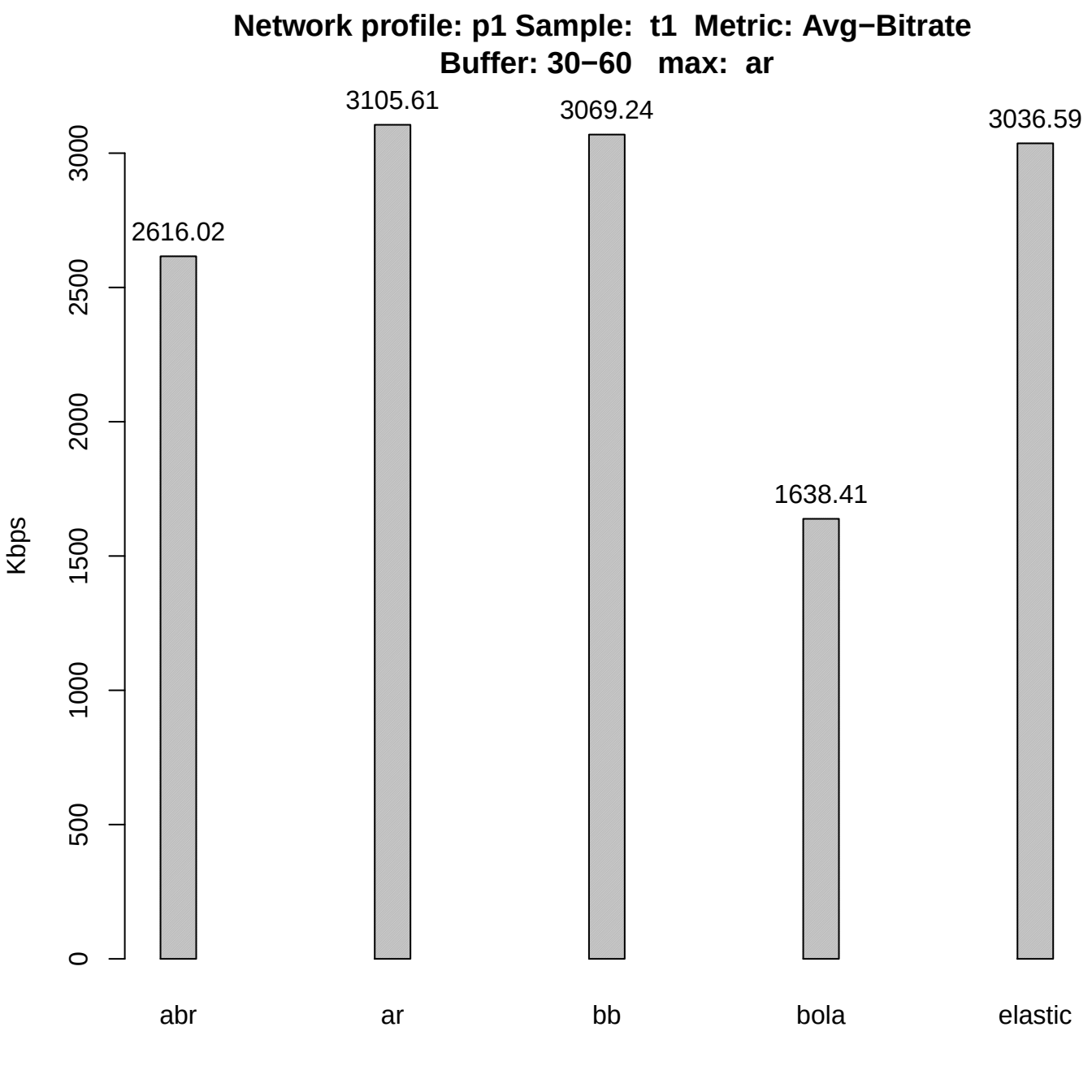
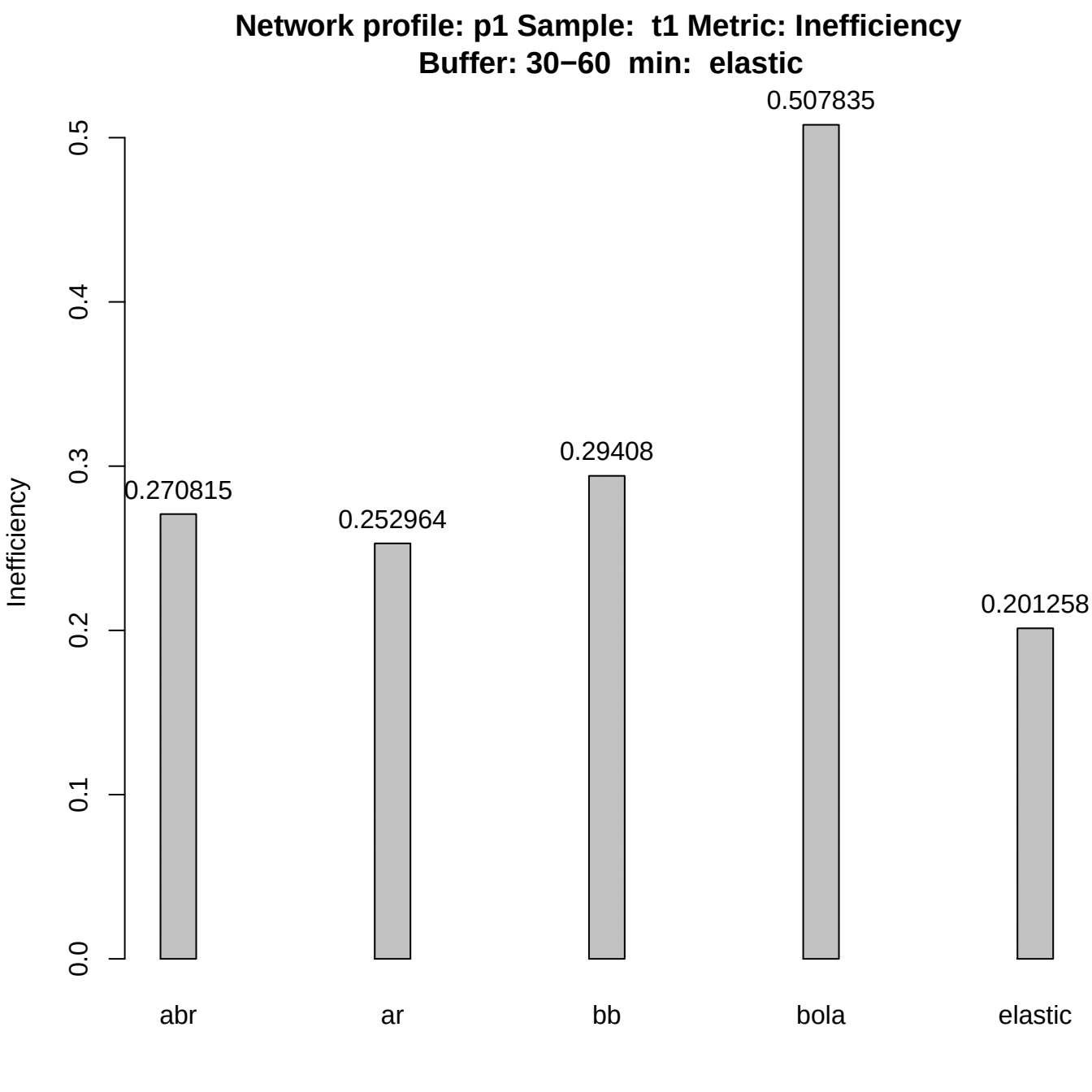
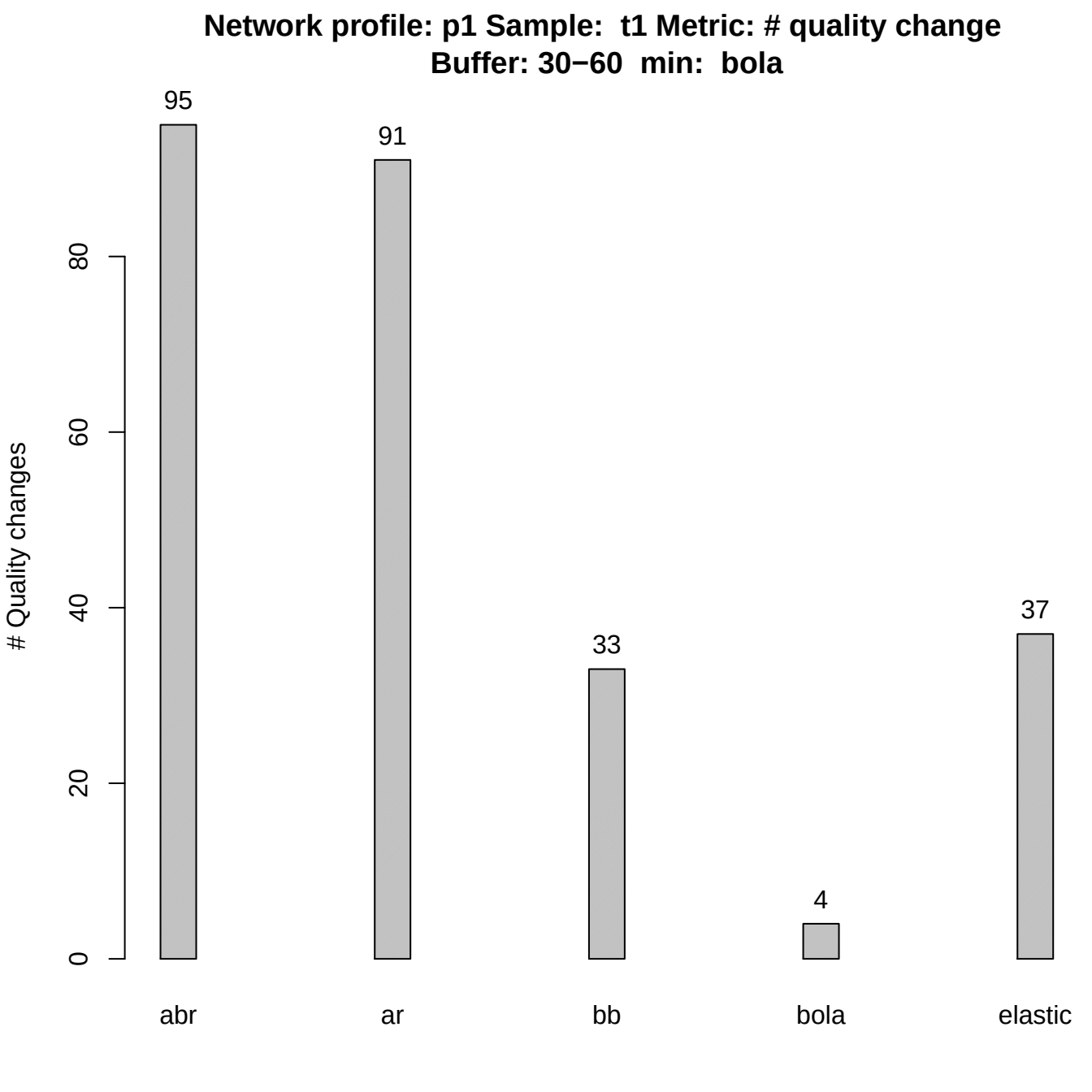
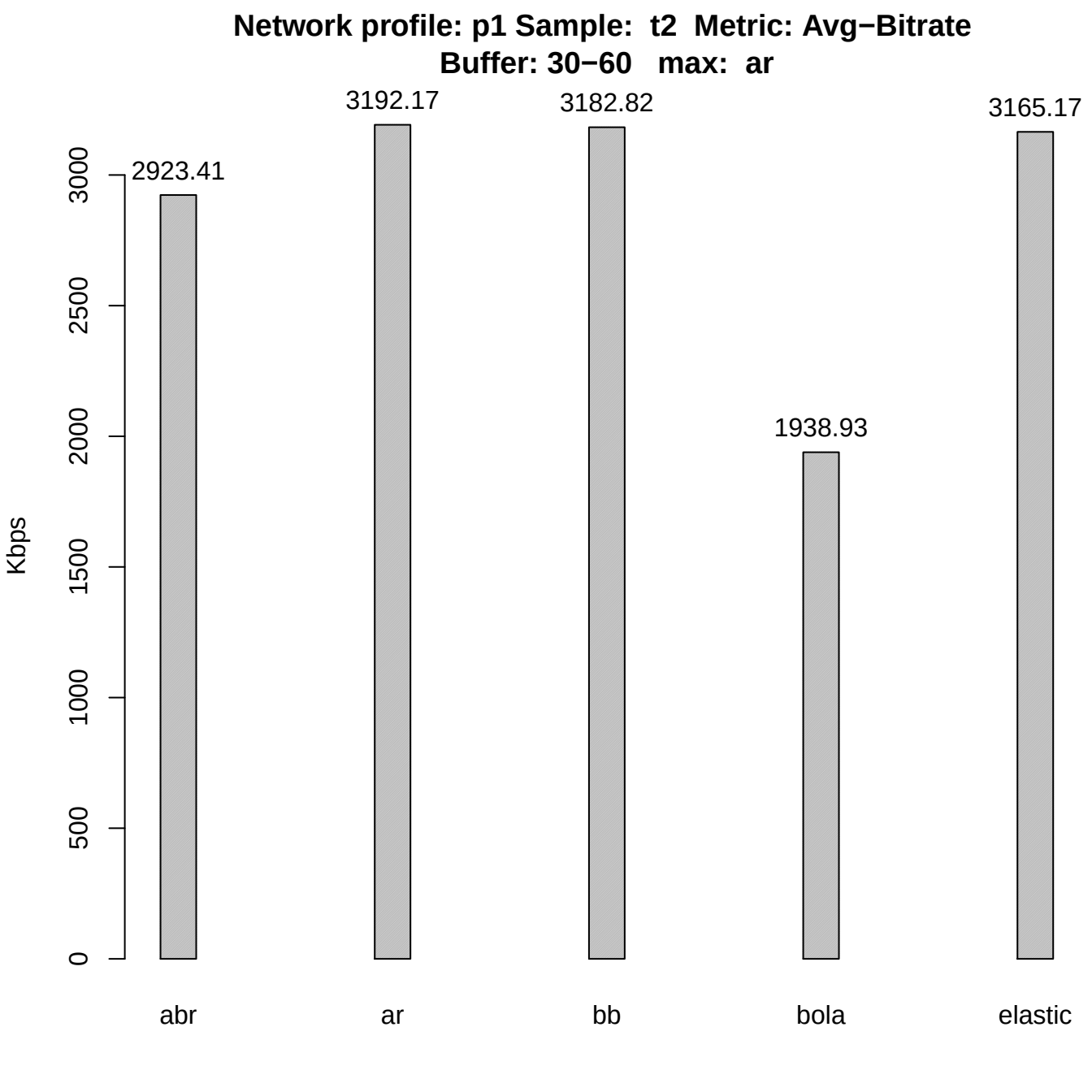
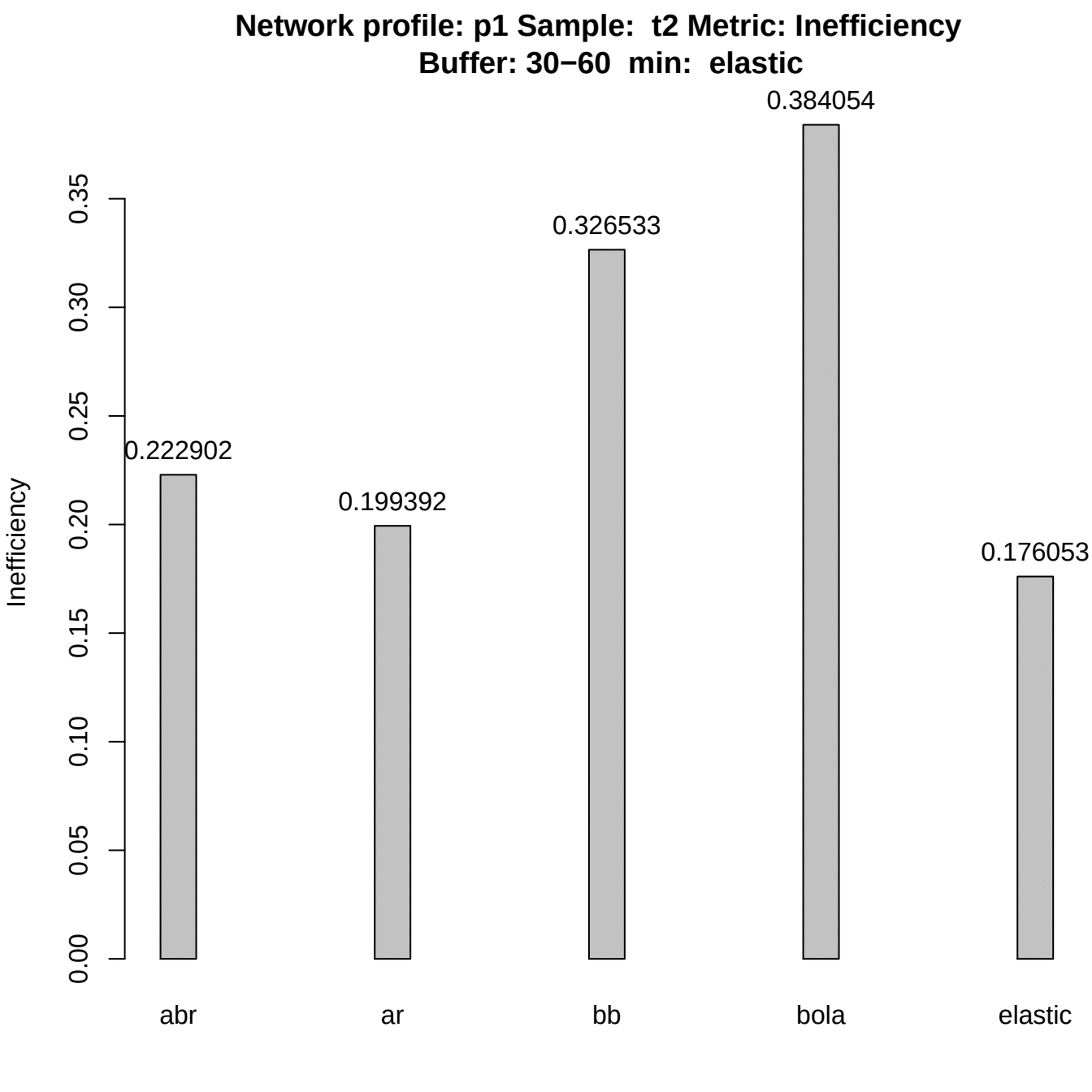
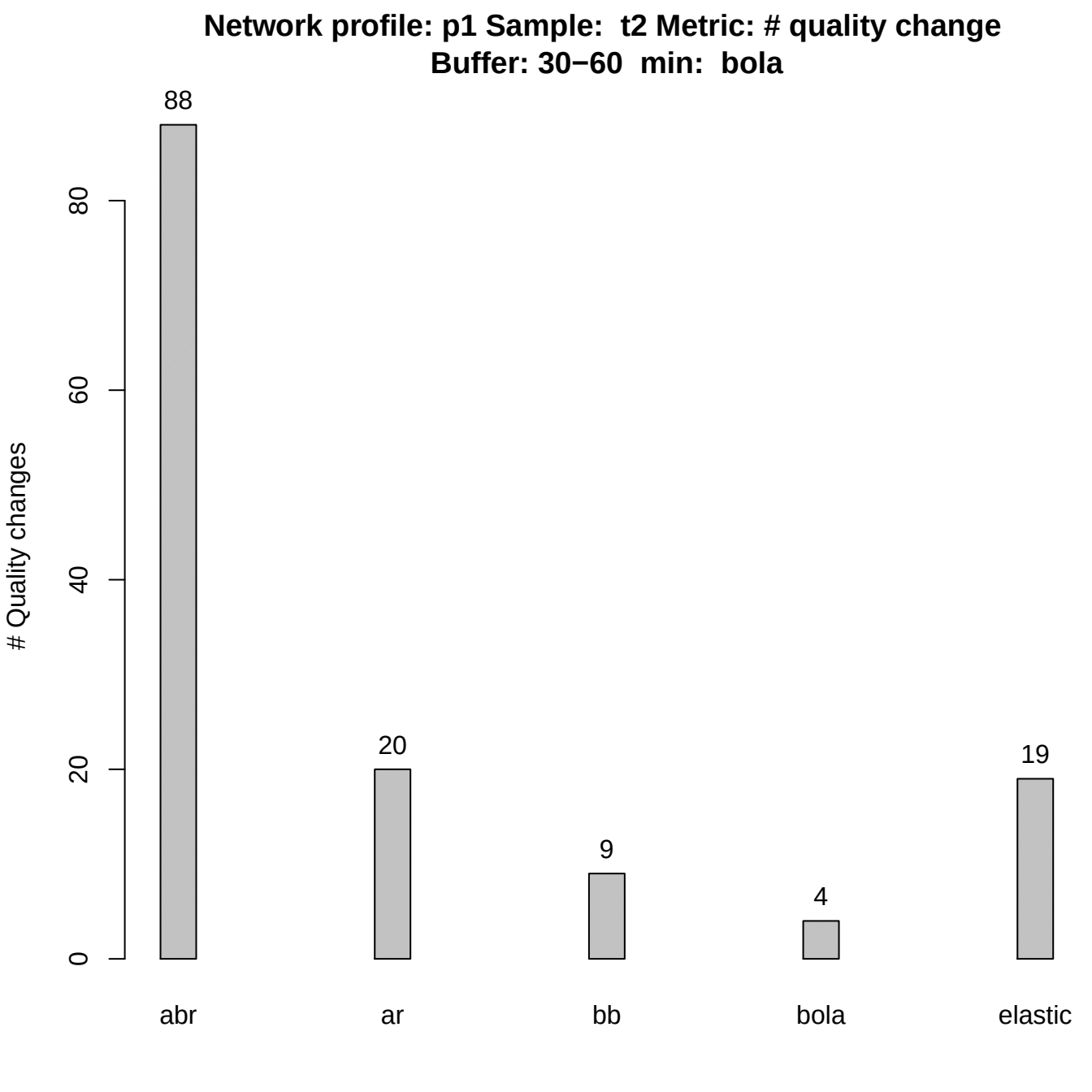

Network profile: p1 Sample: t1 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
3000
2616.02
3105.61
3069.24
1638.41
3036.59
abr
ar
bb
bola
elastic

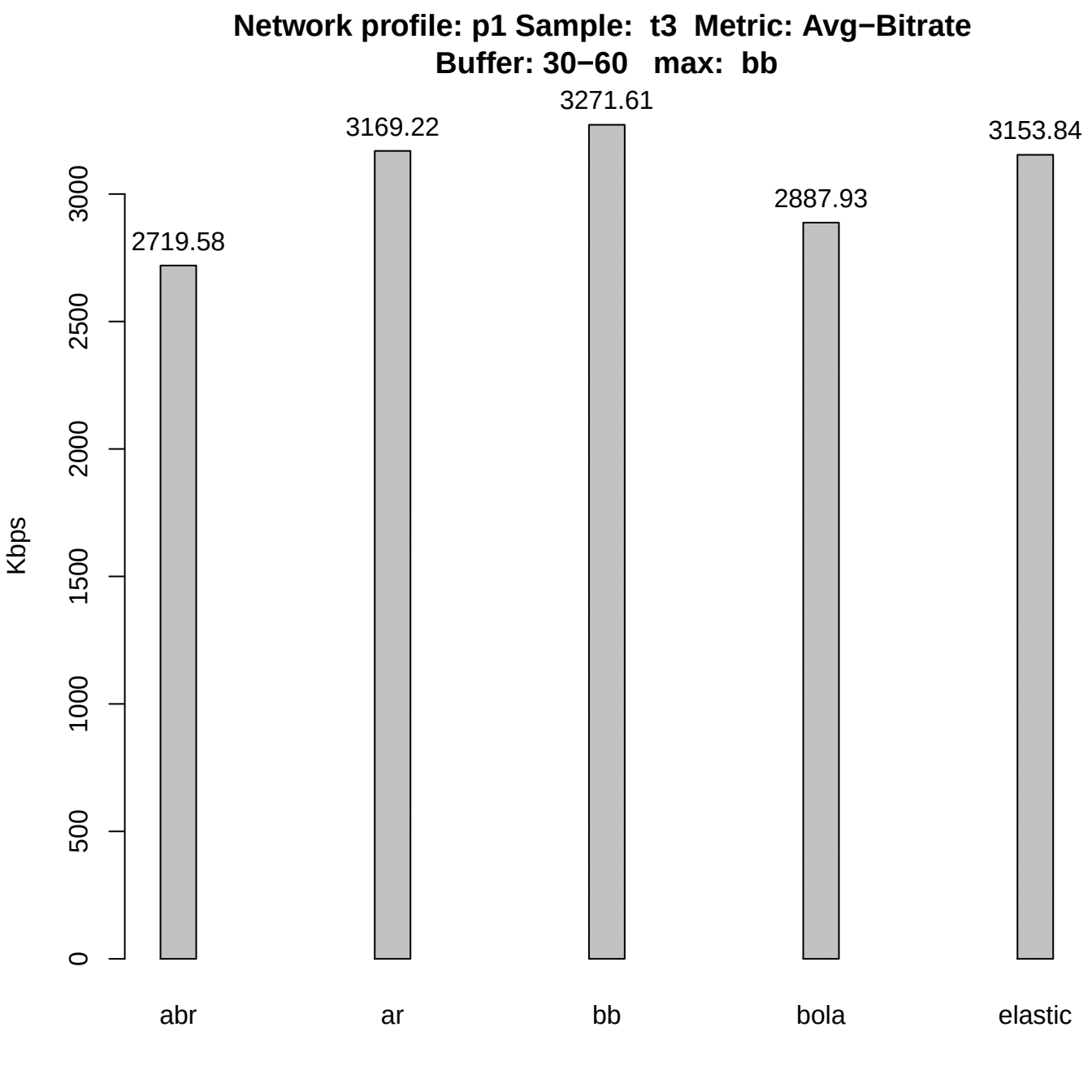

Network profile: p1 Sample: t1 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.5
0.270815
0.252964
0.29408
0.507835
0.201258
abr
ar
bb
bola
elastic

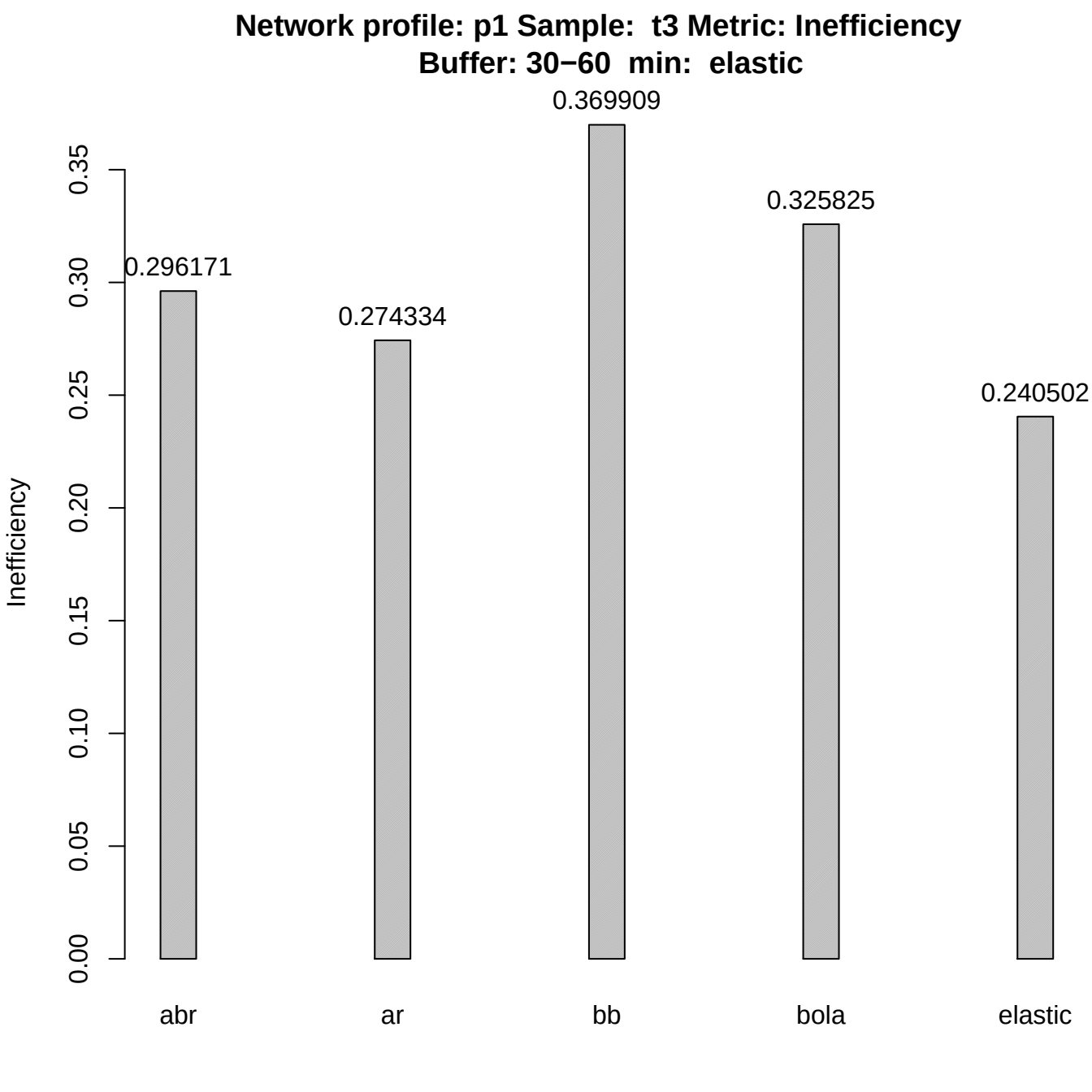

Network profile: p1 Sample: t1 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
95
91
33
4
37
abr
ar
bb
bola
elastic

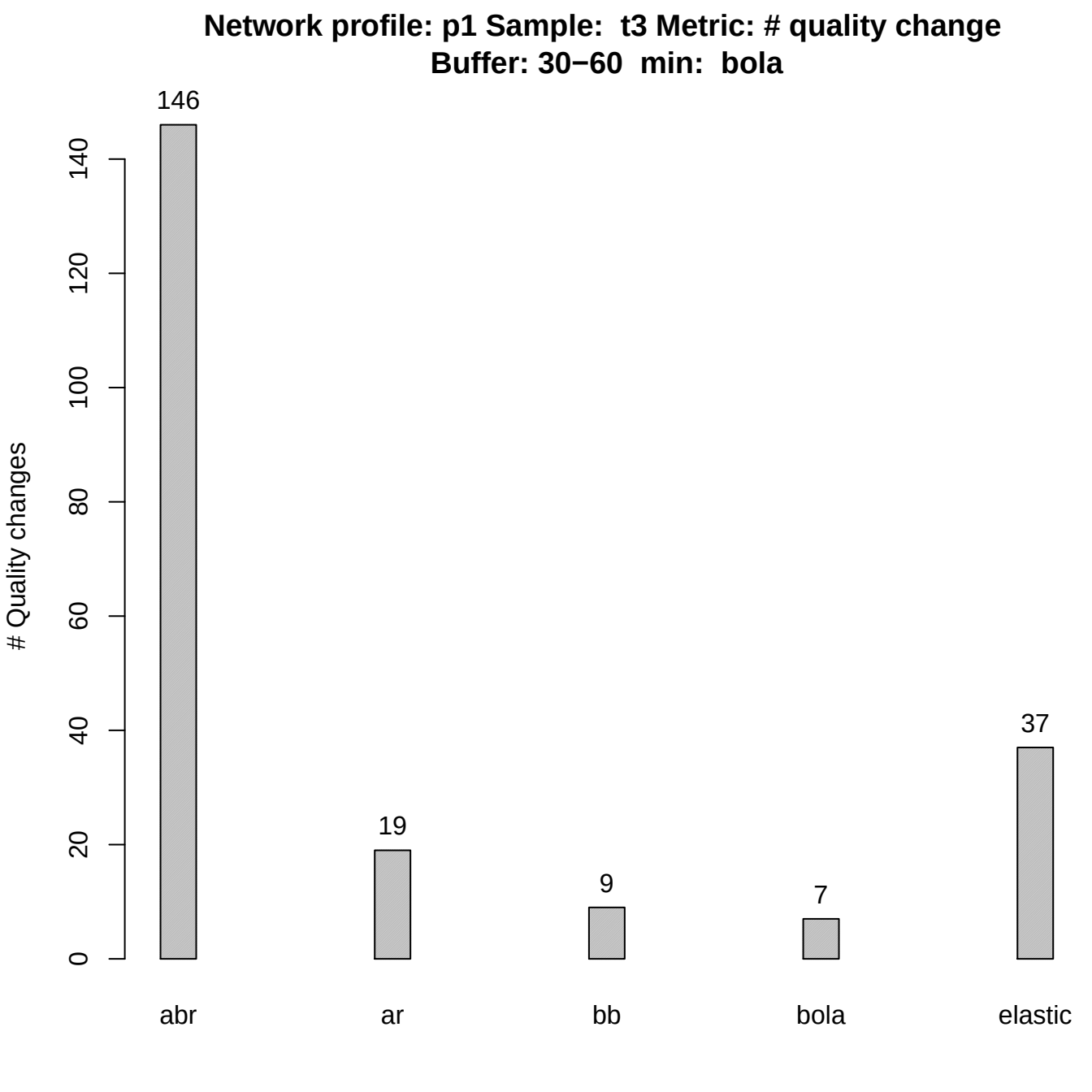

Network profile: p1 Sample: t2 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
3000
2923.41
3192.17
3182.82
1938.93
3165.17
abr
ar
bb
bola
elastic

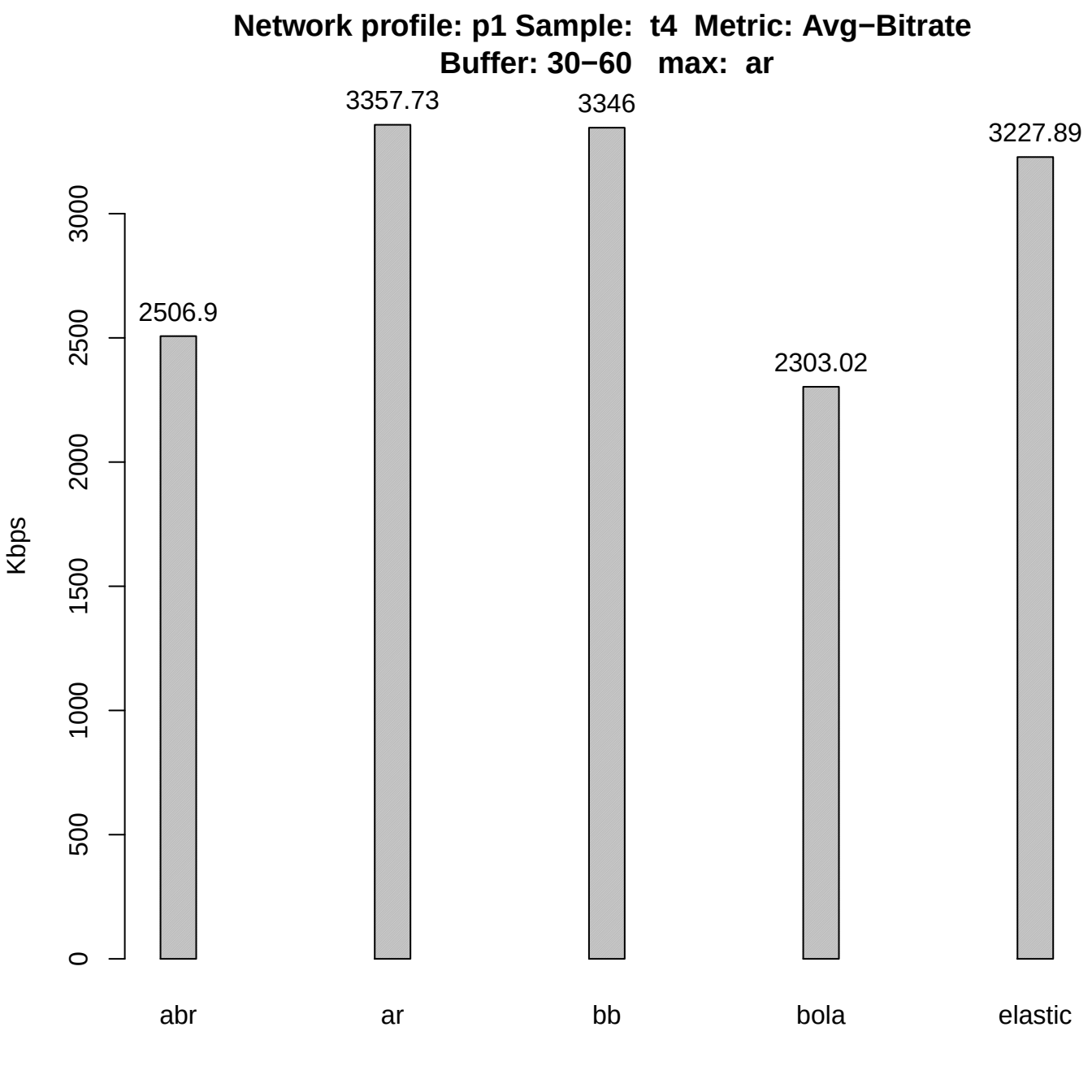

Network profile: p1 Sample: t2 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.222902
0.199392
0.326533
0.384054
0.176053
abr
ar
bb
bola
elastic

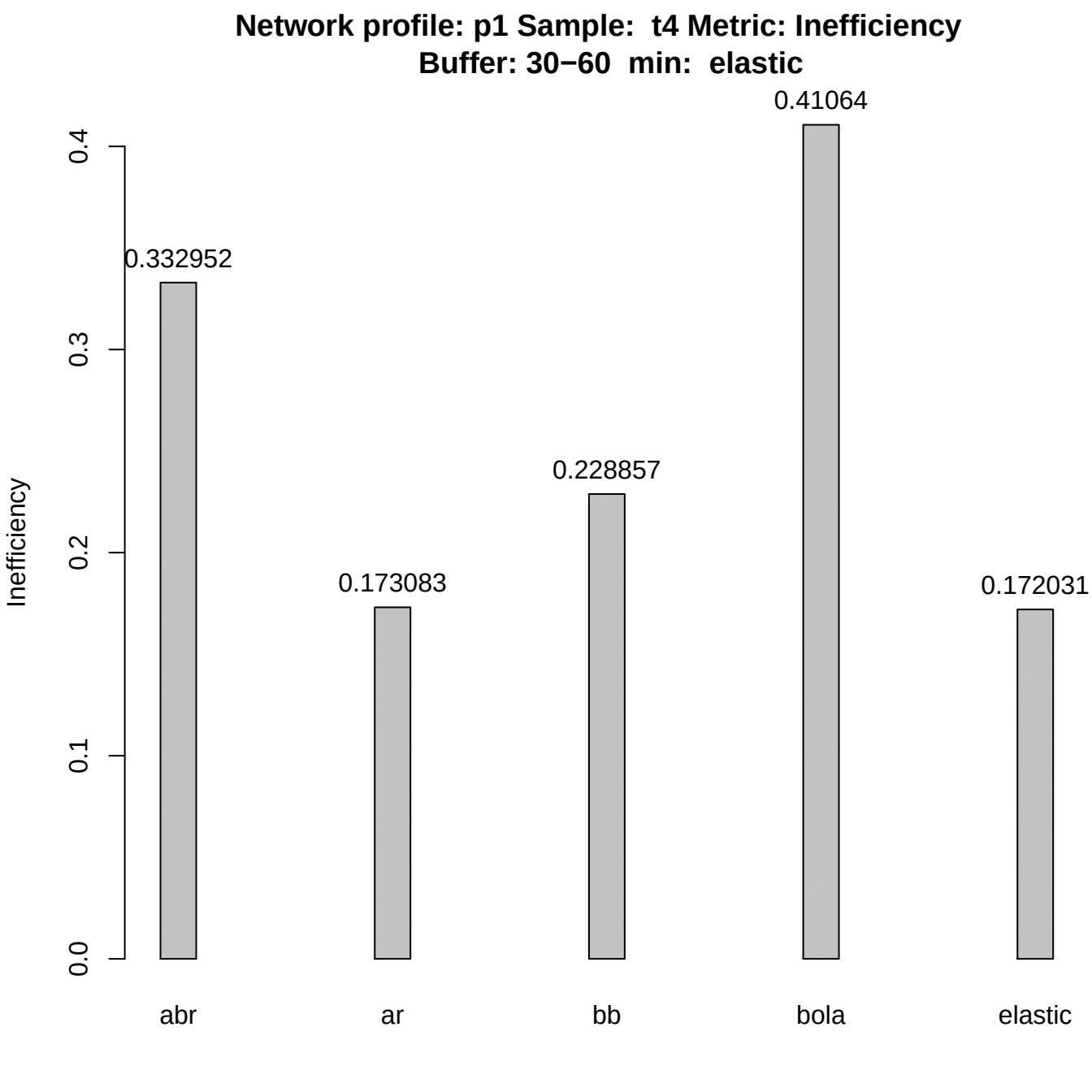

Network profile: p1 Sample: t2 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
88
20
9
4
19
abr
ar
bb
bola
elastic

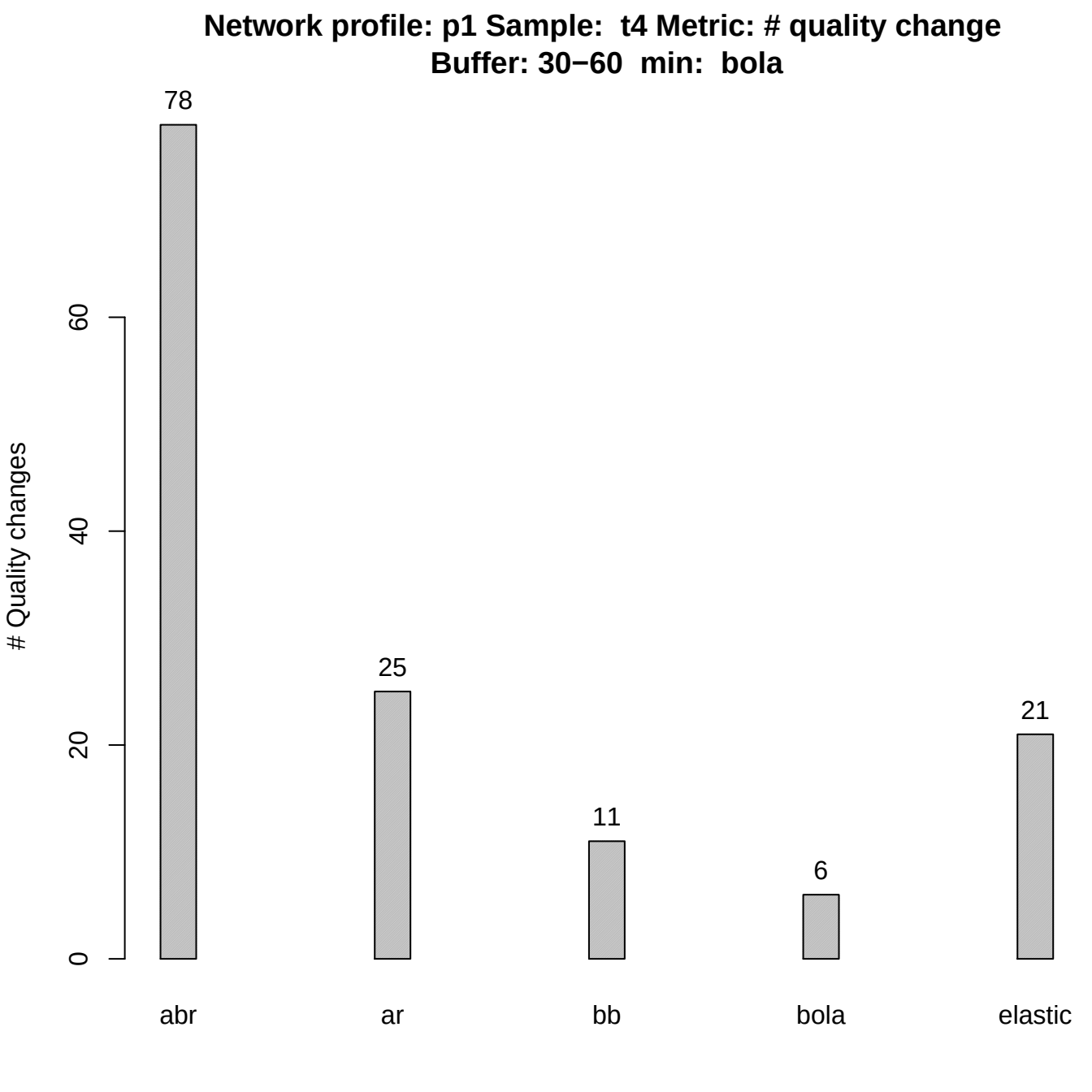

Network profile: p1 Sample: t3 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
Kbps
0
500
1000
1500
2000
2500
3000
2719.58
3169.22
3271.61
2887.93
3153.84
abr
ar
bb
bola
elastic

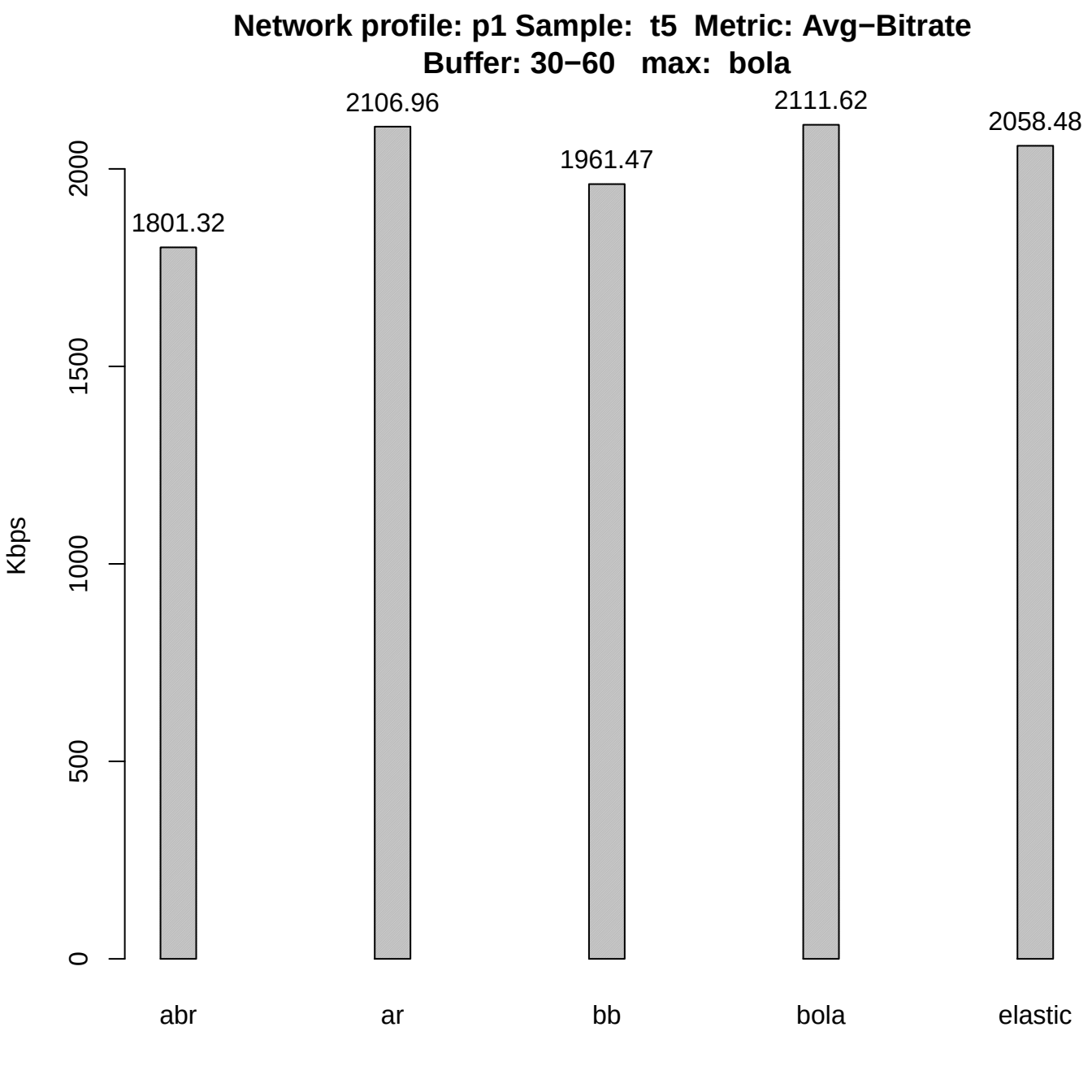

Network profile: p1 Sample: t3 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.296171
0.274334
0.369909
0.325825
0.240502
abr
ar
bb
bola
elastic

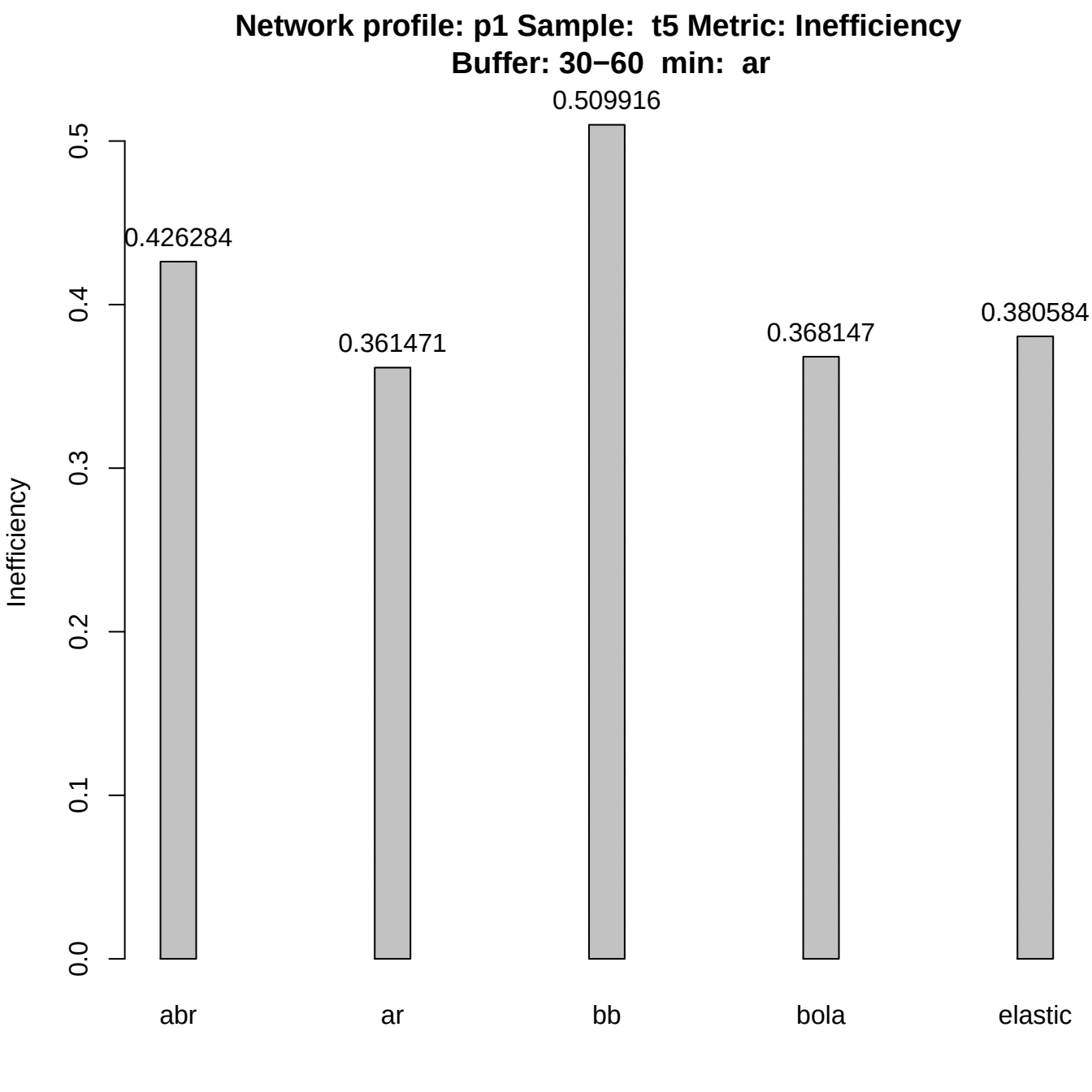

Network profile: p1 Sample: t3 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
120
140
146
19
9
7
37
abr
ar
bb
bola
elastic

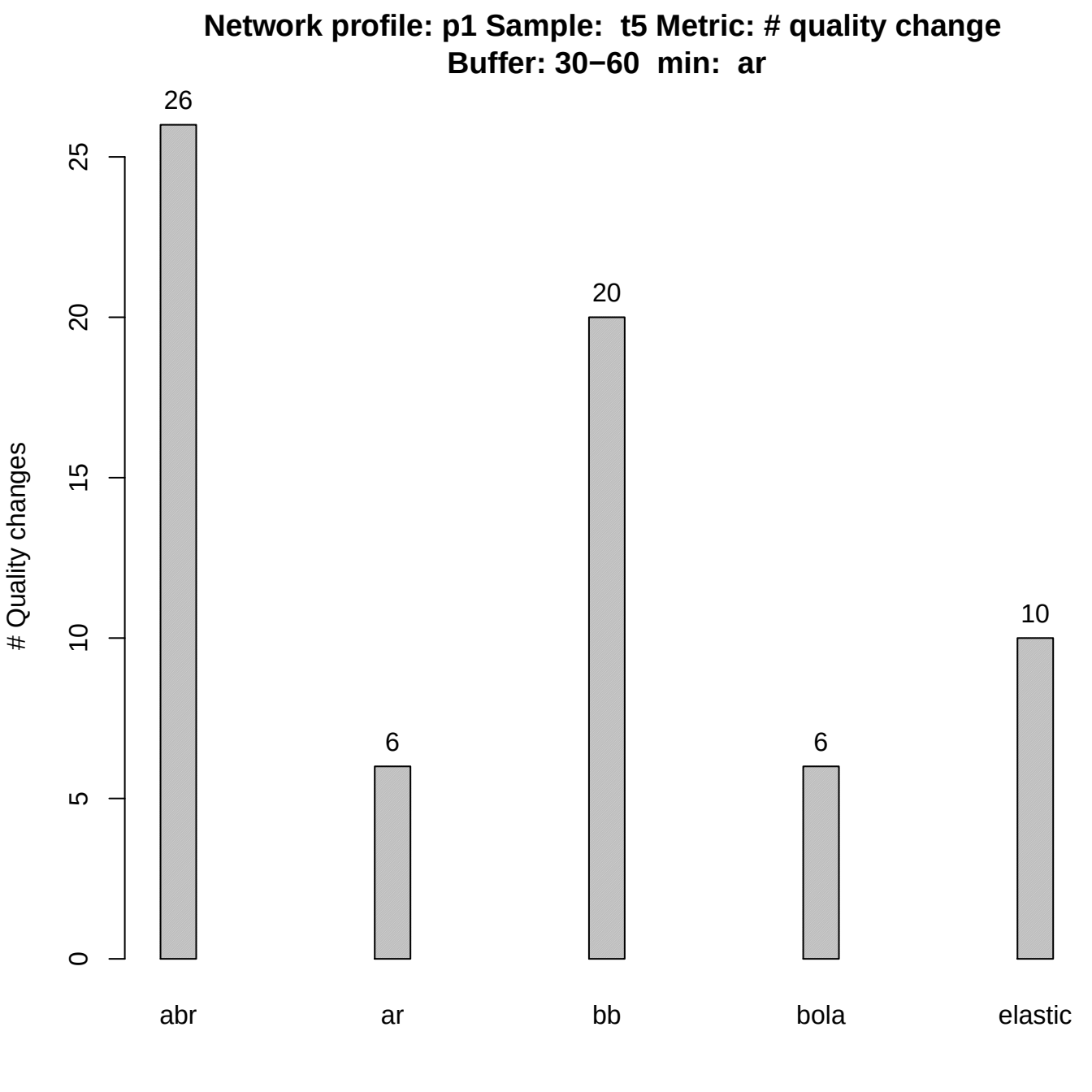

Network profile: p1 Sample: t4 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
3000
2506.9
3357.73
3346
2303.02
3227.89
abr
ar
bb
bola
elastic

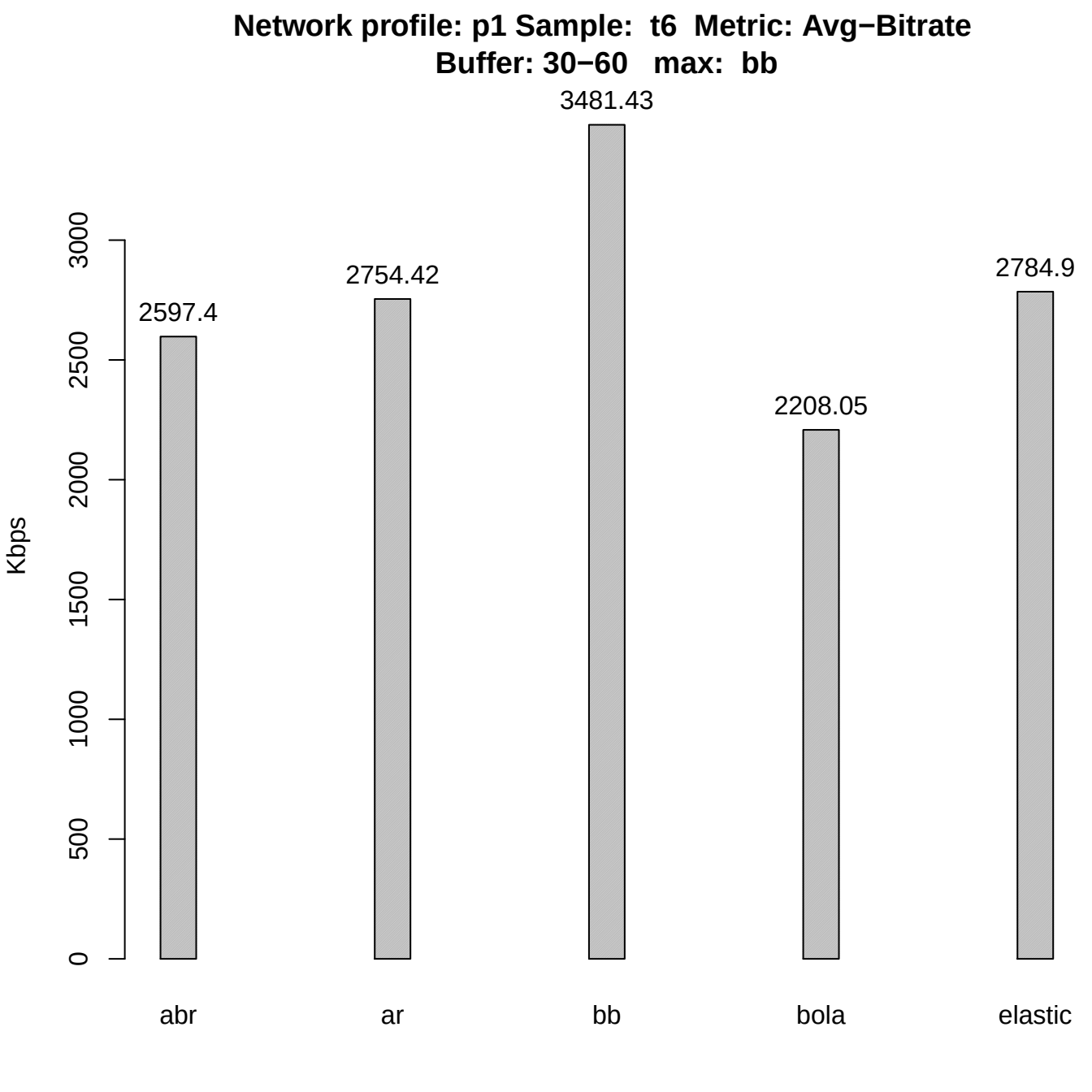

Network profile: p1 Sample: t4 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.332952
0.173083
0.228857
0.41064
0.172031
abr
ar
bb
bola
elastic

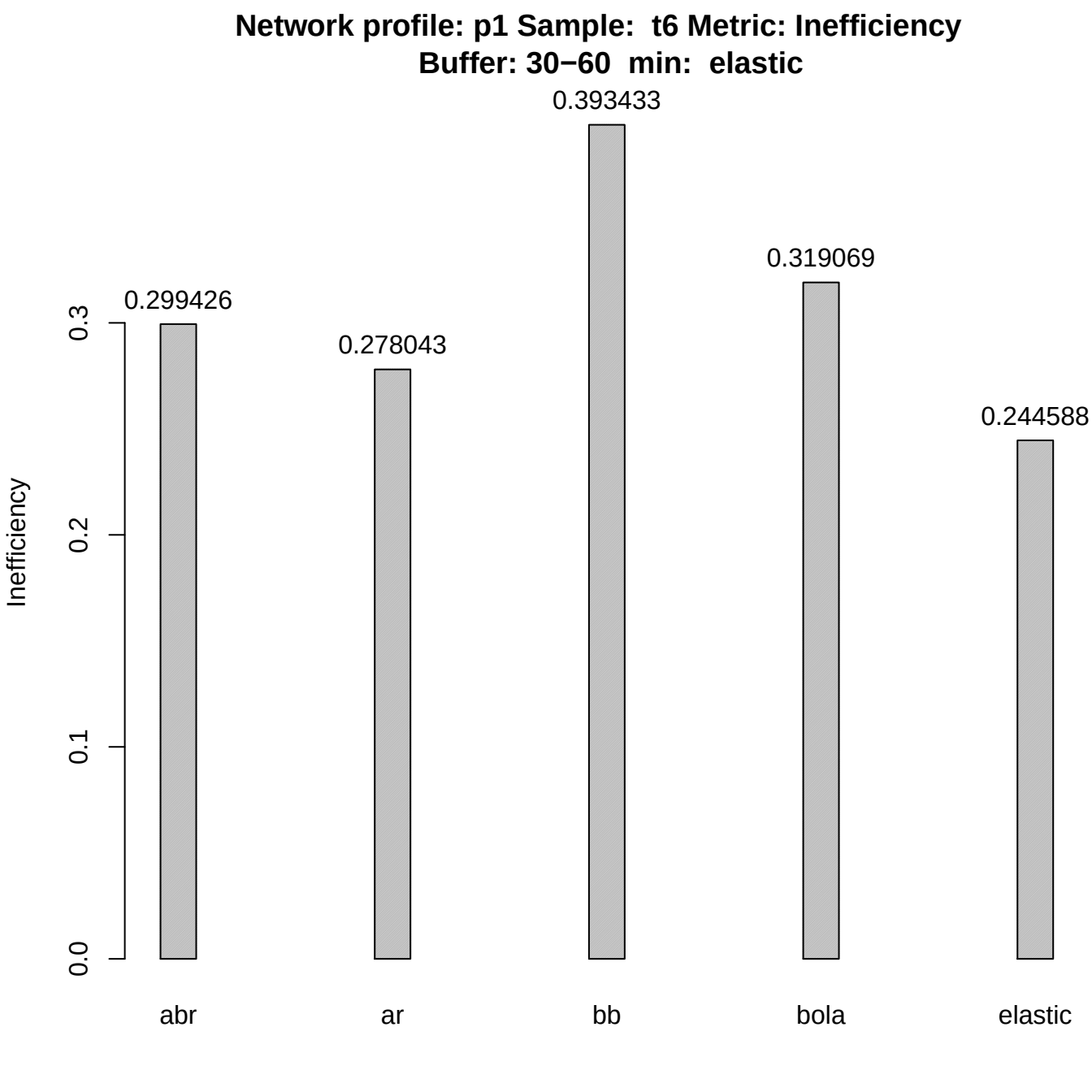

Network profile: p1 Sample: t4 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
78
25
11
6
21
abr
ar
bb
bola
elastic

