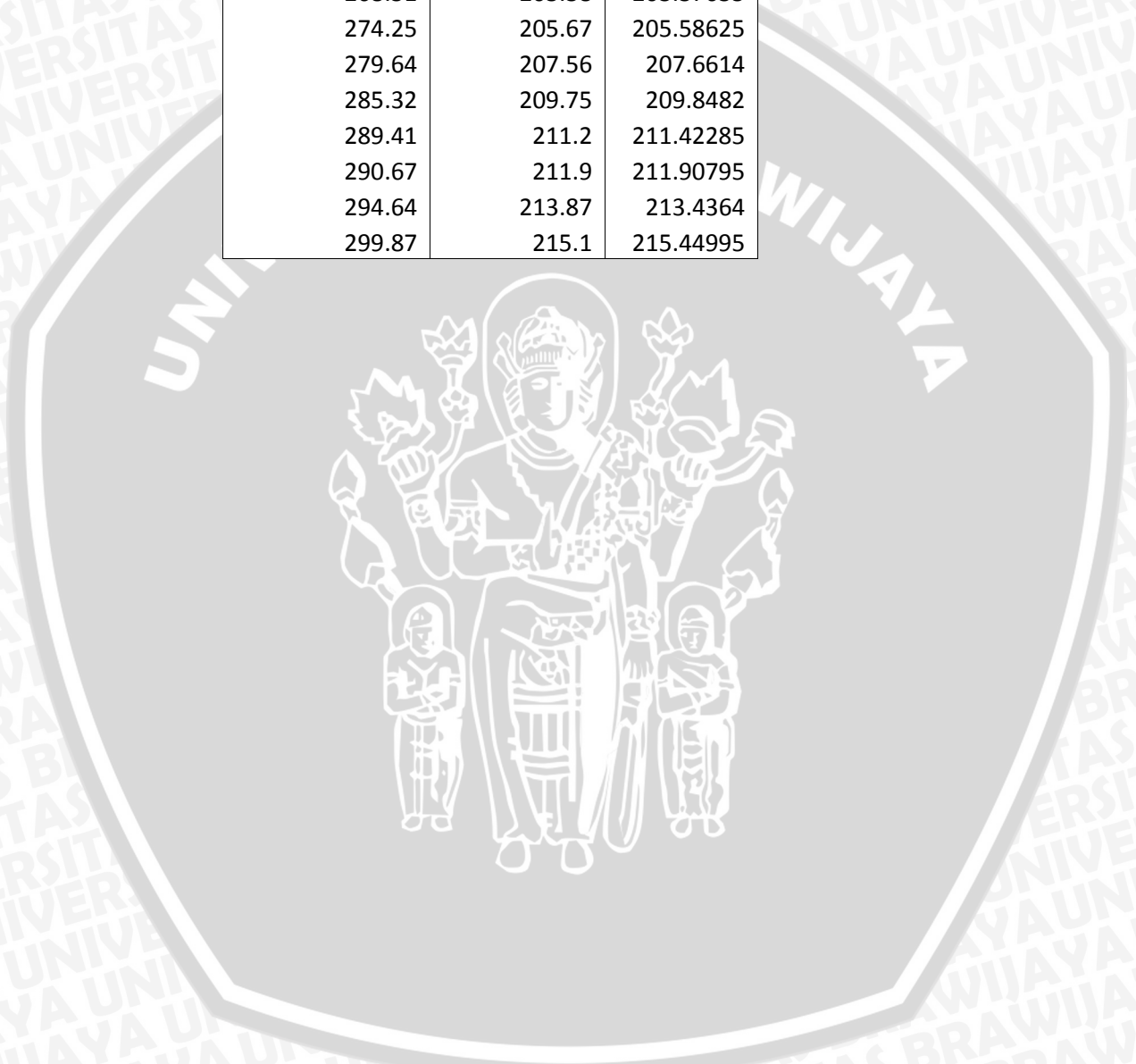


LAMPIRAN

Tabel 5.1 Hasil Perbandingan Nilai Pembacaan Suhu Secara Teori dan Praktek

Suhu (C)	R(praktek)(ohm)	R(teori)(ohm)
4.36	101.2	101.6786
5.3	101.5	102.0405
12.95	104.4	104.98575
16.4	105.6	106.314
18.23	106.4	107.01855
19.91	106.7	107.66535
21.24	107.6	108.1774
22.38	108.1	108.6163
25.95	109.8	109.99075
26.92	110.2	110.3642
33.15	111.9	112.76275
40.01	115.2	115.40385
41.42	115.7	115.9467
45.23	116.2	117.41355
45.63	117.1	117.56755
50.19	118.8	119.32315
58.24	122.2	122.4224
66.67	125.9	125.66795
78.2	130.3	130.107
95.7	137.4	136.8445
100	136.65	138.5
105.67	140.5	140.68295
109.45	142	142.13825
116.78	145.3	144.9603
123.96	147.99	147.7246
127.34	149.1	149.0259
130.12	150.21	150.0962
133.86	151.42	151.5361
143.92	156.01	155.4092
157.25	160.5	160.54125
160.29	162.3	161.71165
166.26	164.11	164.0101
171.93	166.23	166.19305
177.48	168.99	168.3298
180.01	169.1	169.30385
188.72	172.42	172.6572
192.42	174.1	174.0817
197.3	176.23	175.9605
201.82	177.4	177.7007
207.37	179.87	179.83745
211.75	181.42	181.52375

216.62	183.23	183.3987
220.72	185.11	184.9772
227.53	187.6	187.59905
230.05	188.6	188.56925
235.68	191.51	190.7368
243.47	193.82	193.73595
248.3	196.01	195.5955
256.77	197.87	198.85645
261.3	200.67	200.6005
268.51	203.38	203.37635
274.25	205.67	205.58625
279.64	207.56	207.6614
285.32	209.75	209.8482
289.41	211.2	211.42285
290.67	211.9	211.90795
294.64	213.87	213.4364
299.87	215.1	215.44995



Tabel 5.2 Pengambilan Data Resistansi Sebanyak 10 kali

Suhu	Data sheet	Nilai Resistansi									
		Pengukuran ke-									
		1	2	3	4	5	6	7	8	9	10
0	101,17	102,3	101,15	101	100,93	100,72	101,15	101,3	101,42	101,34	101,42
10	105,07	106,51	105,78	104,95	104,85	104,75	104,95	104,85	104,57	104,78	104,85
20	108,96	109,94	109,42	109,63	109,11	109	108,9	108,9	108,69	108,17	108,7
30	112,83	113,72	112,67	112,9	113,19	113,3	111,09	113,19	112,56	113,4	113,3
40	116,7	116,88	116,87	116,99	117,2	116,25	117,31	117,41	117,1	117,31	116,36
50	120,55	121,56	120,71	120,12	120,6	120,71	121,24	120,92	120,92	121,24	120,07
60	124,39	124,99	124,99	123,87	124,77	125,09	126,42	124,99	124,56	124,45	124,32
70	128,22	128,76	128,33	128,87	128,43	128,33	130,16	129,41	127,68	127,14	125,2
80	132,04	127,57	131,9	133,1	129,73	132,12	131,9	132,66	132,12	132,77	132,66
90	135,84	136,92	136,81	134,95	131,47	137,25	134,08	135,83	136,61	135,83	136,27
100	139,64	140,89	140	141	140,89	140,77	140,22	139,34	139,67	138,69	140
110	143,42	141,33	143,54	144,43	144,1	143,87	144	144,43	144,43	143,99	143,32
120	147,19	147,7	148,44	146,1	146,88	148,33	147,21	147,55	147,55	147,33	148,56
130	150,95	152,26	151,36	152,15	151,25	151,02	151,02	145,99	149,45	151,14	151,25
140	154,7	155,08	154,74	154,63	154,97	154,63	155,33	155,65	155,08	155,08	152,94
150	158,43	158,83	159,06	158,83	158,38	157,98	159,86	159,29	158,6	158,26	157,44
160	162,16	161,8	162,03	163,61	162,03	163,06	161	162,83	163,29	163,98	161,57
170	165,87	166,17	165,4	165,94	167,32	166,63	165,59	166,28	166,4	165,02	165,48
180	169,57	170,45	169,41	169,53	168,83	168,48	169,19	168,83	170,11	168,25	169,18
190	173,26	174,65	173,72	173,22	173,83	173,6	173,37	173,6	172,9	173,2	173,37
200	176,94	175,47	176,88	176,12	177,47	177,23	177,01	177,18	176,2	176,9	177,2
210	180,61	180,3	180,77	180,89	181,48	181,25	180,06	180,3	180,2	180,13	180,64
220	184,26	186,24	185,28	183,26	184,57	185,64	183,38	184,09	183,62	184,12	184,08
230	187,91	188,15	187,43	187,67	186,98	187,67	188,1	188,3	188,35	188,4	188,41
240	191,54	191,03	192,24	192,72	191,64	191,1	191,15	190,9	191,98	191,45	191,3
250	195,16	195,62	196,72	195,45	195,25	195,67	196,01	196,11	195	194,67	194,68
260	198,77	197,81	199,03	196,84	198,79	198,65	198,98	198,77	198,99	199,5	199,67
270	202,36	202,95	201,3	202,56	202,45	202,35	202,1	202,56	202,66	202,78	202,72
280	205,95	205,9	206,64	203,93	206,89	206,1	206,12	205,13	206,34	206,23	206,33
290	209,52	210,61	209,78	209,86	210,73	208,87	210,36	210,61	209,17	209,61	209,49
300	213,09	212,22	213,47	213,35	213,9	214,47	215,85	214,47	213,11	213,35	213,85

Tabel 5.3 Tabel Perhitungan Rumus Untuk Uji-t

Suhu (°C)	Nilai rata-rata (x)	Standar deviasi (s)	Jumlah pengambilan data (n)	T hitung	T tabel
0	101,273	0,425755538	10	0,765027276	2,262157
10	105,084	0,595001401	10	0,074406358	2,262157
20	109,046	0,510211285	10	0,533025997	2,262157
30	112,932	0,733708995	10	0,439618873	2,262157
40	116,968	0,394906459	10	2,146053564	2,262157
50	120,809	0,476595566	10	1,718500911	2,262157
60	124,845	0,672710108	10	2,138865343	2,262157
70	128,231	1,35561753	10	0,025659932	2,262157
80	131,653	1,709340679	10	-0,715949412	2,262157
90	135,602	1,741441293	10	-0,432183437	2,262157
100	140,147	0,765216745	10	2,095190395	2,262157
110	143,744	0,926717025	10	1,105599589	2,262157
120	147,565	0,756912589	10	1,566698904	2,262157
130	150,689	1,817216736	10	-0,454186038	2,262157
140	154,813	0,729292656	10	0,489978026	2,262157
150	158,653	0,686942501	10	1,026560326	2,262157
160	162,52	0,972499643	10	-1,170612211	2,262157
170	166,023	0,680180532	10	0,711323626	2,262157
180	169,226	0,685730754	10	-1,586371195	2,262157
190	173,546	0,476193238	10	1,899252947	2,262157
200	176,766	0,630558835	10	-0,872616927	2,262157
210	180,602	0,490346816	10	-0,051592506	2,262157
220	184,428	0,996881805	10	0,532924409	2,262157
230	187,946	0,48614584	10	0,234172519	2,262157
240	191,551	0,593098268	10	0,058649732	2,262157
250	195,518	0,652938656	10	1,733846498	2,262157
260	198,703	0,824581375	10	-0,256945657	2,262157
270	202,443	0,466024558	10	0,563208615	2,262157
280	205,961	0,852453322	10	0,040805817	2,262157
290	209,909	0,647206819	10	1,900669112	2,262157
300	213,763	0,983904354	10	2,163028202	2,262157

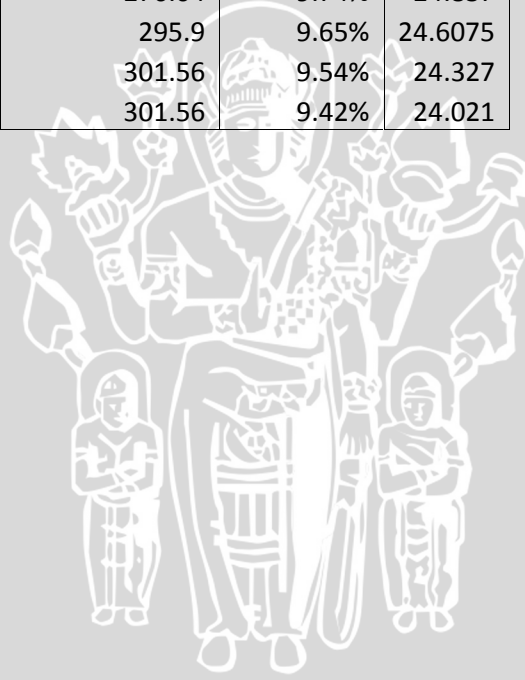
Tabel 5.4 Hubungan Sudut-Duty Cycle-PWM

Sudut	Duty Cycle (%)	PWM
170	11.50%	29.325
168	11.40%	29.07
166	11.30%	28.815
164	11.20%	28.56
162	11.10%	28.305
160	11.00%	28.05
158	10.90%	27.795
156	10.80%	27.54
154	10.70%	27.285
152	10.60%	27.03
150	10.50%	26.775
148	10.40%	26.52
146	10.30%	26.265
144	10.20%	26.01
142	10.10%	25.755
140	9.94%	25.347
138	9.85%	25.1175
136	9.74%	24.837
134	9.65%	24.6075
132	9.54%	24.327
130	9.42%	24.021
128	9.34%	23.825743
126	9.24%	23.561603
124	9.14%	23.297462
122	9.03%	23.033322
120	8.93%	22.769182
118	8.83%	22.505042
116	8.72%	22.240901
114	8.62%	21.976761
112	8.51%	21.712621
110	8.41%	21.448481
108	8.31%	21.18434
106	8.20%	20.9202
104	8.10%	20.65606
102	8.00%	20.391919
100	7.89%	20.127779
98	7.79%	19.863639
96	7.69%	19.599499
94	7.58%	19.335358
92	7.48%	19.071218
90	7.38%	18.807078
88	7.27%	18.542938
86	7.17%	18.278797
84	7.06%	18.014657

82	6.96%	17.750517
80	6.86%	17.486377
78	6.75%	17.222236
76	6.65%	16.958096
74	6.55%	16.693956
72	6.44%	16.429816
70	6.34%	16.165675
68	6.24%	15.901535
66	6.13%	15.637395
64	6.03%	15.373255
62	5.93%	15.109114
60	5.82%	14.844974
58	5.72%	14.580834
56	5.61%	14.316694
54	5.51%	14.052553
52	5.41%	13.788413
50	5.30%	13.524273
48	5.20%	13.260132
46	5.10%	12.995992
44	4.99%	12.731852
42	4.89%	12.467712
40	4.79%	12.203571
38	4.68%	11.939431
36	4.58%	11.675291
34	4.47%	11.411151
32	4.37%	11.14701
30	4.27%	10.88287
28	4.16%	10.61873
26	4.06%	10.35459
24	3.96%	10.090449
22	3.85%	9.8263091
20	3.75%	9.5621688
18	3.65%	9.2980286
16	3.54%	9.0338883
14	3.44%	8.7697481
12	3.34%	8.5056078
10	3.23%	8.2414675
8	3.13%	7.9773273
6	3.02%	7.713187
4	2.92%	7.4490468
2	2.82%	7.1849065
0	2.71%	6.9207662

Tabel 5.5 Tabel Hubungan antara Sudut- Suhu- PWM

Sudut	Suhu maksimal	duty cycle	Pwm
164	33.03	11.20%	28.56
162	40.12	11.10%	28.305
160	44.56	11.00%	28.05
158	53.49	10.90%	27.795
156	67.59	10.80%	27.54
154	86.93	10.70%	27.285
152	107.34	10.60%	27.03
150	128.58	10.50%	26.775
148	146.08	10.40%	26.52
146	166.62	10.30%	26.265
144	185.72	10.20%	26.01
142	206.35	10.10%	25.755
140	228.85	9.94%	25.347
138	254.49	9.85%	25.1175
136	276.04	9.74%	24.837
134	295.9	9.65%	24.6075
132	301.56	9.54%	24.327
130	301.56	9.42%	24.021



Tabel 5.6 Tabel Karakteristik Kenaikan Suhu dalam Tungku Bakar

Waktu	sudut 161	sudut 153	sudut 145	sudut 137	sudut 128
0	25.51	26.54	26.19	27.79	25.71
14	26.15	26.84	27.73	28.02	27.77
28	25.95	27.05	32.19	33.53	35.56
42	25.85	27.13	38.12	41.31	41.87
56	26.12	27	43.05	50.28	45.88
70	25.99	28.37	47.13	56.5	56.55
84	25.93	28.65	50.84	62.05	72.51
98	26.03	29.25	53.8	66.85	85.97
112	26.15	30.51	56.85	70.98	99.76
126	26.13	31.49	59.89	74.32	111.88
140	26.18	32.59	62.44	77.97	122.86
154	26.26	33.24	64.74	81.02	132.85
168	26.18	34.22	66.95	83.86	140.81
182	26.22	35.08	69.01	86.6	148.15
196	26.3	36.23	70.77	89.03	155.32
210	26.5	38.44	72.57	90.92	161.84
224	26.34	41.5	73.97	92.76	168.09
238	26.47	44.92	75.76	94.62	173.6
252	26.67	47.87	77.43	96.37	177.9
266	26.62	50.75	79.13	97.72	182.42
280	26.56	53.39	80.55	99.63	186.67
294	26.79	56.46	82.41	100.99	191.1
308	26.73	58.95	84.48	101.7	194.88
322	26.77	61.52	85.88	103.05	198.63
336	26.58	63.56	87	104.5	202.81
350	26.51	65.9	87.96	105.09	206.28
364	26.7	67.73	89.33	106.26	210.37
378	26.71	69.59	90.57	107.25	213.46
392	26.69	71.16	91.58	108.1	217.23
406	26.82	72.21	92.92	109.1	220.34
420	26.96	73.81	93.82	109.97	223.04
434	26.96	75.12	94.83	110.9	225.53
448	27.05	76.91	95.56	111.93	227.6
462	26.85	78.65	97.02	112.61	230.47
476	27.12	80.38	98.01	113.48	233.26
490	27.1	81.34	98.86	115.06	235.31
504	27.17	82.11	99.84	115.95	236.95
518	27.26	83.06	100.98	116.58	238.59
532	27.21	83.28	101.99	117.66	240.45
546	27.13	84.42	103.23	118.76	241.82
560	27.37	85.79	104.56	119.76	243.35
574	27.18	86.8	105.57	121.55	244.34
588	27.25	87.59	106.15	122.73	245.81

602	27.31	88.53	107.22	124.38	248.24
616	27.52	89.46	108.08	125.4	249.72
630	27.48	90.61	108.7	126.89	251.85
644	27.35	91.41	109.75	128.25	254.2
658	27.64	92.42	110.2	129.48	255.16
672	27.43	92.86	111.49	130.51	256.6
686	27.61	93.74	112.5	131.48	258.28
700	27.51	94.45	113.52	132.22	259.62
714	27.53	94.98	114.31	133.1	260.9
728	27.6	95.23	115.15	133.99	263.11
742	27.88	95.4	115.7	134.93	265.34
756	27.74	96.58	116.43	135.45	267.11
770	27.61	97.35	117.17	135.97	268.33
784	27.83	97.82	118.15	136.8	268.94
798	27.96	98.52	119.04	137.87	269.64
812	27.91	99.41	119.7	138.27	270.61
826	28.06	100.13	120.26	139.32	271.57
840	27.99	100.73	120.95	140.06	273.48
854	28.04	101.45	121.83	141.43	275.38
868	27.98	101.63	122.36	142.23	276.89
882	27.92	102.19	122.96	142.76	278.23
896	28.1	102.77	123.64	144.11	278.74
910	28.03	103.31	124.49	144.82	279.84
924	28.31	103.61	125.36	145	281.11
938	28.18	104.15	126.16	145.26	281.45
952	28.29	104.77	126.95	145.19	282.05
966	28.25	105.43	127.71	145.83	282.31
980	28.26	106.33	128.4	146.8	282.51
994	28.32	106.93	129	148.22	284.09
1008	28.52	107.05	129.23	149.32	285.99
1022	28.42	107.42	130.01	149.87	286.8
1036	28.62	107.91	130.63	150.67	287.4
1050	28.56	108.45	131.4	151.49	288.43
1064	28.7	108.73	132.25	152.43	289.86
1078	28.65	109.16	133.02	153.18	290.75
1092	28.64	109.63	133.51	153.96	290.81
1106	28.61	110.18	134.06	154.68	291.75
1120	28.76	110.91	134.82	155.54	292.58
1134	28.67	111.09	135.31	156.85	293.09
1148	28.83	111.28	135.93	157.16	293.74
1162	28.83	111.49	136.26	157.86	294.87
1176	28.97	111.86	136.78	158.68	296.23
1190	29	112.49	137.56	159.71	298.04
1204	29.07	112.63	138.07	160.51	299.31
1218	28.99	112.94	139.01	161.03	299.67
1232	28.96	113.46	139.53	161.25	300.48

