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LAMPIRAN

Lampiran 1. Penurunan Rumus Identitas Rata-rata Peta Kendali TEWMA

$$\begin{aligned}
\sum_{l=1}^j l\theta^{l-1} &= \frac{d}{d\theta} \left(\sum_{l=1}^j \theta^l \right) \\
&= \frac{d}{d\theta} \left(\sum_{l=0}^j \theta^l - 1 \right) \\
&= \frac{d}{d\theta} \left(\frac{1 - \theta^{j+1}}{1 - \theta} - 1 \right) \\
&= \left[\frac{-(1 - \theta)(j + 1)\theta^j + (1 - \theta^{j+1})}{(1 - \theta)^2} \right] \\
&= \left[\left(\frac{1 - \theta^{j+1}}{(1 - \theta)^2} \right) - \left(\frac{(j + 1)\theta^j}{(1 - \theta)} \right) \right]
\end{aligned}$$

$$\begin{aligned}
\sum_{l=1}^j l(l-1)\theta^{l-2} &= \sum_{l=2}^j l(l-1)\theta^{l-2} \\
&= \frac{d^2}{d\theta^2} \left(\sum_{l=2}^j \theta^l \right) \\
&= \frac{d^2}{d\theta^2} \left(\sum_{l=0}^j \theta^l - \theta - 1 \right) \\
&= \frac{d^2}{d\theta^2} \left(\frac{1 - \theta^{j+1}}{1 - \theta} - \theta - 1 \right) \\
&= \frac{d}{d\theta} \left[\left(\frac{1 - \theta^{j+1}}{(1 - \theta)^2} \right) - \left(\frac{(j + 1)\theta^j}{(1 - \theta)} \right) - 1 - 0 \right] \\
&= \frac{d}{d\theta} \left(\frac{1 - \theta^{j+1}}{(1 - \theta)^2} \right) - \frac{d}{d\theta} \left(\frac{(j + 1)\theta^j}{(1 - \theta)} \right) - \frac{d}{d\theta} (1) \\
&= \left[\frac{-(1 - \theta)^2(j + 1)\theta^j + 2(1 - \theta)(1 - \theta^{j+1})}{(1 - \theta)^4} \right] \\
&\quad - \left[\frac{(1 - \theta)j(j + 1)\theta^{j-1} + (j + 1)\theta^j}{(1 - \theta)^2} \right]
\end{aligned}$$

Lampiran 1. Penurunan Rumus Identitas Rata-rata Peta Kendali TEWMA (Lanjutan)

$$\begin{aligned}
 &= \left[\frac{2(1 - \theta^{j+1})}{(1 - \theta)^3} \right] - \left[\frac{(j + 1)\theta^j}{(1 - \theta)^2} \right] - \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)} \right] - \left[\frac{(j + 1)\theta^j}{(1 - \theta)^2} \right] \\
 &= - \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)} \right] - \left[\frac{2(j + 1)\theta^j}{(1 - \theta)^2} \right] + \left[\frac{2(1 - \theta^{j+1})}{(1 - \theta)^3} \right]
 \end{aligned}$$

$$\begin{aligned}
 \sum_{l=1}^j l(l-1)(l-2)\theta^{l-3} &= \sum_{l=3}^j l(l-1)(l-2)\theta^{l-3} \\
 &= \frac{d^3}{d\theta^3} \left(\sum_{l=3}^j \theta^l \right) \\
 &= \frac{d^3}{d\theta^3} \left[\sum_{l=0}^j \theta^l - \theta - \theta^2 \right] \\
 &= \frac{d^3}{d\theta^3} \left[\sum_{l=0}^j \theta^l \right] - \frac{d^3}{d\theta^3} [\theta] - \frac{d^3}{d\theta^3} [\theta^2] \\
 &= \frac{d^3}{d\theta^3} \left[\frac{1 - \theta^{j+1}}{1 - \theta} \right] - 0 - 0 \\
 &= \frac{d}{d\theta} \left[\frac{d^2}{d\theta^2} \left[\frac{1 - \theta^{j+1}}{1 - \theta} \right] \right] \\
 &= \frac{d}{d\theta} \left[- \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)} \right] - \left[\frac{2(j + 1)\theta^j}{(1 - \theta)^2} \right] + \left[\frac{2(1 - \theta^{j+1})}{(1 - \theta)^3} \right] \right] \\
 &= - \frac{d}{d\theta} \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)} \right] - \frac{d}{d\theta} \left[\frac{2(j + 1)\theta^j}{(1 - \theta)^2} \right] \\
 &\quad + \frac{d}{d\theta} \left[\frac{2(1 - \theta^{j+1})}{(1 - \theta)^3} \right] \\
 &= - \left[\frac{j(j^2 - 1)\theta^{j-2}}{1 - \theta} \right] - \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)^2} \right] - 2 \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)^2} \right] \\
 &\quad - 4 \left[\frac{(j + 1)\theta^j}{(1 - \theta)^3} \right] - 2 \left[\frac{(j + 1)\theta^j}{(1 - \theta)^3} \right] + 6 \left[\frac{1 - \theta^{j+1}}{(1 - \theta)^4} \right]
 \end{aligned}$$

Lampiran 1. Penurunan Rumus Identitas Rata-rata Peta Kendali TEWMA (Lanjutan)

$$= - \left[\frac{j(j^2 - 1)\theta^{j-2}}{1 - \theta} \right] - 3 \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)^2} \right] - 6 \left[\frac{(j + 1)\theta^j}{(1 - \theta)^3} \right] + 6 \left[\frac{1 - \theta^{j+1}}{(1 - \theta)^4} \right]$$

$$\begin{aligned} \sum_{l=1}^j l(l-1)(l-2)(l-3)\theta^{l-4} &= \sum_{l=4}^j l(l-1)(l-2)(l-3)\theta^{l-4} \\ &= \frac{d^4}{d\theta^4} \sum_{l=4}^j \theta^l \\ &= \frac{d^4}{d\theta^4} \left[\sum_{l=0}^j \theta^l - \theta - \theta^2 - \theta^3 \right] \\ &= \frac{d^4}{d\theta^4} \left[\sum_{l=0}^j \theta^l \right] + \frac{d^4}{d\theta^4} [-\theta - \theta^2 - \theta^3] \\ &= \frac{d}{d\theta} \left[\frac{d^3}{d\theta^3} \left[\frac{1 - \theta^{j+1}}{1 - \theta} \right] \right] + 0 \\ &= \frac{d}{d\theta} \left[- \left[\frac{j(j^2 - 1)\theta^{j-2}}{1 - \theta} \right] - 3 \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)^2} \right] - 6 \left[\frac{(j + 1)\theta^j}{(1 - \theta)^3} \right] + 6 \left[\frac{1 - \theta^{j+1}}{(1 - \theta)^4} \right] \right] \\ &= - \frac{d}{d\theta} \left[\frac{j(j^2 - 1)\theta^{j-2}}{1 - \theta} \right] - 3 \frac{d}{d\theta} \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)^2} \right] - 6 \frac{d}{d\theta} \left[\frac{(j + 1)\theta^j}{(1 - \theta)^3} \right] + 6 \frac{d}{d\theta} \left[\frac{1 - \theta^{j+1}}{(1 - \theta)^4} \right] \\ &= - \left[\frac{j(j^2 - 1)(j - 2)\theta^{j-3}}{1 - \theta} \right] - \left[\frac{j(j^2 - 1)\theta^{j-2}}{(1 - \theta)^2} \right] - 3 \left[\frac{j(j^2 - 1)\theta^{j-2}}{(1 - \theta)^2} \right] - 6 \left[\frac{j(j + 1)\theta^{j-1}}{(1 - \theta)^3} \right] \end{aligned}$$

Lampiran 1. Penurunan Rumus Identitas Rata-rata Peta Kendali TEWMA (Lanjutan)

$$\begin{aligned}
& -6 \left[\frac{j(j+1)\theta^{j-1}}{(1-\theta)^3} \right] - 18 \left[\frac{(j+1)\theta^j}{(1-\theta)^4} \right] \\
& -6 \left[\frac{(j+1)\theta^j}{(1-\theta)^4} \right] + 24 \left[\frac{1-\theta^{j+1}}{(1-\theta)^5} \right] \\
= & - \left[\frac{j(j^2-1)(j-2)\theta^{j-3}}{1-\theta} \right] - 4 \left[\frac{j(j^2-1)\theta^{j-2}}{(1-\theta)^2} \right] \\
& -12 \left[\frac{j(j+1)\theta^{j-1}}{(1-\theta)^3} \right] - 24 \left[\frac{(j+1)\theta^j}{(1-\theta)^4} \right] \\
& +24 \left[\frac{1-\theta^{j+1}}{(1-\theta)^5} \right]
\end{aligned}$$

Lampiran 2. Data Cacat Produksi *Nugget* UD. Masagena Frozen Food

Waktu (j)	Bagian Jenis Cacat			Jumlah Cacat (X_j)
	Patah dan Menempel	Adonan Lembek	Kesalahan Pengemasan	
1	6	13	15	34
2	7	15	21	43
3	4	24	18	46
4	2	22	16	40
5	8	20	16	44
6	5	25	18	48
7	14	12	15	41
8	8	14	12	34
9	13	16	0	29
10	4	12	0	16
11	9	18	10	37
12	8	9	14	31
13	9	14	18	41
14	4	11	14	29
15	4	18	21	43
16	3	15	19	37
17	7	20	13	40
18	6	8	13	27
19	0	12	10	22
20	11	0	0	11
21	15	0	15	30
22	8	0	0	8
23	0	0	18	18
24	3	10	0	13
25	0	10	12	22
26	4	22	16	42
27	5	15	19	39
28	5	10	0	15
29	6	12	22	40
30	4	10	14	28
31	0	13	0	13
32	4	15	0	19
33	2	10	0	12
34	4	18	16	38
35	3	11	19	33
36	2	11	13	26
37	5	9	0	14
38	0	11	14	25
39	5	16	0	21

Lampiran 2. Data Cacat Produksi *Nugget* UD. Masagena Frozen Food
(Lanjutan)

Waktu (j)	Bagian Jenis Cacat			Jumlah Cacat (X_j)
	Patah dan Menempel	Adonan Lembek	Kesalahan Pengemasan	
40	7	13	12	32
41	9	11	0	20
42	15	0	21	36
43	6	16	0	22
44	3	14	0	17
45	4	18	13	35
46	11	13	0	24
47	6	11	0	17
48	10	0	0	10
49	6	9	17	32
50	2	8	13	23

