



Real World  
DAC Value



Real World  
Voltage

Ideal World  
Freq Hz

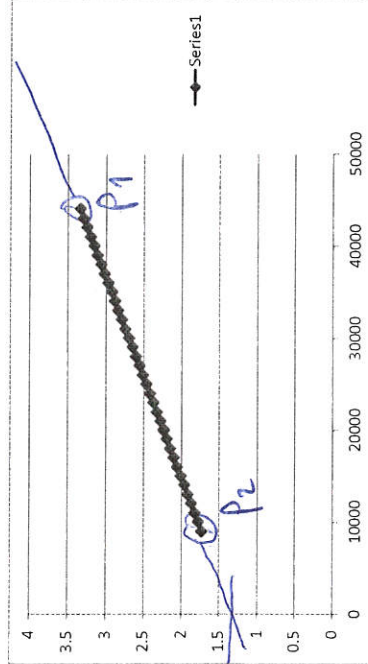
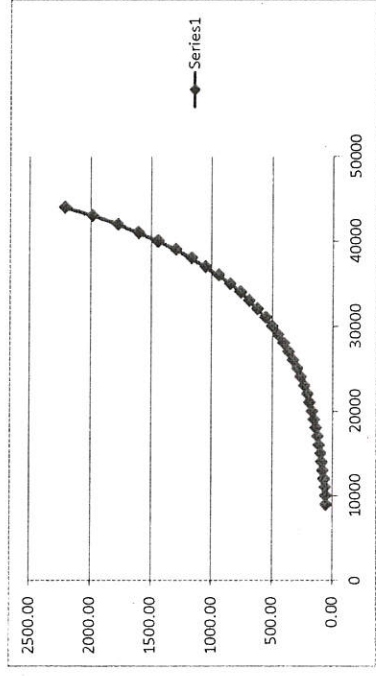
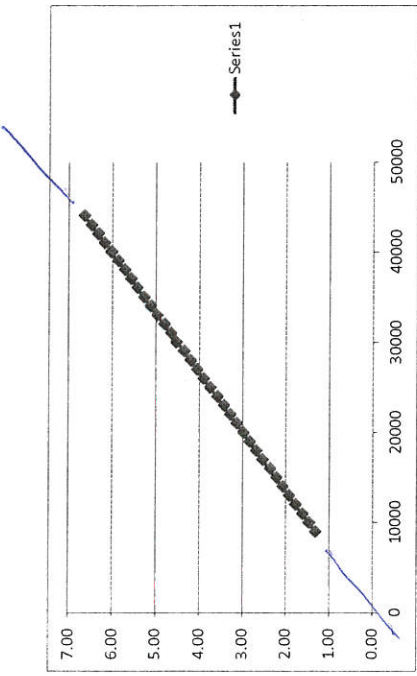
log(Freq)

9000	1.32	54.76	1.738463439	54.76	11.14825
10000	1.47	60.85	1.784260583	60.86	11.14825
11000	1.62	67.65	1.830267801	67.65	11.14825
12000	1.78	75.19	1.876160085	75.19	11.14825
13000	1.93	83.58	1.922102367	83.57	11.14825
14000	2.08	92.93	1.968155937	92.89	11.14825
15000	2.23	103.26	2.013932121	103.25	11.14825
16000	2.38	114.58	2.059108818	114.76	11.14825
17000	2.54	127.33	2.104830739	127.55	11.14825
18000	2.69	141.90	2.151982395	141.77	11.14825
19000	2.84	157.72	2.197886768	157.58	11.14825
20000	2.99	174.88	2.242740145	175.14	11.14825
21000	3.15	194.17	2.288182131	194.67	11.14825
22000	3.30	216.08	2.334614571	216.37	11.14825
23000	3.45	240.76	2.381584335	240.49	11.14825
24000	3.60	267.45	2.427242602	267.30	11.14825
25000	3.75	296.50	2.472024698	297.10	11.14825
26000	3.91	329.48	2.517829057	330.22	11.14825
27000	4.06	366.44	2.564002874	367.04	11.14825
28000	4.21	406.68	2.611383385	407.96	11.14825
29000	4.36	453.48	2.659558138	453.44	11.14825
30000	4.53	502.66	2.701274327	503.99	11.14825
31000	4.67	558.85	2.747295255	560.17	11.14825
32000	4.82	622.37	2.79404865	622.62	11.14825
33000	4.97	692.65	2.840513839	692.03	11.14825
34000	5.12	767.06	2.884829336	769.18	11.14825
35000	5.28	852.37	2.930628156	854.93	11.14825
36000	5.43	950.51	2.97795669	950.24	11.14825
37000	5.58	1056.40	3.023828393	1056.18	11.14825
38000	5.73	1170.06	3.068208133	1173.92	11.14825
39000	5.89	1301.34	3.114390779	1304.80	11.14825
40000	6.04	1449.47	3.161209231	1450.26	11.14825
41000	6.19	1611.32	3.207181798	1611.94	11.14825
42000	6.34	1781.60	3.250810204	1791.64	11.14825
43000	6.49	1966.59	3.298108245	1991.37	11.14825
44000	6.65	2213.38	3.3450555981	2213.38	11.14825

$$V_{out} = A_v \cdot CODE$$

$$A_v = \frac{6.65V}{44000}$$

$$= 0.1511 \cdot 10^{-3} V$$



$$F_0 = \log(A_v) + \log(CODE)$$
$$F(CODE) = F_0 + A_v \log(CODE)$$

$$y = mx + b = \left( \frac{P_1 y - P_2 y}{P_1 x - P_2 x} \right) x + b$$