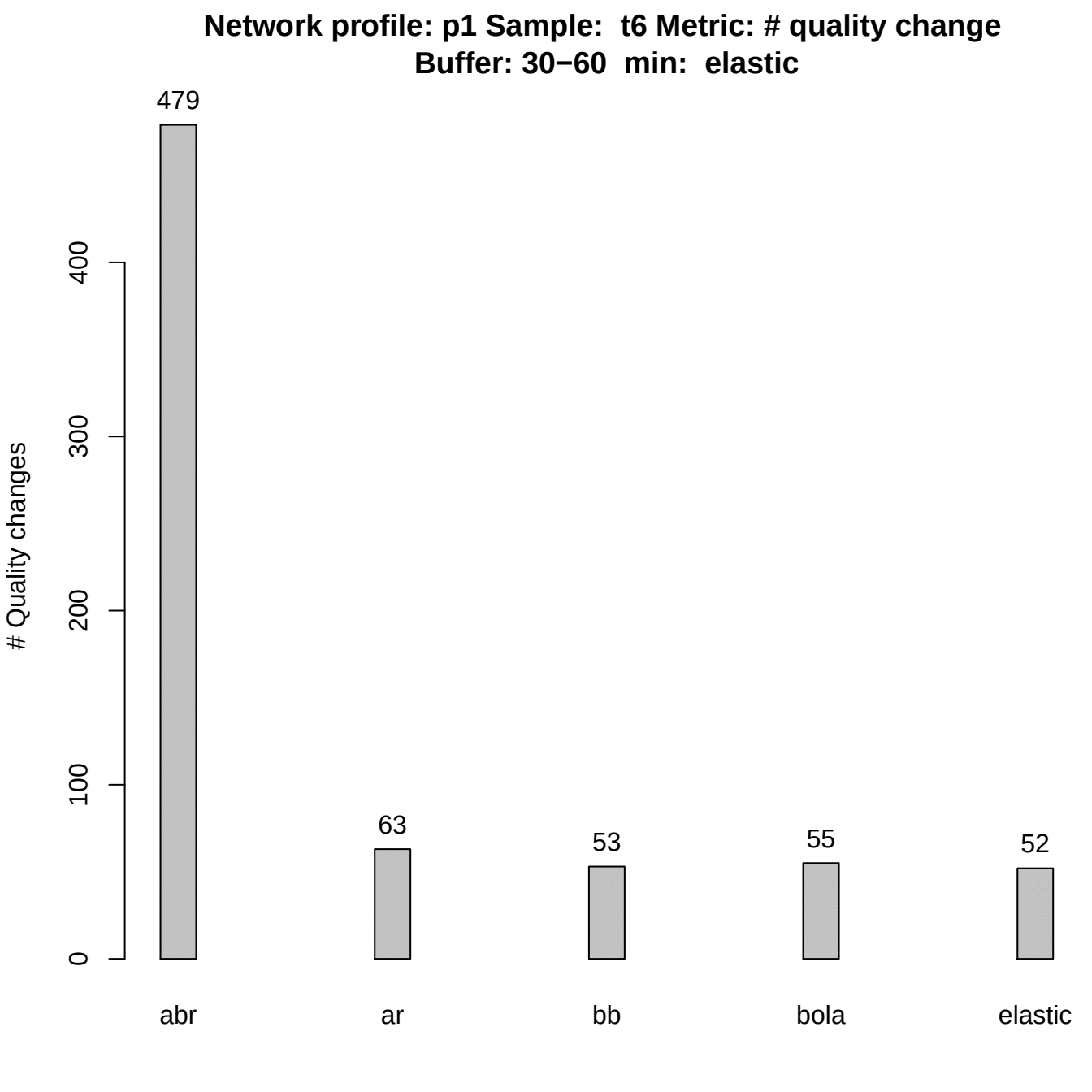

Network profile: p1 Sample: t5 Metric: Avg−Bitrate
Buffer: 30−60 max: bola
Kbps
0
500
1000
1500
2000
1801.32
2106.96
1961.47
2111.62
2058.48
abr
ar
bb
bola
elastic

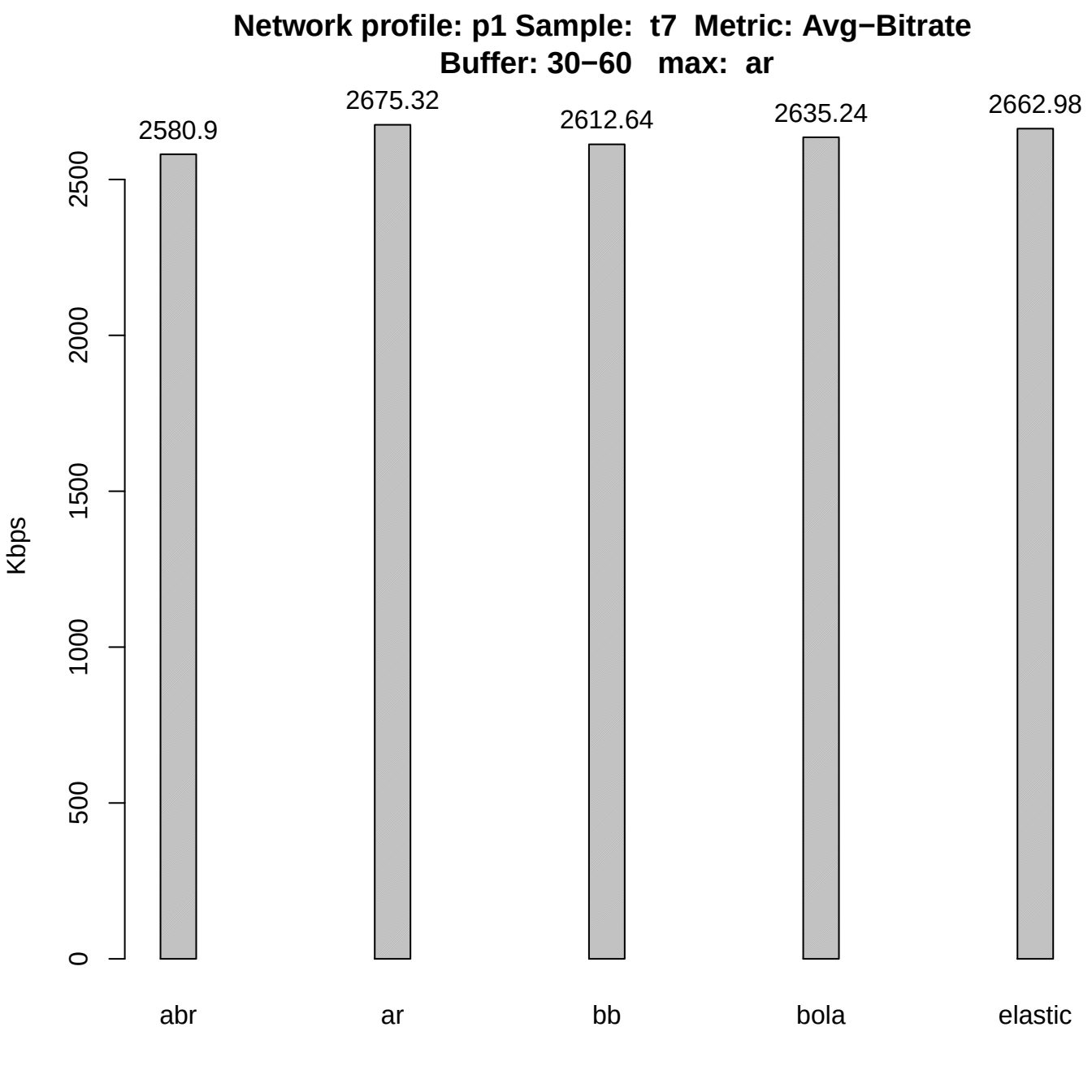

Network profile: p1 Sample: t5 Metric: Inefficiency
Buffer: 30−60 min: ar
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.5
0.426284
0.361471
0.509916
0.368147
0.380584
abr
ar
bb
bola
elastic

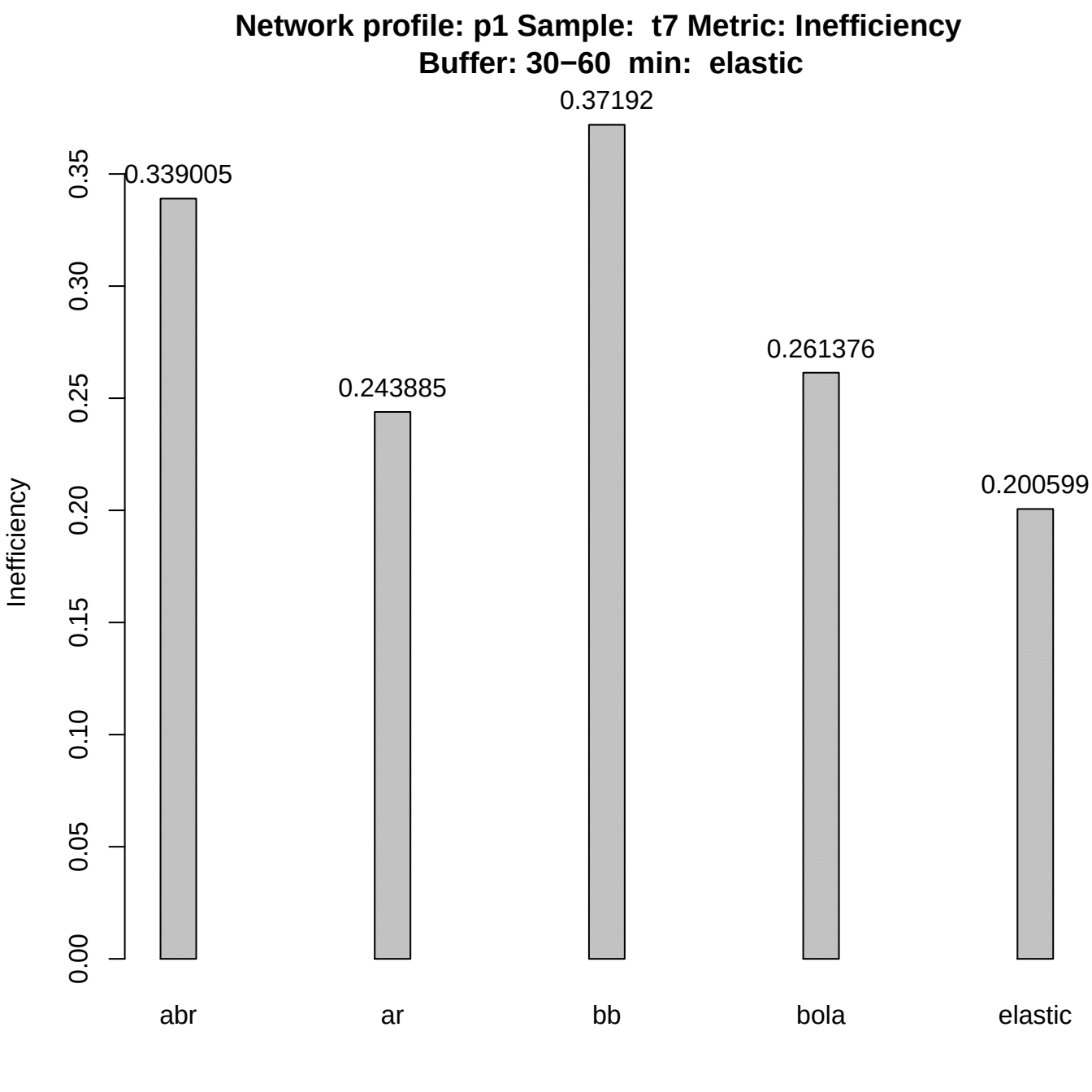

Network profile: p1 Sample: t5 Metric: # quality change
Buffer: 30−60 min: ar
Quality changes
0
5
10
15
20
25
26
6
20
6
10
abr
ar
bb
bola
elastic

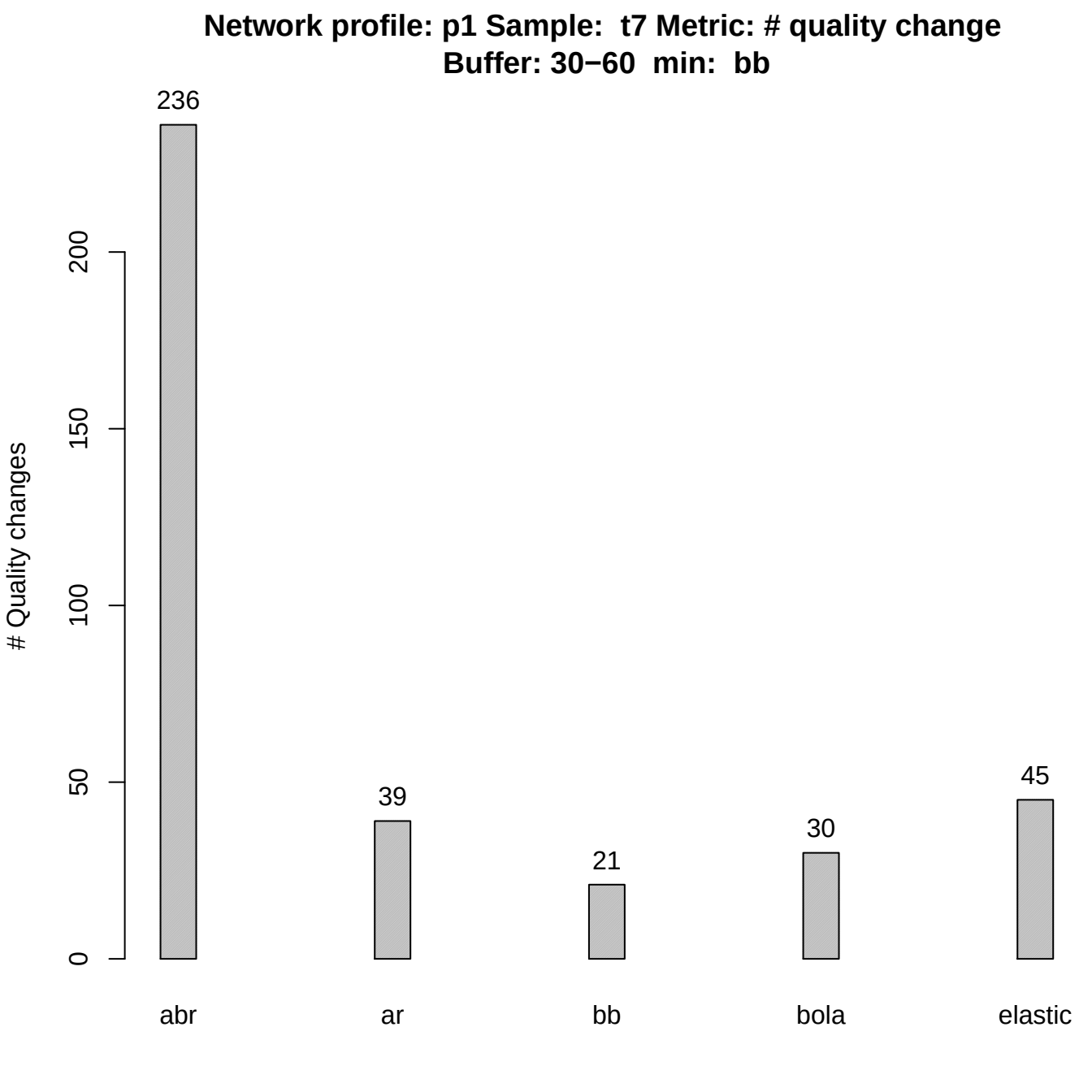

Network profile: p1 Sample: t6 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
Kbps
0
500
1000
1500
2000
2500
3000
2597.4
2754.42
3481.43
2208.05
2784.9
abr
ar
bb
bola
elastic

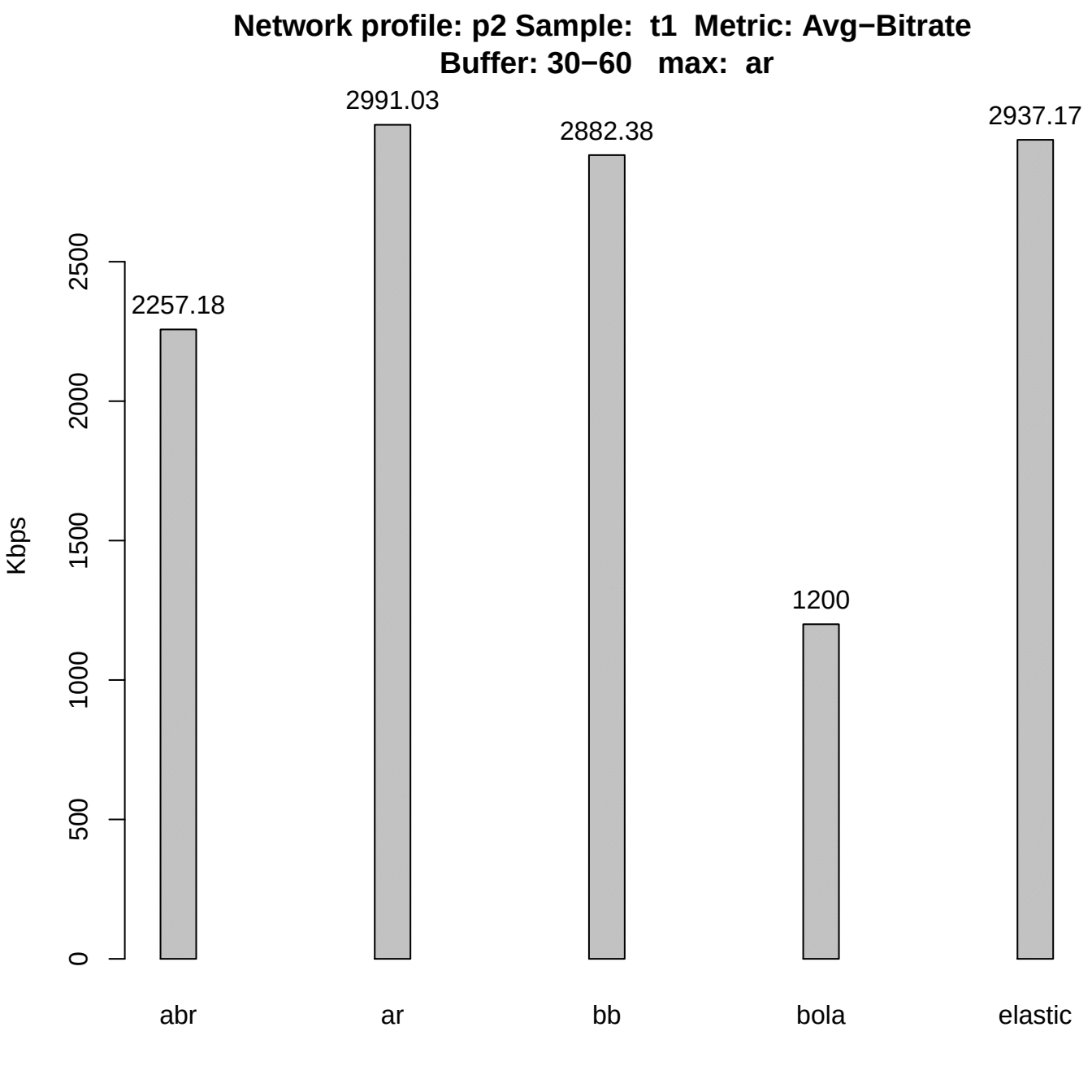

Network profile: p1 Sample: t6 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.0
0.1
0.2
0.3
0.299426
0.278043
0.393433
0.319069
0.244588
abr
ar
bb
bola
elastic

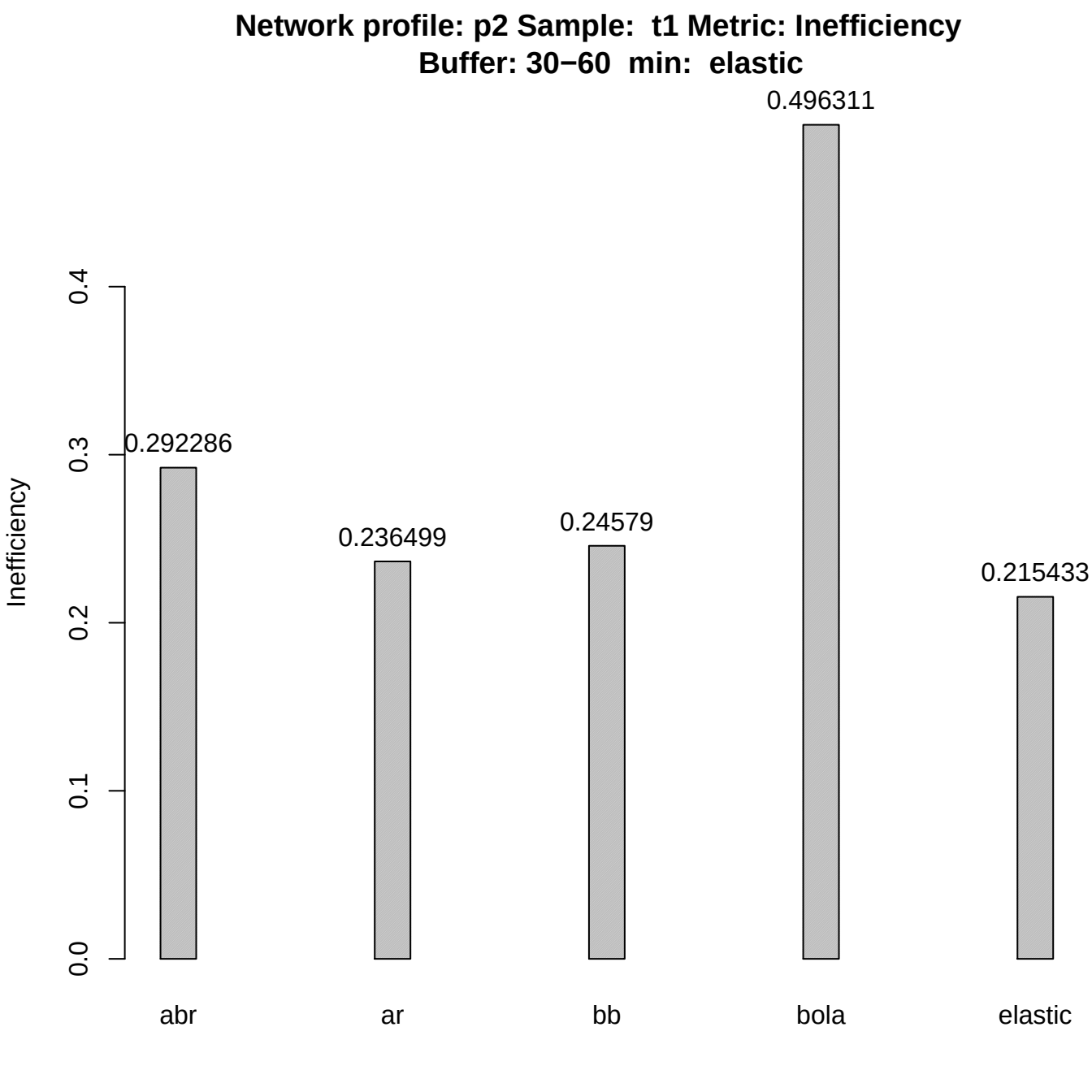

Network profile: p1 Sample: t6 Metric: # quality change
Buffer: 30−60 min: elastic
Quality changes
0
100
200
300
400
479
63
53
55
52
abr
ar
bb
bola
elastic