1246	29.05	114.06	140.13	162.06	299.67
1260	29.04	114.61	140.29	162.42	299.98
1274	28.91	115.19	140.84	162.51	299.96
1288	29.03	115.7	141.29	163.09	300.08
1302	29.11	115.99	142.08	163.47	299.77
1316	29.05	116.29	142.4	163.66	300.48
1330	29.2	116.77	142.73	164.54	300.23
1344	29.13	117.03	143.06	164.85	300.58
1358	29.16	117.22	143.78	165.21	300.67
1372	28.92	117.39	143.98	165.55	300.81
1386	29.18	118.06	144.56	165.86	
1400	29.44	118.37	145.08	166.68	
1414	29.37	118.89	145.59	168.02	
1428	29.37	119.47	145.98	168.56	
1442	29.54	119.92	146.58	169.56	
1456	29.37	120.3	148.14	170.41	
1470	29.42	120.78	148.82	171.13	
1484	29.47	121.07	149.41	171.75	
1498	29.52	121.44	149.98	172.48	
1512	29.55	121.97	150.49	172.89	
1526	29.56	122.34	150.86	173.7	
1540	29.67	123.44	151.32	174.03	
1554	29.43	124.02	151.96	174.07	
1568	29.49	124.04	152.42	174.97	
1582	29.61	124.33	152.89	175.66	
1596	29.58	124.68	153.34	176.18	
1610	29.49	125	153.99	176.34	
1624	29.6	125.08	154.46	176.96	
1638	29.85	125.79	154.81	177.19	
1652	29.69	126.12	155.42	177.84	
1666	29.8	126.57	155.84	178.51	
1680	29.74	127.19	156.31	179.13	
1694	29.98	127.31	156.58	179.01	
1708	29.74	127.49	157.06	179.21	
1722	29.95	127.74	157.44	180.23	
1736	29.81	127.7	157.92	181.26	
1750	30.04	127.91	158.97	182.06	
1764	29.89	127.79	159	182.58	
1778	30.17	127.88	159.48	182.65	
1792	30.02	128.35	159.86	182.65	
1806	30.21	128.88	160.49	182.72	
1820	29.91	129.22	160.94	182.86	
1834	30.33	129.45	161.42	183.41	
1848	30.09	129.94	161.59	183.77	
1862	30.08	130.39	162.2	183.46	
1876	30.36	130.93	162.43	183.88	

1890	30.2	131.25	162.69	184.84
1904	30.43	131.56	163.18	185.83
1918	30.45	131.81	163.86	185.98
1932	30.48	132.16	164.06	186.21
1946	30.46	132.25	164.23	186.1
1960	30.46	132.3	164.48	186.12
1974	30.45	132.75	165.34	185.88
1988	30.37	132.79	166.07	187.3
2002	30.58	133.26	166.5	187.87
2016	30.49	133.29	166.78	187.47
2030	30.49	133.36	167.01	187.49
2044	30.76	133.67	167.76	187.03
2058	30.65	133.58	168.41	187.73
2072	30.74	133.81	168.44	188.33
2086	30.76	134.21	168.85	188.17
2100	30.84	134.67	168.85	188.16
2114	30.89	134.69	169.22	189.13
2128	30.87	135.2	169.7	189.4
2142	30.68	135.92	169.85	189.54
2156	30.78	136.17	170.43	189.63
2170	30.97	136.71	170.7	189.58
2184	30.6	137.1	171.51	189.69
2198	31.27	137.63	171.95	190.22
2212	30.95	137.79	171.83	190.85
2226	31.14	137.93	172.13	191.16
2240	30.8	138.2	172.06	191.51
2254	30.88	138.71	172.68	191.64
2268	31.18	139.13	173.03	191.62
2282	30.91	139.66	173.08	191.46
2296	31.09	140.07	173.08	191.44
2310	30.97	140.21	173.56	191.61
2324	31.01	140.16	174.13	192.04
2338	31.01	140.56	174.63	192.01
2352	31.36	140.55	174.76	191.97
2366	31.25	140.92	175.14	191.61
2380	31.21	140.9	175.25	191.95
2394	31.23	140.93	175.5	191.96
2408	31.18	141.27	175.89	192.18
2422	31.06	141.65	176.01	192.95
2436	31.09	141.76	176.61	193.03
2450	31.22	141.98	177.58	193.35
2464	31.46	142.34	177.42	193.52
2478	31.31	142.6	177.78	194.09
2492	31.21	142.71	178.38	194.25
2506	31.36	142.88	178.99	194.07
2520	31.19	142.85	179.5	194.78

2534	31.21	142.94	179.8	195.54
2548	31.22	143.28	180.85	195.81
2562	31.3	143.73	181.17	195.93
2576	31.56	143.85	181.27	196.07
2590	31.54	144.13	181.94	196.44
2604	31.62	144.28	182.48	196.25
2618	31.39	144.7	183.12	196.44
2632	31.66	144.92	183.45	196.43
2646	31.43	145.27	183.72	196.56
2660	31.67	145.57	183.66	197.16
2674	31.44	145.92	186.84	197.87
2688	31.41	146.3	187.53	198.46
2702	31.67	146.34	187.84	199.81
2716	31.6	146.62	187.96	200.02
2730	31.43	146.72	188.72	200.67
2744	31.63	146.67	189.05	200.06
2758	31.7	147.06	189.38	200.14
2772	31.56	147.29	189.89	200.87
2786	31.59	147.56	190.1	201.45
2800	31.69	147.85	190.53	202.07
2814	31.65	148.28	190.78	202.72
2828	31.88	148.56	191	203
2842	31.73	148.92	191.02	203.36
2856	31.63	149.19	191.38	203.48
2870	31.98	149.56	191.79	204
2884	31.62	149.88	192.25	204.14
2898	31.79	149.85	192.54	204.12
2912	31.66	149.8	192.64	203.57
2926	31.74	149.89	192.95	203.59
2940	31.6	150.12	193.21	203.39
2954	31.71	150.21	193.63	203.87
2968	31.89	150.35	194.22	204.6
2982	31.75	150.75	195	205.67
2996	31.66	150.92	194.65	206.39
3010	31.97	151.16	194.45	206.74
3024	31.82	151.56	194.89	206.81
3038	31.75	151.67	195.27	207.24
3052	31.71	151.77	195.79	208
3066	31.95	151.66	196.12	209.15
3080	32.07	151.82	196.24	209.92
3094	31.87	151.85	196.33	210.38
3108	31.92	151.81	196.84	210.61
3122	31.94	152.1	196.94	210.7
3136	31.86	152.51	197.41	210.63
3150	32.05	152.62	197.72	211.48
3164	32.02	152.8	197.79	211.64

3178	32.04	153.27	198.14	211.41
3192	31.99	153.48	198.22	211.22
3206	32.06	153.68	198.54	211.35
3220	32.1	153.9	198.78	211.97
3234	32.02	154.01	199.61	212.63
3248	31.95	154.24	199.98	213.11
3262	32.03	154.63	200.75	213.19
3276	32.02	154.84	200.54	213.94
3290	31.86	155.08	200.89	214.39
3304	31.97	155.32	201.05	215.07
3318	32.05	155.56	201.03	214.98
3332	32.03	155.57	201.62	215.71
3346	32.03	155.83	201.84	215.9
3360	32.08	156.14	202.54	215.61
3374	32.15	156.55	202.65	215.54
3388	32.09	156.88	202.66	215.85
3402	32.05	157.08	202.7	216.38
3416	32.26	157.35	202.59	216.43
3430	32.25	157.48	202.96	216.08
3444	32.08	157.57	203.38	215.91
3458	32.26	157.91	204.01	216.82
3472	32.07	157.97	204.3	217.61
3486	31.95	158.08	204.32	217.97
3500	32.15	158.03	204.55	218.49
3514	32.26	158.05	204.79	218.83
3528	32.12	158.41	204.96	219.46
3542	32.22	158.41	205.18	219.91
3556	32.33	158.47	205.57	219.82
3570	32.42	158.6	205.99	219.78
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3598	32.25	159.17	205.82	219.96
3612	32.41	159.45	206.24	220.76
3626	32.41	159.79	206.64	221.53
3640	32.56	159.99	207.01	222.04
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3668	32.42	160.62	207.04	222.54
3682	32.32	160.53	207.46	223.01
3696	32.53	160.54	208.19	223.7
3710	32.51	160.61	208.65	223.63
3724	32.41	160.84	209.1	224.14
3738	32.59	160.75	209.64	224.79
3752	32.37	160.96	209.57	224.93
3766	32.34	161.02	209.85	224.96
3780	32.5	161.29	209.8	225.48
3794	32.52	161.69	209.41	225.27
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3836	32.69	161.9	210.94	226.33
3850	32.64	161.93	210.67	226.63
3864	32.79	162.11	211.15	227.07
3878	32.68	162.59	211.45	228.41
3892	32.44	163.03	212.01	228.66
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3920	32.96	163.65	212.82	229.05
3934	32.77	163.94	213.01	229.11
3948	32.66	163.92	212.98	229.46
3962	32.51	164.02	213.51	229.84
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4116	32.67	165.94	215.82	233.4
4130	32.78	166.14	215.92	233.69
4144	32.91	165.94	216.27	233.74
4158	33	166.1	216.43	233.73
4172	32.91	166.59	216.45	234.01
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4410	32.85	169.77	219.12	238.06
4424	33.06	169.88	219.27	238.28
4438	33.06	169.89	219.92	238.78
4452	33.04	169.58	220.04	238.84

4466	32.99	169.89	220.43	238.64
4480	32.98	169.96	221.05	239.36
4494	32.87	170.23	221.1	240.48
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4522	32.95	170.91	221.8	240.65
4536	32.93	170.98	222.04	240.32
4550	32.83	171.44	221.82	240.96
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4578	33.11	171.68	221.9	241.53
4592	32.88	171.79	222.03	241.79
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4620	33.11	172.39	223.07	242.56
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4648	33.09	172.53	223.65	243.71
4662	33.16	172.72	223.76	244.04
4676	33.23	172.83	223.69	243.79
4690	33.14	173.01	223.59	244.63
4704	33.2	173.15	224.02	245.11
4718	33.15	173.54	224.08	245.01
4732	33.11	173.57	224.32	245.3
4746	33	173.8	224.18	245.8
4760	33.27	174.1	224.45	245.92
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4844	33.34	174.98	225.97	246.88
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4942	33.1	175.8	227.15	249.46
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4998	33.16	175.88	227.67	249.64
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5040	33.2	176.09	228.2	249.9
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5068	33.11	176.33	227.69	251.3
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5152	33.23	177.28	226.81	253.35
5166	33.1	177.79	227.18	253.26
5180	33.26	177.99	227.1	253.39
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5208	33.09	178.26	226.93	254.16
5222	33.16	178.81	226.62	254.13
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5264	33.2	179.22	227.83	254.5
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5320	33.23	179.2	228.88	256.4
5334	33.14	179.43	228.41	256.89
5348	33.2	179.73	228.31	257.15
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5460	33.23	180.89	228.29	257.22
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5516	33.09	181	229.19	259.03
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5614	33.14	182.59	230.7	260.26
5628	33.2	182.7	231.26	260.64
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5656	33.11	182.75	231.35	261.45
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5698	33.14	183.32	231.23	261.92
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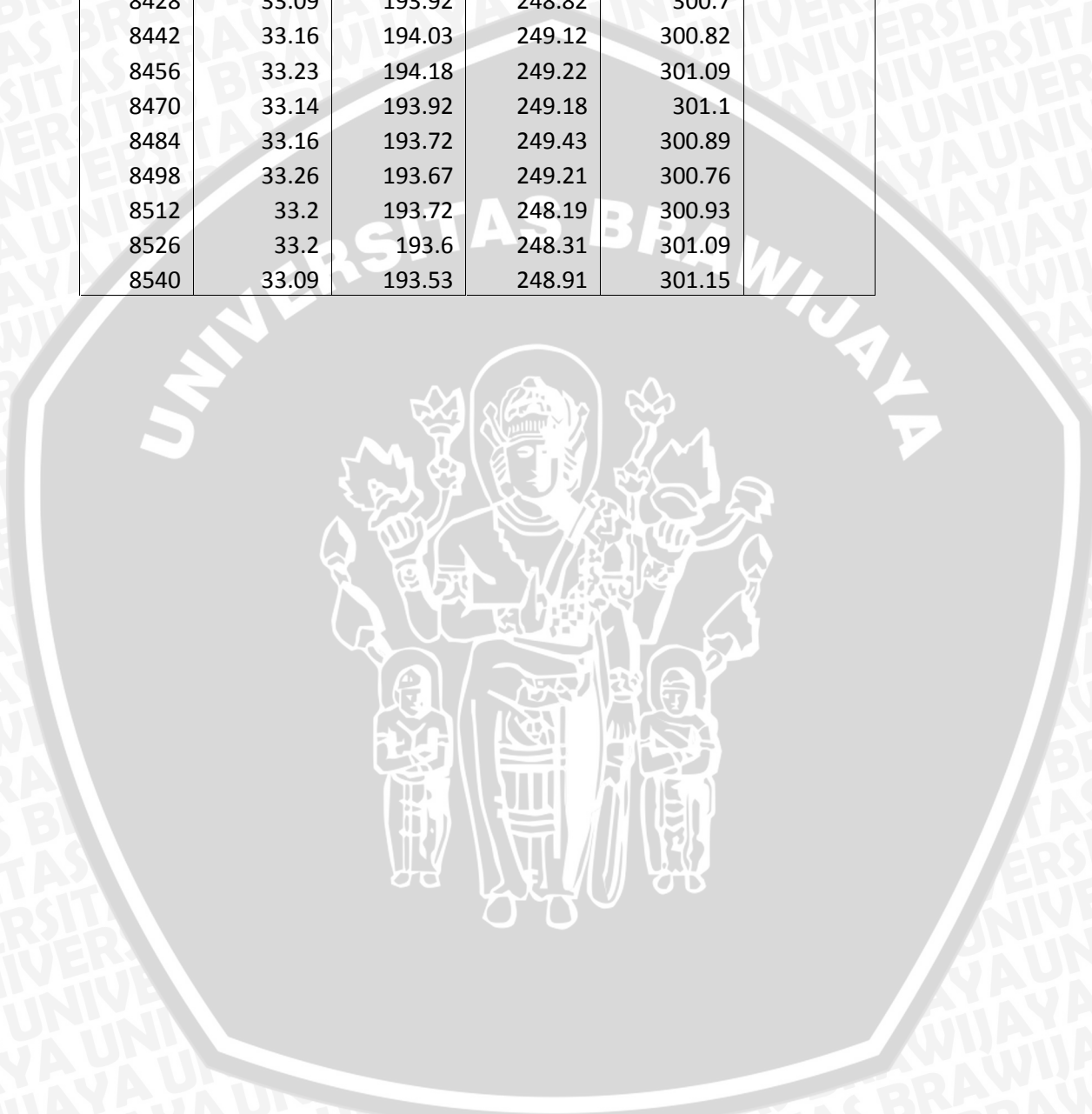
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5824	33.11	183.55	233.16	263.93
5838	33	183.59	233.37	264.17
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7602	33.11	194.18	248.91	291.25
7616	33	193.92	249.26	291.24
7630	33.27	193.72	249.51	291.13
7644	33.07	193.67	250.02	291.72
7658	33.24	193.72	249.82	291.55
7672	33.25	193.6	249.71	291.76

7686	33.11	193.53	250.08	292.62
7700	33	192.93	249.83	293.02
7714	33.27	192.85	249.47	292.87
7728	33.2	193.01	248.91	292.53
7742	33.15	193.11	248.82	292.89
7756	33.11	193.2	249.12	292.6
7770	33.16	193.38	249.22	292.79
7784	33.23	193.41	249.18	293
7798	33.14	194.02	249.43	293.44
7812	33.2	194.13	249.21	293.93
7826	33.15	193.68	248.61	294.47
7840	33.11	193.82	249.26	295.01
7854	33	193.72	249.62	294.56
7868	33.27	193.67	249.28	294.63
7882	33.07	193.44	249.53	294
7896	33.24	193.31	249.43	293.87
7910	33.25	193.11	248.91	293.89
7924	33.11	193.2	248.82	294.76
7938	33	193.38	249.12	295.47
7952	33.27	193.41	249.22	295.83
7966	33.07	194.02	249.18	295.71
7980	33.24	194.13	249.43	295.78
7994	33.25	193.68	249.21	295.8
8008	33.23	193.82	248.19	295.92
8022	33.1	193.72	248.31	296.04
8036	33.26	193.67	248.91	296.4
8050	33.2	193.44	249.26	296.84
8064	33.09	193.31	249.51	297.41
8078	33.16	193.55	250.02	297.15
8092	33.26	193.55	249.82	297.12
8106	33.2	193.5	249.71	296.71
8120	33.09	193.48	250.08	297.03
8134	33.16	193.41	249.83	296.59
8148	33.23	193.92	249.47	297.24
8162	33.14	194.03	248.91	297.92
8176	33.16	194.18	248.82	297.88
8190	33.26	193.92	249.12	298.38
8204	33.2	193.72	249.22	298.52
8218	33.2	193.67	249.18	298.78
8232	33.09	193.72	249.43	299.35
8246	33.16	193.6	249.21	299.76
8260	33.26	193.53	248.61	299.56
8274	33.2	192.93	249.26	299.32
8288	33.09	192.85	249.62	299.44
8302	33.16	193.01	249.28	299.66
8316	33.23	193.67	249.53	299.83

8330	33.1	193.44	249.43	300.43
8344	33.26	193.31	248.91	300.6
8358	33.2	193.55	249.62	300.43
8372	33.09	193.55	249.28	301.09
8386	33.16	193.5	249.53	301.23
8400	33.26	193.48	249.43	301.35
8414	33.2	193.41	248.91	300.4
8428	33.09	193.92	248.82	300.7
8442	33.16	194.03	249.12	300.82
8456	33.23	194.18	249.22	301.09
8470	33.14	193.92	249.18	301.1
8484	33.16	193.72	249.43	300.89
8498	33.26	193.67	249.21	300.76
8512	33.2	193.72	248.19	300.93
8526	33.2	193.6	248.31	301.09
8540	33.09	193.53	248.91	301.15



Tabel 5.7 Tabel Pengujian Secara Keseluruhan

No	waktu	Suhu	set point	Error
1	0	27.77	30	7.43333
2	20	35.01	30.355	15.3352
3	40	35.67	30.711	16.14731
4	60	36.98	31.06633	19.03561
5	80	38.21	31.42183	21.60334
6	100	38.15	31.77733	20.05413
7	120	38.15	32.13283	18.72591
8	140	38.17	32.48833	17.48833
9	160	38.28	32.84383	16.55156
10	180	38.51	33.19933	15.99631
11	200	38.73	33.55483	15.42301
12	220	38.77	33.91033	14.33093
13	240	38.68	34.26583	12.88212
14	260	38.74	34.62133	11.89633
15	280	38.84	34.97683	11.04493
16	300	38.98	35.33233	10.32388
17	320	39.09	35.68783	9.533128
18	340	39.24	36.04333	8.868954
19	360	39.2	36.39883	7.695759
20	380	38.91	36.75433	5.865068
21	400	39.04	37.10983	5.201227
22	420	39.25	37.46533	4.763515
23	440	39.28	37.82083	3.858103
24	460	39.57	38.17633	3.650604
25	480	39.67	38.53183	2.953835
26	500	39.98	38.88733	2.809827
27	520	40.01	39.24283	1.954922
28	540	40.5	39.59833	2.277032
29	560	40.97	39.95383	2.543352
30	580	40.97	40.30933	1.638992
31	600	41.01	40.66483	0.848809
32	620	41.08	41.02033	0.145456
33	640	41.22	41.37583	-0.37663
34	660	41.36	41.73133	-0.88982
35	680	41.36	42.08683	-1.72699
36	700	41.79	42.44233	-1.53699
37	720	42.35	42.79783	-1.04639
38	740	42.76	43.15333	-0.91148
39	760	43.26	43.50883	-0.57191
40	780	43.57	43.86433	-0.67101
41	800	43.89	44.21983	-0.74589
42	820	44.18	44.57533	-0.88689
43	840	44.33	44.93083	-1.33724
44	860	44.52	45.28633	-1.6922

45	880	44.75	45.64183	-1.95398
46	900	46.87	45.99733	1.897211
47	920	49.3	46.35283	6.358115
48	940	49.71	46.70833	6.426405
49	960	49.71	47.06383	5.622506
50	980	49.68	47.41933	4.767394
51	1000	49.64	47.77483	3.904078
52	1020	49.73	48.13033	3.323614
53	1040	49.84	48.48583	2.792912
54	1060	49.91	48.84133	2.188037
55	1080	49.98	49.19683	1.591905
56	1100	50.31	49.55233	1.529023
57	1120	50.45	49.90783	1.086336
58	1140	50.66	50.444	0.428198
59	1160	50.99	50.888	0.20044
60	1180	51.72	51.332	0.755864
61	1200	52.51	51.776	1.417645
62	1220	52.91	52.22	1.321333
63	1240	53.56	52.664	1.701352
64	1260	54.11	53.108	1.886721
65	1280	54.64	53.552	2.03167
66	1300	55.1	53.996	2.044596
67	1320	55.65	54.44	2.22263
68	1340	55.65	54.884	1.395671
69	1360	55.99	55.328	1.196501
70	1380	56.49	55.772	1.287384
71	1400	57.01	56.216	1.412409
72	1420	57.79	56.66	1.994352
73	1440	57.8	57.104	1.218829
74	1460	58.3	57.548	1.306735
75	1480	58.65	57.992	1.134639
76	1500	59.09	58.436	1.119173
77	1520	59.46	58.88	0.985054
78	1540	59.93	59.324	1.021509
79	1560	60.28	59.768	0.856646
80	1580	60.51	60.212	0.494918
81	1600	60.9	60.656	0.402269
82	1620	61.27	61.1	0.278232
83	1640	61.71	61.544	0.269726
84	1660	62.25	61.988	0.422662
85	1680	62.5	62.432	0.108919
86	1700	63	62.876	0.197214
87	1720	63	63.32	-0.50537
88	1740	63.4	63.764	-0.57086
89	1760	63.88	64.208	-0.51084
90	1780	64.1	64.652	-0.8538

91	1800	64.43	65.096	-1.0231
92	1820	64.79	65.54	-1.14434
93	1840	65.14	65.984	-1.2791
94	1860	66.02	66.428	-0.6142
95	1880	66.06	66.872	-1.21426
96	1900	66.38	67.316	-1.39046
97	1920	66.68	67.76	-1.59386
98	1940	67.59	68.204	-0.90024
99	1960	69.49	68.648	1.226547
100	1980	71.09	69.092	2.891796
101	2000	71.2	69.536	2.393005
102	2020	71.15	69.98	1.671906
103	2040	71.03	70.424	0.860502
104	2060	71.16	70.868	0.412034
105	2080	71.16	71.312	-0.21315
106	2100	71.35	71.756	-0.56581
107	2120	71.59	72.2	-0.84488
108	2140	71.54	72.644	-1.51974
109	2160	71.64	73.088	-1.98117
110	2180	72.85	73.532	-0.92749
111	2200	74.38	73.976	0.546123
112	2220	75.15	74.42	0.980919
113	2240	75.63	74.864	1.023189
114	2260	75.94	75.308	0.83922
115	2280	76.24	75.752	0.644207
116	2300	76.47	76.196	0.359599
117	2320	76.77	76.64	0.169624
118	2340	77.46	77.084	0.48778
119	2360	77.99	77.528	0.595914
120	2380	78.72	77.972	0.959319
121	2400	79.12	78.416	0.897776
122	2420	79.76	78.86	1.141263
123	2440	80.34	79.304	1.306365
124	2460	80.34	79.748	0.742338
125	2480	80.75	80.192	0.69583
126	2500	81.15	80.636	0.637432
127	2520	81.34	81.08	0.320671
128	2540	81.65	81.524	0.154556
129	2560	82.24	81.968	0.331837
130	2580	83	82.412	0.713488
131	2600	83.18	82.856	0.39104
132	2620	83.54	83.3	0.288115
133	2640	83.92	83.744	0.210164
134	2660	84.25	84.188	0.073645
135	2680	84.51	84.632	-0.14415
136	2700	84.76	85.076	-0.37143

137	2720	85.11	85.52	-0.47942
138	2740	85.42	85.964	-0.63282
139	2760	86	86.408	-0.47218
140	2780	86.29	86.852	-0.64708
141	2800	86.73	87.296	-0.64837
142	2820	87.07	87.74	-0.76362
143	2840	87.07	88.184	-1.26327
144	2860	87.48	88.628	-1.2953
145	2880	88.28	89.072	-0.88917
146	2900	90.32	89.516	0.898163
147	2920	91.65	89.96	1.878613
148	2940	91.53	90.404	1.24552
149	2960	91.46	90.848	0.673653
150	2980	91.5	91.292	0.22784
151	3000	91.85	91.736	0.12427
152	3020	91.94	92.18	-0.26036
153	3040	92.01	92.624	-0.6629
154	3060	92.29	93.068	-0.83595
155	3080	92.57	93.512	-1.00736
156	3100	92.92	93.956	-1.10264
157	3120	94.33	94.4	-0.07415
158	3140	95.99	94.844	1.2083
159	3160	96.36	95.288	1.12501
160	3180	96.31	95.732	0.603769
161	3200	96.46	96.176	0.295292
162	3220	96.46	96.62	-0.1656
163	3240	96.49	97.064	-0.59136
164	3260	96.79	97.508	-0.73635
165	3280	97.14	97.952	-0.82898
166	3300	97.37	98.396	-1.04273
167	3320	97.24	98.84	-1.61878
168	3340	98.22	99.284	-1.07167
169	3360	99.74	99.728	0.012033
170	3380	100.88	100.172	0.706784
171	3400	101.47	100.616	0.848772
172	3420	101.97	101.06	0.900455
173	3440	102.43	101.504	0.912279
174	3460	102.47	101.948	0.512026
175	3480	102.84	102.392	0.437534
176	3500	103.21	102.836	0.363686
177	3520	103.62	103.28	0.329202
178	3540	103.62	103.724	-0.10027
179	3560	103.59	104.168	-0.55487
180	3580	103.89	104.612	-0.69017
181	3600	104.36	105.056	-0.6625
182	3620	104.64	105.5	-0.81517

183	3640	105.23	105.944	-0.67394
184	3660	105.71	106.388	-0.63729
185	3680	105.82	106.832	-0.94728
186	3700	106.08	107.276	-1.11488
187	3720	107.94	107.72	0.204233
188	3740	109.86	108.164	1.567989
189	3760	110.26	108.608	1.521067
190	3780	109.93	109.052	0.80512
191	3800	109.93	109.496	0.396362
192	3820	109.89	109.94	-0.04548
193	3840	110.15	110.384	-0.21199
194	3860	110.39	110.828	-0.39521
195	3880	110.54	111.272	-0.65785
196	3900	110.78	111.716	-0.83784
197	3920	111.23	112.16	-0.82917
198	3940	112.25	112.604	-0.31438
199	3960	114.02	113.048	0.859812
200	3980	114.51	113.492	0.89698
201	4000	114.35	113.936	0.363362
202	4020	114.4	114.38	0.017486
203	4040	114.33	114.824	-0.43022
204	4060	114.65	115.268	-0.53614
205	4080	114.65	115.712	-0.9178
206	4100	115.09	116.156	-0.91773
207	4120	116.02	116.6	-0.49743
208	4140	117.98	117.044	0.799699
209	4160	119.64	117.488	1.831676
210	4180	119.28	117.932	1.143032
211	4200	118.58	118.376	0.172332
212	4220	118.19	118.82	-0.53021
213	4240	118.15	119.264	-0.93406
214	4260	118.52	119.708	-0.99241
215	4280	120.63	120.152	0.397829
216	4300	122.04	120.596	1.197386
217	4320	121.98	121.04	0.776603
218	4340	121.44	121.484	-0.03622
219	4360	121.44	121.928	-0.40024
220	4380	121.47	122.372	-0.7371
221	4400	121.58	122.816	-1.00638
222	4420	122.06	123.26	-0.97355
223	4440	123.92	123.704	0.17461
224	4460	125.14	124.148	0.799046
225	4480	124.92	124.592	0.263259
226	4500	124.13	125.036	-0.72459
227	4520	123.78	125	-0.976
228	4540	123.77	125	-0.984

229	4560	124.04	125	-0.768
230	4580	124.36	125	-0.512
231	4600	124.64	125	-0.288
232	4620	124.8	125	-0.16
233	4640	124.8	125	-0.16
234	4660	125.23	125	0.184
235	4680	125.53	125	0.424
236	4700	125.57	125	0.456
237	4720	125.74	125	0.592
238	4740	125.95	125	0.76
239	4760	126.5	125	1.2
240	4780	126.29	125	1.032
241	4800	125.65	125	0.52
242	4820	124.97	125	-0.024
243	4840	124.69	125	-0.248
244	4860	124.54	125	-0.368
245	4880	124.67	125	-0.264
246	4900	124.3	125	-0.56
247	4920	124.3	125	-0.56
248	4940	124.25	125	-0.6
249	4960	123.97	125	-0.824
250	4980	124.07	125	-0.744
251	5000	124.71	125	-0.232
252	5020	125	125	0
253	5040	125.25	125	0.2
254	5060	125.58	125	0.464
255	5080	126.01	125	0.808
256	5100	126.11	125	0.888
257	5120	125.73	125	0.584
258	5140	125.44	125	0.352
259	5160	125.12	125	0.096
260	5180	124.7	125	-0.24
261	5200	124.7	125	-0.24
262	5220	124.53	125	-0.376
263	5240	124.57	125	-0.344
264	5260	124.49	125	-0.408
265	5280	124.71	125	-0.232
266	5300	124.91	125	-0.072
267	5320	124.9	125	-0.08
268	5340	125.11	125	0.088
269	5360	125.49	125	0.392
270	5380	125.51	125	0.408
271	5400	125.43	125	0.344
272	5420	125.89	126.11	-0.17445
273	5440	129.67	127.22	1.925798
274	5460	132.64	128.33	3.358529

