



NLCTA-Note #31

September 19, 1994

Subject: Tesla Solenoid Water Cooling Test

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This cooling test was performed to determine the operational limits of the Tesla Solenoid coil. The dimensions of the coil as measured are:

Inner diameter	16 5/16 inches
Outer diameter	22 3/16 inches
Thickness	2 3/4 inches
64 turns	8 x 8 layers
Copper conductor	.313" x .313" with a .15" hole
Electric circuit	1 x 322.4 feet
Water circuit	4 x 80.6 feet

The temperature rise in the cooling water was:

