

### Lampiran 1. Data 1 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	69.7	69.8	69.2	69.3	68.9	70.3	70.2	69.7	71.2	70.8	71.5	71.4	70.5	69.8	71.2
1	0:00:05	69.6	69.8	69.2	69.3	68.9	70.3	70.2	69.7	71.2	70.8	71.5	71.4	70.6	69.8	71.1
2	0:00:10	70.1	70.3	69.7	69.8	69.3	70.8	70.7	70.1	71.1	70.8	71.5	71.4	70.6	69.7	71.1
3	0:00:15	70	70.3	69.7	69.7	69.3	70.8	70.7	70	71.1	70.8	71.5	71.4	70.6	69.7	71.1
4	0:00:20	70	70.3	69.7	69.7	69.3	70.8	70.7	70	71.1	70.8	71.5	71.4	70.6	69.7	71
5	0:00:25	69.9	70.3	69.7	69.7	69.3	70.8	70.7	70.1	71.1	70.8	71.5	71.4	70.6	69.7	71
6	0:00:30	69.9	70.2	69.7	69.7	69.3	70.7	70.7	70.1	71.1	70.8	71.4	71.3	70.6	69.7	71
7	0:00:35	69.8	70.2	69.7	69.7	69.3	70.7	70.6	70.1	71.1	70.8	71.4	71.3	70.6	69.7	71
8	0:00:40	69.8	70.2	69.7	69.6	69.3	70.8	70.6	70.1	71	70.8	71.4	71.3	70.6	69.7	71
9	0:00:45	69.8	70.2	69.7	69.6	69.3	70.7	70.6	70	71	70.8	71.4	71.3	70.6	69.7	71
10	0:00:50	69.7	70.2	69.7	69.6	69.3	70.7	70.6	70	71	70.8	71.4	71.3	70.6	69.7	71
11	0:00:55	69.7	70.2	69.7	69.6	69.3	70.7	70.6	70	71	70.7	71.4	71.3	70.6	69.6	71
12	0:01:00	69.6	70.1	69.6	69.6	69.3	70.7	70.6	69.9	71	70.7	71.4	71.3	70.6	69.6	71
13	0:01:05	69.6	70.1	69.6	69.6	69.3	70.7	70.6	69.9	71	70.7	71.4	71.3	70.6	69.6	71
14	0:01:10	69.6	70.1	69.6	69.6	69.2	70.7	70.6	70	71	70.7	71.4	71.2	70.6	69.6	71
15	0:01:15	69.5	70.1	69.6	69.6	69.2	70.7	70.5	70	71	70.7	71.4	71.2	70.6	69.6	71
16	0:01:20	69.5	70.1	69.6	69.5	69.2	70.7	70.5	70	71	70.7	71.4	71.2	70.6	69.6	70.9
17	0:01:25	69.5	70.1	69.6	69.5	69.2	70.7	70.5	70	71	70.7	71.3	71.3	70.6	69.5	71
2522	3:30:10	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.5	25.3	25.1	25.3	25.3	25.2	25	25.2
2523	3:30:15	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.5	25.3	25.1	25.3	25.3	25.2	25	25.2
2524	3:30:20	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2525	3:30:25	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2526	3:30:30	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2527	3:30:35	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.5	25.3	25.1	25.3	25.3	25.2	25	25.2
2528	3:30:40	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2529	3:30:45	25.3	25.2	25.1	25.1	25.1	25.5	25.3	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2530	3:30:50	25.3	25.2	25.1	25.1	25.1	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2531	3:30:55	25.3	25.2	25.1	25.1	25.1	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2532	3:31:00	25.3	25.2	25.1	25.1	25	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2533	3:31:05	25.3	25.2	25.1	25.1	25.1	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2534	3:31:10	25.3	25.2	25.1	25.1	25.1	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2535	3:31:15	25.3	25.2	25.1	25.1	25	25.5	25.2	25.5	25.3	25.1	25.3	25.3	25.2	25	25.2
2536	3:31:20	25.3	25.2	25.1	25.1	25.1	25.5	25.2	25.3	25.3	25.1	25.3	25.3	25.2	25	25.2
2537	3:31:25	25.3	25.2	25.1	25.1	25.1	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2538	3:31:30	25.3	25.2	25.1	25.1	25	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2
2539	3:31:35	25.3	25.2	25.1	25.1	25.1	25.5	25.2	25.4	25.3	25.1	25.3	25.3	25.2	25	25.2

### Lampiran 1. Data 1 LPM

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	70.6	70.1	69.5	70.6	70.9	70.1	70	70.4	70.3	67.8	68.2	66.9	69.8	26.4	23.8
1	0:00:05	70.5	70.1	69.4	70.6	70.9	70.1	70	70.4	70.3	67.8	68.1	66.9	69.7	26.4	23.8
2	0:00:10	70.4	70.5	69.9	71.1	71.4	70.6	70.5	70.9	70.8	68.3	68.6	67.4	70.2	26.8	24.3
3	0:00:15	70.4	70.5	69.9	71.1	71.4	70.6	70.5	70.9	70.7	68.3	68.6	67.4	70.2	26.8	24.3
4	0:00:20	70.5	70.4	69.9	71	71.3	70.6	70.5	70.9	70.7	68.3	68.6	67.4	70.2	26.9	24.4
5	0:00:25	70.6	70.6	70	71.1	71.4	70.6	70.6	70.9	70.8	68.3	68.6	67.4	70.2	26.8	24.4
6	0:00:30	70.6	70.6	70	71.1	71.4	70.6	70.6	70.9	70.8	68.3	68.6	67.4	70.2	26.9	24.4
7	0:00:35	70.6	70.6	70	71	71.4	70.7	70.6	70.9	70.8	68.4	68.6	67.4	70.2	26.9	24.4
8	0:00:40	70.6	70.5	69.9	71	71.4	70.6	70.5	70.8	70.7	68.4	68.6	67.4	70.2	26.9	24.4
9	0:00:45	70.5	70.5	69.9	70.9	71.3	70.6	70.5	70.8	70.7	68.4	68.5	67.4	70.2	26.9	43.6
10	0:00:50	70.5	70.5	69.9	70.9	71.3	70.6	70.5	70.8	70.7	68.4	68.5	67.4	70.2	26.9	43.2
11	0:00:55	70.4	70.4	69.8	70.9	71.3	70.6	70.5	70.8	70.7	68.3	68.5	67.3	70.1	26.9	45.9
12	0:01:00	70.4	70.4	69.8	70.9	71.3	70.5	70.5	70.8	70.7	68.3	68.5	67.3	70.1	26.9	46.4
13	0:01:05	70.4	70.4	69.8	70.9	71.3	70.5	70.5	70.8	70.7	68.4	68.6	67.4	70.2	26.9	45.9
14	0:01:10	70.4	70.4	69.8	70.8	71.3	70.5	70.5	70.8	70.7	68.4	68.5	67.4	70.2	26.9	46.9
15	0:01:15	70.4	70.5	69.8	70.9	71.3	70.5	70.5	70.8	70.7	68.4	68.5	67.4	70.2	26.9	47.3
16	0:01:20	70.4	70.5	69.8	70.9	71.3	70.5	70.5	70.8	70.7	68.4	68.5	67.4	70.2	26.9	48
17	0:01:25	70.4	70.5	69.8	70.9	71.3	70.5	70.5	70.8	70.7	68.4	68.5	67.4	70.1	26.8	48.8
2522	3:30:10	25.1	25.1	24.9	25.3	25.5	25.2	25.2	25.3	25.3	23.9	24.1	24.5	25.2	25.3	35.3
2523	3:30:15	25.1	25.1	25	25.3	25.5	25.2	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.3
2524	3:30:20	25	25.1	24.9	25.3	25.5	25.2	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.3
2525	3:30:25	25	25.1	24.9	25.3	25.5	25.2	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.3
2526	3:30:30	25	25.2	24.9	25.3	25.5	25.2	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.2
2527	3:30:35	25	25.1	24.9	25.3	25.5	25.2	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.2
2528	3:30:40	25	25.1	24.9	25.3	25.5	25.2	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.2
2529	3:30:45	25.1	25.1	24.9	25.3	25.5	25.2	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.2
2530	3:30:50	25	25.1	24.9	25.3	25.5	25.1	25.2	25.3	25.2	23.9	24.1	24.5	25.2	25.3	35.1
2531	3:30:55	25.1	25.1	24.9	25.3	25.5	25.1	25.2	25.3	25.3	23.9	24	24.5	25.2	25.3	35.3
2532	3:31:00	25	25.1	24.9	25.3	25.5	25.2	25.2	25.2	25.2	23.9	24.1	24.5	25.2	25.3	35.1
2533	3:31:05	25.1	25.1	24.9	25.3	25.5	25.2	25.2	25.2	25.3	23.9	24.1	24.5	25.2	25.3	35.1
2534	3:31:10	25.1	25.1	24.9	25.3	25.5	25.2	25.2	25.2	25.2	23.9	24.1	24.5	25.2	25.4	35
2535	3:31:15	25	25.1	24.9	25.3	25.5	25.1	25.2	25.2	25.3	23.9	24.1	24.5	25.2	25.3	35.2
2536	3:31:20	25	25.1	25	25.3	25.5	25.2	25.2	25.2	25.3	23.9	24.1	24.5	25.2	25.4	35
2537	3:31:25	25.1	25.1	25	25.3	25.5	25.1	25.2	25.2	25.3	23.9	24	24.5	25.2	25.4	35
2538	3:31:30	25.1	25.1	25	25.3	25.5	25.2	25.2	25.2	25.3	23.9	24	24.5	25.2	25.4	35
2539	3:31:35	25.1	25.1	25	25.3	25.5	25.2	25.2	25.2	25.3	23.9	24	24.5	25.2	25.4	35

## Lampiran 2. Data 1,5 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	69	69.2	68.6	68.7	68.3	69.6	69.5	69.1	69.9	69.6	70.1	69.9	69.2	68.5	69.7
1	0:00:05	69.4	69.7	69.1	69.1	68.8	70	70	69.6	70.4	70	70.6	70.4	69.7	69	70.2
2	0:00:10	69.4	69.6	69.1	69.1	68.8	70	70	69.5	70.4	70	70.6	70.4	69.7	69	70.2
3	0:00:15	69.4	69.6	69.1	69.1	68.8	70	70	69.4	70.4	70	70.6	70.4	69.7	68.9	70.2
4	0:00:20	69.3	69.6	69.1	69.1	68.7	70	69.9	69.3	70.4	70	70.6	70.4	69.7	68.8	70.1
5	0:00:25	69.3	69.6	69.1	69.1	68.7	70	69.9	69.4	70.4	70	70.6	70.4	69.7	68.9	70.1
6	0:00:30	69.3	69.6	69.1	69.1	68.7	70	69.9	69.4	70.4	70	70.6	70.4	69.7	68.9	70.1
7	0:00:35	69.2	69.6	69.1	69.1	68.7	70	69.9	69.4	70.4	70	70.6	70.4	69.7	68.9	70.1
8	0:00:40	69.2	69.6	69.1	69	68.7	69.9	69.9	69.4	70.3	70	70.6	70.4	69.7	68.8	70.1
9	0:00:45	69.2	69.5	69.1	69	68.7	70	69.9	69.4	70.3	70	70.6	70.4	69.7	68.8	70.1
10	0:00:50	69.1	69.5	69.1	69	68.7	69.9	69.8	69.4	70.3	70	70.5	70.4	69.7	68.8	70.1
11	0:00:55	69.1	69.5	69	69	68.7	69.9	69.8	69.4	70.4	70.1	70.6	70.4	69.8	68.8	70.2
12	0:01:00	69.1	69.5	69.1	69	68.6	69.9	69.8	69.4	70.4	70.1	70.6	70.4	69.8	68.8	70.2
13	0:01:05	69	69.5	69	69	68.6	69.9	69.8	69.3	70.4	70.1	70.6	70.4	69.8	68.8	70.1
14	0:01:10	69	69.5	69	68.9	68.6	69.9	69.8	69.3	70.3	70	70.5	70.3	69.7	68.7	70.1
15	0:01:15	68.9	69.5	69	68.9	68.6	69.9	69.8	69.4	70.3	70	70.5	70.3	69.7	68.7	70.1
16	0:01:20	68.9	69.4	69	68.9	68.6	69.9	69.8	69.3	70.3	69.9	70.5	70.3	69.8	68.6	70.1
17	0:01:25	68.8	69.4	69	68.9	68.6	69.9	69.8	69.4	70.3	69.9	70.5	70.3	69.7	68.6	70.1
2394	3:19:30	27.9	27.8	27.7	27.7	27.7	27.8	27.7	27.9	27.7	27.6	27.6	27.5	27.5	27.5	27.5
2395	3:19:35	27.9	27.8	27.7	27.7	27.7	27.8	27.7	27.8	27.7	27.6	27.6	27.5	27.5	27.5	27.5
2396	3:19:40	27.9	27.8	27.7	27.7	27.7	27.8	27.7	27.9	27.7	27.6	27.6	27.5	27.5	27.5	27.5
2397	3:19:45	27.9	27.8	27.7	27.7	27.7	27.8	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2398	3:19:50	27.9	27.8	27.7	27.7	27.7	27.8	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2399	3:19:55	27.9	27.8	27.7	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.6	27.5	27.5	27.5	27.5
2400	3:20:00	27.9	27.8	27.7	27.7	27.7	27.7	27.7	27.8	27.7	27.6	27.6	27.6	27.5	27.5	27.6
2401	3:20:05	27.9	27.8	27.7	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.6	27.6	27.5	27.5	27.6
2402	3:20:10	27.9	27.8	27.7	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2403	3:20:15	27.9	27.8	27.7	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2404	3:20:20	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2405	3:20:25	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.6	27.6	27.5	27.5	27.6
2406	3:20:30	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.6	27.6	27.5	27.5	27.6
2407	3:20:35	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.6	27.6	27.5	27.5	27.6
2408	3:20:40	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2409	3:20:45	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2410	3:20:50	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.7	27.6	27.5	27.5	27.5	27.5	27.5
2411	3:20:55	27.9	27.8	27.8	27.7	27.7	27.7	27.7	27.9	27.6	27.6	27.5	27.5	27.5	27.5	27.5

## Lampiran 2. Data 1,5 LPM

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	69.3	69.6	69.1	70	70.1	69.7	69.6	69.8	69.8	67.9	68.2	67.1	69.6	26	61.4
1	0:00:05	69.7	70	69.4	70.5	70.6	70	69.9	70.2	70.2	67.9	68.2	67.1	69.6	25.9	61.8
2	0:00:10	69.7	70	69.4	70.5	70.6	70	69.9	70.3	70.2	67.9	68.2	67.1	69.6	25.8	63.5
3	0:00:15	69.7	69.9	69.4	70.5	70.6	70	69.9	70.2	70.1	67.9	68.2	67.1	69.6	25.8	63.6
4	0:00:20	69.7	70	69.4	70.4	70.6	70	69.9	70.2	70.1	67.9	68.1	67.1	69.6	25.8	63.7
5	0:00:25	69.7	70	69.4	70.4	70.6	70	69.9	70.2	70	67.9	68.1	67.1	69.7	25.7	64
6	0:00:30	69.8	70.1	69.4	70.3	70.6	70	69.9	70.2	70	67.9	68.1	67.1	69.7	25.7	64.3
7	0:00:35	69.7	70	69.4	70.3	70.6	70	69.9	70.2	70.1	67.9	68.1	67.1	69.7	25.7	64.4
8	0:00:40	69.7	70	69.4	70.3	70.6	70	70	70.2	70.1	67.9	68.1	67.1	69.7	25.7	64.8
9	0:00:45	69.7	70	69.3	70.3	70.6	70	70	70.2	70.1	67.9	68.1	67.1	69.7	25.8	64.9
10	0:00:50	69.7	70	69.3	70.3	70.6	70	69.9	70.2	70.1	67.9	68.1	67.1	69.6	25.8	64.8
11	0:00:55	69.7	70	69.3	70.3	70.6	70	69.9	70.2	70.1	67.9	68.1	67.1	69.6	25.8	64.8
12	0:01:00	69.7	69.9	69.3	70.3	70.6	69.9	69.9	70.2	70	67.9	68.1	67.1	69.6	25.8	64.8
13	0:01:05	69.7	69.9	69.3	70.3	70.6	69.9	69.8	70.2	70	67.9	68.1	67.1	69.6	25.8	65
14	0:01:10	69.6	69.9	69.3	70.3	70.6	69.9	69.8	70.2	70	67.9	68.1	67.1	69.6	25.8	64.6
15	0:01:15	69.6	69.9	69.3	70.2	70.5	69.9	69.8	70.2	70	67.9	68.1	67.1	69.6	25.8	65.3
16	0:01:20	69.6	69.9	69.2	70.2	70.5	69.9	69.8	70.2	70	67.9	68	67.1	69.6	25.8	65.1
17	0:01:25	69.6	69.9	69.2	70.2	70.5	69.9	69.8	70.2	70	67.9	68.1	67.1	69.6	25.8	65.2
2394	3:19:30	27.6	27.8	27.7	27.7	27.8	27.8	27.8	27.9	27.9	26.5	26.6	27	27.3	27.9	35.2
2395	3:19:35	27.6	27.8	27.7	27.7	27.8	27.8	27.8	27.9	27.9	26.4	26.6	26.9	27.3	27.8	35
2396	3:19:40	27.6	27.8	27.7	27.7	27.8	27.8	27.8	27.9	27.9	26.4	26.5	26.9	27.3	27.8	35.2
2397	3:19:45	27.6	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.5	26.6	27	27.3	27.9	35.3
2398	3:19:50	27.6	27.8	27.7	27.7	27.8	27.8	27.8	27.9	27.9	26.4	26.6	27	27.3	27.9	35.4
2399	3:19:55	27.6	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.4	26.6	26.9	27.3	27.9	35.3
2400	3:20:00	27.6	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.4	26.6	27	27.3	27.9	35.3
2401	3:20:05	27.7	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.5	26.6	27	27.3	27.9	35.3
2402	3:20:10	27.6	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.4	26.6	27	27.3	27.9	35.3
2403	3:20:15	27.6	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.4	26.6	27	27.3	27.9	35.3
2404	3:20:20	27.6	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.5	26.6	26.9	27.3	27.9	35.2
2405	3:20:25	27.7	27.8	27.7	27.7	27.8	27.8	27.7	27.9	27.9	26.4	26.6	26.9	27.3	28	35.3
2406	3:20:30	27.7	27.8	27.7	27.7	27.8	27.8	27.8	27.9	27.9	26.4	26.6	26.9	27.3	28	35.3
2407	3:20:35	27.7	27.8	27.7	27.7	27.8	27.8	27.8	27.8	27.9	26.4	26.6	26.9	27.3	28	35.3
2408	3:20:40	27.6	27.8	27.8	27.7	27.8	27.8	27.8	27.9	27.9	26.4	26.6	26.9	27.3	28.1	35.2
2409	3:20:45	27.6	27.8	27.8	27.7	27.8	27.8	27.7	27.9	28	26.4	26.6	26.9	27.3	28.1	34.8
2410	3:20:50	27.6	27.9	27.8	27.7	27.8	27.8	27.8	27.9	27.9	26.4	26.6	26.9	27.3	28.1	34.7
2411	3:20:55	27.7	27.9	27.8	27.7	27.8	27.8	27.8	27.9	27.9	26.4	26.6	26.9	27.3	28.1	34.8