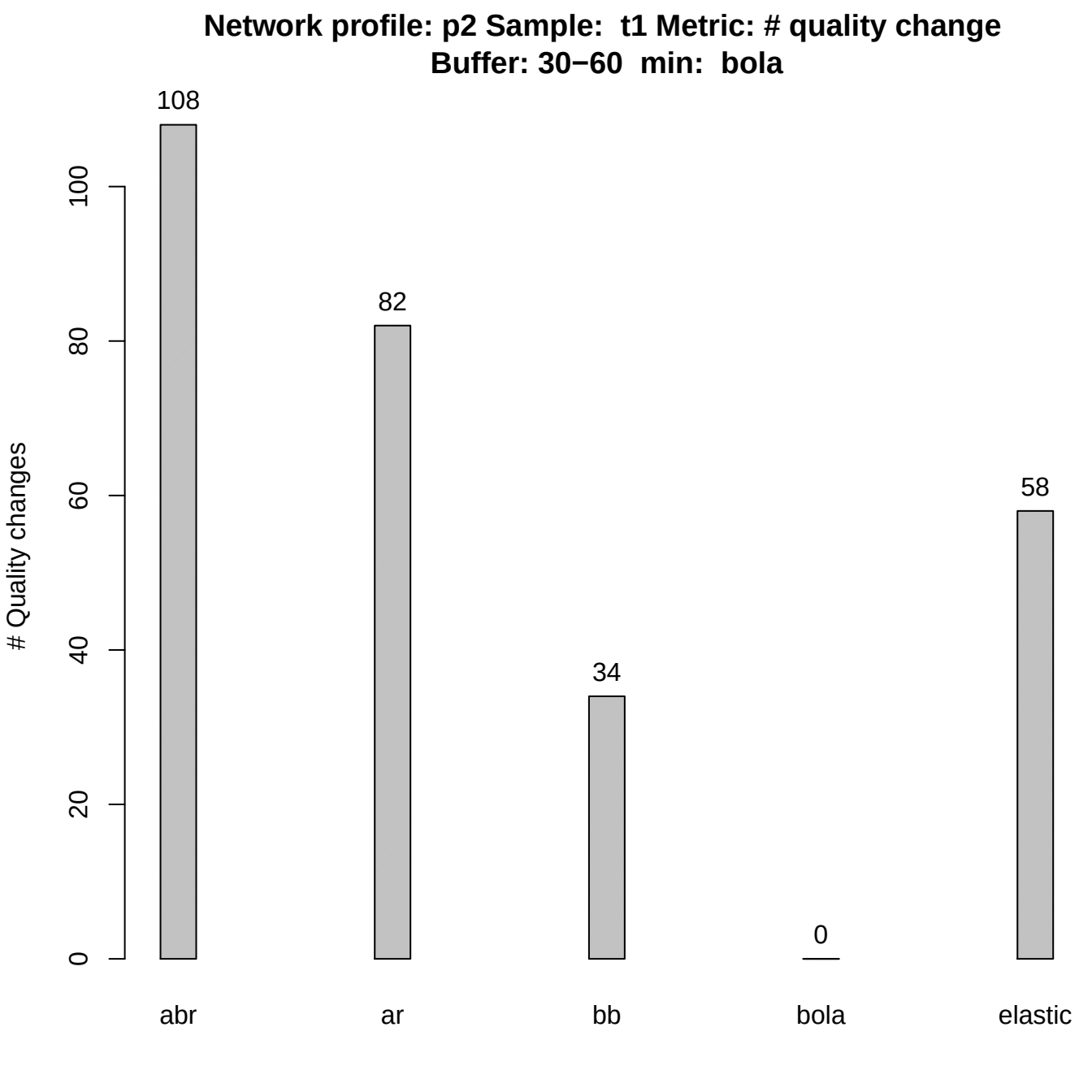

Network profile: p1 Sample: t7 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
2580.9
2675.32
2612.64
2635.24
2662.98
abr
ar
bb
bola
elastic

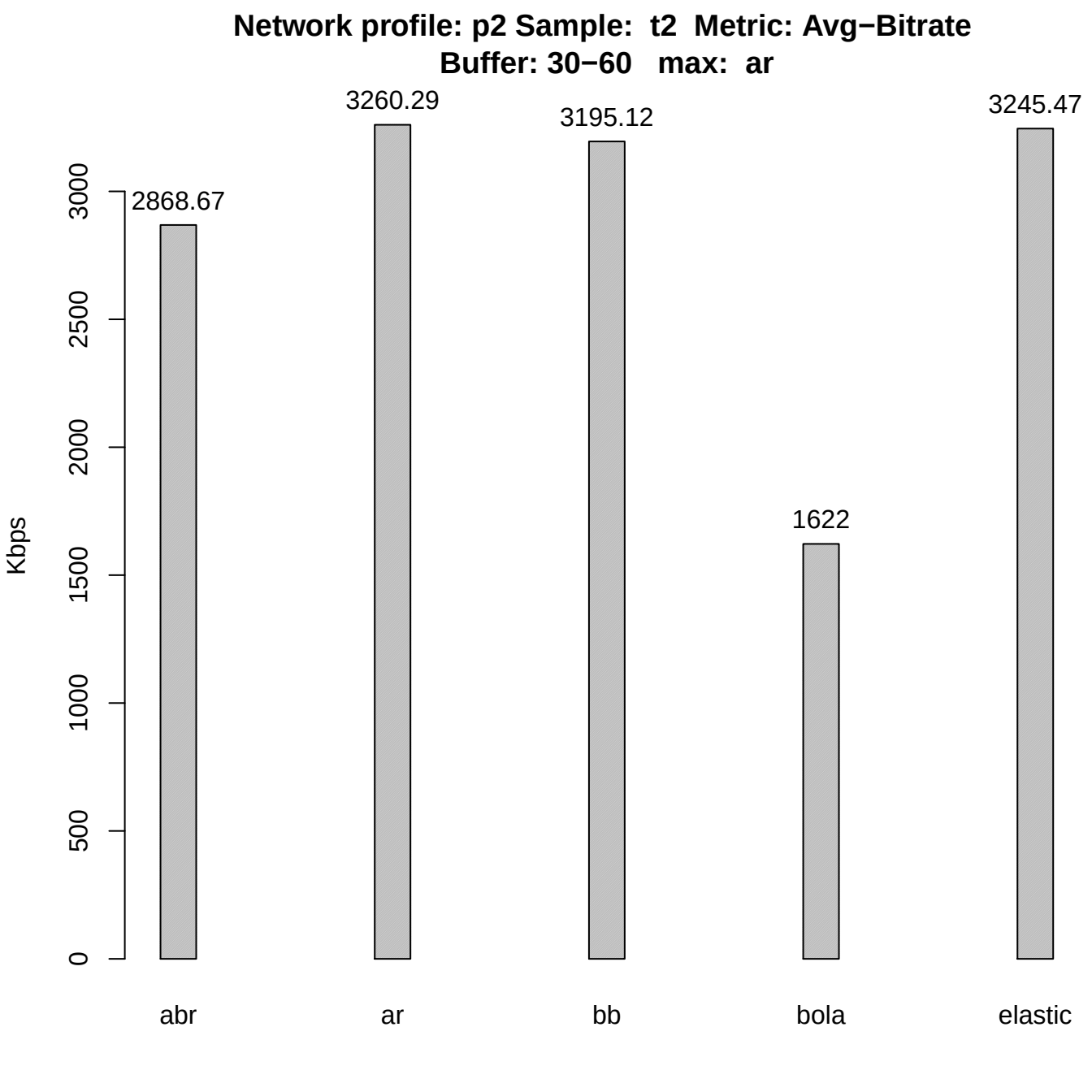

Network profile: p1 Sample: t7 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.339005
0.243885
0.37192
0.261376
0.200599
abr
ar
bb
bola
elastic

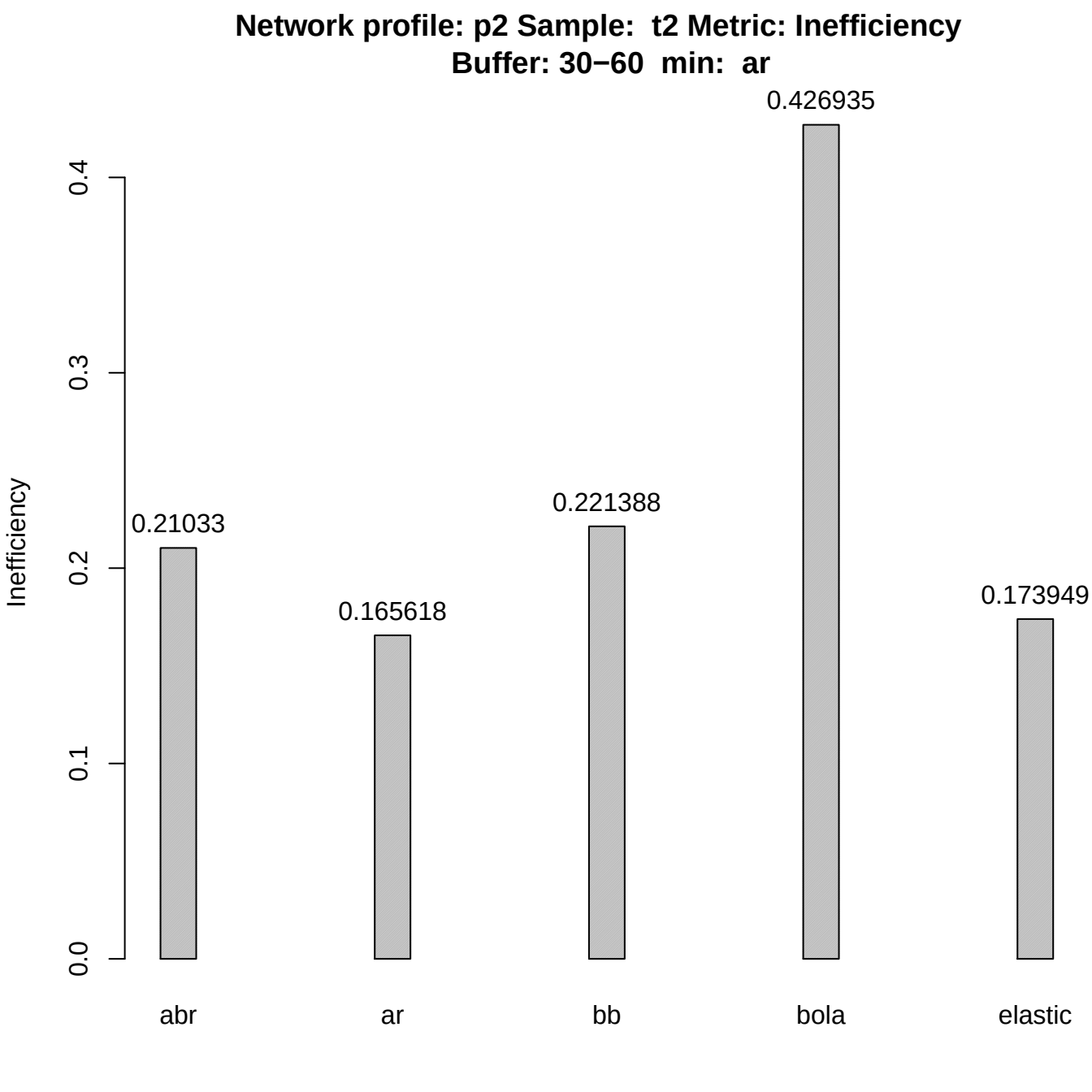

Network profile: p1 Sample: t7 Metric: # quality change
Buffer: 30−60 min: bb
Quality changes
0
50
100
150
200
236
39
21
30
45
abr
ar
bb
bola
elastic

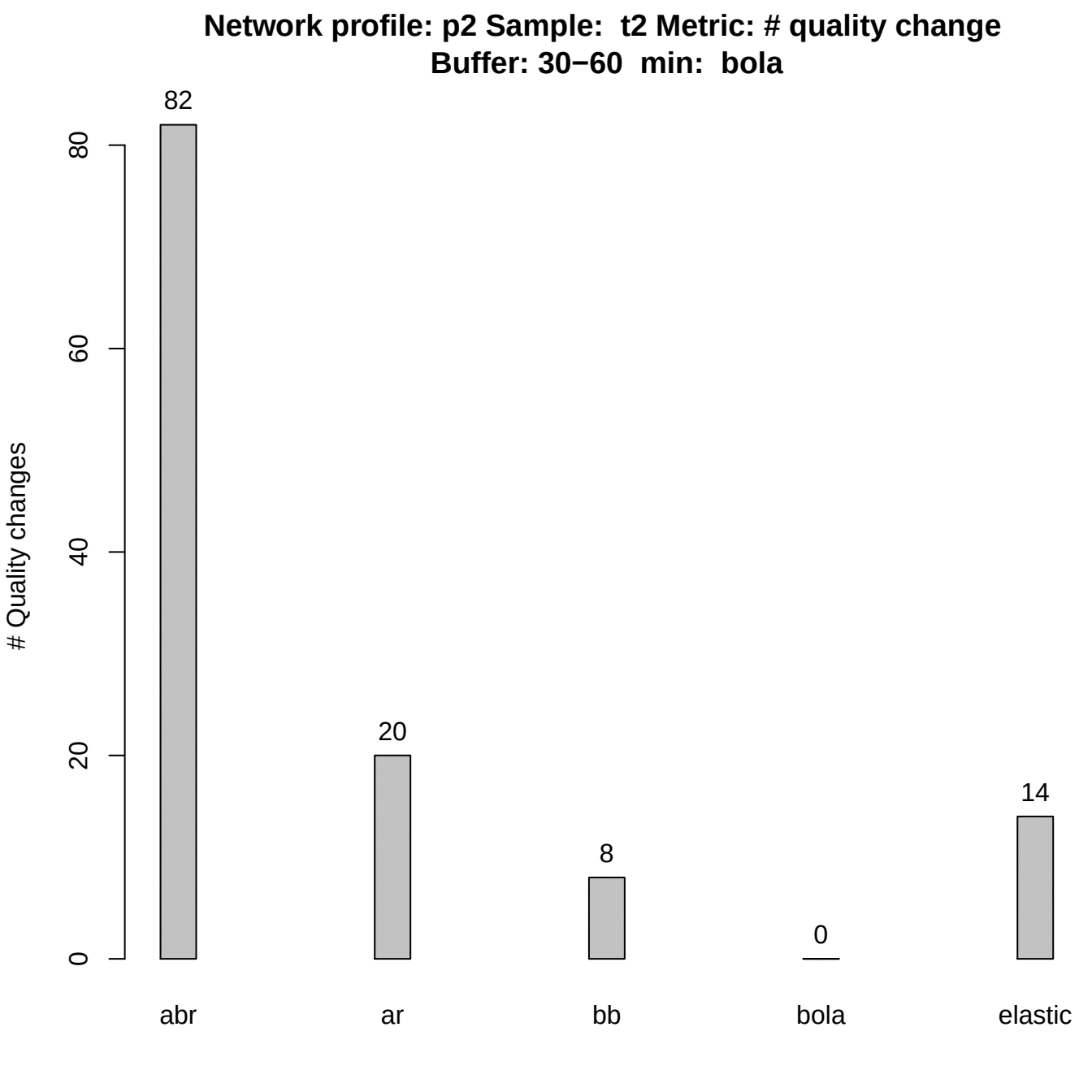

Network profile: p2 Sample: t1 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
2257.18
2991.03
2882.38
1200
2937.17
abr
ar
bb
bola
elastic

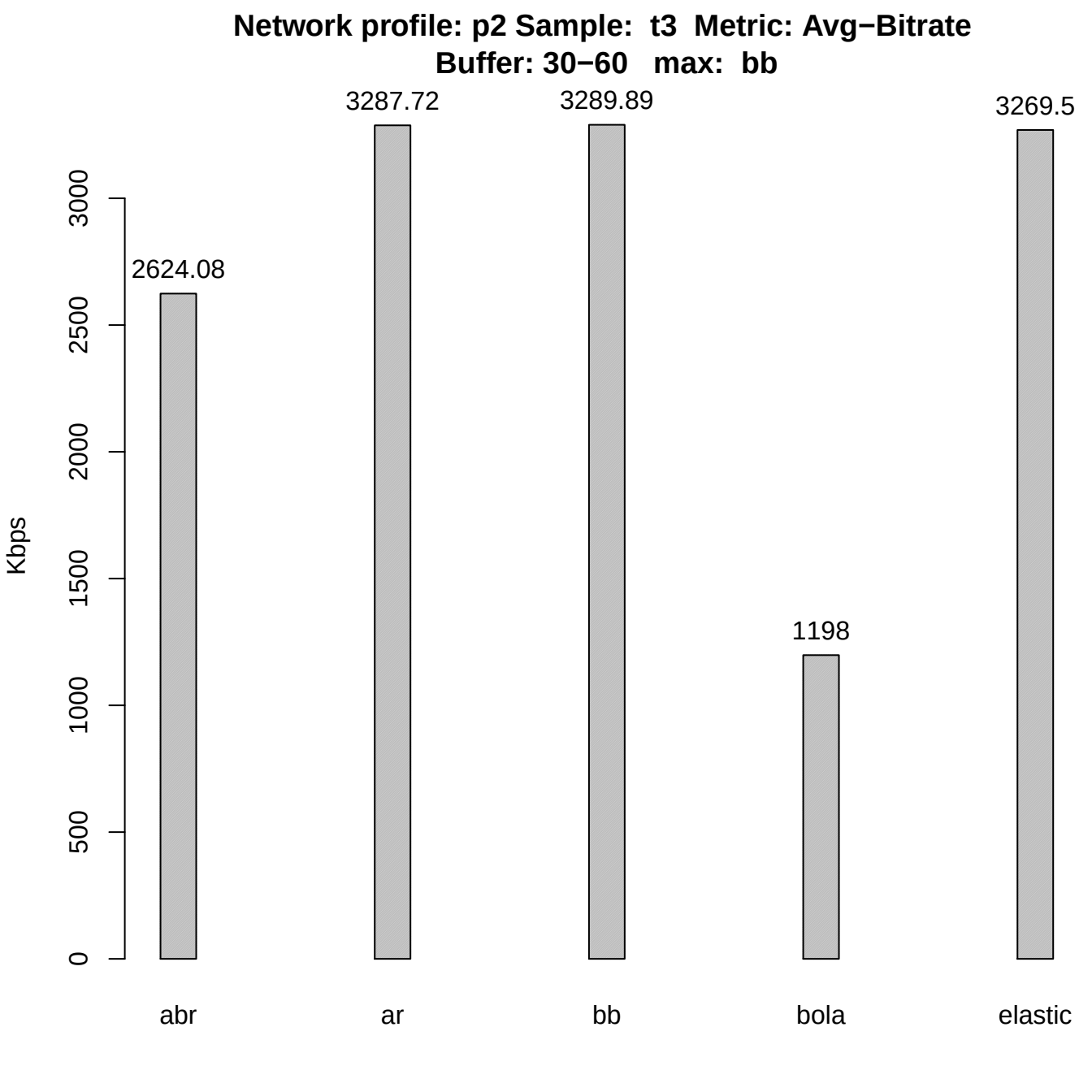

Network profile: p2 Sample: t1 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.292286
0.236499
0.24579
0.496311
0.215433
abr
ar
bb
bola
elastic