Lampiran 3. Uji Normalitas Kolmogorov-Smirnov Data Cacat Produksi *Nugget*

UD. Masagena Frozen Food

Data	Frekuensi	Frekuensi Kumulatif (f_{kum})	$f_s(X_i)$	$(X_i - \bar{X})/s$	$f_0(X_i)$	$f_s(X_i) - f_0(X_i)$	$ f_s(X_i) - f_0(X_i) $
8	1	1	0.02	-1.8447	0.0325	-0.0125	0.0125
10	1	2	0.04	-1.6633	0.0481	-0.0081	0.0081
11	1	3	0.06	-1.5726	0.0579	0.0021	0.0021
12	1	4	0.08	-1.4819	0.0692	0.0108	0.0108
13	2	6	0.12	-1.3912	0.0821	0.0379	0.0379
14	1	7	0.14	-1.3005	0.0967	0.0433	0.0433
15	1	8	0.16	-1.2099	0.1132	0.0468	0.0468
16	1	9	0.18	-1.1192	0.1315	0.0485	0.0485
17	2	11	0.22	-1.0285	0.1519	0.0681	0.0681
18	1	12	0.24	-0.9378	0.1742	0.0658	0.0658
19	1	13	0.26	-0.8471	0.1985	0.0615	0.0615
20	1	14	0.28	-0.7564	0.2247	0.0553	0.0553
21	1	15	0.3	-0.6657	0.2528	0.0472	0.0472
22	3	18	0.36	-0.5750	0.2826	0.0774	0.0774
23	1	19	0.38	-0.4843	0.3141	0.0659	0.0659
24	1	20	0.4	-0.3936	0.3469	0.0531	0.0531
25	1	21	0.42	-0.3029	0.3810	0.0390	0.0390
26	1	22	0.44	-0.2122	0.4160	0.0240	0.0240
27	1	23	0.46	-0.1215	0.4516	0.0084	0.0084
28	1	24	0.48	-0.0308	0.4877	-0.0077	0.0077
29	2	26	0.52	0.0599	0.5239	-0.0039	0.0039
30	1	27	0.54	0.1506	0.5598	-0.0198	0.0198
31	1	28	0.56	0.2412	0.5953	-0.0353	0.0353
32	2	30	0.6	0.3319	0.6300	-0.0300	0.0300
33	1	31	0.62	0.4226	0.6637	-0.0437	0.0437
34	2	33	0.66	0.5133	0.6961	-0.0361	0.0361
35	1	34	0.68	0.6040	0.7271	-0.0471	0.0471
36	1	35	0.7	0.6947	0.7564	-0.0564	0.0564
37	2	37	0.74	0.7854	0.7839	-0.0439	0.0439
38	1	38	0.76	0.8761	0.8095	-0.0495	0.0495
39	1	39	0.78	0.9668	0.8332	-0.0532	0.0532
40	3	42	0.84	1.0575	0.8549	-0.0149	0.0149
41	2	44	0.88	1.1482	0.8746	0.0054	0.0054
42	1	45	0.9	1.2389	0.8923	0.0077	0.0077
43	2	47	0.94	1.3296	0.9082	0.0318	0.0318
44	1	48	0.96	1.4203	0.9222	0.0378	0.0378
46	1	49	0.98	1.6016	0.9454	0.0346	0.0346
48	1	50	1	1.7830	0.9627	0.0373	0.0373

Lampiran 4. Tabel Nilai Kritis Uji Kolmogorov-Smirnov

<i>n</i>	$\alpha = 0,20$	$\alpha = 0,10$	$\alpha = 0,05$	$\alpha = 0,02$	$\alpha = 0,01$
1	0.900	0.950	0.975	0.990	0.995
2	0.684	0.776	0.842	0.900	0.929
3	0.565	0.636	0.708	0.785	0.829
4	0.493	0.565	0.624	0.689	0.734
5	0.447	0.509	0.563	0.627	0.669
6	0.410	0.468	0.519	0.577	0.617
7	0.381	0.436	0.483	0.538	0.576
8	0.359	0.410	0.454	0.507	0.542
9	0.339	0.387	0.430	0.480	0.513
10	0.323	0.369	0.409	0.457	0.486
11	0.308	0.352	0.391	0.437	0.468
12	0.296	0.338	0.375	0.419	0.449
13	0.285	0.325	0.361	0.404	0.432
14	0.275	0.314	0.349	0.390	0.418
15	0.266	0.304	0.338	0.377	0.404
16	0.258	0.295	0.327	0.366	0.392
17	0.250	0.286	0.318	0.355	0.381
18	0.244	0.279	0.309	0.346	0.371
19	0.237	0.271	0.301	0.337	0.361
20	0.232	0.265	0.294	0.329	0.352
21	0.226	0.259	0.287	0.321	0.344
22	0.221	0.253	0.281	0.314	0.337
23	0.216	0.247	0.275	0.307	0.330
24	0.212	0.242	0.269	0.301	0.323
25	0.208	0.238	0.264	0.295	0.317
26	0.204	0.233	0.259	0.290	0.311
27	0.200	0.229	0.254	0.284	0.305
28	0.197	0.225	0.250	0.279	0.300
29	0.193	0.221	0.246	0.275	0.295
30	0.190	0.218	0.242	0.270	0.290
35	0.177	0.202	0.224	0.251	0.269
40	0.165	0.189	0.210	0.235	0.252
45	0.156	0.179	0.198	0.222	0.238
50	0.148	0.170	0.188	0.211	0.226
55	0.142	0.162	0.180	0.201	0.216
60	0.136	0.155	0.172	0.193	0.207
65	0.131	0.149	0.166	0.185	0.199
70	0.126	0.144	0.160	0.179	0.192
75	0.122	0.139	0.154	0.173	0.185
80	0.118	0.135	0.150	0.167	0.179

Lampiran 5. Peta Kendali EWMA untuk $\lambda = 0.6$

No	Jumlah Cacat	Z_j	BKA	BKB	GT	Status
1	34	31.7360	48.1871	8.4929	28.3400	Terkendali
2	43	38.4944	49.7159	6.9641	28.3400	Terkendali
3	46	42.9978	49.9505	6.7295	28.3400	Terkendali
4	40	41.1991	49.9878	6.6922	28.3400	Terkendali
5	44	42.8796	49.9938	6.6862	28.3400	Terkendali
6	48	45.9519	49.9947	6.6853	28.3400	Terkendali
7	41	42.9807	49.9949	6.6851	28.3400	Terkendali
8	34	37.5923	49.9949	6.6851	28.3400	Terkendali
9	29	32.4369	49.9949	6.6851	28.3400	Terkendali
10	16	22.5748	49.9949	6.6851	28.3400	Terkendali
11	37	31.2299	49.9949	6.6851	28.3400	Terkendali
12	31	31.0920	49.9949	6.6851	28.3400	Terkendali
13	41	37.0368	49.9949	6.6851	28.3400	Terkendali
14	29	32.2147	49.9949	6.6851	28.3400	Terkendali
15	43	38.6859	49.9949	6.6851	28.3400	Terkendali
16	37	37.6744	49.9949	6.6851	28.3400	Terkendali
17	40	39.0697	49.9949	6.6851	28.3400	Terkendali
18	27	31.8279	49.9949	6.6851	28.3400	Terkendali
19	22	25.9312	49.9949	6.6851	28.3400	Terkendali
20	11	16.9725	49.9949	6.6851	28.3400	Terkendali
21	30	24.7890	49.9949	6.6851	28.3400	Terkendali
22	8	14.7156	49.9949	6.6851	28.3400	Terkendali
23	18	16.6862	49.9949	6.6851	28.3400	Terkendali
24	13	14.4745	49.9949	6.6851	28.3400	Terkendali
25	22	18.9898	49.9949	6.6851	28.3400	Terkendali
26	42	32.7959	49.9949	6.6851	28.3400	Terkendali
27	39	36.5184	49.9949	6.6851	28.3400	Terkendali
28	15	23.6073	49.9949	6.6851	28.3400	Terkendali
29	40	33.4429	49.9949	6.6851	28.3400	Terkendali
30	28	30.1772	49.9949	6.6851	28.3400	Terkendali
31	13	19.8709	49.9949	6.6851	28.3400	Terkendali
32	19	19.3483	49.9949	6.6851	28.3400	Terkendali
33	12	14.9393	49.9949	6.6851	28.3400	Terkendali
34	38	28.7757	49.9949	6.6851	28.3400	Terkendali
35	33	31.3103	49.9949	6.6851	28.3400	Terkendali
36	26	28.1241	49.9949	6.6851	28.3400	Terkendali
37	14	19.6496	49.9949	6.6851	28.3400	Terkendali
38	25	22.8599	49.9949	6.6851	28.3400	Terkendali
39	21	21.7439	49.9949	6.6851	28.3400	Terkendali
40	32	27.8976	49.9949	6.6851	28.3400	Terkendali

Lampiran 5. Peta Kendali EWMA untuk $\lambda = 0.6$ (Lanjutan)

No	Jumlah Cacat	Z_j	<i>BKA</i>	<i>BKB</i>	<i>GT</i>	Status
41	20	23.1590	49.9949	6.6851	28.3400	Terkendali
42	36	30.8636	49.9949	6.6851	28.3400	Terkendali
43	22	25.5454	49.9949	6.6851	28.3400	Terkendali
44	17	20.4182	49.9949	6.6851	28.3400	Terkendali
45	35	29.1673	49.9949	6.6851	28.3400	Terkendali
46	24	26.0669	49.9949	6.6851	28.3400	Terkendali
47	17	20.6268	49.9949	6.6851	28.3400	Terkendali
48	10	14.2507	49.9949	6.6851	28.3400	Terkendali
49	32	24.9003	49.9949	6.6851	28.3400	Terkendali
50	23	23.7601	49.9949	6.6851	28.3400	Terkendali

Lampiran 6. Peta Kendali DEWMA untuk $\lambda = 0.6$

No	Jumlah Cacat	Y_j	BKA	BKB	GT	Status
1	34	30.3776	40.2482	16.4318	28.3400	Terkendali
2	43	35.2477	43.5900	13.0900	28.3400	Terkendali
3	46	39.8977	44.6260	12.0540	28.3400	Terkendali
4	40	40.6786	44.9089	11.7711	28.3400	Terkendali
5	44	41.9992	44.9788	11.7012	28.3400	Terkendali
6	48	44.3708	44.9949	11.6851	28.3400	Terkendali
7	41	43.5368	44.9984	11.6816	28.3400	Terkendali
8	34	39.9701	44.9991	11.6809	28.3400	Terkendali
9	29	35.4502	44.9993	11.6807	28.3400	Terkendali
10	16	27.7249	44.9993	11.6807	28.3400	Terkendali
11	37	29.8279	44.9993	11.6807	28.3400	Terkendali
12	31	30.5863	44.9993	11.6807	28.3400	Terkendali
13	41	34.4566	44.9993	11.6807	28.3400	Terkendali
14	29	33.1115	44.9993	11.6807	28.3400	Terkendali
15	43	36.4561	44.9993	11.6807	28.3400	Terkendali
16	37	37.1871	44.9993	11.6807	28.3400	Terkendali
17	40	38.3167	44.9993	11.6807	28.3400	Terkendali
18	27	34.4234	44.9993	11.6807	28.3400	Terkendali
19	22	29.3281	44.9993	11.6807	28.3400	Terkendali
20	11	21.9147	44.9993	11.6807	28.3400	Terkendali
21	30	23.6393	44.9993	11.6807	28.3400	Terkendali
22	8	18.2851	44.9993	11.6807	28.3400	Terkendali
23	18	17.3258	44.9993	11.6807	28.3400	Terkendali
24	13	15.6150	44.9993	11.6807	28.3400	Terkendali
25	22	17.6399	44.9993	11.6807	28.3400	Terkendali
26	42	26.7335	44.9993	11.6807	28.3400	Terkendali
27	39	32.6044	44.9993	11.6807	28.3400	Terkendali
28	15	27.2062	44.9993	11.6807	28.3400	Terkendali
29	40	30.9482	44.9993	11.6807	28.3400	Terkendali
30	28	30.4856	44.9993	11.6807	28.3400	Terkendali
31	13	24.1168	44.9993	11.6807	28.3400	Terkendali
32	19	21.2557	44.9993	11.6807	28.3400	Terkendali
33	12	17.4659	44.9993	11.6807	28.3400	Terkendali
34	38	24.2518	44.9993	11.6807	28.3400	Terkendali
35	33	28.4869	44.9993	11.6807	28.3400	Terkendali
36	26	28.2692	44.9993	11.6807	28.3400	Terkendali
37	14	23.0975	44.9993	11.6807	28.3400	Terkendali
38	25	22.9549	44.9993	11.6807	28.3400	Terkendali
39	21	22.2283	44.9993	11.6807	28.3400	Terkendali
40	32	25.6299	44.9993	11.6807	28.3400	Terkendali