### Lampiran 3. Data 2 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	70.2	69.4	69.2	69.2	69.4	69.4	69.4	69.3	70.4	70.1	70.3	70.4	69.2	68.9	70.5
1	0:00:05	69.6	69.5	68.9	69	68.5	69.6	69.6	69.1	70.3	69.8	70.3	69.9	69.3	68.9	69.8
2	0:00:10	69.5	69.5	68.8	69	68.5	69.6	69.5	69.1	70.3	69.8	70.3	70	69.3	68.9	69.8
3	0:00:15	69.4	69.5	68.8	68.9	68.5	69.6	69.5	69.1	70.2	69.8	70.3	70	69.3	68.9	69.8
4	0:00:20	69.3	69.5	68.7	68.9	68.5	69.6	69.5	69	70.2	69.7	70.2	70	69.3	68.6	69.8
5	0:00:25	69.2	69.5	68.7	68.9	68.4	69.6	69.5	69	70.2	69.7	70.2	70	69.3	68.7	69.8
6	0:00:30	69.1	69.5	68.7	68.9	68.4	69.6	69.5	68.9	70.2	69.7	70.2	70	69.3	68.6	69.8
7	0:00:35	68.9	69.4	68.7	68.9	68.4	69.6	69.5	68.9	70.2	69.6	70.2	70	69.3	68.7	69.8
8	0:00:40	68.8	69.4	68.7	68.8	68.4	69.6	69.5	68.9	70.1	69.6	70.2	70	69.3	68.7	69.8
9	0:00:45	68.6	69.4	68.7	68.8	68.4	69.6	69.5	68.9	70.1	69.6	70.2	70	69.3	68.7	69.7
10	0:00:50	68.5	69.3	68.5	68.8	68.3	69.6	69.5	68.4	70.1	69.6	70.2	69.8	69.3	68.8	69.7
11	0:00:55	68.2	69.3	67.8	68.7	68.1	69.5	69.4	69	70.1	69.5	70.2	69.6	69.4	68.5	69.3
12	0:01:00	67.9	69.3	67.8	68.5	67.7	69.5	69.4	68.9	70	69.4	70.2	69.5	69.4	68.3	69.1
13	0:01:05	67.6	69.2	68.1	68.4	68	69.5	69.4	68.7	70	69.2	70.1	69.5	69.4	68.7	69.1
14	0:01:10	67.3	69.2	68.2	68.3	68	69.5	69.3	68.7	70	68.7	70.1	69.4	69.4	68.5	69.1
15	0:01:15	67	69.1	68.1	68.3	68	69.5	69.3	68.8	69.9	69.1	70.1	69.5	69.4	67.2	69
16	0:01:20	66.8	69.1	68.5	68.2	68	69.4	69.2	68.7	69.9	69.4	70	69.4	69.4	68.6	69.3
17	0:01:25	66.5	69	68.4	68.2	68	69.4	69.2	68.7	69.9	69.4	70	69.5	69.4	68.1	69.3
2199	3:03:15	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.9	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2200	3:03:20	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2201	3:03:25	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2202	3:03:30	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2203	3:03:35	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2204	3:03:40	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2205	3:03:45	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.9	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2206	3:03:50	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.9	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2207	3:03:55	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2208	3:04:00	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2209	3:04:05	26.9	26.7	26.6	26.7	26.6	26.7	26.7	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2210	3:04:10	26.8	26.7	26.6	26.6	26.6	26.7	26.7	26.8	26.8	26.6	26.6	26.6	26.6	26.6	26.6
2211	3:04:15	26.9	26.8	26.7	26.7	26.7	26.8	26.8	26.8	26.7	26.6	26.6	26.6	26.6	26.6	26.6
2212	3:04:20	26.9	26.8	26.7	26.7	26.7	26.8	26.7	26.8	26.7	26.6	26.6	26.6	26.6	26.6	26.6
2213	3:04:25	26.9	26.8	26.7	26.7	26.7	26.8	26.7	26.8	26.7	26.6	26.6	26.6	26.6	26.6	26.6
2214	3:04:30	26.9	26.8	26.7	26.7	26.7	26.8	26.7	26.8	26.7	26.6	26.6	26.6	26.6	26.6	26.6
2215	3:04:35	26.9	26.8	26.7	26.7	26.7	26.8	26.7	26.8	26.7	26.6	26.6	26.6	26.6	26.6	26.5
2216	3:04:40	26.9	26.8	26.7	26.7	26.7	26.8	26.7	26.8	26.7	26.6	26.6	26.6	26.6	26.6	26.6

### Lampiran 3. Data 2 LPM

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	71.8	71.2	72.1	70	70.5	69.6	69.7	69.7	69.8	67.3	67.9	66.7	70.1	29.5	26.4
1	0:00:05	69.6	69.9	69.2	69.9	70.2	69.8	69.7	69.8	69.8	67.4	67.9	66.9	69.9	26.9	46.8
2	0:00:10	69.4	69.9	69.2	69.9	70.2	69.8	69.6	69.8	69.8	67.4	67.9	66.9	69.8	26.9	53.3
3	0:00:15	69.3	69.7	69.1	69.9	70.2	69.6	69.6	69.8	69.7	67.5	67.9	66.9	69.8	26.9	59.3
4	0:00:20	69.2	69.5	69.1	69.9	70.2	69.5	69.5	69.8	69.6	67.5	67.9	66.9	69.8	26.8	59
5	0:00:25	69.1	69.5	69	69.9	70.2	69.4	69.4	69.8	69.6	67.5	67.9	66.9	69.8	26.8	59.5
6	0:00:30	69.1	69.5	69	69.9	70.2	69.4	69.4	69.8	69.6	67.4	67.8	66.9	69.7	26.8	60.2
7	0:00:35	69.2	69.5	69	69.9	70.2	69.4	69.4	69.8	69.6	67.4	67.8	66.9	69.7	26.8	60
8	0:00:40	69.3	69.5	69	69.9	70.1	69.5	69.4	69.7	69.6	67.4	67.8	66.9	69.7	26.9	60.2
9	0:00:45	69.3	69.6	69	69.9	70.1	69.5	69.5	69.7	69.6	67.5	67.8	67	69.8	27	60.5
10	0:00:50	65.6	64.3	66	69.9	69.5	69.1	69.5	69.7	69.6	67.5	67.9	67	69.2	27	59.7
11	0:00:55	69.1	68.3	67.2	68.9	68.6	69.5	69.5	69.7	69.7	67.5	67.9	67	68	27.1	61.2
12	0:01:00	68.6	68.7	68.3	69.1	69.8	69.7	69.5	69.7	69.6	67.5	67.8	67	68.8	27.2	61.8
13	0:01:05	68	68.6	68.2	69.5	69.8	69.7	69.5	69.7	69.6	67.5	67.8	67	68.3	27.2	61.9
14	0:01:10	68.9	68.6	68.6	69.8	69.7	69.6	69.5	69.7	69.6	67.5	67.8	67	68.6	27.2	60.9
15	0:01:15	69.1	69.3	68.3	69.7	69.3	69.5	69.5	69.7	69.6	67.5	67.7	67	69.1	27.2	60.1
16	0:01:20	69.2	69.4	68.9	69.6	69.7	69.4	69.5	69.7	69.5	67.5	67.7	67	69.3	27.2	60.8
17	0:01:25	68.9	69.5	68.9	69.6	69.9	69.5	69.5	69.7	69.4	67.5	67.7	67	69.5	27.3	61.9
2199	3:03:15	26.6	26.7	26.5	26.6	26.7	26.7	26.7	26.8	26.9	25.6	25.8	26.5	27	27.3	35.3
2200	3:03:20	26.6	26.7	26.5	26.6	26.6	26.7	26.7	26.8	26.8	25.6	25.8	26.5	27	27.3	35.3
2201	3:03:25	26.6	26.7	26.5	26.6	26.6	26.7	26.7	26.8	26.9	25.6	25.8	26.5	27	27.3	35.2
2202	3:03:30	26.6	26.7	26.5	26.6	26.6	26.7	26.6	26.8	26.9	25.6	25.8	26.5	27	27.3	35.1
2203	3:03:35	26.7	26.7	26.5	26.6	26.7	26.7	26.7	26.8	26.9	25.6	25.8	26.5	27	27.4	35.2
2204	3:03:40	26.7	26.7	26.5	26.6	26.7	26.7	26.7	26.8	26.9	25.6	25.8	26.5	27	27.4	35.2
2205	3:03:45	26.6	26.7	26.5	26.6	26.7	26.7	26.7	26.8	26.8	25.6	25.8	26.5	27	27.4	35.2
2206	3:03:50	26.6	26.7	26.5	26.6	26.7	26.7	26.7	26.8	26.8	25.6	25.8	26.5	27	27.4	35.1
2207	3:03:55	26.6	26.7	26.5	26.6	26.7	26.7	26.7	26.8	26.8	25.6	25.8	26.5	27	27.4	35.3
2208	3:04:00	26.6	26.7	26.5	26.6	26.7	26.7	26.6	26.8	26.8	25.6	25.8	26.5	27	27.4	35.3
2209	3:04:05	26.6	26.7	26.5	26.6	26.6	26.7	26.6	26.8	26.8	25.6	25.8	26.5	27	27.4	35.3
2210	3:04:10	26.6	26.6	26.5	26.6	26.7	26.7	26.6	26.8	26.9	25.6	25.8	26.5	27	27.4	35.2
2211	3:04:15	26.6	26.7	26.5	26.6	26.7	26.7	26.6	26.8	26.8	25.6	25.8	26.5	27	27.4	35.2
2212	3:04:20	26.6	26.6	26.5	26.6	26.7	26.7	26.7	26.8	26.9	25.5	25.8	26.5	27	27.4	35.2
2213	3:04:25	26.6	26.6	26.5	26.6	26.7	26.7	26.7	26.8	26.9	25.6	25.8	26.5	27	27.4	35.1
2214	3:04:30	26.6	26.7	26.5	26.6	26.6	26.7	26.6	26.8	26.8	25.5	25.7	26.4	26.9	27.3	35
2215	3:04:35	26.6	26.7	26.5	26.6	26.7	26.6	26.6	26.8	26.8	25.5	25.7	26.4	26.9	27.4	34.9
2216	3:04:40	26.6	26.7	26.5	26.6	26.7	26.7	26.6	26.8	26.9	25.5	25.8	26.5	27	27.4	35