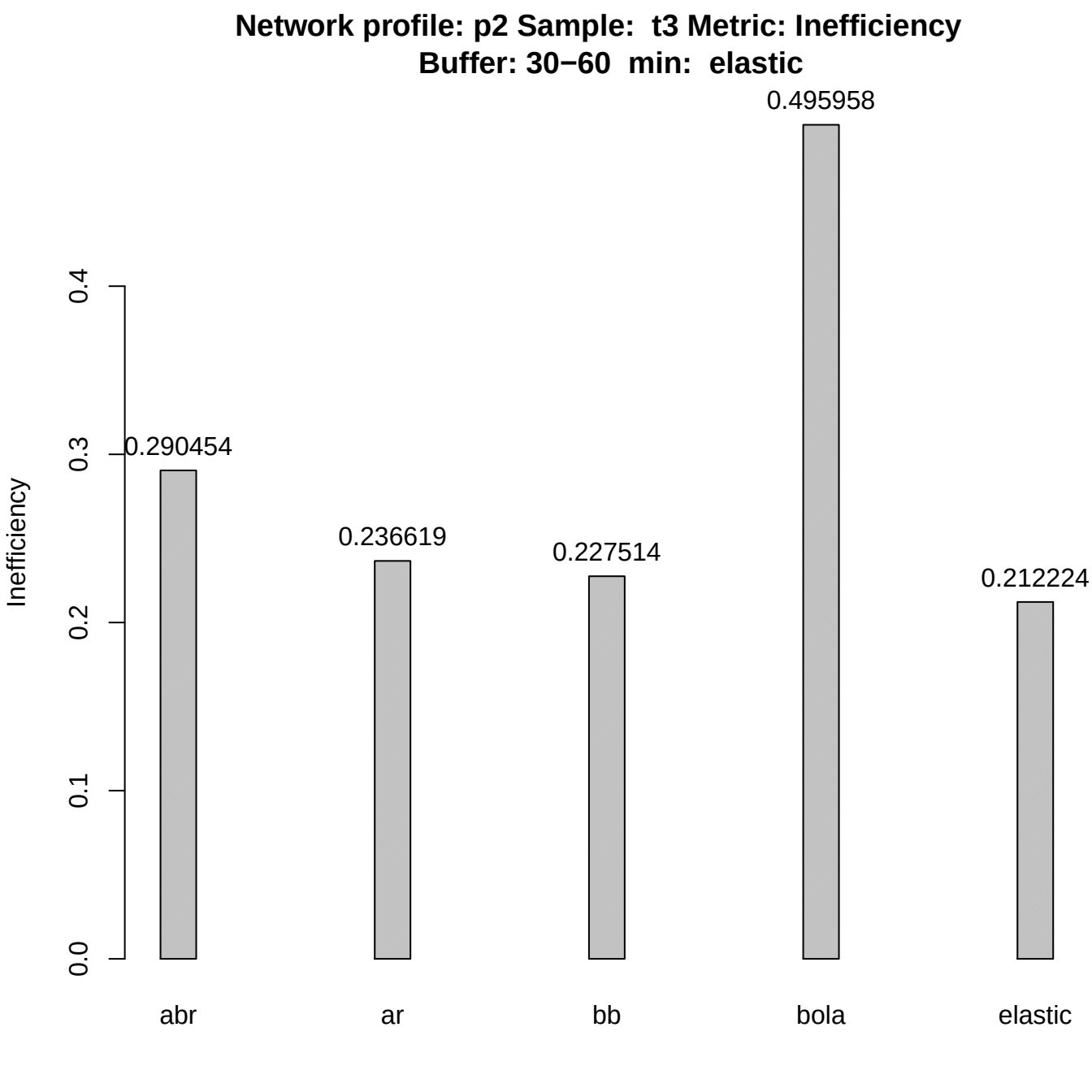

Network profile: p2 Sample: t1 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
108
82
34
0
58
abr
ar
bb
bola
elastic

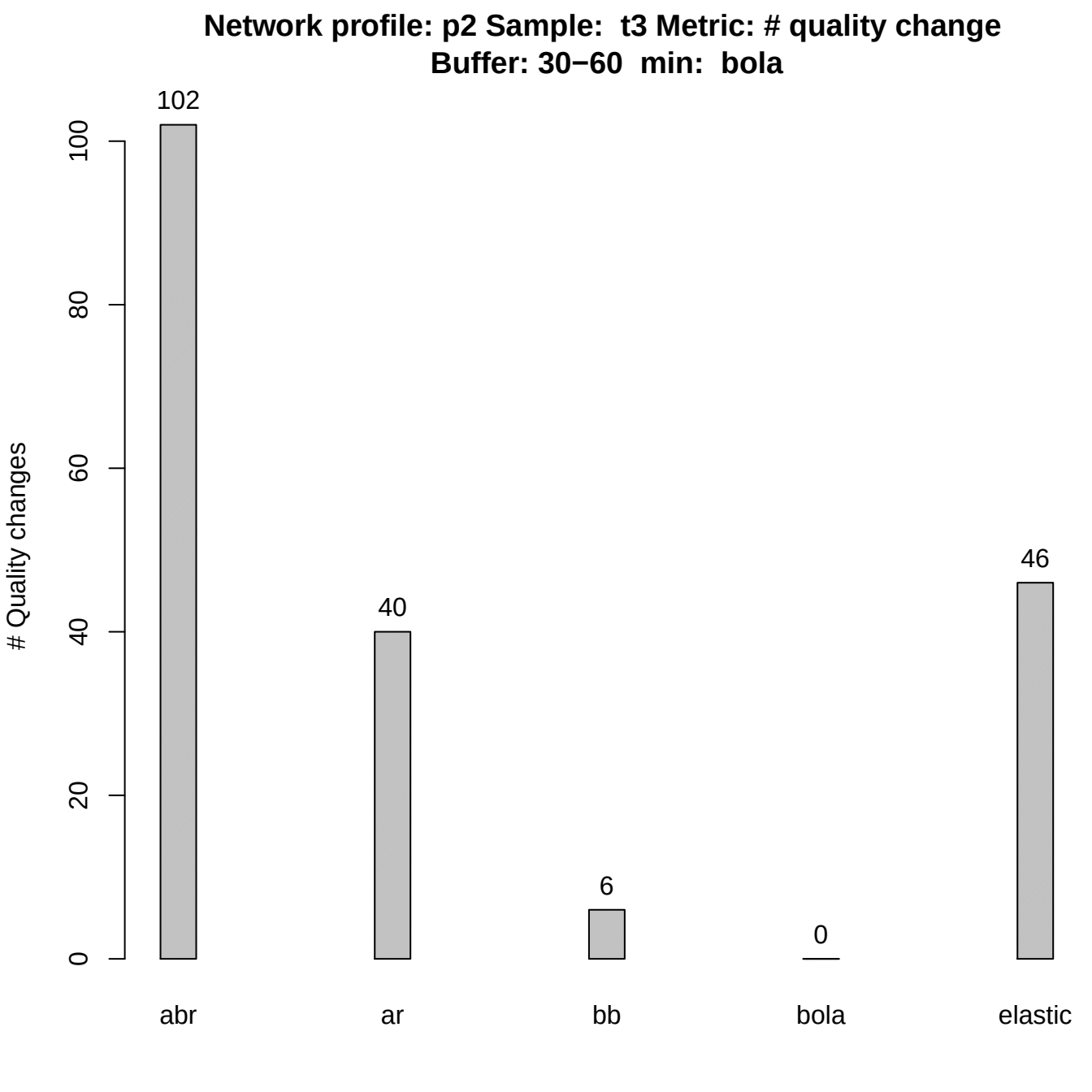

Network profile: p2 Sample: t2 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
3000
2868.67
3260.29
3195.12
1622
3245.47
abr
ar
bb
bola
elastic

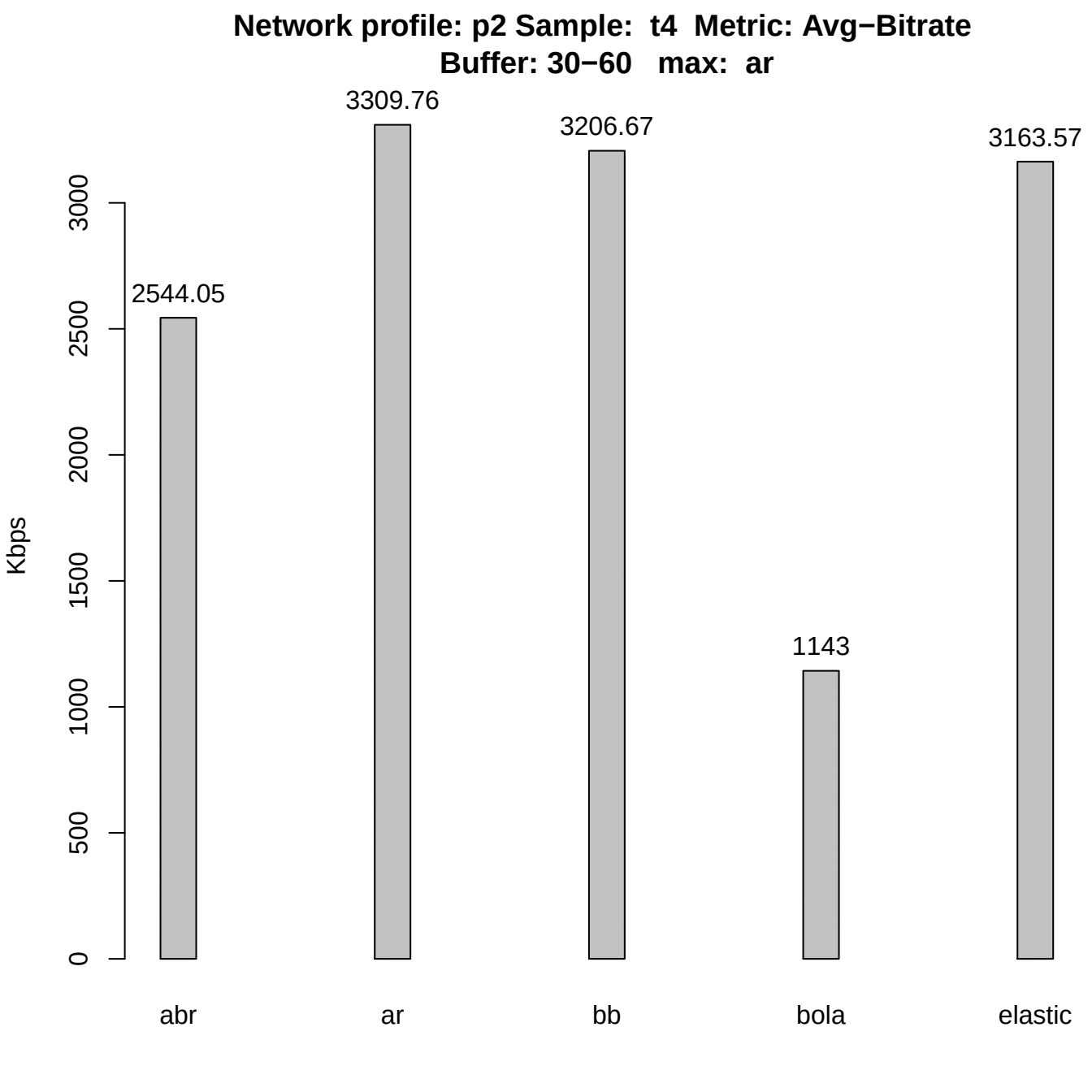

Network profile: p2 Sample: t2 Metric: Inefficiency
Buffer: 30−60 min: ar
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.21033
0.165618
0.221388
0.426935
0.173949
abr
ar
bb
bola
elastic

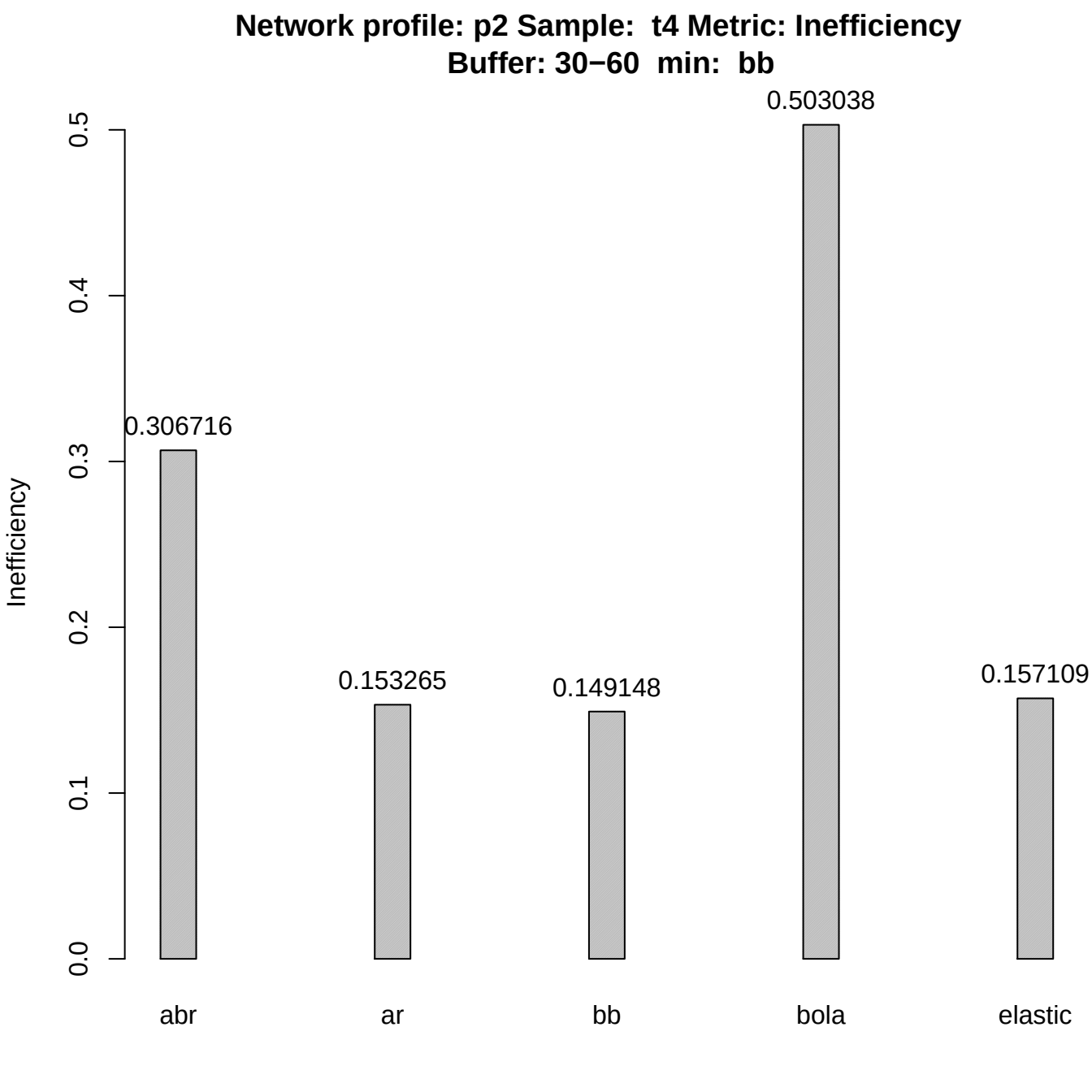

Network profile: p2 Sample: t2 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
82
20
8
0
14
abr
ar
bb
bola
elastic

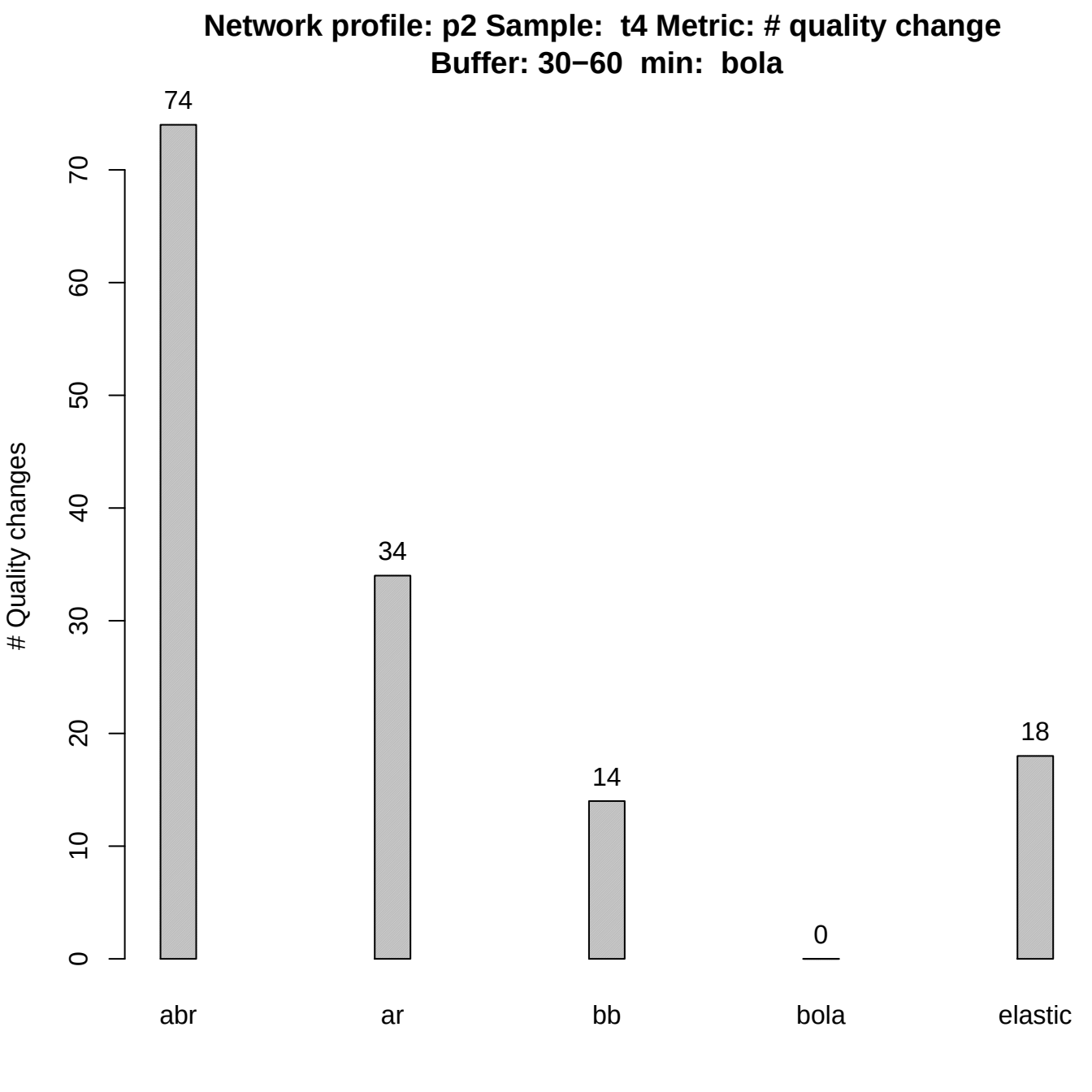

Network profile: p2 Sample: t3 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
Kbps
0
500
1000
1500
2000
2500
3000
2624.08
3287.72
3289.89
1198
3269.5
abr
ar
bb
bola
elastic

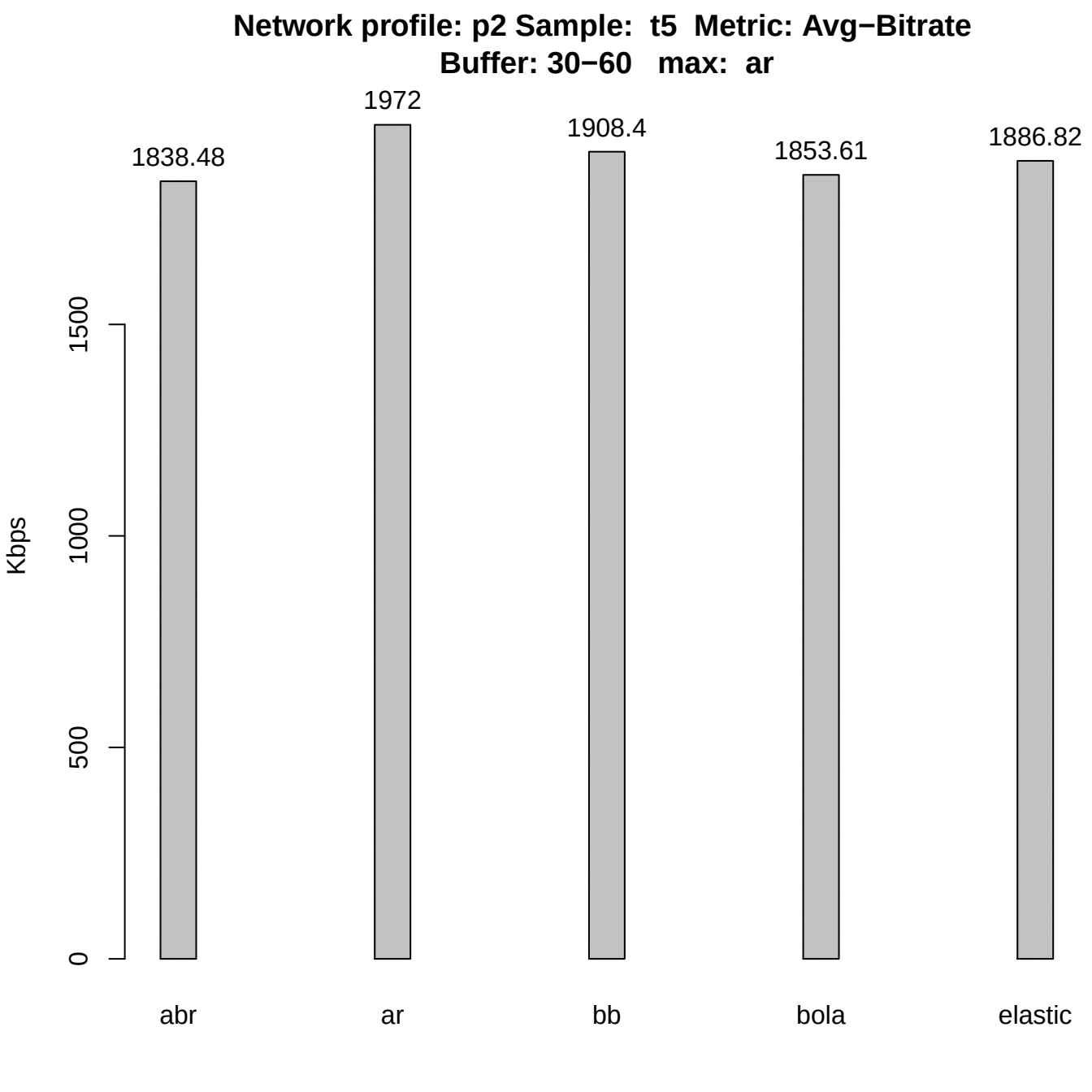

Network profile: p2 Sample: t3 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.290454
0.236619
0.227514
0.495958
0.212224
abr
ar
bb
bola
elastic