Lampiran 6. Peta Kendali DEWMA untuk $\lambda = 0.6$ (Lanjutan)

No	Jumlah Cacat	Y_j	<i>BKA</i>	<i>BKB</i>	<i>GT</i>	Status
41	20	24.1474	44.9993	11.6807	28.3400	Terkendali
42	36	28.1771	44.9993	11.6807	28.3400	Terkendali
43	22	26.5981	44.9993	11.6807	28.3400	Terkendali
44	17	22.8902	44.9993	11.6807	28.3400	Terkendali
45	35	26.6564	44.9993	11.6807	28.3400	Terkendali
46	24	26.3027	44.9993	11.6807	28.3400	Terkendali
47	17	22.8971	44.9993	11.6807	28.3400	Terkendali
48	10	17.7093	44.9993	11.6807	28.3400	Terkendali
49	32	22.0239	44.9993	11.6807	28.3400	Terkendali
50	23	23.0656	44.9993	11.6807	28.3400	Terkendali

Lampiran 7. Peta Kendali TEWMA untuk $\lambda = 0.6$

No	Jumlah Cacat	W_j	BKA	BKB	GT	Status
1	34	29.5626	35.4849	21.1951	28.3400	Terkendali
2	43	32.9736	39.5008	17.1792	28.3400	Terkendali
3	46	37.1281	41.4400	15.2400	28.3400	Terkendali
4	40	39.2584	42.2152	14.4648	28.3400	Terkendali
5	44	40.9029	42.4838	14.1962	28.3400	Terkendali
6	48	42.9836	42.5670	14.1130	28.3400	Tidak Terkendali
7	41	43.3155	42.5906	14.0894	28.3400	Tidak Terkendali
8	34	41.3083	42.5969	14.0831	28.3400	Terkendali
9	29	37.7934	42.5984	14.0816	28.3400	Terkendali
10	16	31.7523	42.5988	14.0812	28.3400	Terkendali
11	37	30.5977	42.5989	14.0811	28.3400	Terkendali
12	31	30.5909	42.5989	14.0811	28.3400	Terkendali
13	41	32.9103	42.5989	14.0811	28.3400	Terkendali
14	29	33.0310	42.5989	14.0811	28.3400	Terkendali
15	43	35.0861	42.5989	14.0811	28.3400	Terkendali
16	37	36.3467	42.5989	14.0811	28.3400	Terkendali
17	40	37.5287	42.5989	14.0811	28.3400	Terkendali
18	27	35.6655	42.5989	14.0811	28.3400	Terkendali
19	22	31.8630	42.5989	14.0811	28.3400	Terkendali
20	11	25.8940	42.5989	14.0811	28.3400	Terkendali
21	30	24.5412	42.5989	14.0811	28.3400	Terkendali
22	8	20.7875	42.5989	14.0811	28.3400	Terkendali
23	18	18.7105	42.5989	14.0811	28.3400	Terkendali
24	13	16.8532	42.5989	14.0811	28.3400	Terkendali
25	22	17.3252	42.5989	14.0811	28.3400	Terkendali
26	42	22.9702	42.5989	14.0811	28.3400	Terkendali
27	39	28.7507	42.5989	14.0811	28.3400	Terkendali
28	15	27.8240	42.5989	14.0811	28.3400	Terkendali
29	40	29.6985	42.5989	14.0811	28.3400	Terkendali
30	28	30.1708	42.5989	14.0811	28.3400	Terkendali
31	13	26.5384	42.5989	14.0811	28.3400	Terkendali
32	19	23.3688	42.5989	14.0811	28.3400	Terkendali
33	12	19.8270	42.5989	14.0811	28.3400	Terkendali
34	38	22.4819	42.5989	14.0811	28.3400	Terkendali
35	33	26.0849	42.5989	14.0811	28.3400	Terkendali
36	26	27.3955	42.5989	14.0811	28.3400	Terkendali
37	14	24.8167	42.5989	14.0811	28.3400	Terkendali
38	25	23.6996	42.5989	14.0811	28.3400	Terkendali
39	21	22.8168	42.5989	14.0811	28.3400	Terkendali
40	32	24.5047	42.5989	14.0811	28.3400	Terkendali

Lampiran 7. Peta Kendali TEWMA untuk $\lambda = 0.6$ (Lanjutan)

No	Jumlah Cacat	W_j	BKA	BKB	GT	Status
41	20	24.2903	42.5989	14.0811	28.3400	Terkendali
42	36	26.6224	42.5989	14.0811	28.3400	Terkendali
43	22	26.6078	42.5989	14.0811	28.3400	Terkendali
44	17	24.3772	42.5989	14.0811	28.3400	Terkendali
45	35	25.7447	42.5989	14.0811	28.3400	Terkendali
46	24	26.0795	42.5989	14.0811	28.3400	Terkendali
47	17	24.1701	42.5989	14.0811	28.3400	Terkendali
48	10	20.2936	42.5989	14.0811	28.3400	Terkendali
49	32	21.3318	42.5989	14.0811	28.3400	Terkendali
50	23	22.3721	42.5989	14.0811	28.3400	Terkendali

Lampiran 8. Jumlah *Out of Control* Peta Kendali EWMA, DEWMA dan TEWMA

Lambda	Jumlah <i>Out of Control</i>		
	EWMA	DEWMA	TEWMA
0.01	8	15	18
0.02	7	16	16
0.03	7	15	16
0.04	5	15	16
0.05	5	14	15
0.06	4	14	15
0.07	3	13	14
0.08	3	13	14
0.09	3	13	14
0.1	3	12	14
0.11	3	9	13
0.12	3	7	14
0.13	3	7	13
0.14	3	4	13
0.15	3	4	12
0.16	3	4	11
0.17	2	4	12
0.18	2	4	9
0.19	2	3	6
0.2	2	3	6
0.21	2	3	5
0.22	2	4	5
0.23	2	4	4
0.24	2	4	4
0.25	2	4	5
0.26	2	4	5
0.27	2	4	5
0.28	2	4	4
0.29	1	4	4
0.3	1	4	4
0.31	1	4	4
0.32	1	3	4
0.33	1	3	4
0.34	0	3	3
0.35	0	3	3
0.36	0	3	3
0.37	0	3	3
0.38	0	3	3

Lampiran 8. Jumlah *Out of Control* Peta Kendali EWMA, DEWMA dan TEWMA (Lanjutan)

Lambda	Jumlah <i>Out of Control</i>		
	EWMA	DEWMA	TEWMA
0.39	0	3	3
0.4	0	3	4
0.41	0	3	4
0.42	0	3	4
0.43	0	2	4
0.44	0	2	4
0.45	0	2	4
0.46	0	2	3
0.47	0	2	3
0.48	0	2	3
0.49	0	2	3
0.5	0	2	3
0.51	0	2	3
0.52	0	2	3
0.53	0	1	3
0.54	0	1	3
0.55	0	1	2
0.56	0	0	2
0.57	0	0	2
0.58	0	0	2
0.59	0	0	2
0.6	0	0	2
0.61	0	0	2
0.62	0	0	2
0.63	0	0	2
0.64	0	0	2
0.65	0	0	0
0.66	0	0	0
⋮	⋮	⋮	⋮
0.99	0	0	0

Lampiran 9. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 0.05$ dan 0.1

Lambda	$k = 0.05$			$k = 0.1$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.01	91.0600	44.1566	30.9567	17.8576	6.3516	4.1137
0.02	156.2330	91.4853	69.3610	44.4184	17.9884	11.8302
0.03	197.5285	128.4140	101.9525	69.7146	31.3700	21.3685
0.04	225.8026	157.2947	128.9068	92.3198	44.9740	31.5774
0.05	246.3355	180.3528	151.3405	112.2668	58.2184	41.9158
0.06	261.9125	199.1445	170.2297	129.8663	70.8765	52.1166
0.07	274.1308	214.7385	186.3245	145.4531	82.8705	62.0452
0.08	283.9693	227.8810	200.1900	159.3266	94.1901	71.6359
0.09	292.0609	239.1059	212.2536	171.7401	104.8557	80.8600
0.1	298.8324	248.8039	222.8426	182.9042	114.9018	89.7096
0.11	304.5825	257.2668	232.2106	192.9938	124.3681	98.1886
0.12	309.5257	264.7171	240.5569	202.1537	133.2955	106.3075
0.13	313.8208	271.3269	248.0401	210.5048	141.7237	114.0806
0.14	317.5874	277.2316	254.7877	218.1483	149.6902	121.5236
0.15	320.9172	282.5391	260.9036	225.1697	157.2300	128.6533
0.16	323.8821	287.3362	266.4730	231.6411	164.3755	135.4862
0.17	326.5390	291.6940	271.5666	237.6245	171.1561	142.0387
0.18	328.9334	295.6709	276.2432	243.1725	177.5991	148.3265
0.19	331.1024	299.3152	280.5527	248.3309	183.7291	154.3646
0.2	333.0764	302.6677	284.5372	253.1391	189.5686	160.1670
0.21	334.8806	305.7625	288.2327	257.6313	195.1383	165.7472
0.22	336.5360	308.6289	291.6699	261.8378	200.4570	171.1178
0.23	338.0602	311.2917	294.8755	265.7848	205.5418	176.2904
0.24	339.4683	313.7723	297.8728	269.4954	210.4084	181.2763
0.25	340.7730	316.0893	300.6817	272.9904	215.0712	186.0856
0.26	341.9853	318.2587	303.3200	276.2879	219.5434	190.7281
0.27	343.1147	320.2945	305.8033	279.4041	223.8371	195.2128
0.28	344.1694	322.2091	308.1452	282.3537	227.9635	199.5483
0.29	345.1565	324.0134	310.3579	285.1494	231.9327	203.7425
0.3	346.0825	325.7170	312.4523	287.8032	235.7542	207.8028
0.31	346.9527	327.3283	314.4380	290.3255	239.4368	211.7362
0.32	347.7722	328.8550	316.3236	292.7258	242.9884	215.5493
0.33	348.5451	330.3037	318.1170	295.0127	246.4165	219.2482
0.34	349.2753	331.6807	319.8251	297.1942	249.7280	222.8387
0.35	349.9664	332.9913	321.4543	299.2773	252.9293	226.3263
0.36	350.6213	334.2404	323.0103	301.2685	256.0263	229.7161
0.37	351.2428	335.4325	324.4983	303.1737	259.0245	233.0129
0.38	351.8334	336.5716	325.9230	304.9985	261.9291	236.2213

