

ภาคผนวก

ตารางที่ ผ 1.การวัดค่าสัมประสิทธิ์ซีเบกCopper Constantan ที่อุณหภูมิ 30 °C

Tem.1	Tem.2	Diff. Temp.	Volt	Seebeck Co.	Time
31.79318	31.58364	0.209539	1.76E-05	8.42E-05	07-10-31 PM
31.7946	31.57365	0.220947	1.84E-05	8.31E-05	07-10-33 PM
31.79244	31.55905	0.233389	1.92E-05	8.21E-05	07-10-35 PM
31.79625	31.54823	0.248019	1.98E-05	7.99E-05	07-10-37 PM
31.78054	31.54766	0.232877	2.04E-05	8.76E-05	07-10-39 PM
31.77706	31.53742	0.239632	2.11E-05	8.8E-05	07-10-41 PM
31.78219	31.52839	0.253798	2.08E-05	8.18E-05	07-10-43 PM
31.79039	31.524	0.266397	2.13E-05	8E-05	07-10-45 PM
31.7886	31.51274	0.275859	2.16E-05	7.83E-05	07-10-47 PM
31.79052	31.50899	0.281523	2.18E-05	7.75E-05	07-10-49 PM
31.80268	31.51137	0.291315	2.21E-05	7.6E-05	07-10-51 PM
31.7984	31.50199	0.296413	2.24E-05	7.57E-05	07-10-53 PM
31.79243	31.50118	0.291242	2.28E-05	7.82E-05	07-10-55 PM
31.79233	31.48846	0.303862	2.3E-05	7.58E-05	07-10-57 PM
31.79308	31.49136	0.301718	2.35E-05	7.8E-05	07-10-59 PM
31.79428	31.48628	0.308006	2.39E-05	7.77E-05	07-11-01 PM
31.79685	31.48053	0.316323	2.44E-05	7.71E-05	07-11-03 PM
31.80484	31.47684	0.327997	2.49E-05	7.6E-05	07-11-05 PM
31.80941	31.47408	0.335325	2.53E-05	7.56E-05	07-11-07 PM
31.81424	31.47767	0.33657	2.57E-05	7.64E-05	07-11-09 PM

ตารางที่ ๒. การวัดค่าสัมประสิทธิ์ซีเบก Copper Constantan ที่อุณหภูมิ 50 °C

Tem.1	Tem.2	Diff. Temp.	Volt	Seebeck Co.	Time
52.12038	53.05447	0.88705	3.59E-05	3.97E-05	10-54-35 AM
52.10291	53.05398	0.892128	3.6E-05	3.78E-05	10-54-37 AM
52.10173	53.04883	0.889728	3.6E-05	3.79E-05	10-54-39 AM
52.11045	53.05367	0.897779	3.6E-05	3.82E-05	10-54-41 AM
52.11404	53.0499	0.891472	3.63E-05	3.84E-05	10-54-43 AM
52.11946	53.04942	0.898934	3.65E-05	3.89E-05	10-54-45 AM
52.12024	53.05052	0.901869	3.66E-05	3.92E-05	10-54-47 AM
52.1245	53.05832	0.911037	3.67E-05	3.96E-05	10-54-49 AM
52.13035	53.05022	0.903738	3.68E-05	4.01E-05	10-54-51 AM
52.1294	53.05366	0.915638	3.71E-05	4E-05	10-54-53 AM
52.13803	53.0549	0.925491	3.74E-05	4.08E-05	10-54-55 AM
52.14648	53.04722	0.916864	3.76E-05	4.16E-05	10-54-57 AM
52.14728	53.05175	0.927258	3.8E-05	4.17E-05	10-54-59 AM
52.14866	53.05454	0.934301	3.85E-05	4.26E-05	10-55-01 AM
52.15049	53.05707	0.937606	3.87E-05	4.31E-05	10-55-03 AM
52.15843	53.0587	0.944669	3.91E-05	4.38E-05	10-55-05 AM
52.15589	53.05268	0.94223	3.95E-05	4.4E-05	10-55-07 AM
52.1591	53.05275	0.951021	4E-05	4.5E-05	10-55-09 AM
52.16185	53.05537	0.952464	4.06E-05	4.55E-05	10-55-11 AM
52.16742	53.02462	0.904237	4.1E-05	4.62E-05	10-55-13 AM

