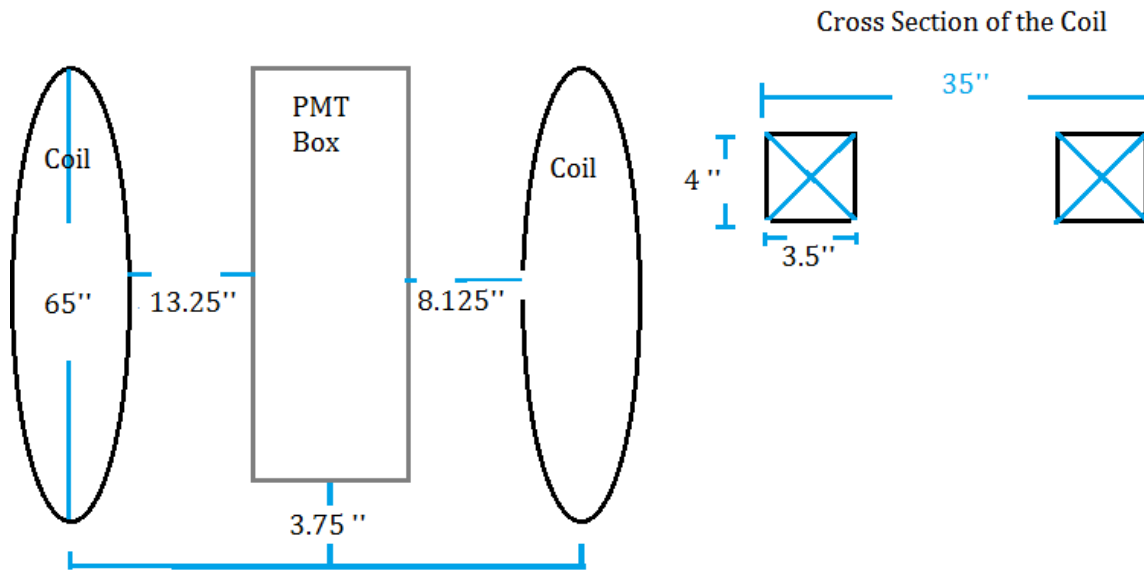
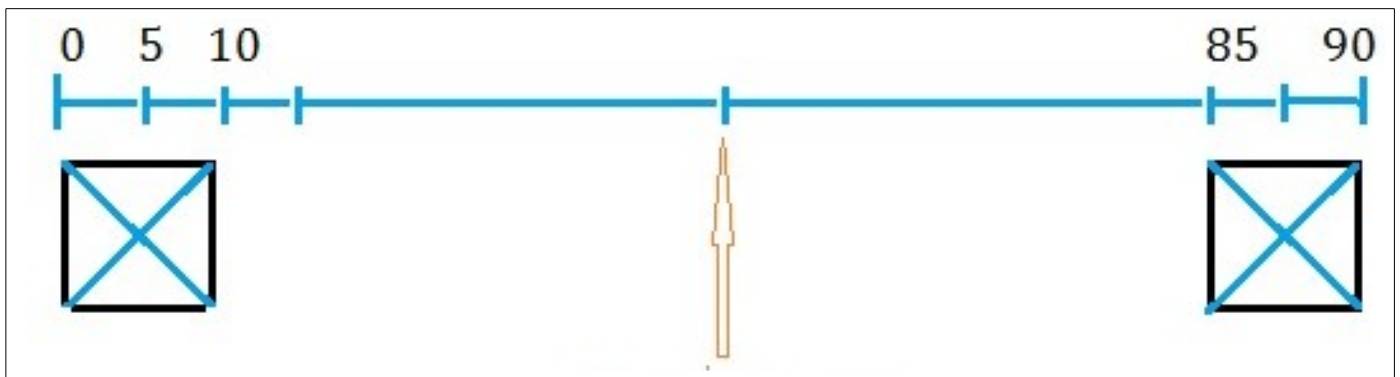


2nd Test (Monday 11/9/2015)

A figure of the Coil and the box:



Measuring the Magnetic Field along X-axis from the back of the box

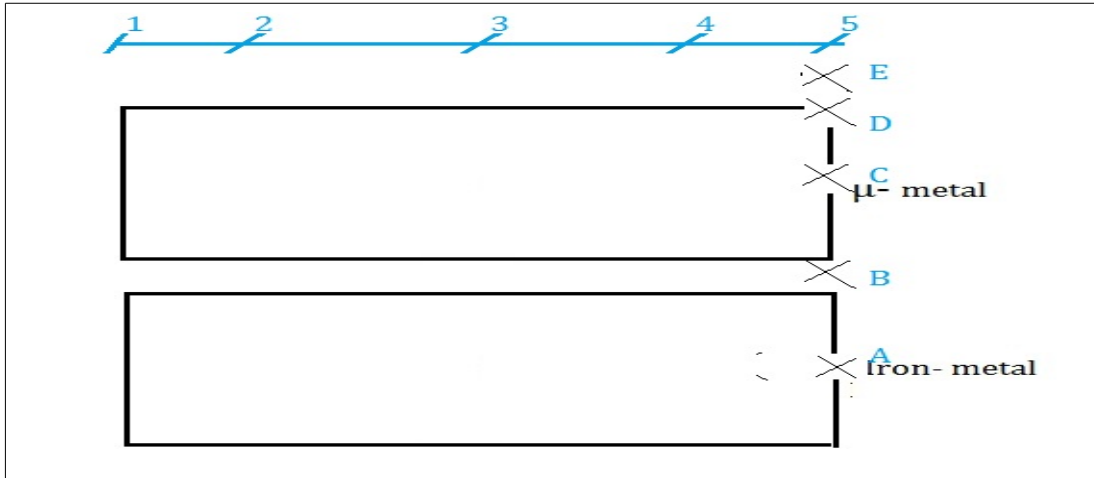


position	20 A	100A	20A w/ box	100 w/ box
0	12.3	59.7	17.5	82.7
5	12.3	59.2	18.4	85.4
10	12.4	61.7	19.3	93.6

15	12.2	61.2	22.6	99.3
20	12.7	60.5	4.3	10.1
25	12.1	58.9	2.1	12.0
30	11.8	59.0	1.2	10.6
35	11.4	58.7	1.2	7.1
40	11.5	57.6	1.3	6.1
45	11.7	56.7	1.5	
50	11.3	58.1	16.5	70.8
55	11.1	57.3	19.9	86.1
60	12.0	58.8	16.5	77.6
65	12.3	61.0	15.9	74.0
70	12.6	60.7	15.7	73.4
75	12.0	61.1	15.0	72.3
80	12.2	61.7	14.7	70.6
85	11.8	61.9	14.1	67.2
90	12.2	61.5	13.5	59.3

Measuring the Magnetic Field along X-axis from the front of the box:

With Current of $I= 100A$



1- from the Top of the box: ($B_x = +131$ G to the right and $+ 53$ G to the left)

	A	B	C	D	E
1	1.54	0.24	2.56	-0.54	-1.14
2	2.45	0.09	-0.03	0.05	-0.85
3	1.55	0.97	-0.33	-0.07	-1.66
4	2.35	1.11	-0.45	-0.07	-1.44
5	0.83	0.76	0.32	0.12	-0.76

2- 1- from the Middle of the box: ($B_x = 112.93$ G to the right and $- 87.91$ G to the left)

	A	B	C	D	E
1	1.54	0.24	2.56	-0.54	-1.14
2	2.45	0.09	-0.03	0.05	-0.85
3	1.55	0.97	-0.33	-0.07	-1.66
4	2.35	1.11	-0.45	-0.07	-1.44
5	0.83	0.76	0.32	0.12	-0.76

3- from the Bottom of the box: ($B_x = 288$ G to the right and 77.16 G to the left)

	A	B	C	D	E
1	-0.32	-0.18	-0.76	0.34	1.22
2	1.12	1.21	0.07	0.04	1.07
3	1.48	1.07	0.11	0.04	0.72
4	1.22	0.92	0.04	0.02	-1.5
5	2.22	1.32	-0.63	-0.23	1.34

Measuring the Magnetic Field along Y-axis from the front of the box:

1- from the Top of the box: ($B_y = -43.12$ G to the right and $+12.61$ G to the left)

	A	B	C	D	E
1	-1.04	1.32	-0.91	-1.02	-0.87
2	-0.94	0.45	-0.99	-0.72	0.68
3	-1.11	0.82	-0.72	-0.54	-0.72
4	-2.31	-2.17	-0.41	-0.35	-0.79
5	-3.01	-3.61	-0.52	-0.27	-1.01

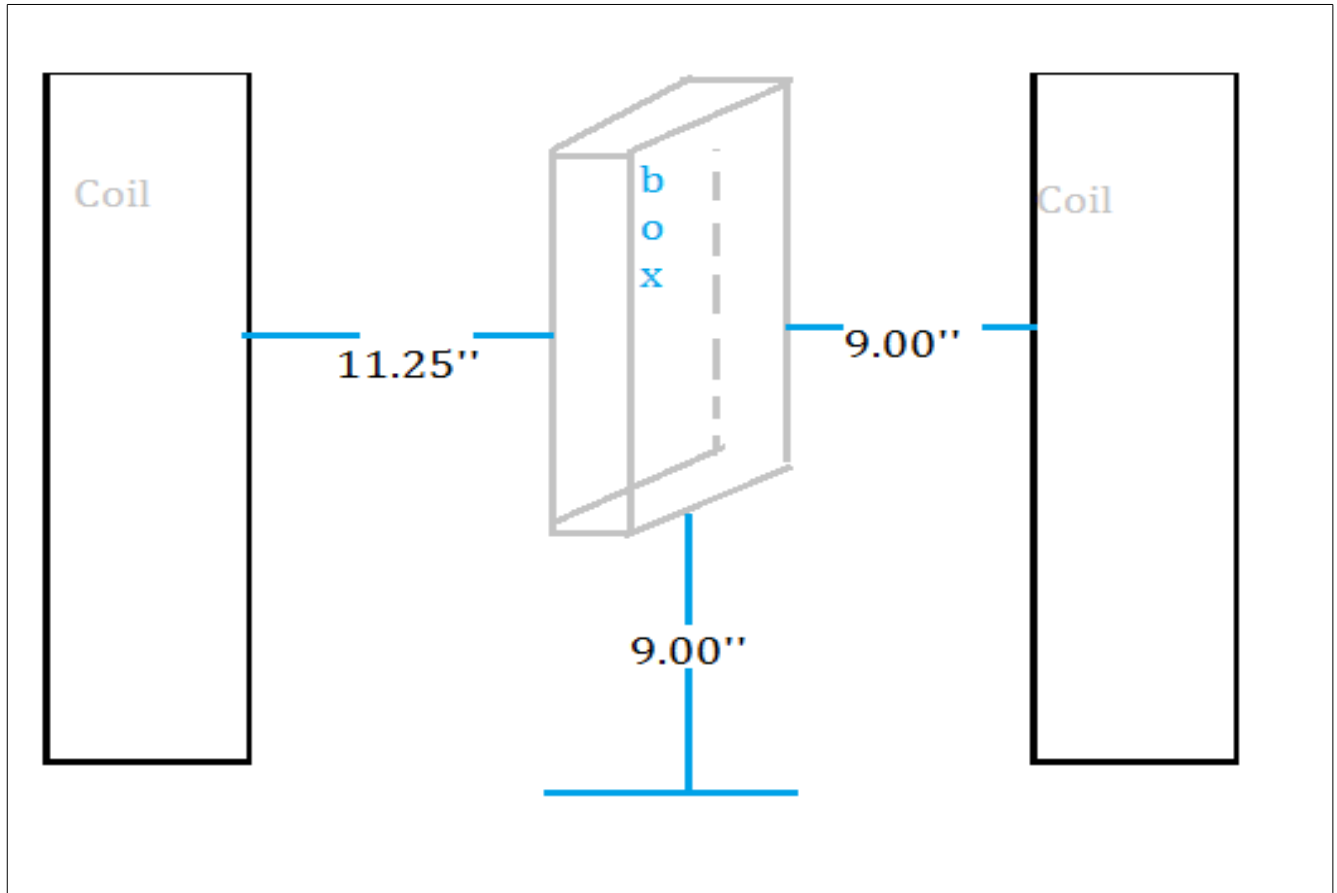
2- 1- from the Middle of the box: ($B_y = 4.91$ G to the right and 6.22 G to the left)

	A	B	C	D	E
1	-1.85	1.45	1.13	2.22	0.71
2	1.72	1.75	1.29	1.17	0.65
3	1.32	0.73	0.76	0.86	0.54
4	1.21	1.96	-1.12	-0.7	0.71
5	1.45	1.99	-0.23	-1.02	0.73

3- from the Bottom of the box: ($B_y = -20.71$ G to the right and -21.13 G to the left)

	A	B	C	D	E
1	-1.8	2.25	-0.91	-0.44	-0.33
2	-0.14	0.87	-1.21	-0.22	0.11
3	-0.13	0.54	-0.34	-0.05	0.07
4	-1.39	0.10	0.21	0.12	0.20
5	1.08	-0.23	0.47	0.87	0.27

Measuring the Magnetic Field along z-axis from the front of the box:



($B_z = 90.1$ G to the right and 72.6 G to the left)

	A	B	C	D	E
1	-6.4	-1.2	0	-0.1	-2.4
2	-9.5	-2.8	-1.1	-0.7	4.1
3	-3.2	-4.9	-0.9	-0.9	3.1
4	-4.5	-6.5	-0.8	-0.8	2.1
5	-5.1	-5.1	-0.5	-1.1	1.9