Lampiran 9. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 0.05$ dan 0.1 (Lanjutan)

Lambda	$k = 0.05$			$k = 0.1$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.39	352.3954	337.6613	327.2887	306.7477	264.7448	239.3456
0.4	352.9308	338.7050	328.5995	308.4261	267.4761	242.3898
0.41	353.4414	339.7056	329.8589	310.0377	270.1271	245.3578
0.42	353.9290	340.6660	331.0702	311.5865	272.7017	248.2532
0.43	354.3950	341.5886	332.2364	313.0762	275.2035	251.0795
0.44	354.8408	342.4757	333.3604	314.5099	277.6359	253.8399
0.45	355.2677	343.3296	334.4448	315.8909	280.0021	256.5375
0.46	355.6770	344.1521	335.4920	317.2220	282.3050	259.1753
0.47	356.0696	344.9450	336.5041	318.5057	284.5473	261.7560
0.48	356.4466	345.7100	337.4833	319.7447	286.7318	264.2823
0.49	356.8089	346.4486	338.4313	320.9412	288.8608	266.7567
0.5	357.1573	347.1622	339.3501	322.0974	290.9366	269.1816
0.51	357.4926	347.8522	340.2412	323.2152	292.9614	271.5592
0.52	357.8156	348.5197	341.1061	324.2965	294.9372	273.8918
0.53	358.1269	349.1659	341.9463	325.3431	296.8659	276.1813
0.54	358.4271	349.7918	342.7632	326.3567	298.7492	278.4297
0.55	358.7168	350.3984	343.5578	327.3387	300.5888	280.6388
0.56	358.9965	350.9866	344.3315	328.2907	302.3863	282.8105
0.57	359.2668	351.5572	345.0852	329.2139	304.1432	284.9463
0.58	359.5282	352.1110	345.8200	330.1097	305.8609	287.0479
0.59	359.7810	352.6488	346.5369	330.9793	307.5407	289.1167
0.6	360.0257	353.1713	347.2366	331.8238	309.1837	291.1541
0.61	360.2626	353.6790	347.9200	332.6443	310.7912	293.1614
0.62	360.4922	354.1726	348.5878	333.4417	312.3642	295.1399
0.63	360.7147	354.6526	349.2409	334.2171	313.9038	297.0907
0.64	360.9305	355.1196	349.8797	334.9713	315.4110	299.0150
0.65	361.1399	355.5740	350.5050	335.7052	316.8865	300.9136
0.66	361.3432	356.0164	351.1172	336.4196	318.3313	302.7874
0.67	361.5406	356.4471	351.7169	337.1153	319.7462	304.6374
0.68	361.7323	356.8665	352.3046	337.7930	321.1320	306.4642
0.69	361.9187	357.2750	352.8807	338.4534	322.4892	308.2686
0.7	362.0999	357.6731	353.4456	339.0971	323.8187	310.0510
0.71	362.2762	358.0609	353.9997	339.7248	325.1210	311.8120
0.72	362.4477	358.4389	354.5432	340.3371	326.3967	313.5520
0.73	362.6147	358.8073	355.0765	340.9344	327.6463	315.2713
0.74	362.7772	359.1664	355.5997	341.5174	328.8705	316.9701
0.75	362.9356	359.5165	356.1132	342.0866	330.0696	318.6486
0.76	363.0899	359.8578	356.6170	342.6425	331.2442	320.3068

Lampiran 9. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 0.05$ dan 0.1 (Lanjutan)

Lambda	$k = 0.05$			$k = 0.1$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.77	363.2404	360.1906	357.1114	343.1854	332.3946	321.9448
0.78	363.3871	360.5151	357.5965	343.7159	333.5214	323.5624
0.79	363.5301	360.8315	358.0723	344.2344	334.6248	325.1594
0.8	363.6697	361.1399	358.5389	344.7413	335.7052	326.7355
0.81	363.8059	361.4407	358.9965	345.2370	336.7631	328.2904
0.82	363.9389	361.7339	359.4448	345.7218	337.7986	329.8237
0.83	364.0688	362.0198	359.8841	346.1960	338.8122	331.3348
0.84	364.1957	362.2984	360.3142	346.6602	339.8041	332.8232
0.85	364.3196	362.5700	360.7351	347.1144	340.7747	334.2883
0.86	364.4408	362.8348	361.1468	347.5592	341.7241	335.7293
0.87	364.5592	363.0928	361.5491	347.9947	342.6526	337.1455
0.88	364.6750	363.3441	361.9420	348.4212	343.5606	338.5362
0.89	364.7883	363.5890	362.3254	348.8391	344.4481	339.9005
0.9	364.8991	363.8275	362.6992	349.2485	345.3156	341.2375
0.91	365.0076	364.0598	363.0633	349.6498	346.1631	342.5465
0.92	365.1137	364.2860	363.4176	350.0431	346.9910	343.8266
0.93	365.2176	364.5062	363.7620	350.4288	347.7994	345.0769
0.94	365.3194	364.7204	364.0963	350.8070	348.5886	346.2966
0.95	365.4190	364.9289	364.4206	351.1779	349.3587	347.4849
0.96	365.5166	365.1317	364.7347	351.5418	350.1099	348.6411
0.97	365.6123	365.3289	365.0385	351.8989	350.8426	349.7644
0.98	365.7060	365.5206	365.3320	352.2493	351.5568	350.8541
0.99	365.7979	365.7070	365.6152	352.5932	352.2528	351.9098

Lampiran 10. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 0.25$ dan 0.5

Lambda	$k = 0.25$			$k = 0.5$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.01	1.4270	1.0240	1.0029	1.0000	1.0000	1.0000
0.02	3.2880	1.4334	1.1684	1.0247	1.0000	1.0000
0.03	6.0607	2.2412	1.6104	1.1716	1.0032	1.0001
0.04	9.4651	3.3381	2.2559	1.4462	1.0263	1.0033
0.05	13.3132	4.6740	3.0677	1.8223	1.0853	1.0183
0.06	17.4712	6.2132	4.0248	2.2848	1.1822	1.0530
0.07	21.8426	7.9268	5.1114	2.8250	1.3136	1.1103
0.08	26.3575	9.7904	6.3141	3.4366	1.4757	1.1894
0.09	30.9643	11.7831	7.6214	4.1149	1.6661	1.2887
0.1	35.6246	13.8876	9.0229	4.8555	1.8830	1.4069
0.11	40.3094	16.0888	10.5095	5.6546	2.1252	1.5426
0.12	44.9969	18.3741	12.0732	6.5087	2.3920	1.6951
0.13	49.6702	20.7327	13.7068	7.4144	2.6828	1.8638
0.14	54.3167	23.1554	15.4041	8.3686	2.9973	2.0483
0.15	58.9264	25.6343	17.1594	9.3685	3.3351	2.2483
0.16	63.4919	28.1626	18.9677	10.4116	3.6959	2.4638
0.17	68.0073	30.7346	20.8248	11.4952	4.0798	2.6945
0.18	72.4685	33.3452	22.7267	12.6172	4.4865	2.9405
0.19	76.8720	35.9900	24.6701	13.7753	4.9159	3.2018
0.2	81.2157	38.6654	26.6517	14.9677	5.3680	3.4783
0.21	85.4978	41.3681	28.6690	16.1924	5.8428	3.7702
0.22	89.7172	44.0953	30.7195	17.4478	6.3402	4.0775
0.23	93.8732	46.8446	32.8012	18.7323	6.8603	4.4003
0.24	97.9657	49.6140	34.9122	20.0444	7.4031	4.7388
0.25	101.9945	52.4015	37.0508	21.3827	7.9687	5.0930
0.26	105.9598	55.2056	39.2156	22.7459	8.5573	5.4632
0.27	109.8622	58.0250	41.4053	24.1328	9.1688	5.8494
0.28	113.7022	60.8585	43.6189	25.5423	9.8035	6.2520
0.29	117.4804	63.7051	45.8554	26.9734	10.4616	6.6710
0.3	121.1976	66.5641	48.1140	28.4250	11.1432	7.1067
0.31	124.8547	69.4345	50.3940	29.8963	11.8486	7.5595
0.32	128.4526	72.3159	52.6950	31.3863	12.5780	8.0294
0.33	131.9923	75.2078	55.0164	32.8943	13.3317	8.5169
0.34	135.4747	78.1096	57.3579	34.4194	14.1100	9.0223
0.35	138.9009	81.0212	59.7193	35.9611	14.9132	9.5459
0.36	142.2719	83.9421	62.1004	37.5186	15.7418	10.0881
0.37	145.5886	86.8721	64.5012	39.0913	16.5960	10.6493
0.38	148.8523	89.8111	66.9217	40.6786	17.4764	11.2299

Lampiran 10. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 0.25$ dan 0.5 (Lanjutan)

Lambda	$k = 0.25$			$k = 0.5$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.39	152.0638	92.7590	69.3620	42.2799	18.3833	11.8305
0.4	155.2242	95.7157	71.8223	43.8947	19.3172	12.4515
0.41	158.3346	98.6810	74.3028	45.5225	20.2786	13.0934
0.42	161.3959	101.6550	76.8038	47.1628	21.2681	13.7570
0.43	164.4092	104.6376	79.3258	48.8153	22.2862	14.4427
0.44	167.3754	107.6289	81.8691	50.4794	23.3336	15.1514
0.45	170.2955	110.6289	84.4344	52.1547	24.4107	15.8837
0.46	173.1705	113.6376	87.0222	53.8410	25.5183	16.6404
0.47	176.0013	116.6549	89.6332	55.5377	26.6570	17.4224
0.48	178.7888	119.6811	92.2680	57.2447	27.8275	18.2305
0.49	181.5339	122.7160	94.9274	58.9615	29.0306	19.0658
0.5	184.2375	125.7597	97.6123	60.6879	30.2670	19.9293
0.51	186.9005	128.8122	100.3236	62.4236	31.5376	20.8220
0.52	189.5237	131.8736	103.0622	64.1683	32.8430	21.7452
0.53	192.1079	134.9438	105.8290	65.9217	34.1842	22.7002
0.54	194.6540	138.0228	108.6252	67.6835	35.5620	23.6883
0.55	197.1627	141.1105	111.4519	69.4536	36.9774	24.7109
0.56	199.6347	144.2069	114.3101	71.2318	38.4312	25.7696
0.57	202.0710	147.3119	117.2012	73.0177	39.9244	26.8661
0.58	204.4721	150.4253	120.1262	74.8112	41.4580	28.0021
0.59	206.8388	153.5471	123.0866	76.6122	43.0329	29.1795
0.6	209.1718	156.6771	126.0835	78.4203	44.6502	30.4003
0.61	211.4718	159.8149	129.1183	80.2355	46.3109	31.6667
0.62	213.7395	162.9605	132.1924	82.0575	48.0161	32.9808
0.63	215.9755	166.1134	135.3072	83.8862	49.7668	34.3451
0.64	218.1804	169.2735	138.4639	85.7214	51.5641	35.7622
0.65	220.3548	172.4402	141.6640	87.5631	53.4091	37.2347
0.66	222.4994	175.6133	144.9088	89.4109	55.3030	38.7657
0.67	224.6148	178.7922	148.1996	91.2649	57.2468	40.3580
0.68	226.7015	181.9764	151.5377	93.1248	59.2417	42.0149
0.69	228.7601	185.1655	154.9243	94.9906	61.2887	43.7398
0.7	230.7911	188.3588	158.3606	96.8622	63.3891	45.5363
0.71	232.7951	191.5556	161.8476	98.7393	65.5440	47.4081
0.72	234.7726	194.7553	165.3863	100.6219	67.7543	49.3593
0.73	236.7241	197.9570	168.9775	102.5099	70.0213	51.3939
0.74	238.6501	201.1601	172.6218	104.4032	72.3461	53.5163
0.75	240.5510	204.3637	176.3198	106.3017	74.7296	55.7310
0.76	242.4275	207.5668	180.0718	108.2052	77.1728	58.0426