ตารางที่ ผ 3.การวัดค่าสัมประสิทธิ์ซีเบกCopper Constantan ที่อุณหภูมิ 100 °C

Tem.1	Tem.2	Diff. Temp.	Volt	Seebeck Co.	Time
92.61843	95.7996	3.1811648	5.70E-05	-1.78106E-05	11-49-53 AM
92.67852	95.73813	3.0596096	5.70E-05	-1.87254E-05	11-49-55 AM
92.73941	95.65954	2.920128	5.80E-05	-1.98892E-05	11-49-57 AM
92.79646	95.58401	2.7875456	5.90E-05	-2.11182E-05	11-50-00 AM
92.8514	95.50965	2.6582464	6.00E-05	-2.24847E-05	11-50-01 AM
92.91639	95.44534	2.5289536	6.10E-05	-2.40364E-05	11-50-03 AM
92.97553	95.38412	2.4085888	6.20E-05	-2.56582E-05	11-50-05 AM
93.03779	95.31674	2.2789504	6.30E-05	-2.7534E-05	11-50-07 AM
93.10128	95.2544	2.15312	6.40E-05	-2.97427E-05	11-50-09 AM
93.1579	95.18154	2.0236416	6.50E-05	-3.22422E-05	11-50-11 AM
93.21554	95.11841	1.9028672	6.60E-05	-3.48919E-05	11-50-13 AM
93.29604	95.04131	1.7452736	6.80E-05	-3.87666E-05	11-50-15 AM
93.37198	94.9741	1.6021184	6.90E-05	-4.28912E-05	11-50-17 AM
93.44026	94.90921	1.4689536	7.00E-05	-4.76013E-05	11-50-19 AM
93.50444	94.82394	1.3195008	7.10E-05	-5.37245E-05	11-50-21 AM
93.58389	94.74835	1.1644544	7.20E-05	-6.1594E-05	11-50-24 AM
93.65107	94.67583	1.0247616	7.30E-05	-7.08998E-05	11-50-25 AM
93.71789	94.58651	0.8686208	7.40E-05	-8.47161E-05	11-50-27 AM
93.79037	94.51037	0.72	7.40E-05	-0.000103228	11-50-29 AM
93.86095	94.42383	0.5628864	7.50E-05	-0.000133247	11-50-31 AM
93.93392	94.34394	0.4100224	7.60E-05	-0.000184651	11-50-33 AM
94.01434	94.26694	0.252608	7.60E-05	-0.000301698	11-50-35 AM
94.08691	94.17901	0.0921088	7.70E-05	-0.000831533	11-50-37 AM
94.15	94.09436	-0.0556416	7.70E-05	0.001380893	11-50-39 AM
94.23731	94.01565	-0.2216576	7.70E-05	0.000348035	11-50-41 AM
94.29357	93.94193	-0.351648	7.70E-05	0.000220073	11-50-43 AM
94.35189	93.85852	-0.493376	7.80E-05	0.000157097	11-50-45 AM
94.41354	93.77815	-0.635392	7.80E-05	0.000122185	11-50-48 AM
94.47713	93.69509	-0.7820416	7.80E-05	9.93702E-05	11-50-49 AM
94.52653	93.61972	-0.9068096	7.80E-05	8.59876E-05	11-50-51 AM
94.59091	93.55147	-1.0394432	7.80E-05	7.54113E-05	11-50-53 AM

94.6445	93.46835	-1.1761472	7.90E-05	6.70696E-05	11-50-55 AM
94.69978	93.39116	-1.3086144	7.90E-05	6.05894E-05	11-50-57 AM
94.75855	93.32067	-1.4378816	8.00E-05	5.53776E-05	11-50-59 AM
94.81037	93.25228	-1.5580928	8.00E-05	5.15076E-05	11-51-01 AM
94.86033	93.18104	-1.6792896	8.10E-05	4.81755E-05	11-51-03 AM
94.9281	93.10826	-1.81984	8.20E-05	4.48171E-05	11-51-05 AM
94.98986	93.06611	-1.9237504	8.20E-05	4.28337E-05	11-51-07 AM
95.04456	92.99694	-2.047616	8.30E-05	4.06882E-05	11-51-09 AM
95.11679	92.9204	-2.1963968	8.40E-05	3.83116E-05	11-51-12 AM
95.17191	92.85194	-2.3199744	8.50E-05	3.65984E-05	11-51-13 AM

