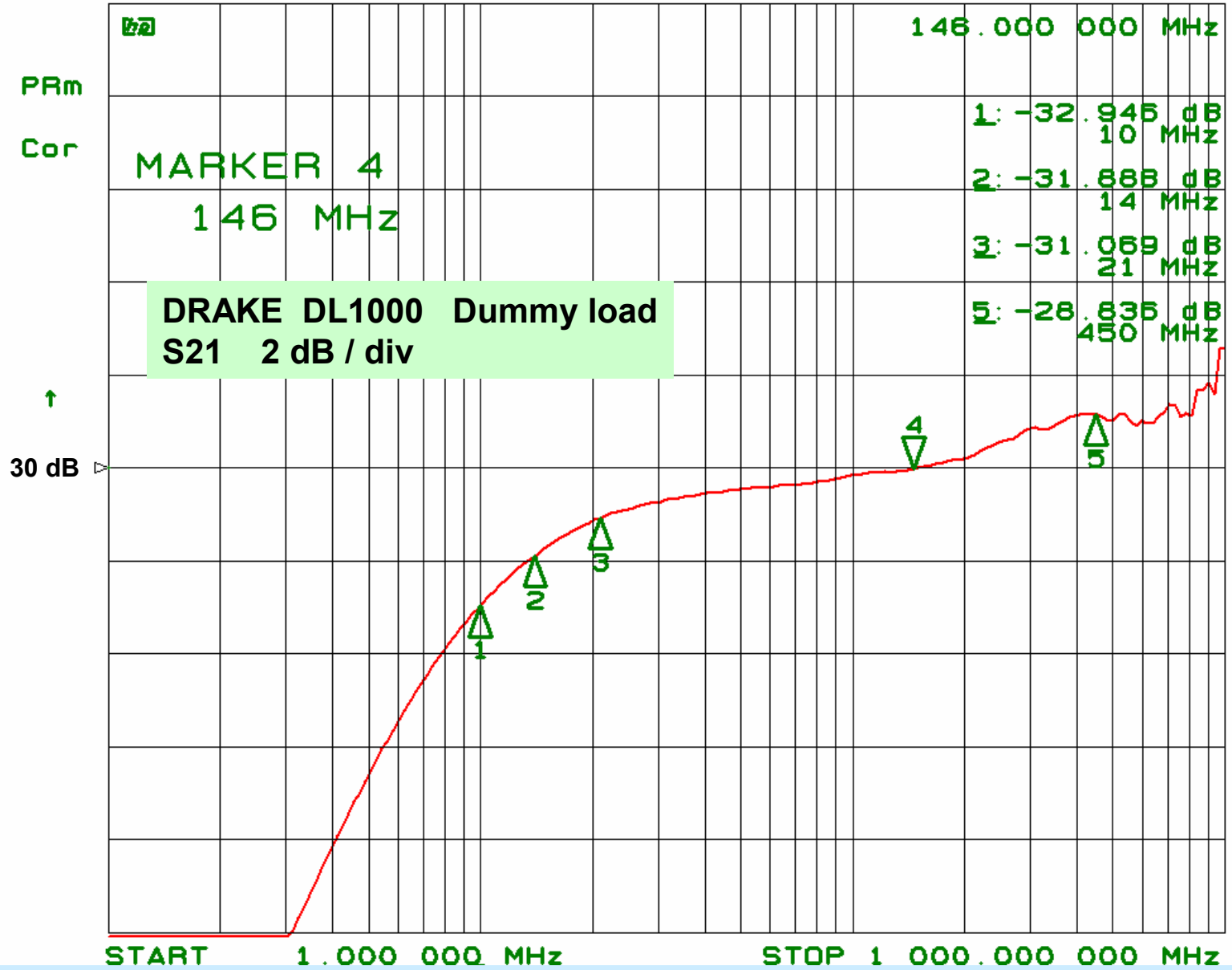
CH1 S₁₁ SWR 500 m / REF 0 1: 4.9058



CH1 S₁₁ log MAG 5 dB/ REF 0 dB 1: -3.5973 dB

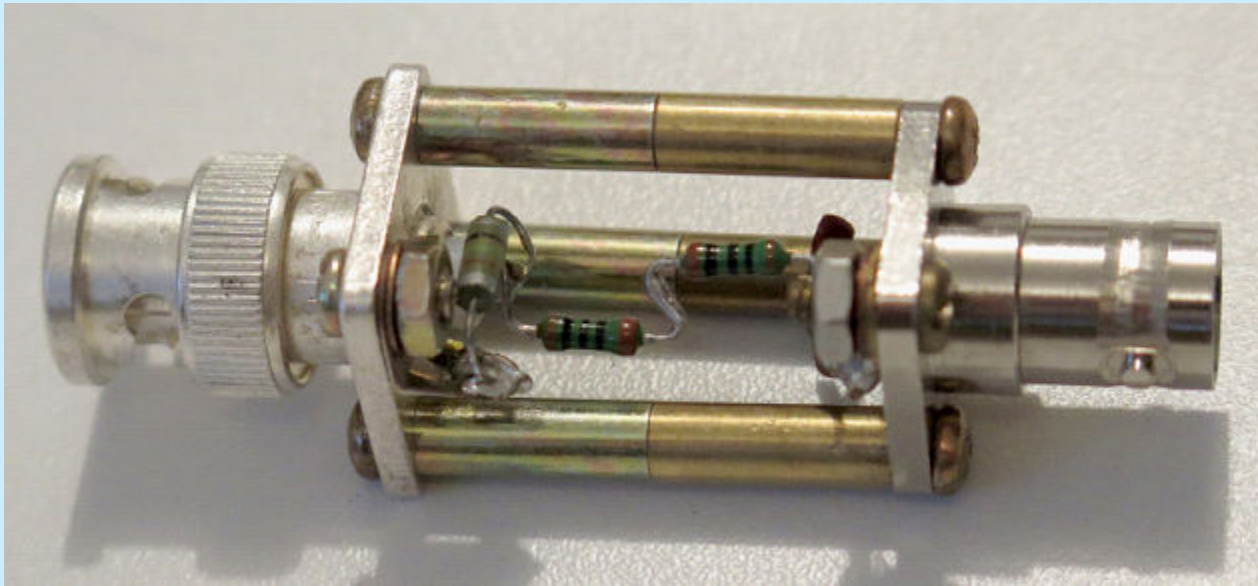


CH1 S₂₁ log MAG 2 dB/ REF -30 dB 4: -30.014 dB