Lampiran 10. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 0.25$ dan 0.5 (Lanjutan)

Lambda	$k = 0.25$			$k = 0.5$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.77	244.2798	210.7685	183.8778	110.1138	79.6769	60.4562
0.78	246.1085	213.9678	187.7377	112.0273	82.2427	62.9766
0.79	247.9140	217.1636	191.6509	113.9456	84.8711	65.6090
0.8	249.6968	220.3548	195.6167	115.8686	87.5631	68.3588
0.81	251.4572	223.5403	199.6340	117.7964	90.3192	71.2313
0.82	253.1957	226.7188	203.7013	119.7287	93.1404	74.2318
0.83	254.9127	229.8891	207.8167	121.6655	96.0272	77.3661
0.84	256.6085	233.0500	211.9780	123.6068	98.9802	80.6393
0.85	258.2835	236.2000	216.1823	125.5525	101.9998	84.0570
0.86	259.9382	239.3377	220.4266	127.5025	105.0865	87.6244
0.87	261.5728	242.4619	224.7072	129.4567	108.2404	91.3466
0.88	263.1878	245.5710	229.0199	131.4151	111.4618	95.2283
0.89	264.7835	248.6636	233.3601	133.3777	114.7506	99.2740
0.9	266.3602	251.7381	237.7227	135.3443	118.1066	103.4878
0.91	267.9182	254.7931	242.1021	137.3150	121.5297	107.8730
0.92	269.4579	257.8270	246.4923	139.2897	125.0193	112.4326
0.93	270.9796	260.8382	250.8868	141.2682	128.5750	117.1686
0.94	272.4836	263.8253	255.2788	143.2507	132.1958	122.0823
0.95	273.9702	266.7866	259.6609	145.2370	135.8810	127.1737
0.96	275.4397	269.7206	264.0257	147.2270	139.6293	132.4422
0.97	276.8924	272.6257	268.3653	149.2208	143.4394	137.8857
0.98	278.3286	275.5004	272.6717	151.2183	147.3098	143.5006
0.99	279.7486	278.3432	276.9369	153.2194	151.2387	149.2822

Lampiran 11. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 0.75$ dan 1

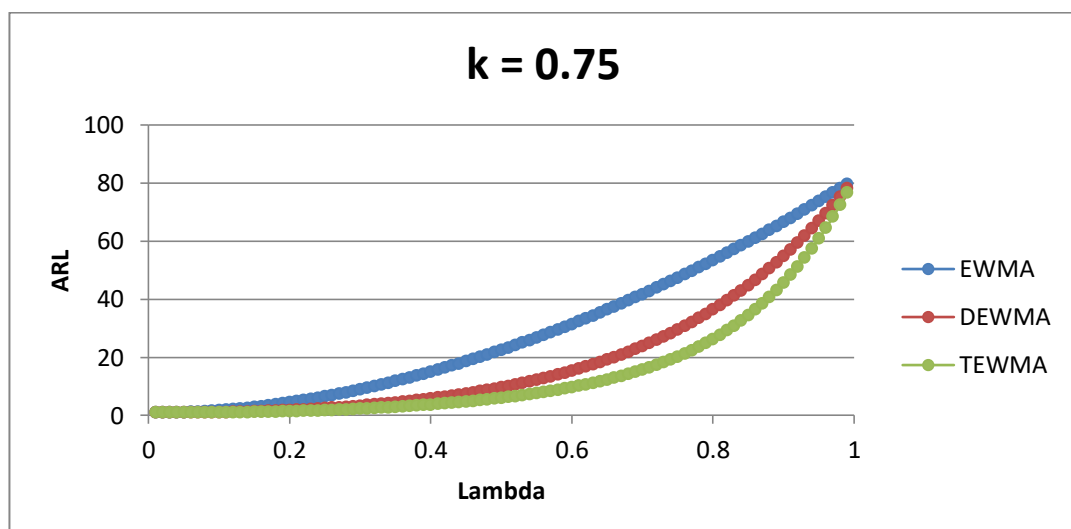
Lambda	$k = 0.75$			$k = 1$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.03	1.0010	1.0000	1.0000	1.0000	1.0000	1.0000
0.04	1.0124	1.0000	1.0000	1.0000	1.0000	1.0000
0.05	1.0483	1.0001	1.0000	1.0006	1.0000	1.0000
0.06	1.1148	1.0012	1.0000	1.0036	1.0000	1.0000
0.07	1.2108	1.0052	1.0003	1.0123	1.0000	1.0000
0.08	1.3335	1.0144	1.0014	1.0296	1.0000	1.0000
0.09	1.4805	1.0309	1.0042	1.0571	1.0002	1.0000
0.1	1.6499	1.0559	1.0099	1.0954	1.0008	1.0000
0.11	1.8405	1.0898	1.0196	1.1443	1.0022	1.0001
0.12	2.0514	1.1326	1.0339	1.2034	1.0049	1.0003
0.13	2.2819	1.1841	1.0535	1.2722	1.0095	1.0007
0.14	2.5316	1.2441	1.0784	1.3504	1.0164	1.0016
0.15	2.7999	1.3123	1.1089	1.4375	1.0262	1.0033
0.16	3.0867	1.3886	1.1449	1.5334	1.0392	1.0058
0.17	3.3916	1.4726	1.1863	1.6377	1.0555	1.0097
0.18	3.7143	1.5645	1.2330	1.7503	1.0754	1.0150
0.19	4.0547	1.6640	1.2850	1.8711	1.0988	1.0221
0.2	4.4125	1.7713	1.3422	2.0000	1.1259	1.0311
0.21	4.7876	1.8864	1.4046	2.1370	1.1567	1.0422
0.22	5.1796	2.0093	1.4721	2.2821	1.1912	1.0554
0.23	5.5885	2.1401	1.5448	2.4352	1.2294	1.0710
0.24	6.0141	2.2790	1.6227	2.5964	1.2713	1.0889
0.25	6.4562	2.4262	1.7058	2.7657	1.3170	1.1092
0.26	6.9146	2.5817	1.7942	2.9430	1.3665	1.1319
0.27	7.3892	2.7458	1.8880	3.1285	1.4197	1.1572
0.28	7.8798	2.9187	1.9873	3.3222	1.4769	1.1850
0.29	8.3863	3.1006	2.0922	3.5241	1.5381	1.2153
0.3	8.9085	3.2918	2.2029	3.7343	1.6033	1.2482
0.31	9.4463	3.4925	2.3195	3.9528	1.6726	1.2838
0.32	9.9996	3.7029	2.4421	4.1797	1.7462	1.3220
0.33	10.5682	3.9235	2.5710	4.4150	1.8243	1.3630
0.34	11.1519	4.1544	2.7063	4.6588	1.9068	1.4068
0.35	11.7508	4.3960	2.8482	4.9111	1.9940	1.4535
0.36	12.3646	4.6487	2.9971	5.1720	2.0861	1.5031
0.37	12.9934	4.9128	3.1530	5.4416	2.1831	1.5558
0.38	13.6368	5.1886	3.3163	5.7199	2.2854	1.6117

Lampiran 11. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 0.75$ dan 1 (Lanjutan)