ตารางที่ ๔. การวัดค่าสัมประสิทธิ์ซีเบก Copper Constantan ที่อุณหภูมิ 150 °C

Tem.1	Tem.2	Diff. Temp.	Volt	Seebeck Co.	Time
156.0265	157.6334	1.60688	-0.00013	-8.4E-05	12-30-05 PM
156.0248	157.6257	1.600848	-0.00013	-8.4E-05	12-30-06 PM
156.0176	157.6271	1.609408	-0.00013	-8.4E-05	12-30-08 PM
156.02	157.625	1.605072	-0.00013	-8.4E-05	12-30-10 PM
156.0085	157.6264	1.617904	-0.00013	-8.3E-05	12-30-12 PM
156.0134	157.6274	1.613968	-0.00013	-8.3E-05	12-30-14 PM
156.0259	157.6522	1.626304	-0.00013	-8.1E-05	12-30-23 PM
156.0232	157.6578	1.634624	-0.00013	-8.1E-05	12-30-24 PM
156.0057	157.6505	1.644736	-0.00013	-8E-05	12-30-26 PM
155.9959	157.6382	1.642368	-0.00013	-7.9E-05	12-30-28 PM
155.9751	157.6368	1.661696	-0.00013	-7.8E-05	12-30-30 PM
155.9581	157.6226	1.66448	-0.00013	-7.8E-05	12-30-32 PM
155.9431	157.6144	1.67136	-0.00013	-7.8E-05	12-30-34 PM
155.9281	157.606	1.677936	-0.00013	-7.7E-05	12-30-36 PM
155.9261	157.5868	1.66064	-0.00013	-7.8E-05	12-30-38 PM
155.8992	157.5758	1.676672	-0.00013	-7.8E-05	12-30-40 PM
155.8888	157.5624	1.673616	-0.00013	-7.8E-05	12-30-42 PM
155.874	157.5398	1.66584	-0.00013	-7.9E-05	12-30-44 PM
155.8558	157.5178	1.661984	-0.00013	-7.9E-05	12-30-47 PM

ตารางที่ ๕. การวัดค่าสัมประสิทธิ์ซีเบก Copper Constantan ที่อุณหภูมิ 200 °C

Tem.1	Tem.2	Diff. Temp.	Volt	Seebeck Co.	Time
200.1157	201.8756	1.759904	0.000124	-7E-05	01-10-37 PM
200.1337	201.8944	1.760672	0.000123	-7E-05	01-10-39 PM
200.1469	201.9112	1.764304	0.000122	-6.9E-05	01-10-41 PM
200.1687	201.9175	1.748768	0.000121	-6.9E-05	01-10-43 PM
200.1808	201.9189	1.73808	0.00012	-6.9E-05	01-10-45 PM
200.1927	201.9281	1.735376	0.000119	-6.9E-05	01-10-47 PM
200.2034	201.9451	1.741728	0.000119	-6.8E-05	01-10-49 PM
200.2094	201.9386	1.729264	0.000118	-6.8E-05	01-10-51 PM
200.223	201.9409	1.717952	0.000118	-6.9E-05	01-10-53 PM
200.3019	201.9981	1.696192	0.000117	-6.9E-05	01-11-01 PM
200.3406	202.0297	1.689136	0.000116	-6.9E-05	01-11-03 PM
200.3705	202.0474	1.67688	0.000116	-6.9E-05	01-11-05 PM
200.4117	202.0749	1.663216	0.000116	-7E-05	01-11-07 PM
200.5443	202.2002	1.655936	0.000115	-7E-05	01-11-13 PM
200.5795	202.2477	1.668144	0.000116	-6.9E-05	01-11-15 PM
200.6214	202.2826	1.661264	0.000116	-7E-05	01-11-17 PM
200.65	202.3145	1.664592	0.000116	-7E-05	01-11-19 PM
200.7047	202.3671	1.662416	0.000115	-6.9E-05	01-11-23 PM
200.7326	202.3961	1.663472	0.000115	-6.9E-05	01-11-25 PM
200.7516	202.415	1.66344	0.000114	-6.9E-05	01-11-27 PM
200.7605	202.4368	1.67632	0.000114	-6.8E-05	01-11-29 PM