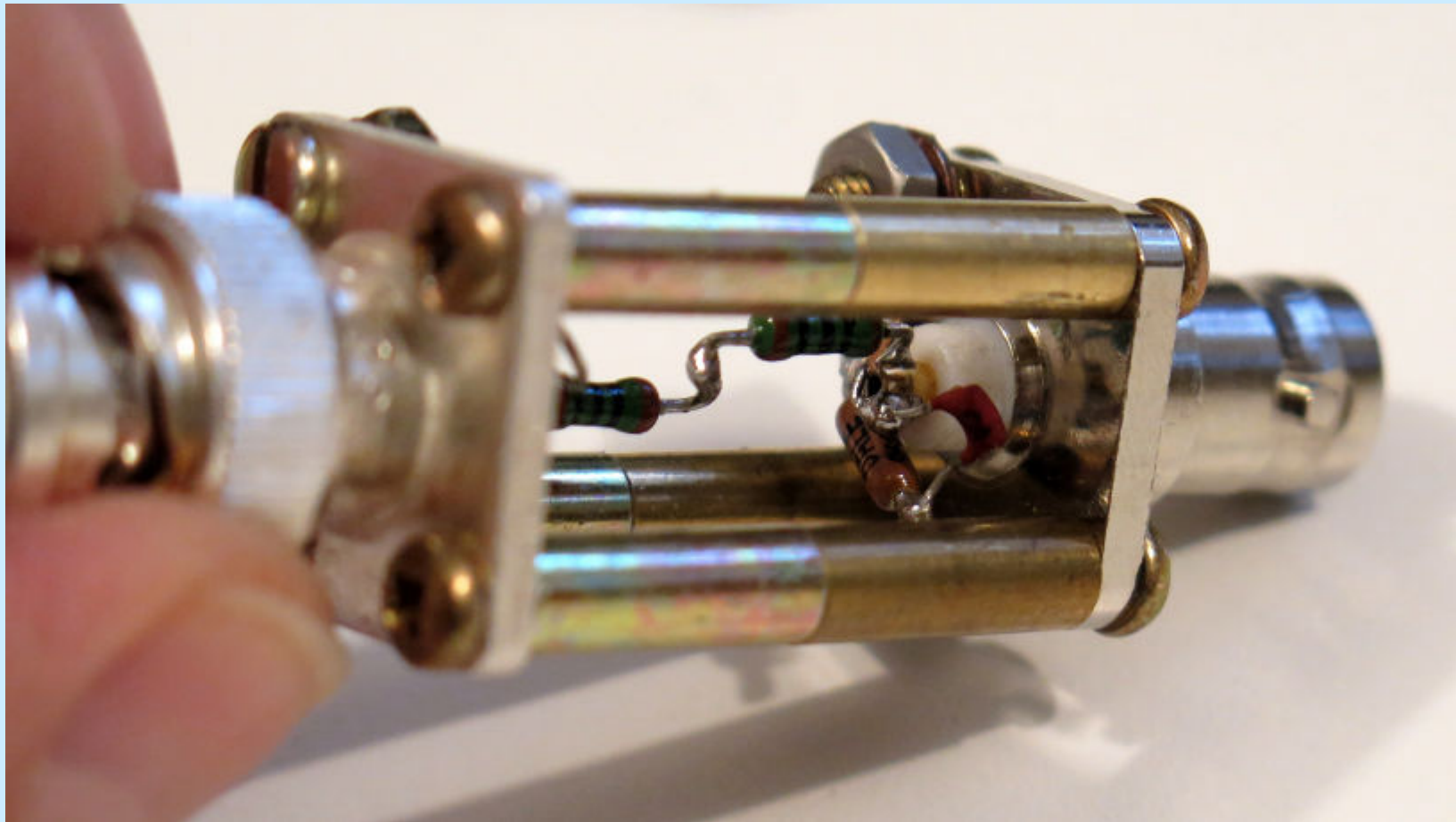


10 dB Compensated Pad

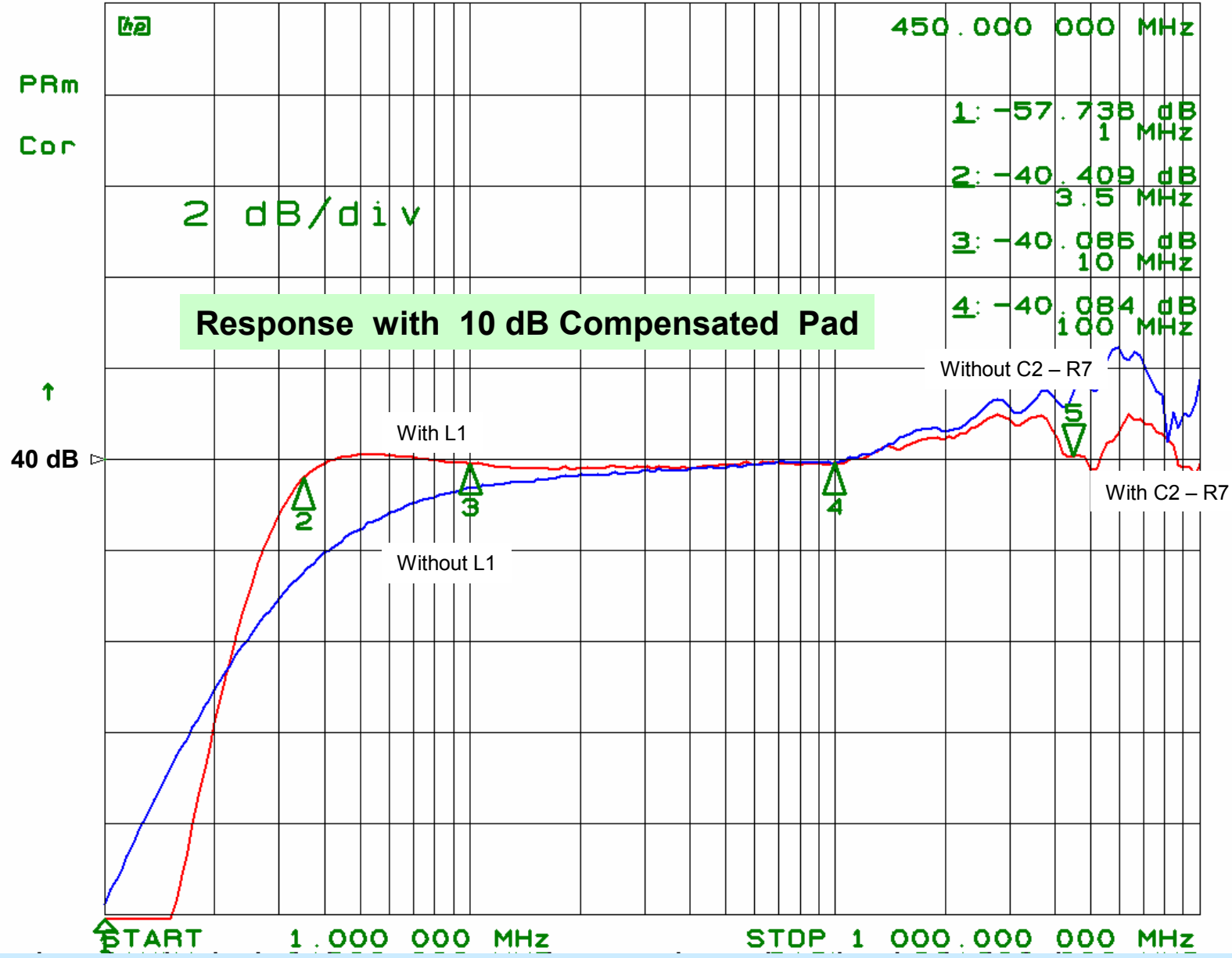
- Increases the max input power to 1000 W, instead of 250 W max at 30 dB attenuation
- Allows response compensation at low and high frequencies.



10 dB Compensated Pad



CH1 S₂₁&M log MAG 2 dB/ REF -40 dB 5: -39.912 dB



CH1 S₂₁&M log MAG 2 dB/ REF -40 dB 5: -49.692 dB