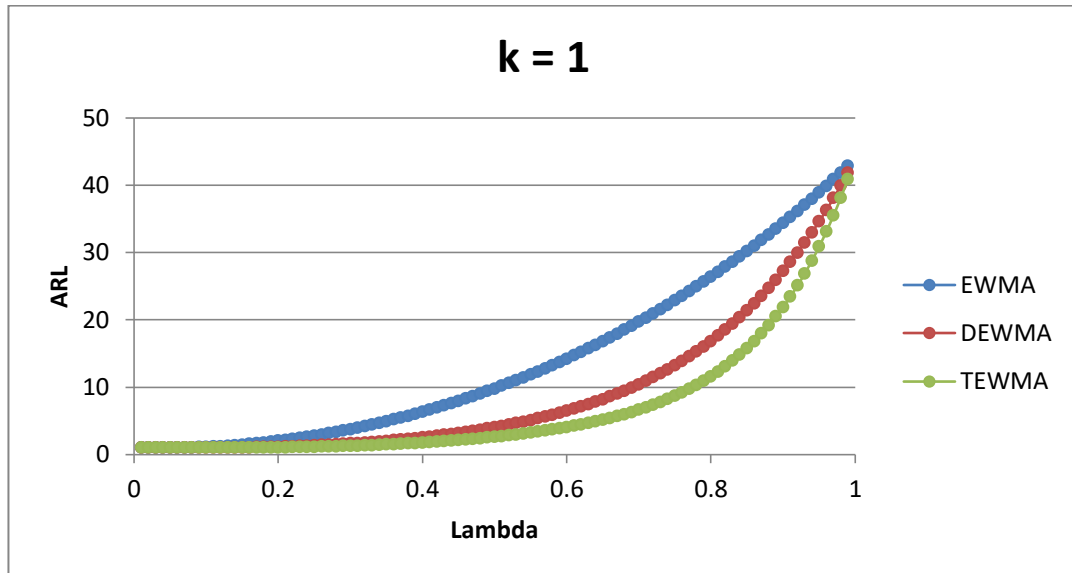
Lambda	$k = 0.75$			$k = 1$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.39	14.2950	5.4766	3.4873	6.0070	2.3931	1.6708
0.4	14.9677	5.7773	3.6662	6.3030	2.5065	1.7333
0.41	15.6549	6.0909	3.8534	6.6078	2.6257	1.7994
0.42	16.3565	6.4181	4.0493	6.9217	2.7510	1.8691
0.43	17.0725	6.7592	4.2541	7.2446	2.8827	1.9427
0.44	17.8027	7.1147	4.4683	7.5767	3.0210	2.0203
0.45	18.5471	7.4853	4.6923	7.9179	3.1663	2.1020
0.46	19.3057	7.8714	4.9266	8.2684	3.3189	2.1883
0.47	20.0783	8.2736	5.1716	8.6283	3.4790	2.2791
0.48	20.8650	8.6926	5.4279	8.9976	3.6472	2.3748
0.49	21.6656	9.1289	5.6960	9.3764	3.8236	2.4757
0.5	22.4802	9.5832	5.9765	9.7648	4.0088	2.5821
0.51	23.3086	10.0562	6.2700	10.1628	4.2030	2.6942
0.52	24.1510	10.5487	6.5773	10.5706	4.4069	2.8124
0.53	25.0072	11.0613	6.8991	10.9882	4.6208	2.9370
0.54	25.8772	11.5949	7.2362	11.4158	4.8452	3.0685
0.55	26.7609	12.1503	7.5894	11.8533	5.0807	3.2074
0.56	27.6585	12.7284	7.9597	12.3010	5.3277	3.3540
0.57	28.5698	13.3300	8.3481	12.7589	5.5869	3.5088
0.58	29.4949	13.9560	8.7555	13.2270	5.8589	3.6725
0.59	30.4337	14.6076	9.1833	13.7056	6.1442	3.8457
0.6	31.3863	15.2855	9.6325	14.1946	6.4436	4.0290
0.61	32.3526	15.9910	10.1046	14.6942	6.7579	4.2230
0.62	33.3327	16.7251	10.6010	15.2046	7.0876	4.4287
0.63	34.3265	17.4889	11.1233	15.7257	7.4336	4.6468
0.64	35.3342	18.2836	11.6730	16.2578	7.7968	4.8782
0.65	36.3556	19.1105	12.2521	16.8008	8.1780	5.1240
0.66	37.3909	19.9708	12.8624	17.3551	8.5781	5.3853
0.67	38.4400	20.8659	13.5061	17.9206	8.9980	5.6632
0.68	39.5030	21.7971	14.1854	18.4975	9.4389	5.9591
0.69	40.5800	22.7659	14.9028	19.0859	9.9017	6.2743
0.7	41.6709	23.7736	15.6608	19.6859	10.3875	6.6104
0.71	42.7758	24.8219	16.4622	20.2978	10.8976	6.9692
0.72	43.8947	25.9123	17.3102	20.9215	11.4331	7.3524
0.73	45.0277	27.0464	18.2079	21.5573	11.9954	7.7621
0.74	46.1749	28.2259	19.1589	22.2053	12.5857	8.2004
0.75	47.3362	29.4525	20.1669	22.8656	13.2055	8.6697
0.76	48.5118	30.7280	21.2359	23.5384	13.8563	9.1727

Lampiran 11. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 0.75$ dan 1 (Lanjutan)

Lambda	$k = 0.75$			$k = 1$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.77	49.7017	32.0542	22.3703	24.2238	14.5396	9.7122
0.78	50.9060	33.4329	23.5746	24.9220	15.2569	10.2912
0.79	52.1248	34.8661	24.8538	25.6332	16.0101	10.9132
0.8	53.3581	36.3556	26.2132	26.3575	16.8008	11.5817
0.81	54.6060	37.9036	27.6582	27.0951	17.6310	12.3009
0.82	55.8685	39.5120	29.1950	27.8462	18.5024	13.0749
0.83	57.1458	41.1829	30.8297	28.6108	19.4170	13.9084
0.84	58.4380	42.9183	32.5690	29.3894	20.3770	14.8066
0.85	59.7451	44.7205	34.4199	30.1819	21.3845	15.7748
0.86	61.0672	46.5916	36.3898	30.9886	22.4417	16.8191
0.87	62.4045	48.5337	38.4865	31.8097	23.5509	17.9457
0.88	63.7570	50.5490	40.7179	32.6455	24.7145	19.1615
0.89	65.1248	52.6396	43.0925	33.4960	25.9350	20.4739
0.9	66.5080	54.8079	45.6188	34.3616	27.2149	21.8907
0.91	67.9068	57.0559	48.3059	35.2424	28.5568	23.4202
0.92	69.3213	59.3857	51.1626	36.1387	29.9635	25.0714
0.93	70.7515	61.7996	54.1983	37.0506	31.4377	26.8536
0.94	72.1976	64.2996	57.4222	37.9786	32.9823	28.7769
0.95	73.6598	66.8877	60.8435	38.9226	34.6001	30.8518
0.96	75.1381	69.5658	64.4712	39.8831	36.2942	33.0890
0.97	76.6328	72.3360	68.3142	40.8603	38.0676	35.5000
0.98	78.1438	75.1999	72.3809	41.8545	39.9234	38.0965
0.99	79.6714	78.1593	76.6790	42.8658	41.8647	40.8907



Lampiran 11. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 0.75$ dan 1 (Lanjutan)



Lampiran 12. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 1.25$ dan 1.5

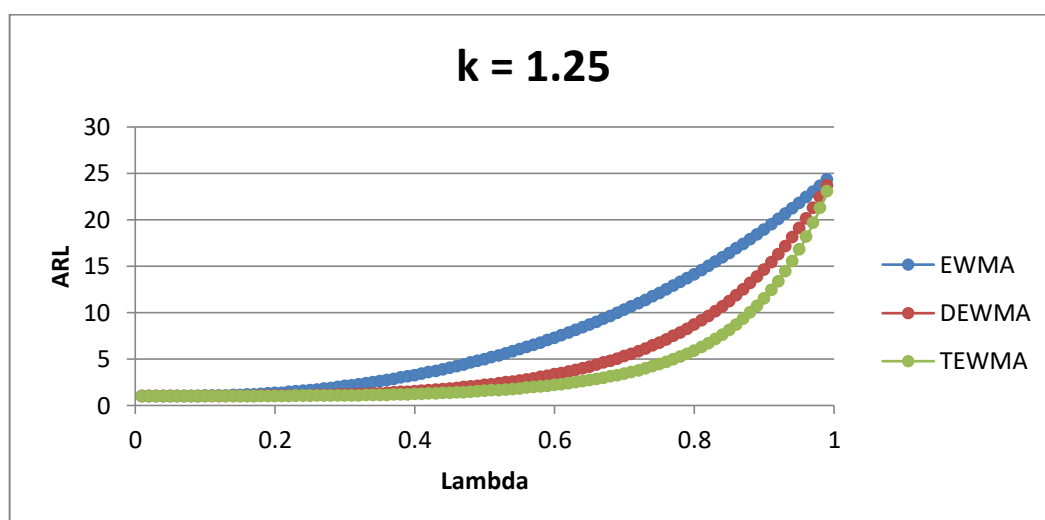
Lambda	$k = 1.25$			$k = 1.5$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.03	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.04	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.05	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.06	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.07	1.0002	1.0000	1.0000	1.0000	1.0000	1.0000
0.08	1.0009	1.0000	1.0000	1.0000	1.0000	1.0000
0.09	1.0029	1.0000	1.0000	1.0000	1.0000	1.0000
0.1	1.0072	1.0000	1.0000	1.0002	1.0000	1.0000
0.11	1.0148	1.0000	1.0000	1.0006	1.0000	1.0000
0.12	1.0264	1.0000	1.0000	1.0017	1.0000	1.0000
0.13	1.0426	1.0001	1.0000	1.0036	1.0000	1.0000
0.14	1.0636	1.0003	1.0000	1.0069	1.0000	1.0000
0.15	1.0897	1.0007	1.0000	1.0118	1.0000	1.0000
0.16	1.1207	1.0015	1.0000	1.0188	1.0000	1.0000
0.17	1.1566	1.0028	1.0001	1.0281	1.0000	1.0000
0.18	1.1974	1.0048	1.0003	1.0399	1.0001	1.0000
0.19	1.2429	1.0077	1.0005	1.0544	1.0002	1.0000
0.2	1.2930	1.0117	1.0010	1.0716	1.0004	1.0000
0.21	1.3478	1.0170	1.0017	1.0916	1.0008	1.0000
0.22	1.4070	1.0238	1.0028	1.1144	1.0014	1.0000
0.23	1.4706	1.0322	1.0043	1.1400	1.0023	1.0001
0.24	1.5387	1.0424	1.0064	1.1684	1.0036	1.0002
0.25	1.6112	1.0543	1.0091	1.1996	1.0053	1.0003
0.26	1.6881	1.0683	1.0127	1.2335	1.0077	1.0005
0.27	1.7694	1.0842	1.0171	1.2702	1.0107	1.0008
0.28	1.8550	1.1021	1.0225	1.3097	1.0145	1.0013
0.29	1.9451	1.1223	1.0290	1.3519	1.0192	1.0019
0.3	2.0397	1.1445	1.0367	1.3968	1.0249	1.0028
0.31	2.1388	1.1691	1.0455	1.4445	1.0316	1.0040
0.32	2.2424	1.1959	1.0557	1.4949	1.0395	1.0055
0.33	2.3506	1.2251	1.0673	1.5481	1.0486	1.0075
0.34	2.4634	1.2566	1.0802	1.6041	1.0590	1.0099
0.35	2.5809	1.2907	1.0947	1.6629	1.0708	1.0129
0.36	2.7032	1.3273	1.1107	1.7245	1.0840	1.0164
0.37	2.8303	1.3665	1.1282	1.7890	1.0987	1.0207
0.38	2.9622	1.4084	1.1475	1.8564	1.1149	1.0256

Lampiran 12. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 1.25$ dan 1.5 (Lanjutan)