ตารางที่ 6.การวัดค่าสภาพนำไฟฟ้าCopper Constantan ที่อุณหภูมิ 30 °C

Voltage (V)	Current (A)	Resist. (Ω)	H (m)	W (m)	probe Long (m)	Resisti. (Ω m)	Conducti. ($S\ m^{-1}$)	Count	Time
1.9E-05	-0.00604	-0.00314	3.00E-03	3.00E-03	9.25E-03	-3.1E-06	-327468	2	10:44:27 AM
1.88E-05	-0.00605	-0.00311	3.00E-03	3.00E-03	9.25E-03	-3E-06	-330386	12	10:44:27 AM
1.88E-05	-0.00606	-0.0031	3.00E-03	3.00E-03	9.25E-03	-3E-06	-331455	22	10:44:27 AM
1.86E-05	-0.00606	-0.00307	3.00E-03	3.00E-03	9.25E-03	-3E-06	-335209	32	10:44:27 AM
1.84E-05	-0.00608	-0.00302	3.00E-03	3.00E-03	9.25E-03	-2.9E-06	-339815	42	10:44:27 AM
1.85E-05	-0.00611	-0.00302	3.00E-03	3.00E-03	9.25E-03	-2.9E-06	-339913	52	10:44:28 AM
1.84E-05	-0.00614	-0.00299	3.00E-03	3.00E-03	9.25E-03	-2.9E-06	-344001	62	10:44:28 AM
1.82E-05	-0.00619	-0.00294	3.00E-03	3.00E-03	9.25E-03	-2.9E-06	-349212	72	10:44:28 AM
1.81E-05	-0.00624	-0.00291	3.00E-03	3.00E-03	9.25E-03	-2.8E-06	-353452	82	10:44:28 AM
1.8E-05	-0.00629	-0.00286	3.00E-03	3.00E-03	9.25E-03	-2.8E-06	-359745	92	10:44:28 AM
2.44E-05	0.005769	0.004228	3.00E-03	3.00E-03	9.25E-03	4.11E-06	243063.7	2	10:44:30 AM
2.43E-05	0.005761	0.004227	3.00E-03	3.00E-03	9.25E-03	4.11E-06	243172.6	12	10:44:30 AM
2.42E-05	0.005797	0.004173	3.00E-03	3.00E-03	9.25E-03	4.06E-06	246287.4	22	10:44:30 AM
2.43E-05	0.005826	0.004174	3.00E-03	3.00E-03	9.25E-03	4.06E-06	246248.6	32	10:44:30 AM
2.44E-05	0.005875	0.004156	3.00E-03	3.00E-03	9.25E-03	4.04E-06	247311.4	42	10:44:30 AM
2.45E-05	0.005932	0.004132	3.00E-03	3.00E-03	9.25E-03	4.02E-06	248734.3	52	10:44:31 AM
2.46E-05	0.00599	0.004112	3.00E-03	3.00E-03	9.25E-03	4E-06	249964.5	62	10:44:31 AM
2.47E-05	0.006052	0.004081	3.00E-03	3.00E-03	9.25E-03	3.97E-06	251824.1	72	10:44:31 AM
2.48E-05	0.006117	0.004047	3.00E-03	3.00E-03	9.25E-03	3.94E-06	253991.4	82	10:44:31 AM
2.48E-05	0.006185	0.004003	3.00E-03	3.00E-03	9.25E-03	3.89E-06	256758	92	10:44:31 AM

