# tables

# **Points**

#### x-axis

X Position	Electric Potential	Err in X Position	Err in Electric Potential	E	dE
cm	V	cm	V	V/cm	V/cm
-13.0	4.99	0.1	0.01	0.145	0.009
-11.0	4.70	0.1	0.01	0.210	0.012
-9.0	4.28	0.1	0.01	2.140	0.107
-7.0	0.00	0.1	0.01	-2.385	0.119
-5.0	4.77	0.1	0.01	-0.575	0.029
-3.0	5.92	0.1	0.01	-0.490	0.025
-1.0	6.90	0.1	0.01	-0.460	0.047
0.0	7.36	0.1	0.01	-0.540	0.055
1.0	7.90	0.1	0.01	-0.470	0.024
3.0	8.84	0.1	0.01	-0.655	0.033
5.0	10.15	0.1	0.01	-2.600	0.130
7.0	15.35	0.1	0.01	2.275	0.114
9.0	10.80	0.1	0.01	0.300	0.016
11.0	10.20	0.1	0.01	0.095	0.007
13.0	10.01	0.1	0.01		

## y-axis

Y Position	Electric Potential	Err in Y Position	Err in Electric Potential	E	dE
cm	V	cm	V	V/cm	V/cm
-10.0	7.44	0.1	0.01	0.000	0.002
-5.0	7.44	0.1	0.01	-0.002	0.002
0.0	7.45	0.1	0.01	0.022	0.002
5.0	7.34	0.1	0.01	0.018	0.002
10.0	7.25	0.1	0.01		

#### **EP**

X Position	Y Position	<b>Electric Potential</b>
cm	cm	V
0.00	0.00	7.36
1.00	0.00	7.90
1.50	-3.00	7.90
2.25	-6.00	7.90
3.00	-9.00	7.90
3.25	-12.00	7.91
3.00	0.00	8.84
4.50	-4.00	8.84
6.00	-7.50	8.84
8.25	-9.00	8.84
10.25	-11.00	8.84
5.00	0.00	10.15
7.00	-1.90	10.15
9.75	0.00	10.15
16.00	0.00	9.55
14.00	-3.00	9.55
11.00	-4.00	9.55
7.00	-3.25	9.55
5.00	-1.50	9.55
4.75	0.00	9.55

# **Plates**

# y-axis

Y Position	Electric Potential	Err in Y Position	Err in Electric Pot	E	dE
cm	V	cm	V	V/cm	V/cm
-12.0	13.55	0.1	0.01	-0.075	0.006
-10.0	13.70	0.1	0.01	-0.245	0.013
-8.0	14.19	0.1	0.01	0.873	0.022
-4.0	10.70	0.1	0.01	0.860	0.043
-2.0	8.98	0.1	0.01	0.770	0.039

Y Position	<b>Electric Potential</b>	Err in Y Position	Err in Electric Pot	E	dE
0.0	7.44	0.1	0.01	0.750	0.038
2.0	5.94	0.1	0.01	0.825	0.042
4.0	4.29	0.1	0.01	0.773	0.019
8.0	1.20	0.1	0.01	-0.230	0.013
10.0	1.66	0.1	0.01	-0.145	0.009
12.0	1.95	0.1	0.01		

### x-axis

X Position	Electric Potential	Err in X Position	Err in Electric Pot	E	dE
cm	V	cm	V	V/cm	V/cm
-15.0	7.22	0.1	0.01	-0.012	0.002
-10.0	7.28	0.1	0.01	0.000	0.002
-5.0	7.28	0.1	0.01	-0.034	0.002
0.0	7.45	0.1	0.01	-0.008	0.002
5.0	7.49	0.1	0.01	-0.014	0.002
10.0	7.56	0.1	0.01	-0.012	0.002
15.0	7.62	0.1	0.01		

#### **EP**

X Position	Y Position	<b>Electric Potential</b>
cm	cm	V
0.00	-2.00	8.98
7.00	-2.00	8.98
10.00	-2.25	8.98
15.00	-2.75	8.98
0.00	-4.00	10.70
6.00	-4.25	10.70
10.00	-4.75	10.70
12.50	-6.00	10.70
16.00	-7.75	10.70
0.00	-12.00	13.55
2.50	-9.00	13.55

X Position	Y Position	Electric Potential
5.75	-7.50	13.55
0.00	-10.00	13.70
1.00	-8.25	13.70
3.75	-8.50	13.70

# Cylinder y-axis

Y Position	Electric Potential	Err in Y Position	Err in Electric Potential	E	dE
cm	V	cm	V	V/cm	V/cm
-5.5	12.39	0.1	0.01	0.860	0.173
-5.0	11.96	0.1	0.01	1.020	0.205
-4.5	11.45	0.1	0.01	0.860	0.173
-4.0	11.02	0.1	0.01	0.740	0.149
-3.5	10.65	0.1	0.01	0.980	0.197
-3.0	10.16	0.1	0.01	1.860	0.186
-2.0	8.30	0.1	0.01	0.380	0.079
-1.5	8.11	0.1	0.01	0.320	0.067
-1.0	7.95	0.1	0.01	0.300	0.063
-0.5	7.80	0.1	0.01	0.440	0.090
0.0	7.58	0.1	0.01	0.360	0.075
0.5	7.40	0.1	0.01	0.360	0.075
1.0	7.22	0.1	0.01	0.540	0.110
1.5	6.95	0.1	0.01	0.340	0.071
2.0	6.78	0.1	0.01	1.690	0.169
3.0	5.09	0.1	0.01	0.780	0.157
3.5	4.70	0.1	0.01	1.100	0.221
4.0	4.15	0.1	0.01	0.900	0.181
4.5	3.70	0.1	0.01	1.320	0.265
5.0	3.04	0.1	0.01	0.360	0.075
5.5	2.86	0.1	0.01		

#### x-axis

X Position	Y Position	Electric Potential
cm	cm	V
-1	1	7.25
-0.5	1.5	6.86
-1.5	1	7.21
-1	-1	8.22
-1.5	-1	8.26
-0.5	-1.5	8.49

#### **EP**

X Position	Y Position	<b>Electric Potential</b>
cm	cm	V
0	-3.5	10.65
6	-3.25	10.65
9	-4.5	10.65
16	-7.5	10.65
0	-5	11.96
5.5	-5.5	11.96
9.75	-7	11.96
11.5	-11	11.96
3	-1	8.56
8	-1.25	8.56
13	-1.5	8.56
2	-2	9.71
8	-3	9.71
16	-4.5	9.71