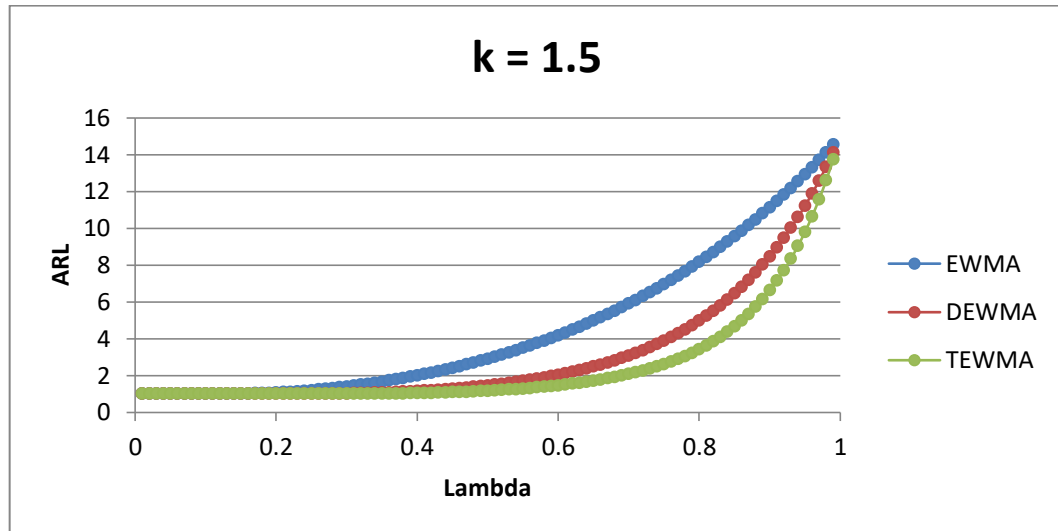
Lambda	$k = 1.25$			$k = 1.5$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.39	3.0992	1.4530	1.1684	1.9267	1.1328	1.0314
0.4	3.2411	1.5006	1.1911	2.0000	1.1524	1.0380
0.41	3.3881	1.5512	1.2157	2.0763	1.1737	1.0456
0.42	3.5403	1.6049	1.2421	2.1557	1.1968	1.0541
0.43	3.6977	1.6618	1.2706	2.2382	1.2218	1.0637
0.44	3.8605	1.7222	1.3010	2.3239	1.2488	1.0744
0.45	4.0287	1.7860	1.3337	2.4128	1.2778	1.0863
0.46	4.2023	1.8535	1.3685	2.5051	1.3090	1.0995
0.47	4.3815	1.9250	1.4057	2.6006	1.3424	1.1139
0.48	4.5664	2.0004	1.4454	2.6996	1.3781	1.1297
0.49	4.7570	2.0801	1.4877	2.8021	1.4162	1.1470
0.5	4.9535	2.1643	1.5326	2.9081	1.4569	1.1658
0.51	5.1559	2.2531	1.5805	3.0177	1.5002	1.1862
0.52	5.3643	2.3468	1.6314	3.1310	1.5463	1.2084
0.53	5.5789	2.4458	1.6855	3.2481	1.5953	1.2324
0.54	5.7997	2.5502	1.7430	3.3690	1.6475	1.2582
0.55	6.0268	2.6603	1.8041	3.4938	1.7029	1.2862
0.56	6.2603	2.7765	1.8691	3.6227	1.7617	1.3163
0.57	6.5003	2.8991	1.9383	3.7556	1.8241	1.3487
0.58	6.7470	3.0284	2.0118	3.8927	1.8903	1.3835
0.59	7.0005	3.1649	2.0901	4.0340	1.9606	1.4210
0.6	7.2608	3.3088	2.1735	4.1797	2.0351	1.4613
0.61	7.5280	3.4608	2.2622	4.3298	2.1142	1.5047
0.62	7.8024	3.6211	2.3569	4.4845	2.1980	1.5513
0.63	8.0840	3.7903	2.4578	4.6438	2.2869	1.6013
0.64	8.3729	3.9689	2.5656	4.8078	2.3812	1.6552
0.65	8.6692	4.1574	2.6806	4.9766	2.4812	1.7131
0.66	8.9731	4.3565	2.8037	5.1504	2.5872	1.7755
0.67	9.2848	4.5666	2.9353	5.3292	2.6997	1.8426
0.68	9.6043	4.7886	3.0762	5.5132	2.8191	1.9149
0.69	9.9317	5.0230	3.2273	5.7024	2.9457	1.9929
0.7	10.2673	5.2706	3.3894	5.8971	3.0800	2.0770
0.71	10.6111	5.5322	3.5634	6.0972	3.2226	2.1678
0.72	10.9634	5.8087	3.7505	6.3030	3.3739	2.2660
0.73	11.3242	6.1007	3.9518	6.5145	3.5346	2.3721
0.74	11.6937	6.4094	4.1685	6.7319	3.7052	2.4871
0.75	12.0720	6.7357	4.4022	6.9553	3.8864	2.6117
0.76	12.4594	7.0806	4.6544	7.1848	4.0788	2.7469

Lampiran 12. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 1.25$ dan 1.5 (Lanjutan)

Lambda	$k = 1.25$			$k = 1.5$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.77	12.8559	7.4452	4.9269	7.4206	4.2832	2.8937
0.78	13.2618	7.8306	5.2214	7.6629	4.5004	3.0533
0.79	13.6773	8.2382	5.5403	7.9117	4.7313	3.2270
0.8	14.1024	8.6692	5.8857	8.1673	4.9766	3.4162
0.81	14.5374	9.1250	6.2602	8.4298	5.2374	3.6226
0.82	14.9824	9.6070	6.6667	8.6993	5.5148	3.8480
0.83	15.4377	10.1167	7.1083	8.9760	5.8096	4.0943
0.84	15.9035	10.6558	7.5883	9.2601	6.1233	4.3638
0.85	16.3799	11.2260	8.1106	9.5517	6.4568	4.6589
0.86	16.8671	11.8289	8.6792	9.8511	6.8116	4.9823
0.87	17.3654	12.4666	9.2987	10.1584	7.1891	5.3372
0.88	17.8750	13.1410	9.9739	10.4738	7.5907	5.7269
0.89	18.3961	13.8542	10.7104	10.7974	8.0180	6.1551
0.9	18.9289	14.6082	11.5140	11.1296	8.4726	6.6261
0.91	19.4736	15.4055	12.3912	11.4705	8.9564	7.1443
0.92	20.0306	16.2484	13.3489	11.8203	9.4711	7.7150
0.93	20.6000	17.1394	14.3947	12.1793	10.0188	8.3436
0.94	21.1821	18.0810	15.5369	12.5476	10.6016	9.0364
0.95	21.7771	19.0761	16.7843	12.9255	11.2217	9.8001
0.96	22.3854	20.1275	18.1464	13.3132	11.8813	10.6422
0.97	23.0072	21.2381	19.6334	13.7111	12.5831	11.5708
0.98	23.6427	22.4110	21.2563	14.1193	13.3296	12.5946
0.99	24.2924	23.6493	23.0265	14.5380	14.1235	13.7235



Lampiran 12. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 1.25$ dan 1.5 (Lanjutan)



Lampiran 13. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 1.75$ dan 2

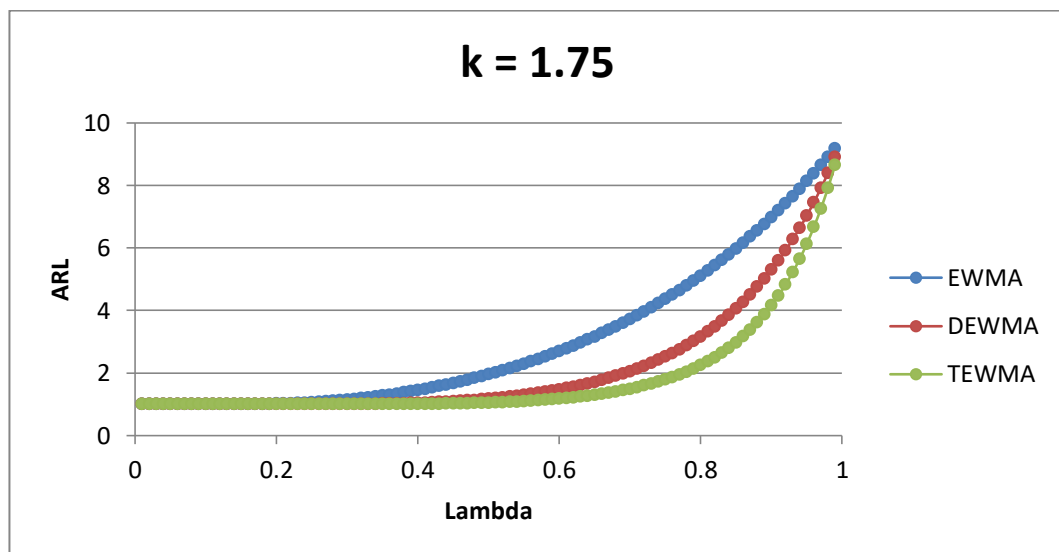
Lambda	$k = 1.75$			$k = 2$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.01	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.02	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.03	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.04	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.05	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.06	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.07	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.08	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.09	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.12	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.13	1.0001	1.0000	1.0000	1.0000	1.0000	1.0000
0.14	1.0004	1.0000	1.0000	1.0000	1.0000	1.0000
0.15	1.0008	1.0000	1.0000	1.0000	1.0000	1.0000
0.16	1.0017	1.0000	1.0000	1.0001	1.0000	1.0000
0.17	1.0031	1.0000	1.0000	1.0002	1.0000	1.0000
0.18	1.0052	1.0000	1.0000	1.0004	1.0000	1.0000
0.19	1.0082	1.0000	1.0000	1.0008	1.0000	1.0000
0.2	1.0124	1.0000	1.0000	1.0014	1.0000	1.0000
0.21	1.0178	1.0000	1.0000	1.0023	1.0000	1.0000
0.22	1.0246	1.0000	1.0000	1.0036	1.0000	1.0000
0.23	1.0329	1.0001	1.0000	1.0054	1.0000	1.0000
0.24	1.0428	1.0001	1.0000	1.0079	1.0000	1.0000
0.25	1.0543	1.0002	1.0000	1.0111	1.0000	1.0000
0.26	1.0676	1.0004	1.0000	1.0151	1.0000	1.0000
0.27	1.0827	1.0007	1.0000	1.0200	1.0000	1.0000
0.28	1.0996	1.0011	1.0000	1.0258	1.0000	1.0000
0.29	1.1182	1.0017	1.0001	1.0327	1.0001	1.0000
0.3	1.1387	1.0025	1.0001	1.0407	1.0001	1.0000
0.31	1.1611	1.0037	1.0002	1.0499	1.0002	1.0000
0.32	1.1853	1.0051	1.0003	1.0602	1.0004	1.0000
0.33	1.2113	1.0070	1.0004	1.0717	1.0006	1.0000
0.34	1.2392	1.0093	1.0006	1.0845	1.0009	1.0000
0.35	1.2690	1.0122	1.0009	1.0986	1.0013	1.0000
0.36	1.3006	1.0156	1.0014	1.1139	1.0019	1.0001
0.37	1.3341	1.0198	1.0019	1.1306	1.0026	1.0001
0.38	1.3696	1.0247	1.0027	1.1486	1.0036	1.0002

Lampiran 13. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 1.75$ dan 2 (Lanjutan)