ตารางที่ ๗. การวัดค่าสภาพนำไฟฟ้า Copper Constantan ที่อุณหภูมิ 50 °C

Voltage (V)	Current (A)	Resist. (Ω)	H (m)	W (m)	probe Long (m)	Resisti. (Ω m)	Conducti. ($S\ m^{-1}$)	Count	Time
-4.07E-06	-0.000554	0.007352	3.00E-03	3.00E-03	1.17E-02	5.66E-06	176833.3	2	9:28:50 AM
-3.84E-06	-0.000558	0.006876	3.00E-03	3.00E-03	1.17E-02	5.29E-06	189074.9	7	9:28:50 AM
-3.17E-06	-0.000563	0.005623	3.00E-03	3.00E-03	1.17E-02	4.33E-06	231186.8	12	9:28:50 AM
-3.37E-06	-0.000568	0.00593	3.00E-03	3.00E-03	1.17E-02	4.56E-06	219225	17	9:28:50 AM
-2.79E-06	-0.000573	0.004878	3.00E-03	3.00E-03	1.17E-02	3.75E-06	266497.5	22	9:28:50 AM
-2.64E-06	-0.000578	0.004566	3.00E-03	3.00E-03	1.17E-02	3.51E-06	284692	27	9:28:51 AM
-1.97E-06	-0.000582	0.00338	3.00E-03	3.00E-03	1.17E-02	2.6E-06	384590	32	9:28:51 AM
-3.59E-06	-0.000587	0.006114	3.00E-03	3.00E-03	1.17E-02	4.7E-06	212614.9	37	9:28:51 AM
-3.11E-06	-0.000593	0.005256	3.00E-03	3.00E-03	1.17E-02	4.04E-06	247314.7	42	9:28:51 AM
-2.27E-06	-0.000598	0.003797	3.00E-03	3.00E-03	1.17E-02	2.92E-06	342345.6	47	9:28:52 AM
-2.14E-06	-0.000604	0.003547	3.00E-03	3.00E-03	1.17E-02	2.73E-06	366552.8	52	9:28:52 AM
-2.46E-06	-0.000611	0.00403	3.00E-03	3.00E-03	1.17E-02	3.1E-06	322575.2	57	9:28:52 AM
-1.7E-06	-0.000618	0.002744	3.00E-03	3.00E-03	1.17E-02	2.11E-06	473763.7	62	9:28:52 AM
-1.93E-06	-0.000623	0.003096	3.00E-03	3.00E-03	1.17E-02	2.38E-06	419930.2	67	9:28:52 AM
-2.5E-06	-0.000632	0.003949	3.00E-03	3.00E-03	1.17E-02	3.04E-06	329231.6	72	9:28:53 AM
-1.59E-06	-0.000643	0.002475	3.00E-03	3.00E-03	1.17E-02	1.9E-06	525343.6	77	9:28:53 AM
-2.02E-06	-0.000653	0.003089	3.00E-03	3.00E-03	1.17E-02	2.38E-06	420827.5	82	9:28:53 AM
-1.53E-06	-0.00066	0.002318	3.00E-03	3.00E-03	1.17E-02	1.78E-06	560811.8	87	9:28:53 AM
-1.82E-06	-0.000664	0.002738	3.00E-03	3.00E-03	1.17E-02	2.11E-06	474761	92	9:28:53 AM
-1.34E-06	-0.000664	0.002024	3.00E-03	3.00E-03	1.17E-02	1.56E-06	642402.4	97	9:28:53 AM
-5.29E-07	0.0005578	-0.00095	3.00E-03	3.00E-03	1.17E-02	-7.3E-07	-1371360	2	9:28:55 AM
9.33E-08	0.0005621	0.000166	3.00E-03	3.00E-03	1.17E-02	1.28E-07	7832408	7	9:28:55 AM
-2.01E-07	0.0005668	-0.00035	3.00E-03	3.00E-03	1.17E-02	-2.7E-07	-3666321	12	9:28:55 AM
-9.16E-07	0.0005713	-0.0016	3.00E-03	3.00E-03	1.17E-02	-1.2E-06	-810511	17	9:28:55 AM
-2.91E-07	0.0005763	-0.0005	3.00E-03	3.00E-03	1.17E-02	-3.9E-07	-2576441	22	9:28:55 AM
-1.86E-06	0.0005812	-0.0032	3.00E-03	3.00E-03	1.17E-02	-2.5E-06	-406739	27	9:28:56 AM
-5.09E-07	0.0005853	-0.00087	3.00E-03	3.00E-03	1.17E-02	-6.7E-07	-1495464	32	9:28:56 AM
-5.69E-07	0.0005906	-0.00096	3.00E-03	3.00E-03	1.17E-02	-7.4E-07	-1349386	37	9:28:56 AM
-2.36E-07	0.0005961	-0.0004	3.00E-03	3.00E-03	1.17E-02	-3E-07	-3281580	42	9:28:56 AM