275	5480	132.97	129.44	2.727132
276	5500	132.56	130.55	1.53964
277	5520	132	131.66	0.258241
278	5540	133.36	132.77	0.444377
279	5560	136.54	133.88	1.986854
280	5580	139.14	134.99	3.074302
281	5600	139.35	136.1	2.38795
282	5620	138.98	137.21	1.289993
283	5640	138.12	138.32	-0.14459
284	5660	139.61	139.43	0.129097
285	5680	143.63	140.54	2.198662
286	5700	145.94	141.65	3.028592
287	5720	144.77	142.76	1.407957
288	5740	143.5	143.87	-0.25718
289	5760	143.64	144.98	-0.92427
290	5780	146.39	146.09	0.205353
291	5800	151.38	147.2	2.839674
292	5820	149.98	148.31	1.12602
293	5840	149.12	149.42	-0.20078
294	5860	149.74	150.53	-0.52481
295	5880	152.7	151.64	0.699024
296	5900	155.01	152.75	1.479542
297	5920	155.02	153.86	0.753932
298	5940	152.38	154.97	-1.67129
299	5960	155.73	156.08	-0.22424
300	5980	160.95	157.19	2.39201
301	6000	163.35	158.3	3.190145
302	6020	160.74	159.41	0.834327
303	6040	158.57	160.52	-1.2148
304	6060	164.74	161.63	1.924148
305	6080	169.01	162.74	3.852771
306	6100	166.14	163.85	1.39762
307	6120	163.8	164.96	-0.7032
308	6140	163.04	166.07	-1.82453
309	6160	167.75	167.18	0.34095
310	6180	173.11	168.29	2.864104
311	6200	170.72	169.4	0.779221
312	6220	168	170.51	-1.47205
313	6240	170.96	171.62	-0.38457
314	6260	176.58	172.73	2.228912
315	6280	179.12	173.84	3.037276
316	6300	175.13	174.95	0.102887
317	6320	172.5	176.06	-2.02204
318	6340	181.95	177.17	2.697974
319	6360	184.55	178.28	3.51694
320	6380	182.92	179.39	1.96778

321	6400	181.17	180.5	0.371191
322	6420	179.95	181.61	-0.91405
323	6440	183.7	182.72	0.53634
324	6460	186.93	183.83	1.686341
325	6480	184.49	184.94	-0.24332
326	6500	183.92	186.05	-1.14485
327	6520	188.08	187.16	0.491558
328	6540	192.8	188.27	2.406119
329	6560	193.45	189.38	2.149118
330	6580	191.4	190.49	0.477715
331	6600	189.11	191.6	-1.29958
332	6620	195.43	192.71	1.411447
333	6640	198.79	193.82	2.564235
334	6660	196.22	194.93	0.661776
335	6680	193.91	196.04	-1.08651
336	6700	194.44	197.15	-1.37459
337	6720	199.75	198.26	0.751538
338	6740	200.58	199.37	0.606912
339	6760	198.58	200.48	-0.94773
340	6780	201.71	201.59	0.059527
341	6800	206.82	202.7	2.03256
342	6820	210.2	203.81	3.135273
343	6840	209.02	204.92	2.000781
344	6860	209.14	206.03	1.509489
345	6880	208.55	207.14	0.680699
346	6900	209.82	208.25	0.753902
347	6920	212.26	209.36	1.385174
348	6940	213.71	210.47	1.539412
349	6960	213.93	211.58	1.110691
350	6980	214.53	212.69	0.865109
351	7000	215.51	213.8	0.799813
352	7020	217.33	214.91	1.126053
353	7040	217.44	216.02	0.657347
354	7060	217.67	217.13	0.248699
355	7080	219.56	218.24	0.604839
356	7100	221.1	219.35	0.797812
357	7120	222.45	220.46	0.902658
358	7140	223.29	221.57	0.776278
359	7160	224.22	222.68	0.691575
360	7180	225.53	223.79	0.777515
361	7200	226.53	224.9	0.724767
362	7220	227.95	226.01	0.858369
363	7240	229.37	227.12	0.990666
364	7260	230.37	228.23	0.937651
365	7280	231.28	229.34	0.845906
366	7300	232.45	230.45	0.867867

367	7320	232.7	231.56	0.492313
368	7340	233.76	232.67	0.468475
369	7360	236.26	233.78	1.060826
370	7380	238.06	234.89	1.349568
371	7400	237.33	236	0.563559
372	7420	235.52	237.11	-0.67057
373	7440	239.43	238.22	0.507934
374	7460	241.6	239.33	0.948481
375	7480	243.31	240.44	1.193645
376	7500	243.38	241.55	0.757607
377	7520	243.04	242.66	0.156598
378	7540	243.77	243.77	0
379	7560	245.4	244.88	0.212349
380	7580	248.33	245.99	0.951258
381	7600	248.49	247.1	0.562525
382	7620	248.9	248.21	0.27799
383	7640	249.83	249.32	0.204556
384	7660	250.94	250.43	0.20365
385	7680	252.07	251.54	0.210702
386	7700	253.62	252.65	0.38393
387	7720	255.45	253.76	0.665984
388	7740	256.64	254.87	0.694472
389	7760	257.66	255.98	0.656301
390	7780	258.36	257.09	0.49399
391	7800	259.48	258.2	0.49574
392	7932	264.73	259.31	2.090162
393	7940	264.73	260.42	1.655019
394	7960	266.79	261.53	2.011242
395	7980	268.08	262.64	2.071276
396	8000	269.87	263.75	2.320379
397	8020	270.37	264.86	2.080344
398	8040	270.6	265.97	1.740798
399	8060	270.66	267.08	1.340422
400	8080	271.9	268.19	1.383348
401	8100	274.5	269.3	1.930932
402	8120	276.43	270.41	2.226249
403	8140	277.05	271.52	2.036682
404	8160	278.42	272.63	2.123757
405	8180	279.44	273.74	2.082268
406	8200	280.87	274.85	2.190286
407	8220	280.76	275.96	1.739383
408	8240	281.82	277.07	1.714368
409	8260	283.47	278.18	1.901646
410	8280	285.52	279.29	2.230656
411	8300	286.48	280.4	2.168331
412	8320	287.47	281.51	2.117154

413	8340	287.55	282.62	1.744392
414	8360	288.29	283.73	1.607162
415	8380	290.2	284.84	1.881758
416	8400	292.32	285.95	2.227662
417	8420	293.32	287.06	2.180729
418	8440	294.68	288.17	2.259083
419	8460	295.44	289.28	2.129425
420	8480	295.99	290.39	1.928441
421	8500	296.06	291.5	1.564322
422	8520	296.37	292.61	1.284987
423	8540	298.82	293.72	1.736348
424	8560	300.37	294.83	1.879049
425	8580	300.43	295.94	1.517199
426	8600	299.21	297.05	0.72715
427	8620	297.82	298.16	-0.11403
428	8640	297.6	299.27	-0.55802
429	8660	298.01	300	-0.66333
430	8680	299.02	300	-0.32667
431	8700	299.84	300	-0.05333
432	8720	299.97	300	-0.01
433	8740	300.42	300	0.14
434	8760	301.13	300	0.376667
435	8780	301.17	300	0.39
436	8800	298.97	300	-0.34333
437	8820	298.45	300	-0.51667
438	8840	299.26	300	-0.24667
439	8860	300.51	300	0.17
440	8880	301.21	300	0.403333
441	8900	300.63	300	0.21
442	8920	299.54	300	-0.15333
443	8940	299.29	300	-0.23667
444	8960	298.98	300	-0.34
445	8980	297.98	300	-0.67333
446	9000	299.4	300	-0.2
Rata-rata Error keseluruhan				1.147579