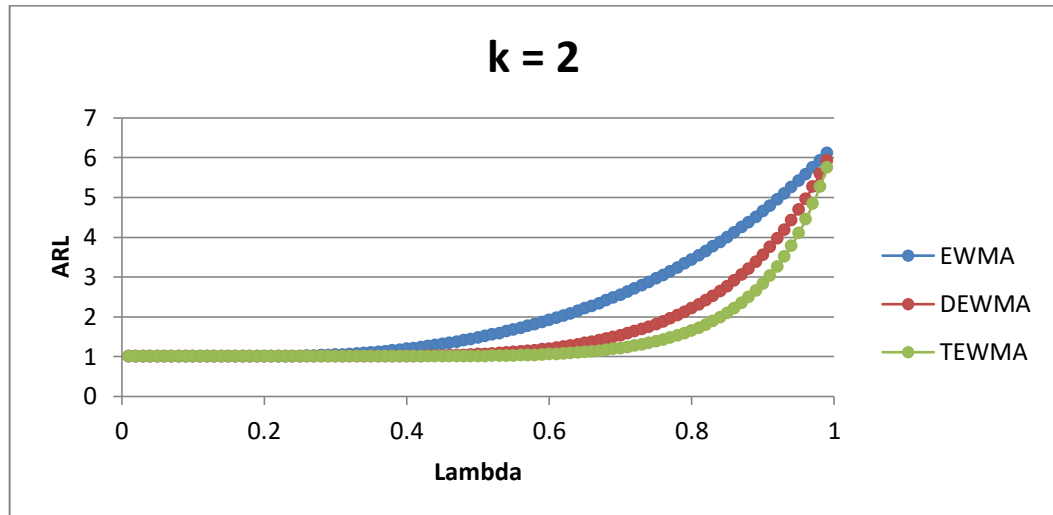
Lambda	$k = 1.75$			$k = 2$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.39	1.4069	1.0305	1.0036	1.1679	1.0049	1.0002
0.4	1.4462	1.0371	1.0048	1.1886	1.0065	1.0004
0.41	1.4875	1.0447	1.0063	1.2106	1.0084	1.0005
0.42	1.5307	1.0533	1.0082	1.2341	1.0108	1.0007
0.43	1.5759	1.0630	1.0104	1.2589	1.0136	1.0011
0.44	1.6232	1.0738	1.0131	1.2851	1.0170	1.0015
0.45	1.6726	1.0859	1.0163	1.3128	1.0211	1.0020
0.46	1.7240	1.0993	1.0200	1.3419	1.0257	1.0027
0.47	1.7776	1.1140	1.0244	1.3725	1.0311	1.0036
0.48	1.8334	1.1301	1.0295	1.4046	1.0373	1.0047
0.49	1.8914	1.1478	1.0352	1.4382	1.0444	1.0060
0.5	1.9516	1.1670	1.0418	1.4734	1.0523	1.0077
0.51	2.0141	1.1878	1.0493	1.5101	1.0613	1.0097
0.52	2.0790	1.2104	1.0577	1.5484	1.0713	1.0121
0.53	2.1463	1.2348	1.0672	1.5883	1.0825	1.0149
0.54	2.2160	1.2611	1.0777	1.6299	1.0948	1.0183
0.55	2.2883	1.2894	1.0894	1.6731	1.1085	1.0223
0.56	2.3630	1.3199	1.1024	1.7181	1.1234	1.0269
0.57	2.4404	1.3525	1.1168	1.7648	1.1399	1.0322
0.58	2.5205	1.3875	1.1326	1.8133	1.1578	1.0383
0.59	2.6033	1.4250	1.1500	1.8637	1.1774	1.0453
0.6	2.6889	1.4652	1.1691	1.9159	1.1987	1.0532
0.61	2.7774	1.5080	1.1900	1.9700	1.2217	1.0622
0.62	2.8688	1.5538	1.2128	2.0261	1.2467	1.0724
0.63	2.9632	1.6028	1.2378	2.0843	1.2737	1.0839
0.64	3.0606	1.6550	1.2650	2.1445	1.3029	1.0967
0.65	3.1612	1.7107	1.2947	2.2067	1.3344	1.1110
0.66	3.2651	1.7701	1.3271	2.2712	1.3682	1.1270
0.67	3.3722	1.8335	1.3623	2.3379	1.4047	1.1448
0.68	3.4828	1.9010	1.4006	2.4069	1.4438	1.1646
0.69	3.5968	1.9730	1.4424	2.4782	1.4859	1.1865
0.7	3.7143	2.0498	1.4878	2.5519	1.5311	1.2108
0.71	3.8356	2.1316	1.5373	2.6281	1.5796	1.2377
0.72	3.9605	2.2189	1.5912	2.7068	1.6316	1.2673
0.73	4.0893	2.3119	1.6499	2.7881	1.6873	1.3001
0.74	4.2220	2.4111	1.7140	2.8721	1.7470	1.3362
0.75	4.3588	2.5168	1.7838	2.9588	1.8111	1.3761
0.76	4.4997	2.6296	1.8601	3.0484	1.8797	1.4201

Lampiran 13. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 1.75$ dan 2 (Lanjutan)

Lambda	$k = 1.75$			$k = 2$		
	EWMA	DEWMA	TEWMA	EWMA	DEWMA	TEWMA
0.77	4.6449	2.7499	1.9434	3.1409	1.9532	1.4686
0.78	4.7945	2.8782	2.0345	3.2364	2.0319	1.5221
0.79	4.9485	3.0151	2.1342	3.3349	2.1163	1.5811
0.8	5.1071	3.1612	2.2433	3.4366	2.2067	1.6462
0.81	5.2704	3.3172	2.3630	3.5416	2.3036	1.7181
0.82	5.4386	3.4837	2.4944	3.6499	2.4075	1.7975
0.83	5.6117	3.6615	2.6387	3.7616	2.5187	1.8852
0.84	5.7900	3.8514	2.7974	3.8769	2.6380	1.9823
0.85	5.9735	4.0542	2.9721	3.9959	2.7659	2.0898
0.86	6.1624	4.2709	3.1646	4.1186	2.9030	2.2089
0.87	6.3569	4.5024	3.3770	4.2452	3.0501	2.3409
0.88	6.5570	4.7498	3.6115	4.3758	3.2079	2.4874
0.89	6.7630	5.0143	3.8707	4.5105	3.3771	2.6502
0.9	6.9750	5.2971	4.1574	4.6494	3.5587	2.8312
0.91	7.1931	5.5995	4.4749	4.7927	3.7537	3.0326
0.92	7.4176	5.9227	4.8267	4.9405	3.9629	3.2569
0.93	7.6487	6.2685	5.2167	5.0930	4.1876	3.5071
0.94	7.8864	6.6383	5.6496	5.2502	4.4289	3.7861
0.95	8.1311	7.0338	6.1302	5.4124	4.6880	4.0977
0.96	8.3829	7.4569	6.6641	5.5797	4.9664	4.4458
0.97	8.6419	7.9094	7.2574	5.7522	5.2654	4.8350
0.98	8.9085	8.3935	7.9169	5.9301	5.5867	5.2704
0.99	9.1829	8.9113	8.6500	6.1137	5.9320	5.7576



Lampiran 13. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 1.75$ dan 2 (Lanjutan)



Lampiran 14. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMAuntuk $k = 3$

	$k = 3$		
Lambda	EWMA	DEWMA	TEWMA
0.01	1.0000	1.0000	1.0000
0.02	1.0000	1.0000	1.0000
0.03	1.0000	1.0000	1.0000
0.04	1.0000	1.0000	1.0000
0.05	1.0000	1.0000	1.0000
0.06	1.0000	1.0000	1.0000
0.07	1.0000	1.0000	1.0000
0.08	1.0000	1.0000	1.0000
0.09	1.0000	1.0000	1.0000
0.1	1.0000	1.0000	1.0000
0.11	1.0000	1.0000	1.0000
0.12	1.0000	1.0000	1.0000
0.13	1.0000	1.0000	1.0000
0.14	1.0000	1.0000	1.0000
0.15	1.0000	1.0000	1.0000
0.16	1.0000	1.0000	1.0000
0.17	1.0000	1.0000	1.0000
0.18	1.0000	1.0000	1.0000
0.19	1.0000	1.0000	1.0000
0.2	1.0000	1.0000	1.0000
0.21	1.0000	1.0000	1.0000
0.22	1.0000	1.0000	1.0000
0.23	1.0000	1.0000	1.0000
0.24	1.0000	1.0000	1.0000
0.25	1.0000	1.0000	1.0000
0.26	1.0000	1.0000	1.0000
0.27	1.0000	1.0000	1.0000
0.28	1.0000	1.0000	1.0000
0.29	1.0000	1.0000	1.0000
0.3	1.0000	1.0000	1.0000
0.31	1.0000	1.0000	1.0000
0.32	1.0001	1.0000	1.0000
0.33	1.0001	1.0000	1.0000
0.34	1.0001	1.0000	1.0000
0.35	1.0002	1.0000	1.0000
0.36	1.0003	1.0000	1.0000
0.37	1.0005	1.0000	1.0000
0.38	1.0007	1.0000	1.0000

Lampiran 14. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA
untuk $k = 3$ (Lanjutan)

	$k = 3$		
Lambda	EWMA	DEWMA	TEWMA
0.39	1.0010	1.0000	1.0000
0.4	1.0014	1.0000	1.0000
0.41	1.0018	1.0000	1.0000
0.42	1.0024	1.0000	1.0000
0.43	1.0032	1.0000	1.0000
0.44	1.0041	1.0000	1.0000
0.45	1.0051	1.0000	1.0000
0.46	1.0064	1.0000	1.0000
0.47	1.0080	1.0000	1.0000
0.48	1.0098	1.0000	1.0000
0.49	1.0119	1.0000	1.0000
0.5	1.0142	1.0000	1.0000
0.51	1.0170	1.0001	1.0000
0.52	1.0200	1.0001	1.0000
0.53	1.0235	1.0001	1.0000
0.54	1.0274	1.0002	1.0000
0.55	1.0316	1.0003	1.0000
0.56	1.0364	1.0004	1.0000
0.57	1.0416	1.0006	1.0000
0.58	1.0473	1.0008	1.0000
0.59	1.0535	1.0011	1.0000
0.6	1.0602	1.0016	1.0000
0.61	1.0674	1.0021	1.0001
0.62	1.0753	1.0028	1.0001
0.63	1.0837	1.0036	1.0001
0.64	1.0927	1.0047	1.0002
0.65	1.1023	1.0061	1.0003
0.66	1.1126	1.0078	1.0005
0.67	1.1235	1.0098	1.0007
0.68	1.1351	1.0122	1.0009
0.69	1.1474	1.0151	1.0013
0.7	1.1604	1.0186	1.0018
0.71	1.1741	1.0227	1.0025
0.72	1.1886	1.0275	1.0034
0.73	1.2038	1.0331	1.0046
0.74	1.2198	1.0396	1.0062
0.75	1.2366	1.0470	1.0082
0.76	1.2542	1.0555	1.0107

Lampiran 14. Perbandingan ARL Peta Kendali EWMA, DEWMA dan TEWMA untuk $k = 3$ (Lanjutan)

	$k = 3$		
Lambda	EWMA	DEWMA	TEWMA
0.77	1.2727	1.0652	1.0139
0.78	1.2921	1.0761	1.0179
0.79	1.3123	1.0885	1.0229
0.8	1.3335	1.1023	1.0289
0.81	1.3556	1.1179	1.0364
0.82	1.3787	1.1352	1.0454
0.83	1.4027	1.1545	1.0562
0.84	1.4279	1.1759	1.0691
0.85	1.4540	1.1996	1.0845
0.86	1.4813	1.2258	1.1027
0.87	1.5097	1.2546	1.1240
0.88	1.5392	1.2863	1.1490
0.89	1.5700	1.3211	1.1781
0.9	1.6020	1.3592	1.2120
0.91	1.6352	1.4010	1.2511
0.92	1.6698	1.4467	1.2963
0.93	1.7058	1.4967	1.3483
0.94	1.7431	1.5513	1.4080
0.95	1.7820	1.6109	1.4766
0.96	1.8223	1.6759	1.5552
0.97	1.8642	1.7468	1.6451
0.98	1.9078	1.8240	1.7480
0.99	1.9530	1.9082	1.8656