-8.93E-07	0.0006019	-0.00148	3.00E-03	3.00E-03	1.17E-02	-1.1E-06	-875999	47	9:28:56 AM
-1.15E-06	0.0006077	-0.00189	3.00E-03	3.00E-03	1.17E-02	-1.5E-06	-689307	52	9:28:56 AM
-1.01E-06	0.000614	-0.00164	3.00E-03	3.00E-03	1.17E-02	-1.3E-06	-793197	57	9:28:57 AM
-1.63E-06	0.0006213	-0.00262	3.00E-03	3.00E-03	1.17E-02	-2E-06	-495980	62	9:28:57 AM
-1.15E-06	0.0006268	-0.00184	3.00E-03	3.00E-03	1.17E-02	-1.4E-06	-707916	67	9:28:57 AM
4.01E-07	0.0006361	0.00063	3.00E-03	3.00E-03	1.17E-02	4.85E-07	2062709	72	9:28:57 AM
-6.19E-07	0.0006468	-0.00096	3.00E-03	3.00E-03	1.17E-02	-7.4E-07	-1359014	77	9:28:57 AM
-8.87E-07	0.0006573	-0.00135	3.00E-03	3.00E-03	1.17E-02	-1E-06	-963763	82	9:28:57 AM
-5.29E-07	0.0006642	-0.0008	3.00E-03	3.00E-03	1.17E-02	-6.1E-07	-1632205	87	9:28:58 AM
-1.71E-07	0.0006675	-0.00026	3.00E-03	3.00E-03	1.17E-02	-2E-07	-5063941	92	9:28:58 AM
3.63E-07	0.0006677	0.000544	3.00E-03	3.00E-03	1.17E-02	4.18E-07	2390208	97	9:28:58 AM

ตารางที่ 8.การวัดค่าสภาพนำไฟฟ้าCopper Constantan ที่อุณหภูมิ 100 °C

Voltage (V)	Current (A)	Resist. (Ω)	H (m)	W (m)	probe Long (m)	Resisti. (Ω m)	Conducti. ($S\ m^{-1}$)	Count	Time
-6.4E-05	-0.00594	0.010808	3.00E-03	3.00E-03	9.25E-03	1.05E-05	95090.61	2	11:23:09 AM
-6.4E-05	-0.00594	0.01078	3.00E-03	3.00E-03	9.25E-03	1.05E-05	95340.98	12	11:23:09 AM
-6.4E-05	-0.00594	0.01074	3.00E-03	3.00E-03	9.25E-03	1.04E-05	95695.54	22	11:23:10 AM
-6.4E-05	-0.00593	0.010713	3.00E-03	3.00E-03	9.25E-03	1.04E-05	95937.41	32	11:23:10 AM
-6.4E-05	-0.00594	0.010693	3.00E-03	3.00E-03	9.25E-03	1.04E-05	96118.41	42	11:23:10 AM
-6.4E-05	-0.00597	0.010681	3.00E-03	3.00E-03	9.25E-03	1.04E-05	96228.69	52	11:23:10 AM
-6.4E-05	-0.00601	0.010624	3.00E-03	3.00E-03	9.25E-03	1.03E-05	96738.37	62	11:23:10 AM
-6.4E-05	-0.00604	0.010582	3.00E-03	3.00E-03	9.25E-03	1.03E-05	97126.89	72	11:23:11 AM
-6.4E-05	-0.00608	0.010548	3.00E-03	3.00E-03	9.25E-03	1.03E-05	97438.78	82	11:23:11 AM
-6.4E-05	-0.00612	0.010505	3.00E-03	3.00E-03	9.25E-03	1.02E-05	97834.07	92	11:23:11 AM
-5.9E-05	0.005556	-0.01059	3.00E-03	3.00E-03	9.25E-03	-1E-05	-97057.9	2	11:23:12 AM
-5.9E-05	0.005585	-0.01052	3.00E-03	3.00E-03	9.25E-03	-1E-05	-97714.5	12	11:23:13 AM
-5.8E-05	0.0056	-0.01044	3.00E-03	3.00E-03	9.25E-03	-1E-05	-98468.6	22	11:23:13 AM
-5.8E-05	0.005621	-0.01038	3.00E-03	3.00E-03	9.25E-03	-1E-05	-99058.4	32	11:23:13 AM
-5.8E-05	0.005666	-0.0103	3.00E-03	3.00E-03	9.25E-03	-1E-05	-99797.2	42	11:23:13 AM
-5.8E-05	0.005716	-0.01019	3.00E-03	3.00E-03	9.25E-03	-9.9E-06	-100839	52	11:23:13 AM
-5.8E-05	0.005767	-0.01009	3.00E-03	3.00E-03	9.25E-03	-9.8E-06	-101843	62	11:23:13 AM
-5.8E-05	0.005822	-0.01	3.00E-03	3.00E-03	9.25E-03	-9.7E-06	-102765	72	11:23:14 AM
-5.8E-05	0.005872	-0.00992	3.00E-03	3.00E-03	9.25E-03	-9.7E-06	-103569	82	11:23:14 AM
-5.8E-05	0.005946	-0.00978	3.00E-03	3.00E-03	9.25E-03	-9.5E-06	-105038	92	11:23:14 AM