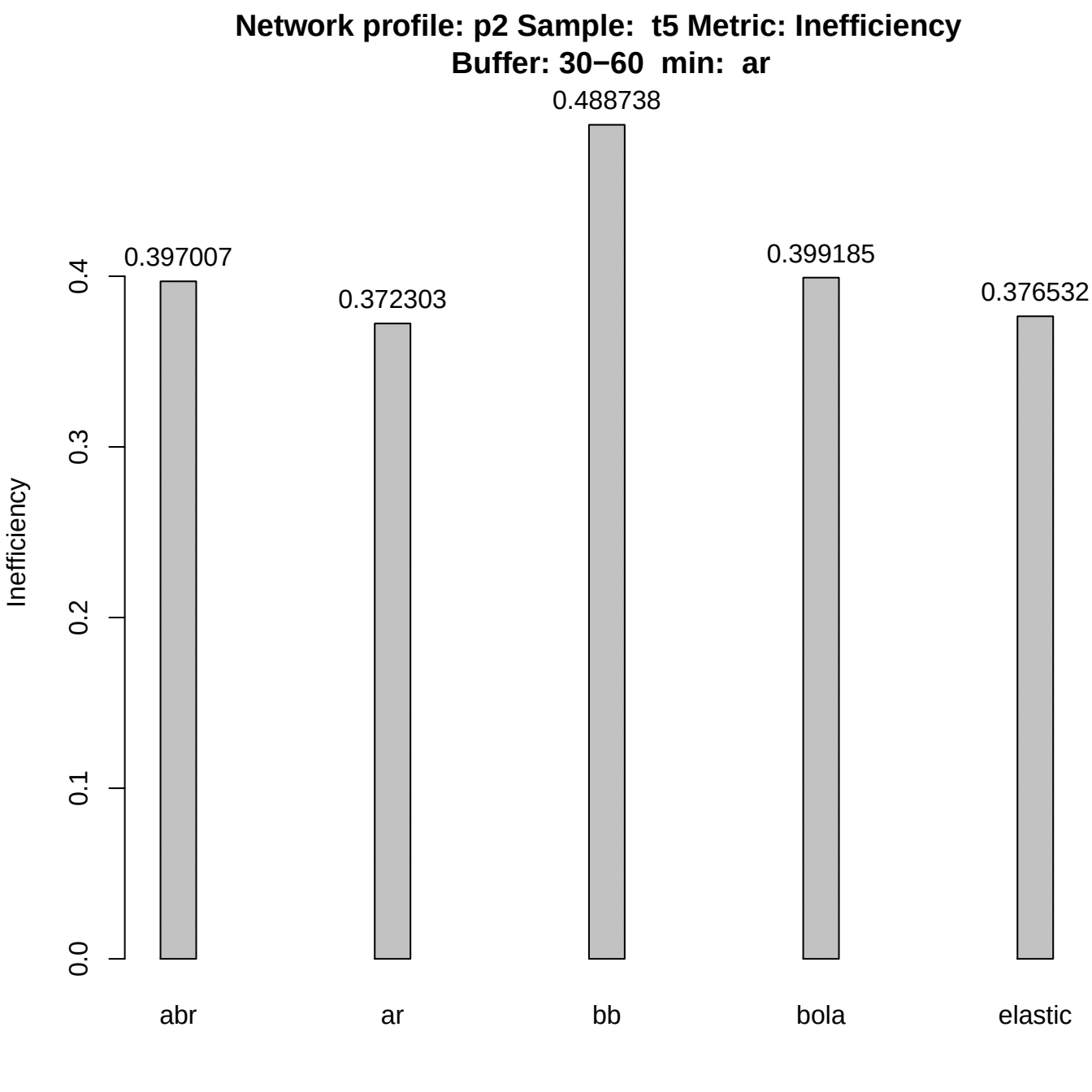

Network profile: p2 Sample: t3 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
102
40
6
0
46
abr
ar
bb
bola
elastic

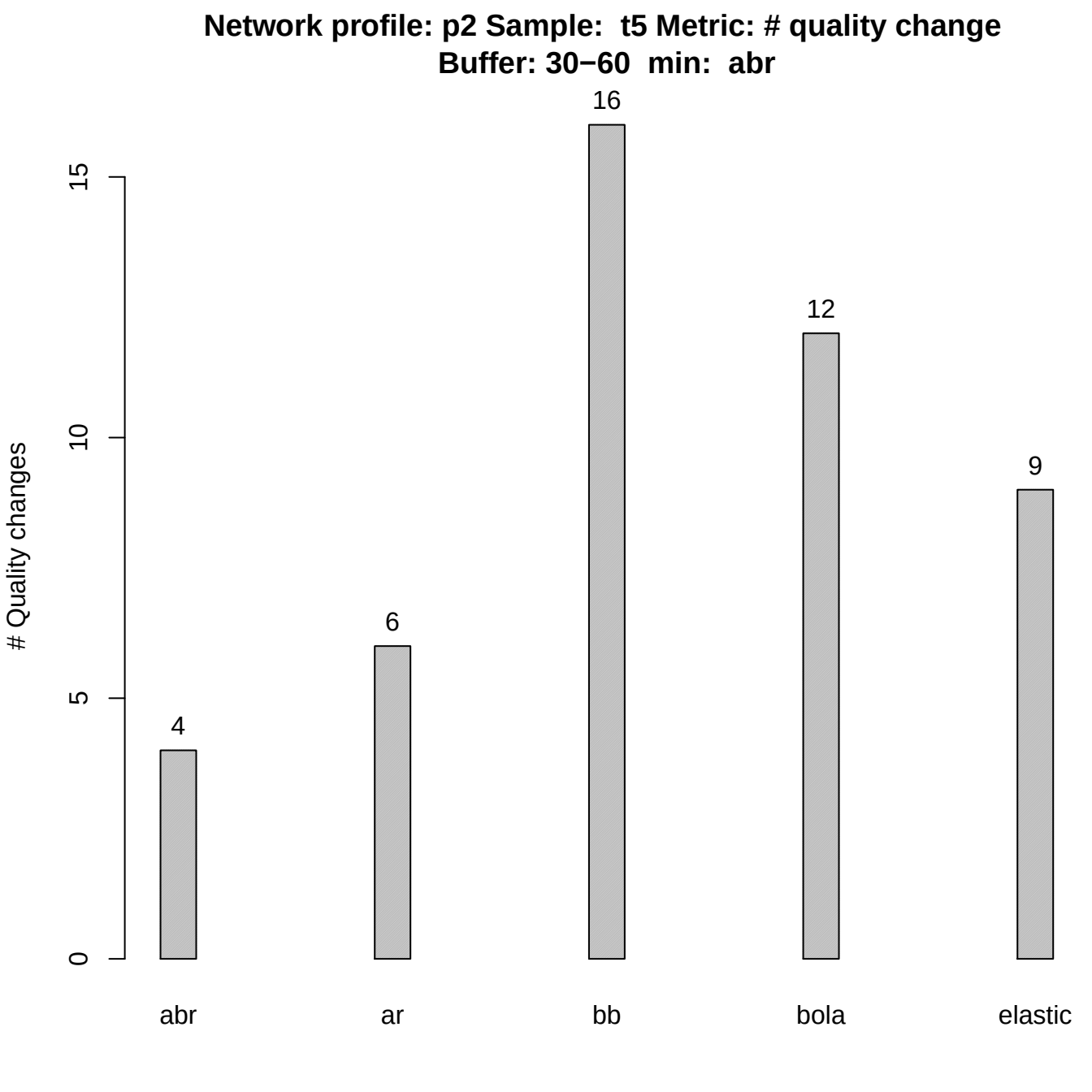

Network profile: p2 Sample: t4 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
3000
2544.05
3309.76
3206.67
1143
3163.57
abr
ar
bb
bola
elastic

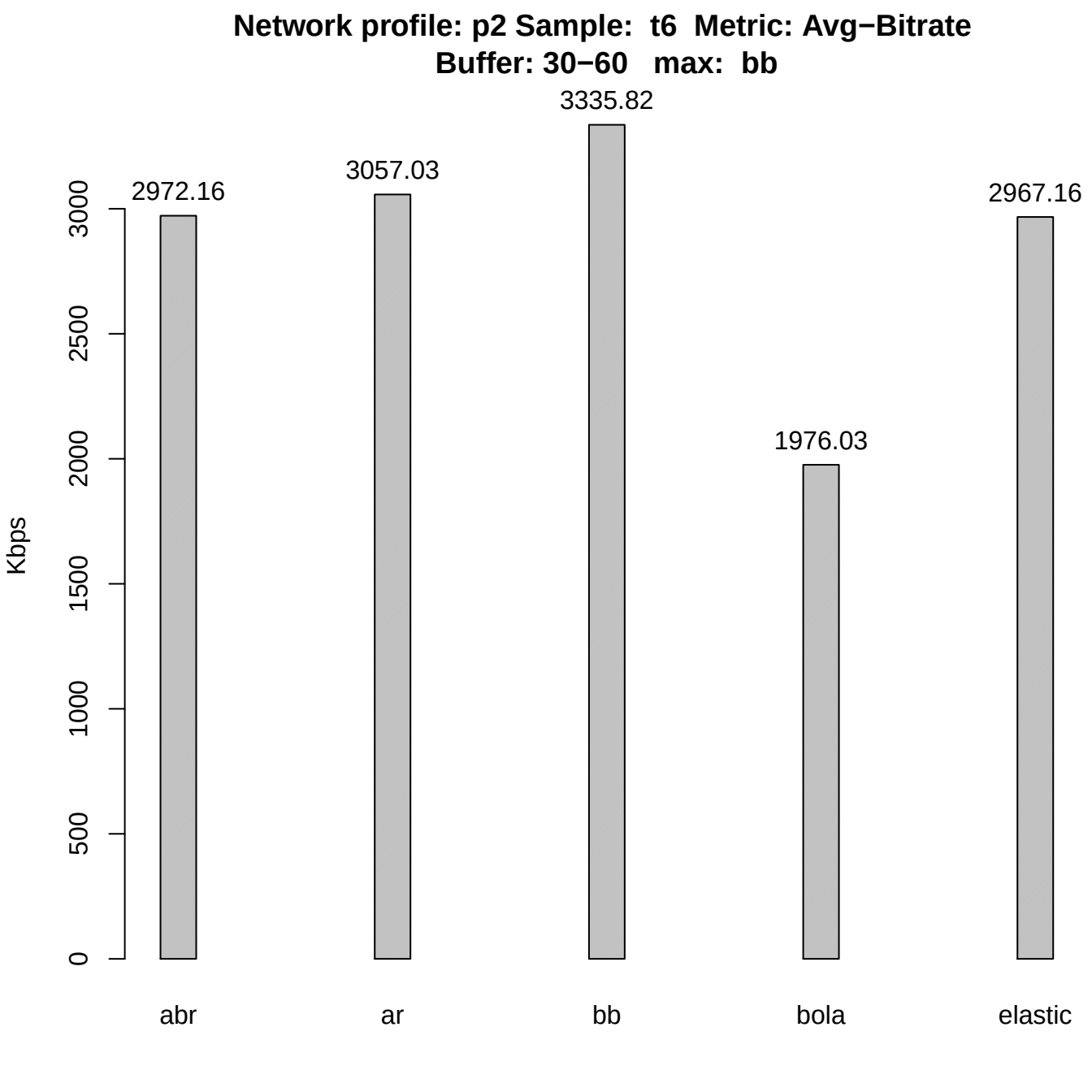

Network profile: p2 Sample: t4 Metric: Inefficiency
Buffer: 30−60 min: bb
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.5
0.306716
0.153265
0.149148
0.503038
0.157109
abr
ar
bb
bola
elastic

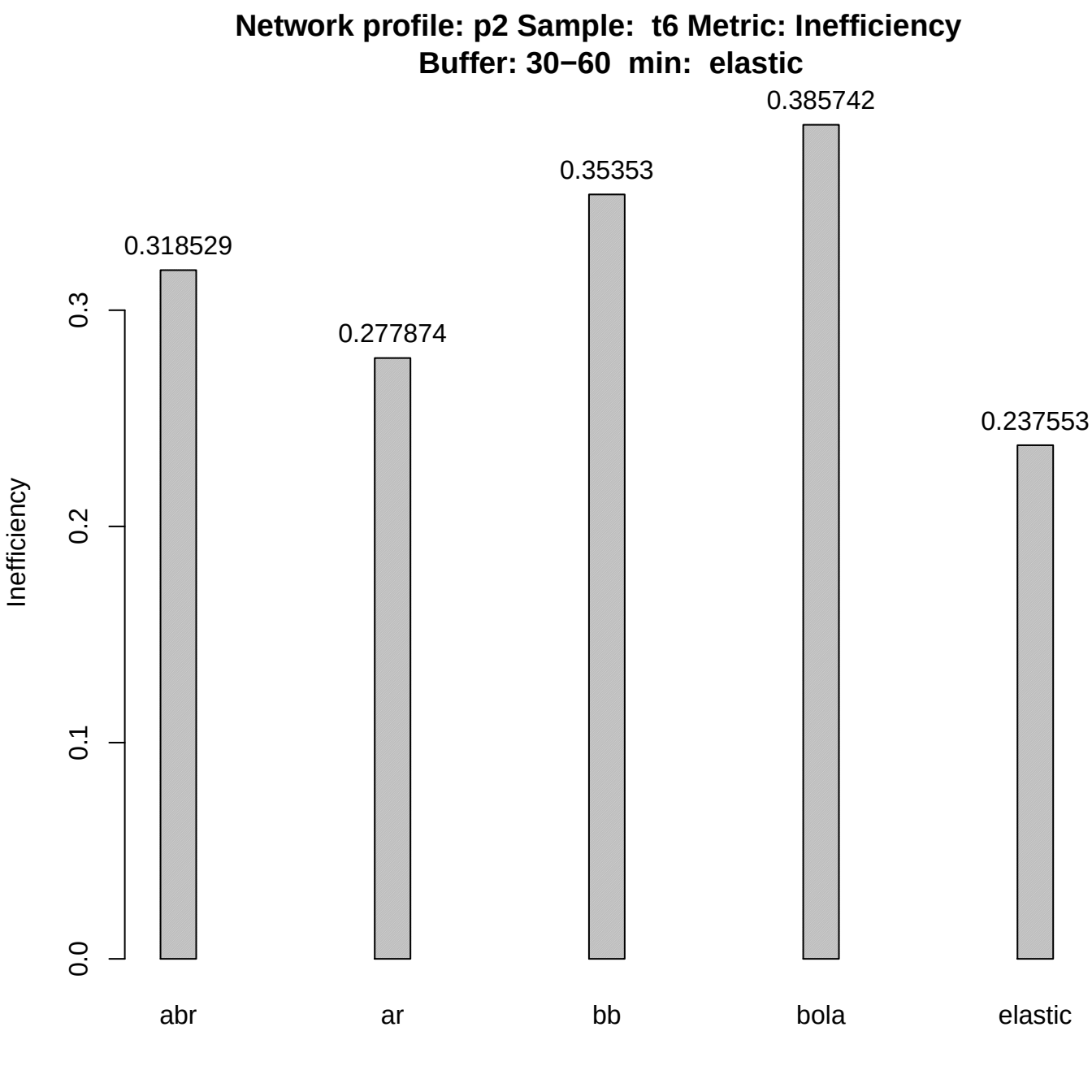

Network profile: p2 Sample: t4 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
10
20
30
40
50
60
70
74
34
14
0
18
abr
ar
bb
bola
elastic

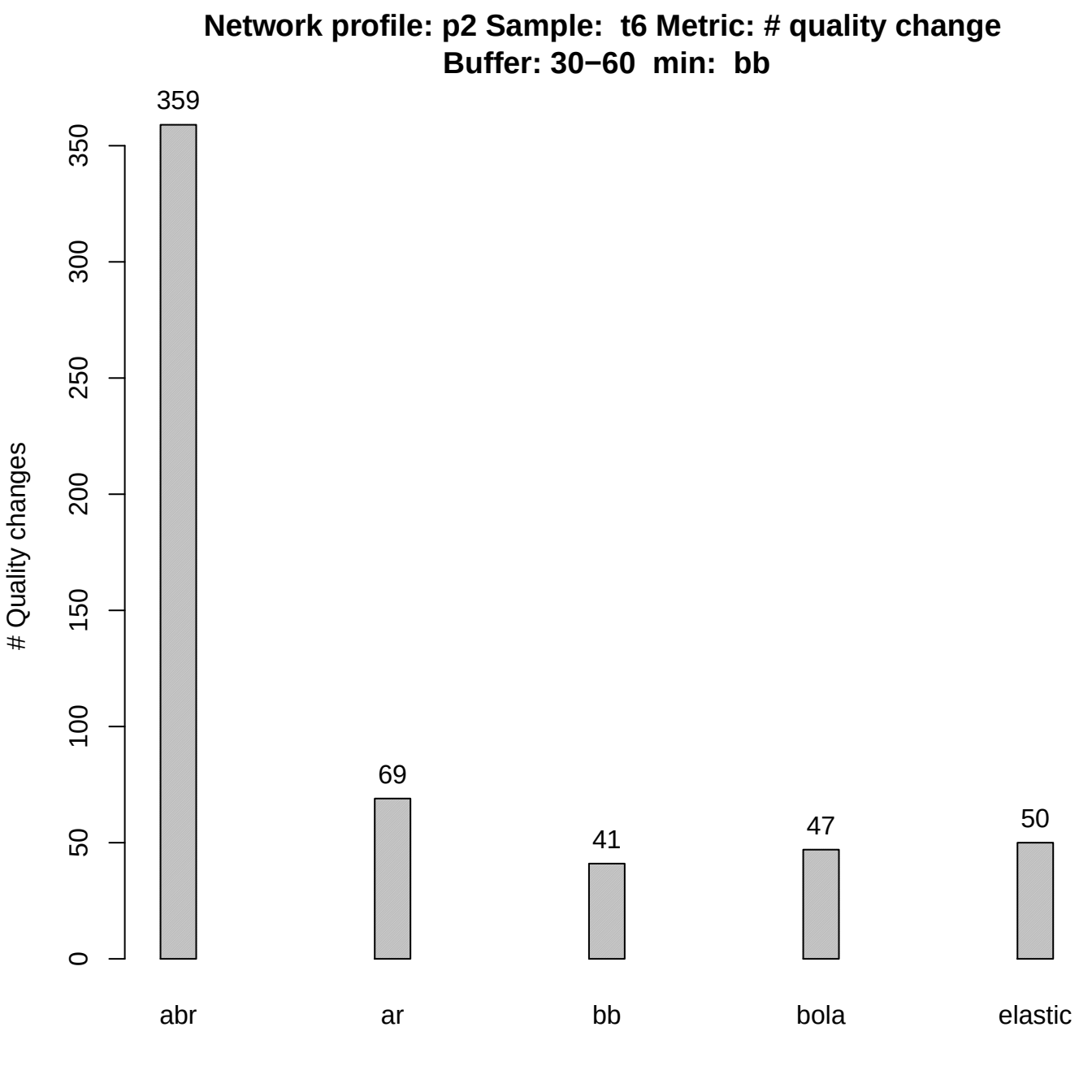

Network profile: p2 Sample: t5 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
1838.48
1972
1908.4
1853.61
1886.82
Kbps
0
500
1000
1500
abr
ar
bb
bola
elastic