### Lampiran 4. Data 2,5 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	69.6	69.6	69.2	69	68.8	70	70.1	69.6	70.6	70.2	70.7	70.4	69.8	69.4	70.5
1	0:00:05	69.3	69.6	69.2	69	68.8	70	70.1	69.6	70.6	70.2	70.7	70.5	69.8	69.3	70.5
2	0:00:10	69.1	69.6	69.1	69	68.7	70.1	70.1	69.6	71	70.7	71.1	71	70.3	69	71
3	0:00:15	69.3	70.1	69.5	69.5	69.1	70.5	70.6	70.1	71	70.6	71.1	71	70.3	68.7	71
4	0:00:20	69.1	70.1	69.5	69.5	69.1	70.5	70.6	70.1	71	70.6	71.1	71	70.3	69.1	71
5	0:00:25	68.8	70	69.5	69.5	69	70.5	70.5	70.1	71	70.6	71.1	71	70.3	69.2	71
6	0:00:30	68.5	70	69.5	69.4	69	70.5	70.5	70.1	71	70.5	71.1	71	70.3	69.4	71
7	0:00:35	68.3	70	69.5	69.4	69.1	70.5	70.5	70.1	71	70.6	71.1	71	70.3	69.5	71
8	0:00:40	68	70	69.5	69.4	69.1	70.5	70.5	70	70.9	70.5	71.1	71	70.3	69.4	71
9	0:00:45	67.7	70	69.5	69.4	69.1	70.5	70.5	70	70.9	70.5	71.1	71	70.4	69.4	70.9
10	0:00:50	67.4	70	69.5	69.4	69.1	70.5	70.5	69.9	70.9	70.5	71.1	71	70.4	69	70.9
11	0:00:55	67.2	70	69.5	69.4	69.1	70.5	70.5	69.9	70.9	70.5	71.1	70.9	70.4	69.2	70.9
12	0:01:00	66.9	69.9	69.5	69.4	69	70.5	70.5	69.9	70.9	70.5	71.1	70.9	70.4	68.9	70.9
13	0:01:05	66.7	69.9	69.4	69.4	68.9	70.5	70.5	69.9	70.9	70.5	71.1	70.9	70.4	69.1	70.8
14	0:01:10	66.4	69.9	69.4	69.3	68.9	70.5	70.5	69.8	70.9	70.5	71.1	70.9	70.4	68.7	70.8
15	0:01:15	66.1	69.9	69.4	69.3	68.9	70.5	70.4	69.9	70.9	70.5	71.1	70.9	70.4	69	70.8
16	0:01:20	65.7	69.8	69.3	69.2	68.8	70.4	70.4	69.8	70.8	70.4	71	70.8	70.3	67.4	70.7
17	0:01:25	65.4	69.8	69.3	69.2	68.8	70.4	70.4	69.8	70.8	70.4	71	70.8	70.3	67.8	70.7
1639	2:16:35	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1640	2:16:40	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	25.9
1641	2:16:45	26.1	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	25.9
1642	2:16:50	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	25.9
1643	2:16:55	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1644	2:17:00	26.1	25.9	25.9	25.9	25.9	26	26	26.1	26	25.8	25.8	25.8	25.9	25.9	26
1645	2:17:05	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1646	2:17:10	26	25.9	25.9	25.9	25.9	26	26	26.1	26	25.8	25.8	25.8	25.9	25.9	26
1647	2:17:15	26	25.9	25.9	25.9	25.9	26	26	26.1	26	25.8	25.8	25.8	25.9	25.9	26
1648	2:17:20	26	25.9	25.9	25.9	25.9	26	26	26.1	26	25.8	25.8	25.8	25.9	25.9	26
1649	2:17:25	26	25.9	25.9	25.9	25.9	26	26	26.1	26	25.8	25.8	25.8	25.9	25.9	26
1650	2:17:30	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1651	2:17:35	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1652	2:17:40	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1653	2:17:45	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1654	2:17:50	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1655	2:17:55	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26
1656	2:18:00	26	25.9	25.9	25.9	25.9	26	26	26.1	25.9	25.8	25.8	25.8	25.9	25.9	26

#### Lampiran 4. Data 2,5 LPM

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	70	70.2	69.7	70.4	70.6	70.3	70.3	70.3	70.4	68.2	68.5	67.1	69.2	25	24.1
1	0:00:05	70.1	70.1	69.5	70.4	70.7	70.2	70.2	70.3	70.4	68.3	68.5	67.1	69.2	24.9	24.6
2	0:00:10	70.4	70	69.4	70.5	70.6	70.1	70	70.3	70.4	68.3	68.6	67.1	69.2	24.9	24.7
3	0:00:15	70.2	70.5	69.8	70.9	71.1	70.5	70.4	70.8	70.8	68.7	69	67.5	69.6	25.3	25.3
4	0:00:20	70.3	70.5	69.7	71	71.1	70.6	70.4	70.8	70.7	68.7	69	67.5	69.6	25.3	25.5
5	0:00:25	70.3	70.5	69.8	71	71.1	70.6	70.5	70.8	70.7	68.7	68.9	67.6	69.7	25.2	25.2
6	0:00:30	70.5	70.5	69.8	71	71.1	70.6	70.6	70.8	70.7	68.7	68.9	67.5	69.7	25.2	25.2
7	0:00:35	70.5	70.5	69.9	71	71.2	70.6	70.6	70.8	70.7	68.8	68.9	67.6	69.7	25.3	25.6
8	0:00:40	70.5	70.5	69.9	71	71.2	70.6	70.6	70.8	70.8	68.8	68.9	67.6	69.7	25.3	26.4
9	0:00:45	70.4	70.5	69.9	70.9	71.1	70.6	70.5	70.8	70.8	68.8	68.9	67.5	69.7	25.4	26.6
10	0:00:50	70.4	70.5	69.9	70.9	71.2	70.6	70.5	70.8	70.8	68.8	68.9	67.6	69.7	25.4	26.9
11	0:00:55	70.4	70.5	69.8	70.9	71.1	70.5	70.4	70.8	70.7	68.8	68.9	67.6	69.7	25.4	26.4
12	0:01:00	70.3	70.5	69.7	70.8	71.1	70.5	70.4	70.8	70.7	68.8	68.9	67.5	69.6	25.4	26.9
13	0:01:05	70.2	70.5	69.6	70.8	71.1	70.5	70.4	70.8	70.7	68.8	68.8	67.6	69.6	25.4	26.6
14	0:01:10	70.2	70.5	69.5	70.8	71.1	70.5	70.5	70.8	70.6	68.8	68.8	67.5	69.6	25.4	26.6
15	0:01:15	70.3	70.4	69.5	70.8	71.1	70.5	70.5	70.8	70.7	68.8	68.8	67.6	69.6	25.5	26.6
16	0:01:20	70.3	70.5	69.5	70.8	71.1	70.5	70.4	70.8	70.7	68.8	68.8	67.6	69.6	25.6	26.6
17	0:01:25	70.2	70.5	69.5	70.8	71.1	70.5	70.4	70.8	70.7	68.8	68.8	67.6	69.6	25.6	26.4
1639	2:16:35	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.1	25.2	25.4	25.4	25.6	35.2
1640	2:16:40	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.1	25.2	25.4	25.4	25.6	35.2
1641	2:16:45	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.1	25.2	25.4	25.4	25.6	35.2
1642	2:16:50	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.2	25.2	25.4	25.4	25.6	35.2
1643	2:16:55	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.1	25.2	25.4	25.4	25.6	35.1
1644	2:17:00	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.2	25.2	25.4	25.4	25.6	35.1
1645	2:17:05	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.2	25.2	25.4	25.4	25.6	35.1
1646	2:17:10	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.2	25.2	25.4	25.4	25.6	35.1
1647	2:17:15	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.2	25.2	25.4	25.4	25.6	35.1
1648	2:17:20	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.2	25.2	25.4	25.4	25.6	35.1
1649	2:17:25	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.1	25.2	25.4	25.4	25.6	35.1
1650	2:17:30	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.1	25.2	25.4	25.4	25.6	35
1651	2:17:35	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.1	25.2	25.4	25.4	25.6	35
1652	2:17:40	26.1	26	25.8	25.9	26	26	26	26.1	26.2	25.2	25.2	25.4	25.4	25.6	35
1653	2:17:45	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.1	25.2	25.4	25.4	25.6	35
1654	2:17:50	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.2	25.2	25.4	25.4	25.6	35
1655	2:17:55	26.1	26	25.9	25.9	26	26.1	26.1	26.2	26.3	25.1	25.2	25.4	25.4	25.6	35
1656	2:18:00	26.1	26	25.8	25.9	25.9	26	26	26.1	26.2	25.1	25.2	25.4	25.4	25.6	34.9



### Lampiran 5. Hasil Kalibrasi 1 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	66.6	66.9	66.3	66.4	66.1	67.6	67.5	67.0	67.1	67.1	67.8	67.8	66.9	66.1	67.7
1	0:00:05	66.5	66.9	66.3	66.4	66.1	67.6	67.5	67.0	67.1	67.1	67.8	67.8	67.0	66.1	67.6
2	0:00:10	67.0	67.4	66.8	66.9	66.5	68.1	68.0	67.3	67.0	67.1	67.8	67.8	67.0	66.0	67.6
3	0:00:15	66.9	67.4	66.8	66.8	66.5	68.1	68.0	67.2	67.0	67.1	67.8	67.8	67.0	66.0	67.6
4	0:00:20	66.9	67.4	66.8	66.8	66.5	68.1	68.0	67.2	67.0	67.1	67.8	67.8	67.0	66.0	67.5
5	0:00:25	66.8	67.4	66.8	66.8	66.5	68.1	68.0	67.3	67.0	67.1	67.8	67.8	67.0	66.0	67.5
6	0:00:30	66.8	67.3	66.8	66.8	66.5	68.0	68.0	67.3	67.0	67.1	67.7	67.7	67.0	66.0	67.5
7	0:00:35	66.7	67.3	66.8	66.8	66.5	68.0	67.9	67.3	67.0	67.1	67.7	67.7	67.0	66.0	67.5
8	0:00:40	66.7	67.3	66.8	66.7	66.5	68.1	67.9	67.3	66.9	67.1	67.7	67.7	67.0	66.0	67.5
9	0:00:45	66.7	67.3	66.8	66.7	66.5	68.0	67.9	67.2	66.9	67.1	67.7	67.7	67.0	66.0	67.5
10	0:00:50	66.6	67.3	66.8	66.7	66.5	68.0	67.9	67.2	66.9	67.1	67.7	67.7	67.0	66.0	67.5
11	0:00:55	66.6	67.3	66.8	66.7	66.5	68.0	67.9	67.2	66.9	67.0	67.7	67.7	67.0	65.9	67.5
12	0:01:00	66.5	67.2	66.7	66.7	66.5	68.0	67.9	67.1	66.9	67.0	67.7	67.7	67.0	65.9	67.5
13	0:01:05	66.5	67.2	66.7	66.7	66.5	68.0	67.9	67.1	66.9	67.0	67.7	67.7	67.0	65.9	67.5
14	0:01:10	66.5	67.2	66.7	66.7	66.4	68.0	67.9	67.2	66.9	67.0	67.7	67.6	67.0	65.9	67.5
15	0:01:15	66.4	67.2	66.7	66.7	66.4	68.0	67.8	67.2	66.9	67.0	67.7	67.6	67.0	65.9	67.5
16	0:01:20	66.4	67.2	66.7	66.6	66.4	68.0	67.8	67.2	66.9	67.0	67.7	67.6	67.0	65.9	67.4
17	0:01:25	66.4	67.2	66.7	66.6	66.4	68.0	67.8	67.2	66.9	67.0	67.6	67.7	67.0	65.8	67.5
2522	3:30:10	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.2	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2523	3:30:15	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.2	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2524	3:30:20	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2525	3:30:25	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2526	3:30:30	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2527	3:30:35	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.2	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2528	3:30:40	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2529	3:30:45	22.2	22.3	22.1	23.2	22.4	22.9	22.9	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2530	3:30:50	22.2	22.3	22.1	23.2	22.4	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2531	3:30:55	22.2	22.3	22.1	23.2	22.4	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2532	3:31:00	22.2	22.3	22.1	23.2	22.3	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2533	3:31:05	22.2	22.3	22.1	23.2	22.4	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2534	3:31:10	22.2	22.3	22.1	23.2	22.4	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2535	3:31:15	22.2	22.3	22.1	23.2	22.3	22.9	22.8	24.2	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2536	3:31:20	22.2	22.3	22.1	23.2	22.4	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2537	3:31:25	22.2	22.3	22.1	23.2	22.4	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2538	3:31:30	22.2	22.3	22.1	23.2	22.3	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4
2539	3:31:35	22.2	22.3	22.1	23.2	22.4	22.9	22.8	24.1	23.3	22.1	22.4	22.4	22.5	23.1	22.4

**Lampiran 5. Hasil Kalibrasi 1 LPM**

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	67.1	66.4	65.9	66.7	67.1	66.5	66.5	66.7	66.8	66.3	66.6	65.1	67.9	24.3	23.6
1	0:00:05	67.0	66.4	65.8	66.7	67.1	66.5	66.5	66.7	66.8	66.3	66.5	65.1	67.8	24.3	23.6
2	0:00:10	66.9	66.8	66.3	67.2	67.6	67.0	67.0	67.2	67.3	66.8	67.0	65.6	68.3	24.7	24.1
3	0:00:15	66.9	66.8	66.3	67.2	67.6	67.0	67.0	67.2	67.2	66.8	67.0	65.6	68.3	24.7	24.1
4	0:00:20	67.0	66.7	66.3	67.1	67.5	67.0	67.0	67.2	67.2	66.8	67.0	65.6	68.3	24.8	24.2
5	0:00:25	67.1	66.9	66.4	67.2	67.6	67.0	67.1	67.2	67.3	66.8	67.0	65.6	68.3	24.7	24.2
6	0:00:30	67.1	66.9	66.4	67.2	67.6	67.0	67.1	67.2	67.3	66.8	67.0	65.6	68.3	24.8	24.2
7	0:00:35	67.1	66.9	66.4	67.1	67.6	67.1	67.1	67.2	67.3	66.9	67.0	65.6	68.3	24.8	24.2
8	0:00:40	67.1	66.8	66.3	67.1	67.6	67.0	67.0	67.1	67.2	66.9	67.0	65.6	68.3	24.8	24.2
9	0:00:45	67.0	66.8	66.3	67.0	67.5	67.0	67.0	67.1	67.2	66.9	66.9	65.6	68.3	24.8	42.5
10	0:00:50	67.0	66.8	66.3	67.0	67.5	67.0	67.0	67.1	67.2	66.9	66.9	65.6	68.3	24.8	42.1
11	0:00:55	66.9	66.7	66.2	67.0	67.5	67.0	67.0	67.1	67.2	66.8	66.9	65.5	68.2	24.8	44.7
12	0:01:00	66.9	66.7	66.2	67.0	67.5	66.9	67.0	67.1	67.2	66.8	66.9	65.5	68.2	24.8	45.2
13	0:01:05	66.9	66.7	66.2	67.0	67.5	66.9	67.0	67.1	67.2	66.9	67.0	65.6	68.3	24.8	44.7
14	0:01:10	66.9	66.7	66.2	66.9	67.5	66.9	67.0	67.1	67.2	66.9	66.9	65.6	68.3	24.8	45.7
15	0:01:15	66.9	66.8	66.2	67.0	67.5	66.9	67.0	67.1	67.2	66.9	66.9	65.6	68.3	24.8	46.1
16	0:01:20	66.9	66.8	66.2	67.0	67.5	66.9	67.0	67.1	67.2	66.9	66.9	65.6	68.3	24.8	46.7
17	0:01:25	66.9	66.8	66.2	67.0	67.5	66.9	67.0	67.1	67.2	66.9	66.9	65.6	68.2	24.7	47.5
2522	3:30:10	22.3	22.8	22.3	23.8	23.8	22.9	22.5	24.3	23.3	22.3	22.5	22.6	24.1	23.2	34.6
2523	3:30:15	22.3	22.8	22.4	23.8	23.8	22.9	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.6
2524	3:30:20	22.2	22.8	22.3	23.8	23.8	22.9	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.6
2525	3:30:25	22.2	22.8	22.3	23.8	23.8	22.9	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.6
2526	3:30:30	22.2	22.9	22.3	23.8	23.8	22.9	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.5
2527	3:30:35	22.2	22.8	22.3	23.8	23.8	22.9	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.5
2528	3:30:40	22.2	22.8	22.3	23.8	23.8	22.9	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.5
2529	3:30:45	22.3	22.8	22.3	23.8	23.8	22.9	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.5
2530	3:30:50	22.2	22.8	22.3	23.8	23.8	22.8	22.5	24.3	23.2	22.3	22.5	22.6	24.1	23.2	34.4
2531	3:30:55	22.3	22.8	22.3	23.8	23.8	22.8	22.5	24.3	23.3	22.3	22.4	22.6	24.1	23.2	34.6
2532	3:31:00	22.2	22.8	22.3	23.8	23.8	22.9	22.5	24.2	23.2	22.3	22.5	22.6	24.1	23.2	34.4
2533	3:31:05	22.3	22.8	22.3	23.8	23.8	22.9	22.5	24.2	23.3	22.3	22.5	22.6	24.1	23.2	34.4
2534	3:31:10	22.3	22.8	22.3	23.8	23.8	22.9	22.5	24.2	23.2	22.3	22.5	22.6	24.1	23.3	34.3
2535	3:31:15	22.2	22.8	22.3	23.8	23.8	22.8	22.5	24.2	23.3	22.3	22.5	22.6	24.1	23.2	34.5
2536	3:31:20	22.2	22.8	22.4	23.8	23.8	22.9	22.5	24.2	23.3	22.3	22.5	22.6	24.1	23.3	34.3
2537	3:31:25	22.3	22.8	22.4	23.8	23.8	22.8	22.5	24.2	23.3	22.3	22.4	22.6	24.1	23.3	34.3
2538	3:31:30	22.3	22.8	22.4	23.8	23.8	22.9	22.5	24.2	23.3	22.3	22.4	22.6	24.1	23.3	34.3
2539	3:31:35	22.3	22.8	22.4	23.8	23.8	22.9	22.5	24.2	23.3	22.3	22.4	22.6	24.1	23.3	34.3

### Lampiran 6. Hasil Kalibrasi 1,5 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	65.9	66.3	65.7	65.9	65.5	66.9	66.8	66.4	65.9	65.9	66.4	66.3	65.6	64.9	66.2
1	0:00:05	66.3	66.8	66.2	66.2	66.0	67.3	67.3	66.9	66.4	66.3	66.9	66.8	66.1	65.4	66.7
2	0:00:10	66.3	66.7	66.2	66.2	66.0	67.3	67.3	66.8	66.4	66.3	66.9	66.8	66.1	65.4	66.7
3	0:00:15	66.3	66.7	66.2	66.2	66.0	67.3	67.3	66.7	66.4	66.3	66.9	66.8	66.1	65.3	66.7
4	0:00:20	66.2	66.7	66.2	66.2	65.9	67.3	67.2	66.6	66.4	66.3	66.9	66.8	66.1	65.2	66.6
5	0:00:25	66.2	66.7	66.2	66.2	65.9	67.3	67.2	66.7	66.4	66.3	66.9	66.8	66.1	65.3	66.6
6	0:00:30	66.2	66.7	66.2	66.2	65.9	67.3	67.2	66.7	66.4	66.3	66.9	66.8	66.1	65.3	66.6
7	0:00:35	66.1	66.7	66.2	66.2	65.9	67.3	67.2	66.7	66.4	66.3	66.9	66.8	66.1	65.3	66.6
8	0:00:40	66.1	66.7	66.2	66.2	65.9	67.2	67.2	66.7	66.3	66.3	66.9	66.8	66.1	65.2	66.6
9	0:00:45	66.1	66.6	66.2	66.2	65.9	67.3	67.2	66.7	66.3	66.3	66.9	66.8	66.1	65.2	66.6
10	0:00:50	66.0	66.6	66.2	66.2	65.9	67.2	67.1	66.7	66.3	66.3	66.8	66.8	66.1	65.2	66.6
11	0:00:55	66.0	66.6	66.1	66.2	65.9	67.2	67.1	66.7	66.4	66.4	66.9	66.8	66.2	65.2	66.7
12	0:01:00	66.0	66.6	66.2	66.2	65.8	67.2	67.1	66.7	66.4	66.4	66.9	66.8	66.2	65.2	66.7
13	0:01:05	65.9	66.6	66.1	66.2	65.8	67.2	67.1	66.6	66.4	66.4	66.9	66.8	66.2	65.2	66.6
14	0:01:10	65.9	66.6	66.1	66.1	65.8	67.2	67.1	66.6	66.3	66.3	66.8	66.7	66.1	65.1	66.6
15	0:01:15	65.8	66.6	66.1	66.1	65.8	67.2	67.1	66.7	66.3	66.3	66.8	66.7	66.1	65.1	66.6
16	0:01:20	65.8	66.5	66.1	66.1	65.8	67.2	67.1	66.6	66.3	66.2	66.8	66.7	66.2	65.0	66.6
17	0:01:25	65.7	66.5	66.1	66.1	65.8	67.2	67.1	66.7	66.3	66.2	66.8	66.7	66.1	65.0	66.6
2394	3:19:30	24.8	24.9	24.8	25.7	25.0	25.2	25.3	26.6	25.6	24.6	24.7	24.5	24.7	25.5	24.7
2395	3:19:35	24.8	24.9	24.8	25.7	25.0	25.2	25.3	26.5	25.6	24.6	24.7	24.5	24.7	25.5	24.7
2396	3:19:40	24.8	24.9	24.8	25.7	25.0	25.2	25.3	26.6	25.6	24.6	24.7	24.5	24.7	25.5	24.7
2397	3:19:45	24.8	24.9	24.8	25.7	25.0	25.2	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2398	3:19:50	24.8	24.9	24.8	25.7	25.0	25.2	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2399	3:19:55	24.8	24.9	24.8	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.7	24.5	24.7	25.5	24.7
2400	3:20:00	24.8	24.9	24.8	25.7	25.0	25.1	25.3	26.5	25.6	24.6	24.7	24.6	24.7	25.5	24.8
2401	3:20:05	24.8	24.9	24.8	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.7	24.6	24.7	25.5	24.8
2402	3:20:10	24.8	24.9	24.8	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2403	3:20:15	24.8	24.9	24.8	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2404	3:20:20	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2405	3:20:25	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.7	24.6	24.7	25.5	24.8
2406	3:20:30	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.7	24.6	24.7	25.5	24.8
2407	3:20:35	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.7	24.6	24.7	25.5	24.8
2408	3:20:40	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2409	3:20:45	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2410	3:20:50	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.6	24.6	24.6	24.5	24.7	25.5	24.7
2411	3:20:55	24.8	24.9	24.9	25.7	25.0	25.1	25.3	26.6	25.5	24.6	24.6	24.5	24.7	25.5	24.7

### Lampiran 6. Hasil Kalibrasi 1,5 LPM

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	65.8	65.9	65.5	66.1	66.3	66.1	66.1	66.1	66.4	66.4	66.6	65.3	67.7	23.9	59.5
1	0:00:05	66.2	66.3	65.8	66.6	66.8	66.4	66.4	66.5	66.7	66.4	66.6	65.3	67.7	23.8	59.9
2	0:00:10	66.2	66.3	65.8	66.6	66.8	66.4	66.4	66.6	66.7	66.4	66.6	65.3	67.7	23.7	61.5
3	0:00:15	66.2	66.2	65.8	66.6	66.8	66.4	66.4	66.5	66.6	66.4	66.6	65.3	67.7	23.7	61.6
4	0:00:20	66.2	66.3	65.8	66.5	66.8	66.4	66.4	66.5	66.6	66.4	66.5	65.3	67.7	23.7	61.7
5	0:00:25	66.2	66.3	65.8	66.5	66.8	66.4	66.4	66.5	66.6	66.4	66.5	65.3	67.8	23.6	62.0
6	0:00:30	66.3	66.4	65.8	66.4	66.8	66.4	66.4	66.5	66.6	66.4	66.5	65.3	67.8	23.6	62.3
7	0:00:35	66.2	66.3	65.8	66.4	66.8	66.4	66.4	66.5	66.6	66.4	66.5	65.3	67.8	23.6	62.4
8	0:00:40	66.2	66.3	65.8	66.4	66.8	66.4	66.5	66.5	66.6	66.4	66.5	65.3	67.8	23.6	62.8
9	0:00:45	66.2	66.3	65.7	66.4	66.8	66.4	66.5	66.5	66.6	66.4	66.5	65.3	67.8	23.7	62.9
10	0:00:50	66.2	66.3	65.7	66.4	66.8	66.4	66.4	66.5	66.6	66.4	66.5	65.3	67.7	23.7	62.8
11	0:00:55	66.2	66.3	65.7	66.4	66.8	66.4	66.4	66.5	66.6	66.4	66.5	65.3	67.7	23.7	62.8
12	0:01:00	66.2	66.2	65.7	66.4	66.8	66.3	66.4	66.5	66.6	66.4	66.5	65.3	67.7	23.7	62.8
13	0:01:05	66.2	66.2	65.7	66.4	66.8	66.3	66.3	66.5	66.6	66.4	66.5	65.3	67.7	23.7	63.0
14	0:01:10	66.1	66.2	65.7	66.4	66.8	66.3	66.3	66.5	66.6	66.4	66.5	65.3	67.7	23.7	62.6
15	0:01:15	66.1	66.2	65.7	66.3	66.7	66.3	66.3	66.5	66.6	66.4	66.5	65.3	67.7	23.7	63.3
16	0:01:20	66.1	66.2	65.6	66.3	66.7	66.3	66.3	66.5	66.6	66.4	66.4	65.3	67.7	23.7	63.1
17	0:01:25	66.1	66.2	65.6	66.3	66.7	66.3	66.3	66.5	66.6	66.4	66.5	65.3	67.7	23.7	63.2
2394	3:19:30	24.8	25.4	25.1	26.0	26.0	25.4	25.0	26.8	25.8	24.9	25.0	25.1	26.2	25.8	34.5
2395	3:19:35	24.8	25.4	25.1	26.0	26.0	25.4	25.0	26.8	25.8	24.8	25.0	25.0	26.2	25.7	34.3
2396	3:19:40	24.8	25.4	25.1	26.0	26.0	25.4	25.0	26.8	25.8	24.8	24.9	25.0	26.2	25.7	34.5
2397	3:19:45	24.8	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.9	25.0	25.1	26.2	25.8	34.6
2398	3:19:50	24.8	25.4	25.1	26.0	26.0	25.4	25.0	26.8	25.8	24.8	25.0	25.1	26.2	25.8	34.7
2399	3:19:55	24.8	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.8	25.0	25.0	26.2	25.8	34.6
2400	3:20:00	24.8	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.8	25.0	25.1	26.2	25.8	34.6
2401	3:20:05	24.9	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.9	25.0	25.1	26.2	25.8	34.6
2402	3:20:10	24.8	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.8	25.0	25.1	26.2	25.8	34.6
2403	3:20:15	24.8	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.8	25.0	25.1	26.2	25.8	34.6
2404	3:20:20	24.8	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.9	25.0	25.0	26.2	25.8	34.5
2405	3:20:25	24.9	25.4	25.1	26.0	26.0	25.4	24.9	26.8	25.8	24.8	25.0	25.0	26.2	25.9	34.6
2406	3:20:30	24.9	25.4	25.1	26.0	26.0	25.4	25.0	26.8	25.8	24.8	25.0	25.0	26.2	25.9	34.6
2407	3:20:35	24.9	25.4	25.1	26.0	26.0	25.4	25.0	26.7	25.8	24.8	25.0	25.0	26.2	25.9	34.6
2408	3:20:40	24.8	25.4	25.2	26.0	26.0	25.4	25.0	26.8	25.8	24.8	25.0	25.0	26.2	26.0	34.5
2409	3:20:45	24.8	25.4	25.2	26.0	26.0	25.4	24.9	26.8	25.9	24.8	25.0	25.0	26.2	26.0	34.1
2410	3:20:50	24.8	25.5	25.2	26.0	26.0	25.4	25.0	26.8	25.8	24.8	25.0	25.0	26.2	26.0	34.0
2411	3:20:55	24.9	25.5	25.2	26.0	26.0	25.4	25.0	26.8	25.8	24.8	25.0	25.0	26.2	26.0	34.1

### Lampiran 7. Hasil Kalibrasi 2 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	67.1	66.5	66.3	66.3	66.6	66.7	66.7	66.6	66.4	66.4	66.6	66.8	65.6	65.3	67.0
1	0:00:05	66.5	66.6	66.0	66.2	65.7	66.9	66.9	66.4	66.3	66.1	66.6	66.3	65.7	65.3	66.3
2	0:00:10	66.4	66.6	65.9	66.2	65.7	66.9	66.8	66.4	66.3	66.1	66.6	66.4	65.7	65.3	66.3
3	0:00:15	66.3	66.6	65.9	66.1	65.7	66.9	66.8	66.4	66.2	66.1	66.6	66.4	65.7	65.3	66.3
4	0:00:20	66.2	66.6	65.8	66.1	65.7	66.9	66.8	66.3	66.2	66.0	66.5	66.4	65.7	65.0	66.3
5	0:00:25	66.1	66.6	65.8	66.1	65.6	66.9	66.8	66.3	66.2	66.0	66.5	66.4	65.7	65.1	66.3
6	0:00:30	66.0	66.6	65.8	66.1	65.6	66.9	66.8	66.2	66.2	66.0	66.5	66.4	65.7	65.0	66.3
7	0:00:35	65.8	66.5	65.8	66.1	65.6	66.9	66.8	66.2	66.2	65.9	66.5	66.4	65.7	65.1	66.3
8	0:00:40	65.7	66.5	65.8	66.0	65.6	66.9	66.8	66.2	66.1	65.9	66.5	66.4	65.7	65.1	66.3
9	0:00:45	65.5	66.5	65.8	66.0	65.6	66.9	66.8	66.2	66.1	65.9	66.5	66.4	65.7	65.1	66.2
10	0:00:50	65.4	66.4	65.6	66.0	65.5	66.9	66.8	65.7	66.1	65.9	66.5	66.2	65.7	65.2	66.2
11	0:00:55	65.1	66.4	64.9	65.9	65.3	66.8	66.7	66.3	66.1	65.8	66.5	66.0	65.8	64.9	65.8
12	0:01:00	64.8	66.4	64.9	65.7	64.9	66.8	66.7	66.2	66.0	65.7	66.5	65.9	65.8	64.7	65.6
13	0:01:05	64.5	66.3	65.2	65.6	65.2	66.8	66.7	66.0	66.0	65.5	66.4	65.9	65.8	65.1	65.6
14	0:01:10	64.2	66.3	65.3	65.5	65.2	66.8	66.6	66.0	66.0	65.0	66.4	65.8	65.8	64.9	65.6
15	0:01:15	63.9	66.2	65.2	65.5	65.2	66.8	66.6	66.1	65.9	65.4	66.4	65.9	65.8	63.6	65.5
16	0:01:20	63.7	66.2	65.6	65.4	65.2	66.7	66.5	66.0	65.9	65.7	66.3	65.8	65.8	65.0	65.8
17	0:01:25	63.4	66.1	65.5	65.4	65.2	66.7	66.5	66.0	65.9	65.7	66.3	65.9	65.8	64.5	65.8
2199	3:03:15	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.6	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2200	3:03:20	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2201	3:03:25	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2202	3:03:30	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2203	3:03:35	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2204	3:03:40	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2205	3:03:45	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.6	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2206	3:03:50	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.6	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2207	3:03:55	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2208	3:04:00	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2209	3:04:05	23.8	23.8	23.7	24.7	23.9	24.1	24.3	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2210	3:04:10	23.7	23.8	23.7	24.6	23.9	24.1	24.3	25.5	24.8	23.6	23.7	23.7	23.9	24.6	23.8
2211	3:04:15	23.8	23.9	23.8	24.7	24.0	24.2	24.4	25.5	24.7	23.6	23.7	23.7	23.9	24.6	23.8
2212	3:04:20	23.8	23.9	23.8	24.7	24.0	24.2	24.3	25.5	24.7	23.6	23.7	23.7	23.9	24.6	23.8
2213	3:04:25	23.8	23.9	23.8	24.7	24.0	24.2	24.3	25.5	24.7	23.6	23.7	23.7	23.9	24.6	23.8
2214	3:04:30	23.8	23.9	23.8	24.7	24.0	24.2	24.3	25.5	24.7	23.6	23.7	23.7	23.9	24.6	23.8
2215	3:04:35	23.8	23.9	23.8	24.7	24.0	24.2	24.3	25.5	24.7	23.6	23.7	23.7	23.9	24.6	23.7
2216	3:04:40	23.8	23.9	23.8	24.7	24.0	24.2	24.3	25.5	24.7	23.6	23.7	23.7	23.9	24.6	23.8

### Lampiran 7. Hasil Kalibrasi 2 LPM

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	68.3	67.4	68.4	66.1	66.7	66.0	66.2	66.0	66.4	65.8	66.3	64.9	68.2	27.4	26.1
1	0:00:05	66.1	66.2	65.6	66.0	66.4	66.2	66.2	66.1	66.4	65.9	66.3	65.1	68.0	24.8	45.6
2	0:00:10	65.9	66.2	65.6	66.0	66.4	66.2	66.1	66.1	66.4	65.9	66.3	65.1	67.9	24.8	51.8
3	0:00:15	65.8	66.0	65.5	66.0	66.4	66.0	66.1	66.1	66.3	66.0	66.3	65.1	67.9	24.8	57.5
4	0:00:20	65.7	65.8	65.5	66.0	66.4	65.9	66.0	66.1	66.2	66.0	66.3	65.1	67.9	24.7	57.2
5	0:00:25	65.6	65.8	65.4	66.0	66.4	65.8	65.9	66.1	66.2	66.0	66.3	65.1	67.9	24.7	57.7
6	0:00:30	65.6	65.8	65.4	66.0	66.4	65.8	65.9	66.1	66.2	65.9	66.2	65.1	67.8	24.7	58.4
7	0:00:35	65.7	65.8	65.4	66.0	66.4	65.8	65.9	66.1	66.2	65.9	66.2	65.1	67.8	24.7	58.2
8	0:00:40	65.8	65.8	65.4	66.0	66.3	65.9	65.9	66.0	66.2	65.9	66.2	65.1	67.8	24.8	58.4
9	0:00:45	65.8	65.9	65.4	66.0	66.3	65.9	66.0	66.0	66.2	66.0	66.2	65.2	67.9	24.9	58.7
10	0:00:50	62.2	60.8	62.5	66.0	65.7	65.5	66.0	66.0	66.2	66.0	66.3	65.2	67.3	24.9	57.9
11	0:00:55	65.6	64.6	63.6	65.1	64.9	65.9	66.0	66.0	66.3	66.0	66.3	65.2	66.1	25.0	59.3
12	0:01:00	65.2	65.0	64.7	65.3	66.0	66.1	66.0	66.0	66.2	66.0	66.2	65.2	66.9	25.1	59.9
13	0:01:05	64.6	64.9	64.6	65.7	66.0	66.1	66.0	66.0	66.2	66.0	66.2	65.2	66.4	25.1	60.0
14	0:01:10	65.4	64.9	65.0	65.9	65.9	66.0	66.0	66.0	66.2	66.0	66.2	65.2	66.7	25.1	59.1
15	0:01:15	65.6	65.6	64.7	65.8	65.6	65.9	66.0	66.0	66.2	66.0	66.1	65.2	67.2	25.1	58.3
16	0:01:20	65.7	65.7	65.3	65.7	65.9	65.8	66.0	66.0	66.1	66.0	66.1	65.2	67.4	25.1	59.0
17	0:01:25	65.4	65.8	65.3	65.7	66.1	65.9	66.0	66.0	66.0	66.0	66.1	65.2	67.6	25.2	60.0
2199	3:03:15	23.8	24.3	23.9	25.0	24.9	24.4	24.0	25.7	24.9	24.0	24.2	24.6	25.9	25.2	34.6
2200	3:03:20	23.8	24.3	23.9	25.0	24.8	24.4	24.0	25.7	24.8	24.0	24.2	24.6	25.9	25.2	34.6
2201	3:03:25	23.8	24.3	23.9	25.0	24.8	24.4	24.0	25.7	24.9	24.0	24.2	24.6	25.9	25.2	34.5
2202	3:03:30	23.8	24.3	23.9	25.0	24.8	24.4	23.9	25.7	24.9	24.0	24.2	24.6	25.9	25.2	34.4
2203	3:03:35	23.9	24.3	23.9	25.0	24.9	24.4	24.0	25.7	24.9	24.0	24.2	24.6	25.9	25.3	34.5
2204	3:03:40	23.9	24.3	23.9	25.0	24.9	24.4	24.0	25.7	24.9	24.0	24.2	24.6	25.9	25.3	34.5
2205	3:03:45	23.8	24.3	23.9	25.0	24.9	24.4	24.0	25.7	24.8	24.0	24.2	24.6	25.9	25.3	34.5
2206	3:03:50	23.8	24.3	23.9	25.0	24.9	24.4	24.0	25.7	24.8	24.0	24.2	24.6	25.9	25.3	34.4
2207	3:03:55	23.8	24.3	23.9	25.0	24.9	24.4	24.0	25.7	24.8	24.0	24.2	24.6	25.9	25.3	34.6
2208	3:04:00	23.8	24.3	23.9	25.0	24.9	24.4	23.9	25.7	24.8	24.0	24.2	24.6	25.9	25.3	34.6
2209	3:04:05	23.8	24.3	23.9	25.0	24.8	24.4	23.9	25.7	24.8	24.0	24.2	24.6	25.9	25.3	34.6
2210	3:04:10	23.8	24.2	23.9	25.0	24.9	24.4	23.9	25.7	24.9	24.0	24.2	24.6	25.9	25.3	34.5
2211	3:04:15	23.8	24.3	23.9	25.0	24.9	24.4	23.9	25.7	24.8	24.0	24.2	24.6	25.9	25.3	34.5
2212	3:04:20	23.8	24.2	23.9	25.0	24.9	24.4	24.0	25.7	24.9	23.9	24.2	24.6	25.9	25.3	34.5
2213	3:04:25	23.8	24.2	23.9	25.0	24.9	24.4	24.0	25.7	24.9	24.0	24.2	24.6	25.9	25.3	34.4
2214	3:04:30	23.8	24.3	23.9	25.0	24.8	24.4	23.9	25.7	24.8	23.9	24.1	24.5	25.8	25.2	34.3
2215	3:04:35	23.8	24.3	23.9	25.0	24.9	24.3	23.9	25.7	24.8	23.9	24.1	24.5	25.8	25.3	34.2
2216	3:04:40	23.8	24.3	23.9	25.0	24.9	24.4	23.9	25.7	24.9	23.9	24.2	24.6	25.9	25.3	34.3

### Lampiran 8. Hasil Kalibrasi 2,5 LPM

NO.	WAKTU	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15
0	0:00:00	66.5	66.7	66.3	66.2	66.0	67.3	67.4	66.9	66.6	66.5	67.0	66.8	66.2	65.7	67.0
1	0:00:05	66.2	66.7	66.3	66.2	66.0	67.3	67.4	66.9	66.6	66.5	67.0	66.9	66.2	65.6	67.0
2	0:00:10	66.0	66.7	66.2	66.2	65.9	67.4	67.4	66.9	66.9	67.0	67.4	67.4	66.7	65.4	67.5
3	0:00:15	66.2	67.2	66.6	66.6	66.3	67.8	67.9	67.3	66.9	66.9	67.4	67.4	66.7	65.1	67.5
4	0:00:20	66.0	67.2	66.6	66.6	66.3	67.8	67.9	67.3	66.9	66.9	67.4	67.4	66.7	65.5	67.5
5	0:00:25	65.7	67.1	66.6	66.6	66.2	67.8	67.8	67.3	66.9	66.9	67.4	67.4	66.7	65.5	67.5
6	0:00:30	65.4	67.1	66.6	66.5	66.2	67.8	67.8	67.3	66.9	66.8	67.4	67.4	66.7	65.7	67.5
7	0:00:35	65.2	67.1	66.6	66.5	66.3	67.8	67.8	67.3	66.9	66.9	67.4	67.4	66.7	65.8	67.5
8	0:00:40	64.9	67.1	66.6	66.5	66.3	67.8	67.8	67.2	66.8	66.8	67.4	67.4	66.7	65.7	67.5
9	0:00:45	64.6	67.1	66.6	66.5	66.3	67.8	67.8	67.2	66.8	66.8	67.4	67.4	66.8	65.7	67.4
10	0:00:50	64.3	67.1	66.6	66.5	66.3	67.8	67.8	67.1	66.8	66.8	67.4	67.4	66.8	65.4	67.4
11	0:00:55	64.1	67.1	66.6	66.5	66.3	67.8	67.8	67.1	66.8	66.8	67.4	67.3	66.8	65.5	67.4
12	0:01:00	63.8	67.0	66.6	66.5	66.2	67.8	67.8	67.1	66.8	66.8	67.4	67.3	66.8	65.3	67.4
13	0:01:05	63.6	67.0	66.5	66.5	66.1	67.8	67.8	67.1	66.8	66.8	67.4	67.3	66.8	65.5	67.3
14	0:01:10	63.3	67.0	66.5	66.4	66.1	67.8	67.8	67.0	66.8	66.8	67.4	67.3	66.8	65.1	67.3
15	0:01:15	63.0	67.0	66.5	66.4	66.1	67.8	67.7	67.1	66.8	66.8	67.4	67.3	66.8	65.4	67.3
16	0:01:20	62.6	66.9	66.4	66.3	66.0	67.7	67.7	67.0	66.8	66.7	67.3	67.2	66.7	63.8	67.2
17	0:01:25	62.3	66.9	66.4	66.3	66.0	67.7	67.7	67.0	66.8	66.7	67.3	67.2	66.7	64.2	67.2
1639	2:16:35	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1640	2:16:40	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.1
1641	2:16:45	23.0	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.1
1642	2:16:50	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.1
1643	2:16:55	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1644	2:17:00	23.0	23.0	23.0	24.0	23.2	23.4	23.6	24.8	24.0	22.8	22.9	22.9	23.2	24.0	23.2
1645	2:17:05	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1646	2:17:10	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	24.0	22.8	22.9	22.9	23.2	24.0	23.2
1647	2:17:15	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	24.0	22.8	22.9	22.9	23.2	24.0	23.2
1648	2:17:20	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	24.0	22.8	22.9	22.9	23.2	24.0	23.2
1649	2:17:25	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	24.0	22.8	22.9	22.9	23.2	24.0	23.2
1650	2:17:30	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1651	2:17:35	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1652	2:17:40	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1653	2:17:45	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1654	2:17:50	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1655	2:17:55	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2
1656	2:18:00	22.9	23.0	23.0	24.0	23.2	23.4	23.6	24.8	23.9	22.8	22.9	22.9	23.2	24.0	23.2

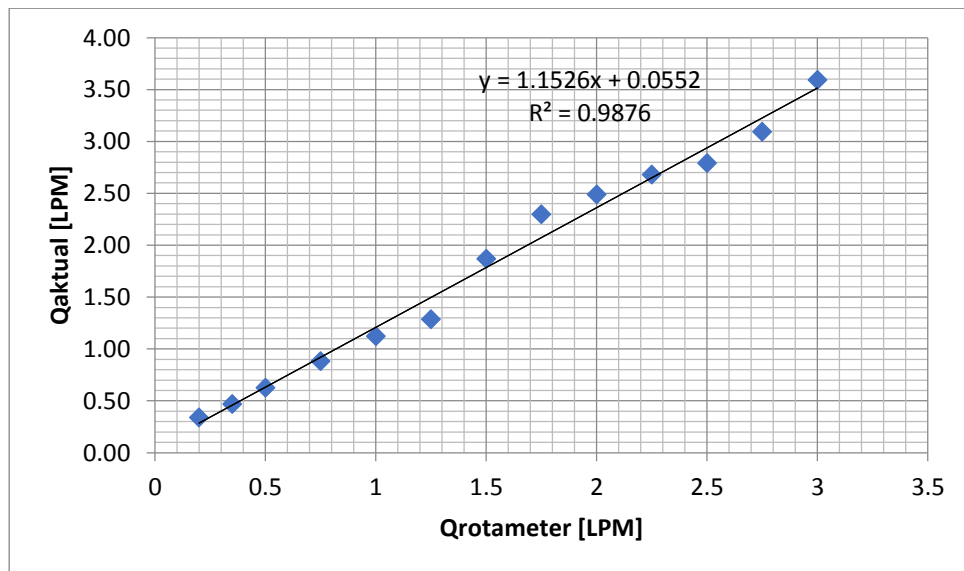
### Lampiran 8. Hasil Kalibrasi 2,5 LPM

NO.	WAKTU	T16	T17	T18	T19	T20	T21	T22	T23	T24	T25	T26	T27	T28	T31	T32
0	0:00:00	66.5	66.5	66.1	66.5	66.8	66.7	66.8	66.6	66.9	66.7	66.9	65.3	67.3	22.9	23.9
1	0:00:05	66.6	66.4	65.9	66.5	66.9	66.6	66.7	66.6	66.9	66.8	66.9	65.3	67.3	22.8	24.4
2	0:00:10	66.9	66.3	65.8	66.6	66.8	66.5	66.5	66.6	66.9	66.8	67.0	65.3	67.3	22.8	24.5
3	0:00:15	66.7	66.8	66.2	67.0	67.3	66.9	66.9	67.1	67.3	67.2	67.4	65.7	67.7	23.2	25.0
4	0:00:20	66.8	66.8	66.1	67.1	67.3	67.0	66.9	67.1	67.2	67.2	67.4	65.7	67.7	23.2	25.2
5	0:00:25	66.8	66.8	66.2	67.1	67.3	67.0	67.0	67.1	67.2	67.2	67.3	65.8	67.8	23.1	24.9
6	0:00:30	67.0	66.8	66.2	67.1	67.3	67.0	67.1	67.1	67.2	67.2	67.3	65.7	67.8	23.1	24.9
7	0:00:35	67.0	66.8	66.3	67.1	67.4	67.0	67.1	67.1	67.2	67.3	67.3	65.8	67.8	23.2	25.3
8	0:00:40	67.0	66.8	66.3	67.1	67.4	67.0	67.1	67.1	67.3	67.3	67.3	65.8	67.8	23.2	26.1
9	0:00:45	66.9	66.8	66.3	67.0	67.3	67.0	67.0	67.1	67.3	67.3	67.3	65.7	67.8	23.3	26.3
10	0:00:50	66.9	66.8	66.3	67.0	67.4	67.0	67.0	67.1	67.3	67.3	67.3	65.8	67.8	23.3	26.6
11	0:00:55	66.9	66.8	66.2	67.0	67.3	66.9	66.9	67.1	67.2	67.3	67.3	65.8	67.8	23.3	60.5
12	0:01:00	66.8	66.8	66.1	66.9	67.3	66.9	66.9	67.1	67.2	67.3	67.3	65.7	67.7	23.3	60.0
13	0:01:05	66.7	66.8	66.0	66.9	67.3	66.9	66.9	67.1	67.2	67.3	67.2	65.8	67.7	23.3	59.7
14	0:01:10	66.7	66.8	65.9	66.9	67.3	66.9	67.0	67.1	67.1	67.3	67.2	65.7	67.7	23.3	59.7
15	0:01:15	66.8	66.7	65.9	66.9	67.3	66.9	67.0	67.1	67.2	67.3	67.2	65.8	67.7	23.4	59.7
16	0:01:20	66.8	66.8	65.9	66.9	67.3	66.9	66.9	67.1	67.2	67.3	67.2	65.8	67.7	23.5	59.7
17	0:01:25	66.7	66.8	65.9	66.9	67.3	66.9	66.9	67.1	67.2	67.3	67.2	65.8	67.7	23.5	59.5
1639	2:16:35	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.5	23.6	23.5	24.3	23.5	34.5
1640	2:16:40	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.5	23.6	23.5	24.3	23.5	34.5
1641	2:16:45	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.5	23.6	23.5	24.3	23.5	34.5
1642	2:16:50	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.6	23.6	23.5	24.3	23.5	34.5
1643	2:16:55	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.5	23.6	23.5	24.3	23.5	34.4
1644	2:17:00	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.6	23.6	23.5	24.3	23.5	34.4
1645	2:17:05	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.6	23.6	23.5	24.3	23.5	34.4
1646	2:17:10	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.6	23.6	23.5	24.3	23.5	34.4
1647	2:17:15	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.6	23.6	23.5	24.3	23.5	34.4
1648	2:17:20	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.6	23.6	23.5	24.3	23.5	34.4
1649	2:17:25	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.5	23.6	23.5	24.3	23.5	34.4
1650	2:17:30	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.5	23.6	23.5	24.3	23.5	34.3
1651	2:17:35	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.5	23.6	23.5	24.3	23.5	34.3
1652	2:17:40	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.6	23.6	23.5	24.3	23.5	34.3
1653	2:17:45	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.5	23.6	23.5	24.3	23.5	34.3
1654	2:17:50	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.6	23.6	23.5	24.3	23.5	34.3
1655	2:17:55	23.3	23.7	23.3	24.3	24.2	23.8	23.4	25.2	24.3	23.5	23.6	23.5	24.3	23.5	34.3
1656	2:18:00	23.3	23.7	23.2	24.3	24.2	23.7	23.3	25.1	24.2	23.5	23.6	23.5	24.3	23.5	34.2



### Lampiran 9. Kalibrasi Rotameter

No.	Rotameter	DC Power Supply		Debit Aktual		Suhu Air		Q aktual
		Voltase	Arus	Volume	Waktu	Awal	Akhir	
	[LPM]	[Volt]	[Ampere]	[mL]	[detik]	[°C]	[°C]	LPM
1	0.2	1.8	0.4	100	17.66	28	28	0.34
2	0.35	2.1	0.42	100	12.79	28	28	0.47
3	0.5	2.6	0.44	100	9.6	28	28	0.63
4	0.75	3.9	0.51	100	6.81	28	28	0.88
5	1	4.6	0.56	100	5.34	28	28	1.12
6	1.25	5.5	0.62	100	4.66	28	28	1.29
7	1.5	6.1	0.67	100	3.21	28	28	1.87
8	1.75	7	0.74	100	2.61	28	28	2.30
9	2	8	0.81	100	2.41	28	28	2.49
10	2.25	8.9	0.89	100	2.24	28	28	2.68
11	2.5	10.1	0.95	100	2.15	28	28	2.79
12	2.75	10.8	1	100	1.94	28	28	3.09
13	3	11.8	1.06	100	1.67	28	28	3.59



Debit LPM	Hasil Kalibrasi LPM
1	1.21
1.5	1.78
2	2.36
2.5	2.94