ตารางที่ ๘ 9.การวัดค่าสภาพนำไฟฟ้าCopper Constantan ที่อุณหภูมิ 150 °C

Voltage (V)	Current (A)	Resist. (Ω)	H (m)	W (m)	probe Long (m)	Resisti. (Ω m)	Conducti. ($S m^{-1}$)	Count	Time
-5.5E-05	-0.00595	0.009211	3.00E-03	3.00E-03	1.10E-02	7.54E-06	132685.8	2	2:56:33 PM
-5.5E-05	-0.00597	0.009259	3.00E-03	3.00E-03	1.10E-02	7.58E-06	132003.9	12	2:56:33 PM
-5.6E-05	-0.00597	0.009386	3.00E-03	3.00E-03	1.10E-02	7.68E-06	130212.7	22	2:56:34 PM
-5.5E-05	-0.00596	0.009283	3.00E-03	3.00E-03	1.10E-02	7.59E-06	131669.2	32	2:56:34 PM
-5.5E-05	-0.00597	0.009289	3.00E-03	3.00E-03	1.10E-02	7.6E-06	131578	42	2:56:34 PM
-5.6E-05	-0.006	0.009392	3.00E-03	3.00E-03	1.10E-02	7.68E-06	130140.4	52	2:56:34 PM
-5.5E-05	-0.00603	0.009067	3.00E-03	3.00E-03	1.10E-02	7.42E-06	134803.2	62	2:56:35 PM
-5.6E-05	-0.00607	0.009148	3.00E-03	3.00E-03	1.10E-02	7.48E-06	133604.9	72	2:56:35 PM
-5.5E-05	-0.00611	0.008935	3.00E-03	3.00E-03	1.10E-02	7.31E-06	136790.3	82	2:56:35 PM
-5.4E-05	-0.00616	0.008778	3.00E-03	3.00E-03	1.10E-02	7.18E-06	139243	92	2:56:35 PM
-4.7E-05	0.005718	-0.00828	3.00E-03	3.00E-03	1.10E-02	-6.8E-06	-147674	2	2:56:37 PM
-4.8E-05	0.005749	-0.00835	3.00E-03	3.00E-03	1.10E-02	-6.8E-06	-146289	12	2:56:37 PM
-4.9E-05	0.005767	-0.00844	3.00E-03	3.00E-03	1.10E-02	-6.9E-06	-144745	22	2:56:37 PM
-4.8E-05	0.005787	-0.00834	3.00E-03	3.00E-03	1.10E-02	-6.8E-06	-146628	32	2:56:37 PM
-4.9E-05	0.005832	-0.00835	3.00E-03	3.00E-03	1.10E-02	-6.8E-06	-146363	42	2:56:37 PM
-4.9E-05	0.005888	-0.00835	3.00E-03	3.00E-03	1.10E-02	-6.8E-06	-146434	52	2:56:37 PM
-4.9E-05	0.005943	-0.00824	3.00E-03	3.00E-03	1.10E-02	-6.7E-06	-148404	62	2:56:38 PM
-4.8E-05	0.006004	-0.00799	3.00E-03	3.00E-03	1.10E-02	-6.5E-06	-152923	72	2:56:38 PM
-4.9E-05	0.006067	-0.00807	3.00E-03	3.00E-03	1.10E-02	-6.6E-06	-151438	82	2:56:38 PM
-4.9E-05	0.00613	-0.00793	3.00E-03	3.00E-03	1.10E-02	-6.5E-06	-154157	92	2:56:38 PM

ตารางที่ ผ 10.การวัดค่าสภาพนำไฟฟ้าCopper Constantan ที่อุณหภูมิ 200 °C

Voltage (V)	Current (A)	Resist. (Ω)	H (m)	W (m)	probe Long (m)	Resisti. (Ω m)	Conducti. ($S\ m^{-1}$)	Count	Time
-4.3E-05	-0.00607	0.007073	3.00E-03	3.00E-03	1.10E-02	5.79E-06	172801.6	2	2:03:57 PM
-4.3E-05	-0.00606	0.007056	3.00E-03	3.00E-03	1.10E-02	5.77E-06	173229.2	12	2:03:57 PM
-4.2E-05	-0.00605	0.007001	3.00E-03	3.00E-03	1.10E-02	5.73E-06	174583.2	22	2:03:57 PM
-4.3E-05	-0.00604	0.007166	3.00E-03	3.00E-03	1.10E-02	5.86E-06	170549.3	32	2:03:58 PM
-4.2E-05	-0.00605	0.006867	3.00E-03	3.00E-03	1.10E-02	5.62E-06	177992.7	42	2:03:58 PM
-4.2E-05	-0.00606	0.006875	3.00E-03	3.00E-03	1.10E-02	5.63E-06	177768.9	52	2:03:58 PM
-4.1E-05	-0.00609	0.006741	3.00E-03	3.00E-03	1.10E-02	5.52E-06	181301.5	62	2:03:58 PM
-4.1E-05	-0.00612	0.006687	3.00E-03	3.00E-03	1.10E-02	5.47E-06	182767.1	72	2:03:58 PM
-4.2E-05	-0.00615	0.006855	3.00E-03	3.00E-03	1.10E-02	5.61E-06	178300.8	82	2:03:59 PM
-4.2E-05	-0.0062	0.00684	3.00E-03	3.00E-03	1.10E-02	5.6E-06	178685.1	92	2:03:59 PM
-3.6E-05	0.005662	-0.00637	3.00E-03	3.00E-03	1.10E-02	-5.2E-06	-191770	2	2:04:00 PM
-3.6E-05	0.005691	-0.0063	3.00E-03	3.00E-03	1.10E-02	-5.2E-06	-193897	12	2:04:00 PM
-3.6E-05	0.005707	-0.00624	3.00E-03	3.00E-03	1.10E-02	-5.1E-06	-195825	22	2:04:01 PM
-3.5E-05	0.005729	-0.00614	3.00E-03	3.00E-03	1.10E-02	-5E-06	-198982	32	2:04:01 PM
-3.5E-05	0.005777	-0.0061	3.00E-03	3.00E-03	1.10E-02	-5E-06	-200245	42	2:04:01 PM
-3.6E-05	0.00583	-0.00611	3.00E-03	3.00E-03	1.10E-02	-5E-06	-200003	52	2:04:01 PM
-3.6E-05	0.005885	-0.00603	3.00E-03	3.00E-03	1.10E-02	-4.9E-06	-202573	62	2:04:01 PM
-3.6E-05	0.005944	-0.00599	3.00E-03	3.00E-03	1.10E-02	-4.9E-06	-203943	72	2:04:02 PM
-3.6E-05	0.006004	-0.00598	3.00E-03	3.00E-03	1.10E-02	-4.9E-06	-204372	82	2:04:02 PM
-3.6E-05	0.006067	-0.00597	3.00E-03	3.00E-03	1.10E-02	-4.9E-06	-204673	92	2:04:02 PM