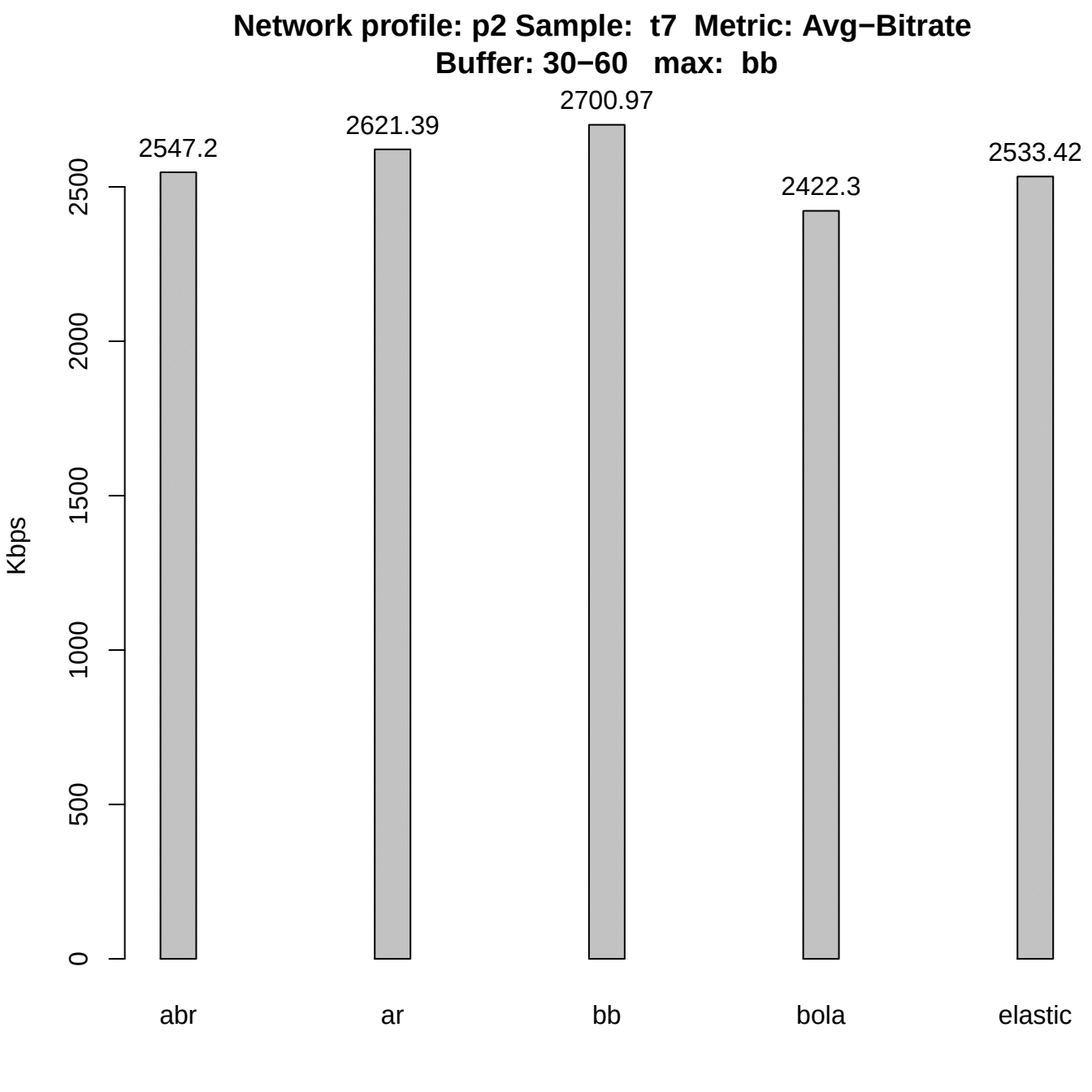

Network profile: p2 Sample: t5 Metric: Inefficiency
Buffer: 30−60 min: ar
Inefficiency
0.0
0.1
0.2
0.3
0.4
0.397007
0.372303
0.488738
0.399185
0.376532
abr
ar
bb
bola
elastic

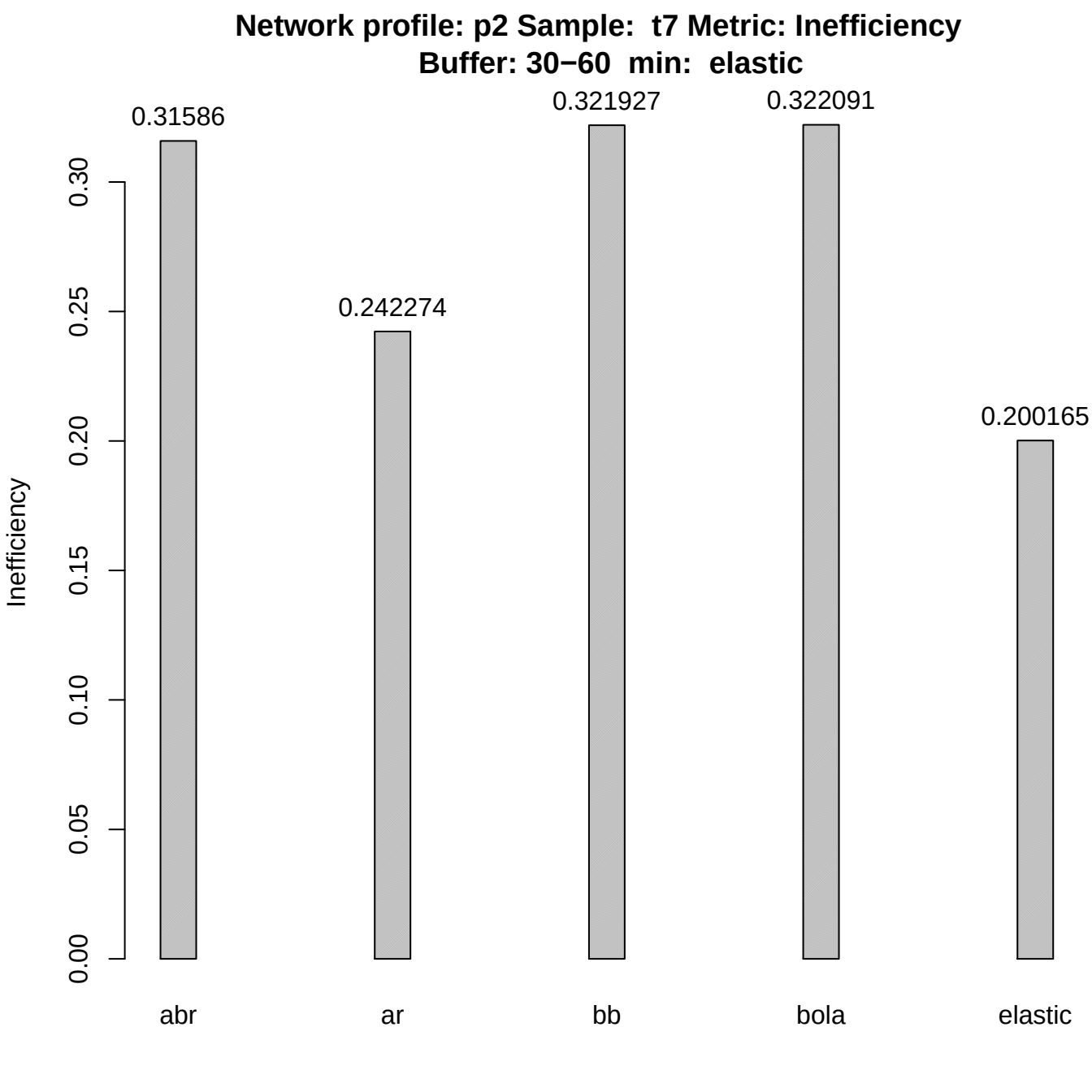

Network profile: p2 Sample: t5 Metric: # quality change
Buffer: 30−60 min: abr
Quality changes
0
5
10
15
4
6
16
12
9
abr
ar
bb
bola
elastic

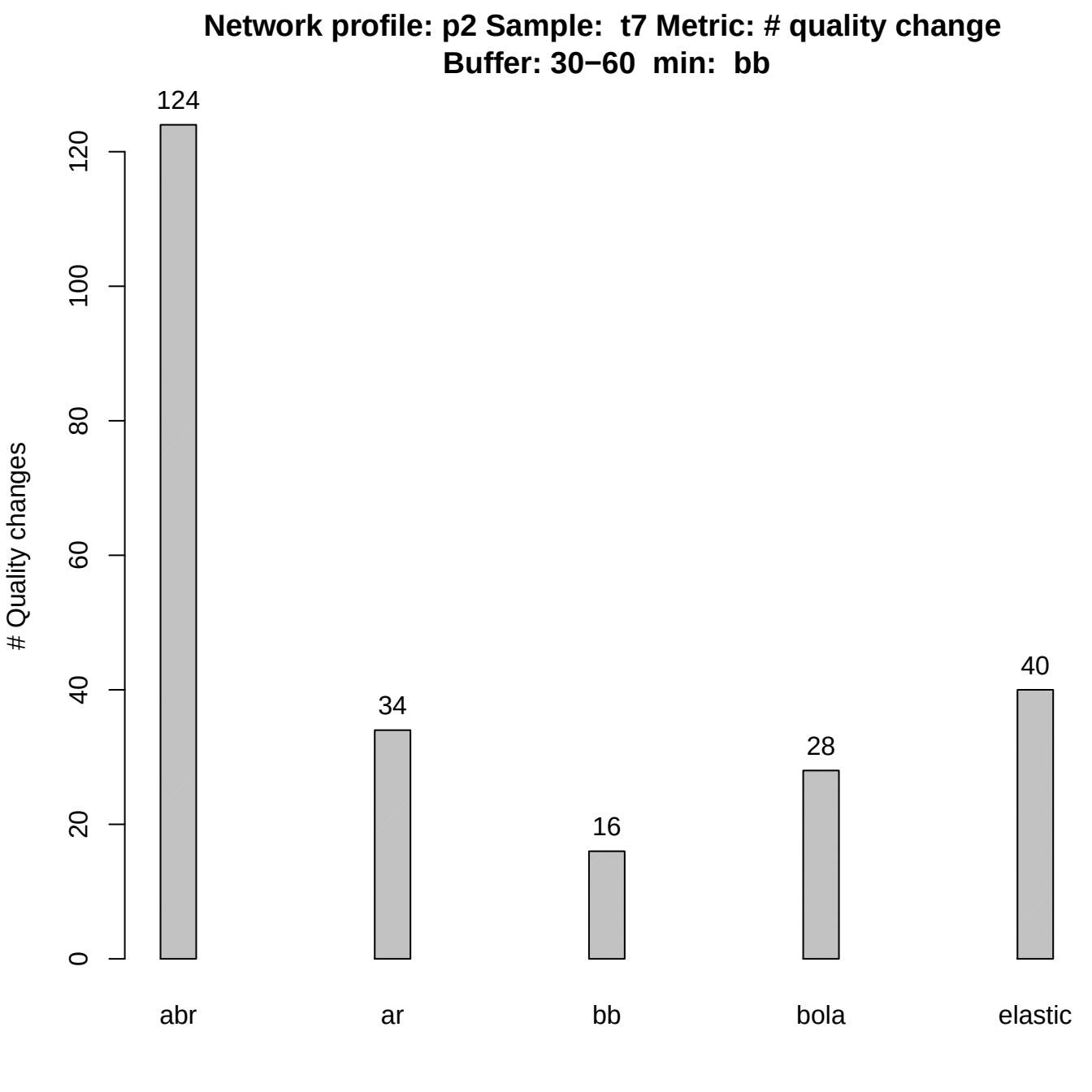

Network profile: p2 Sample: t6 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
Kbps
0
500
1000
1500
2000
2500
3000
2972.16
3057.03
3335.82
1976.03
2967.16
abr
ar
bb
bola
elastic

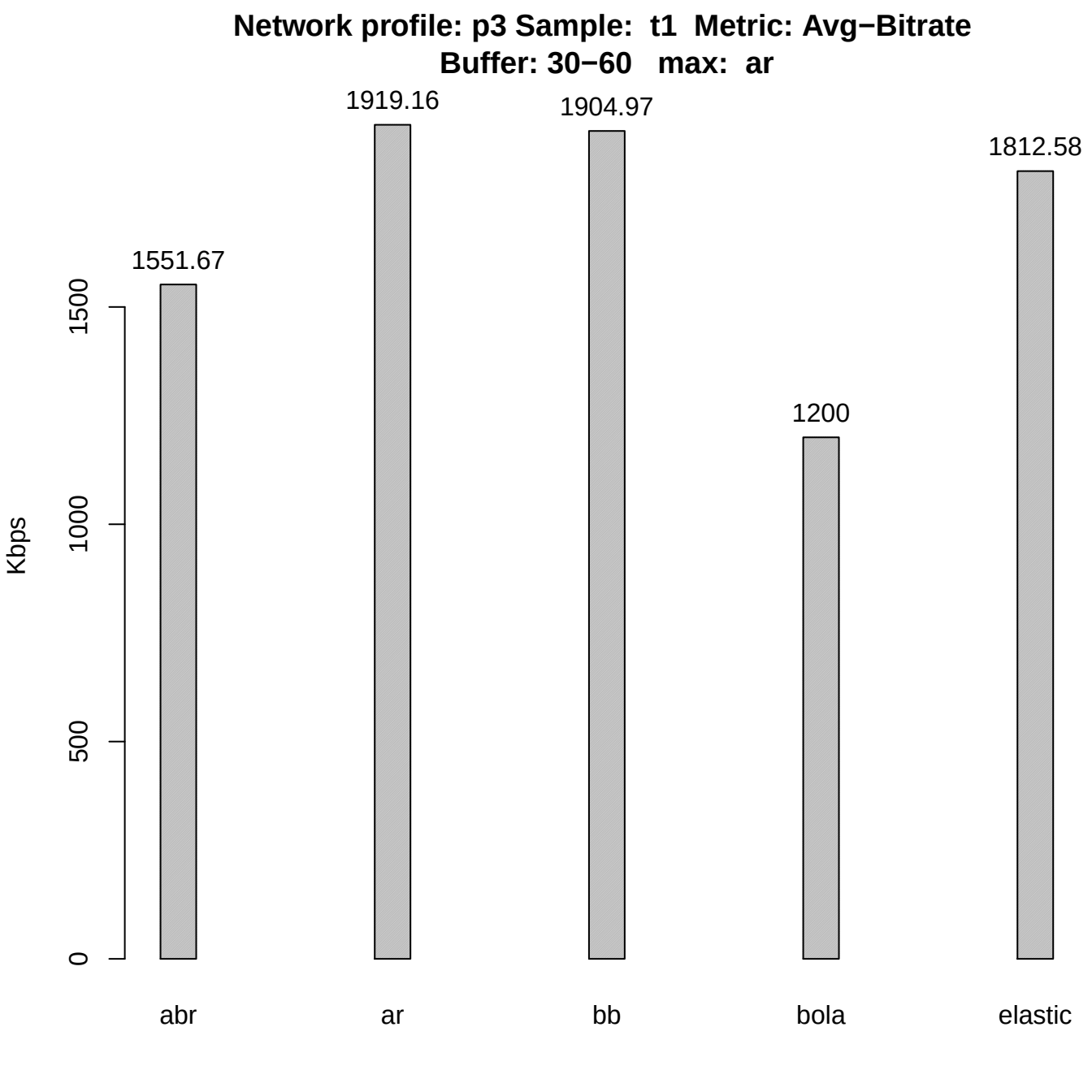

Network profile: p2 Sample: t6 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.0
0.1
0.2
0.3
0.318529
0.277874
0.35353
0.385742
0.237553
abr
ar
bb
bola
elastic

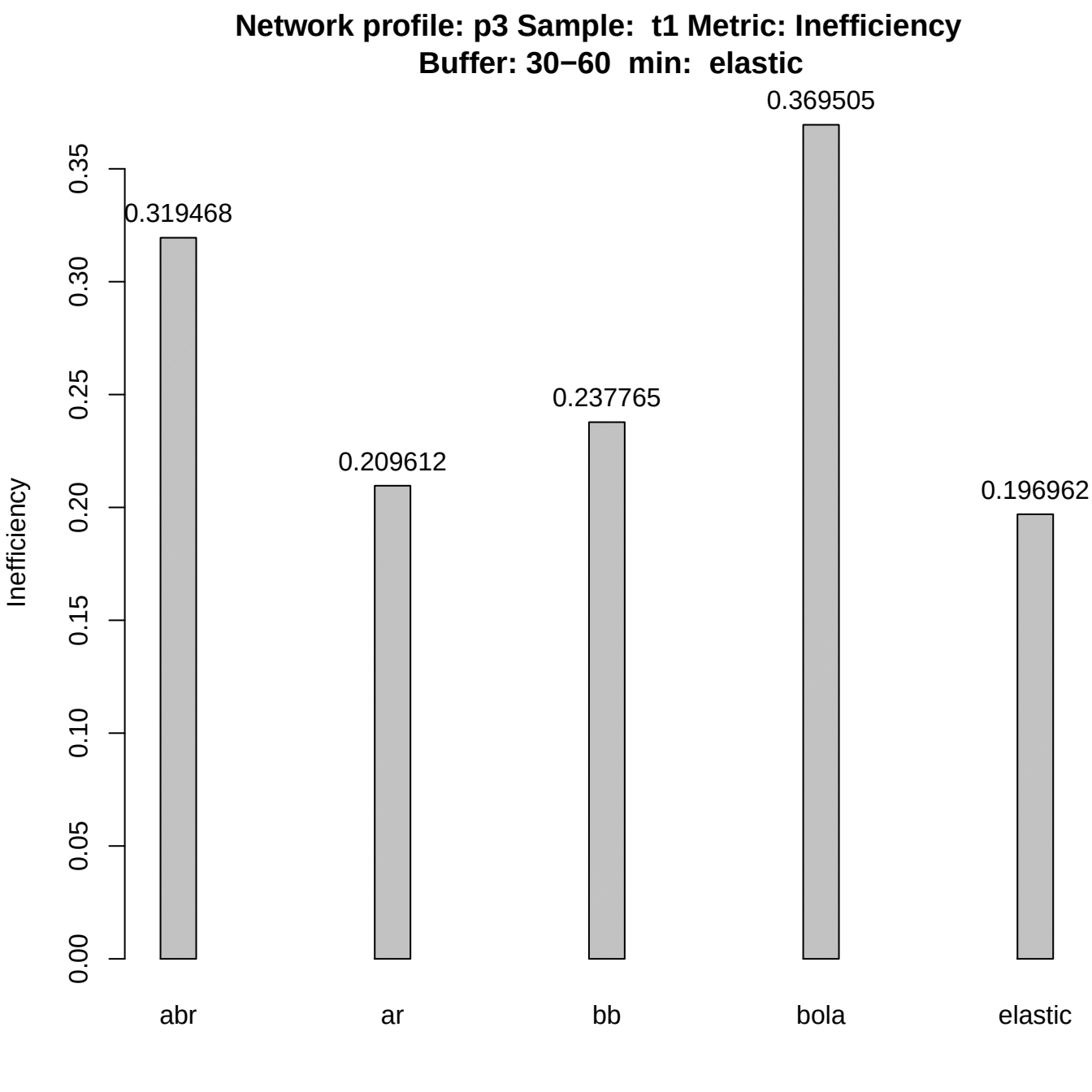

Network profile: p2 Sample: t6 Metric: # quality change
Buffer: 30−60 min: bb
Quality changes
0
50
100
150
200
250
300
350
359
69
41
47
50
abr
ar
bb
bola
elastic

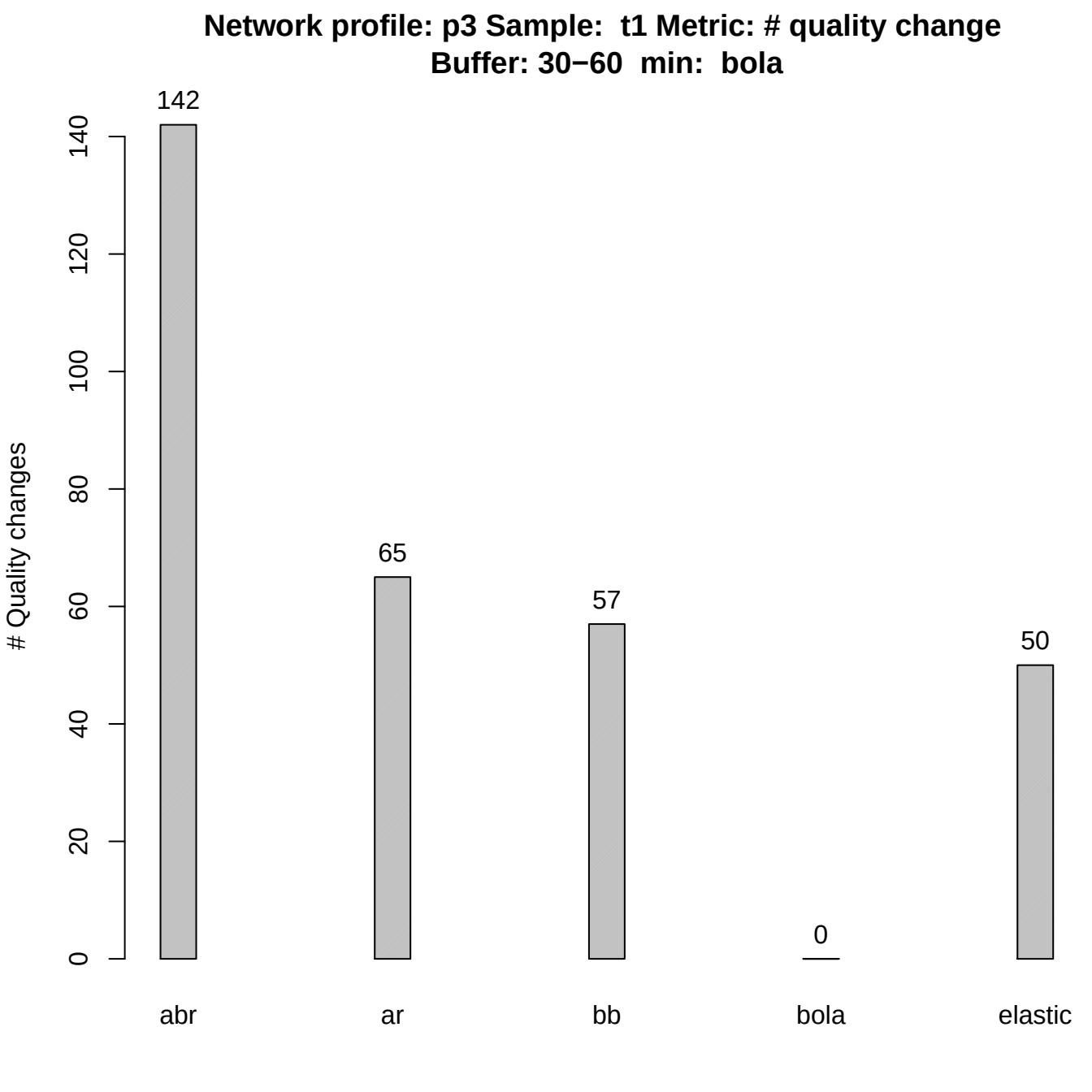

Network profile: p2 Sample: t7 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
Kbps
0
500
1000
1500
2000
2500
2547.2
2621.39
2700.97
2422.3
2533.42
abr
ar
bb
bola
elastic

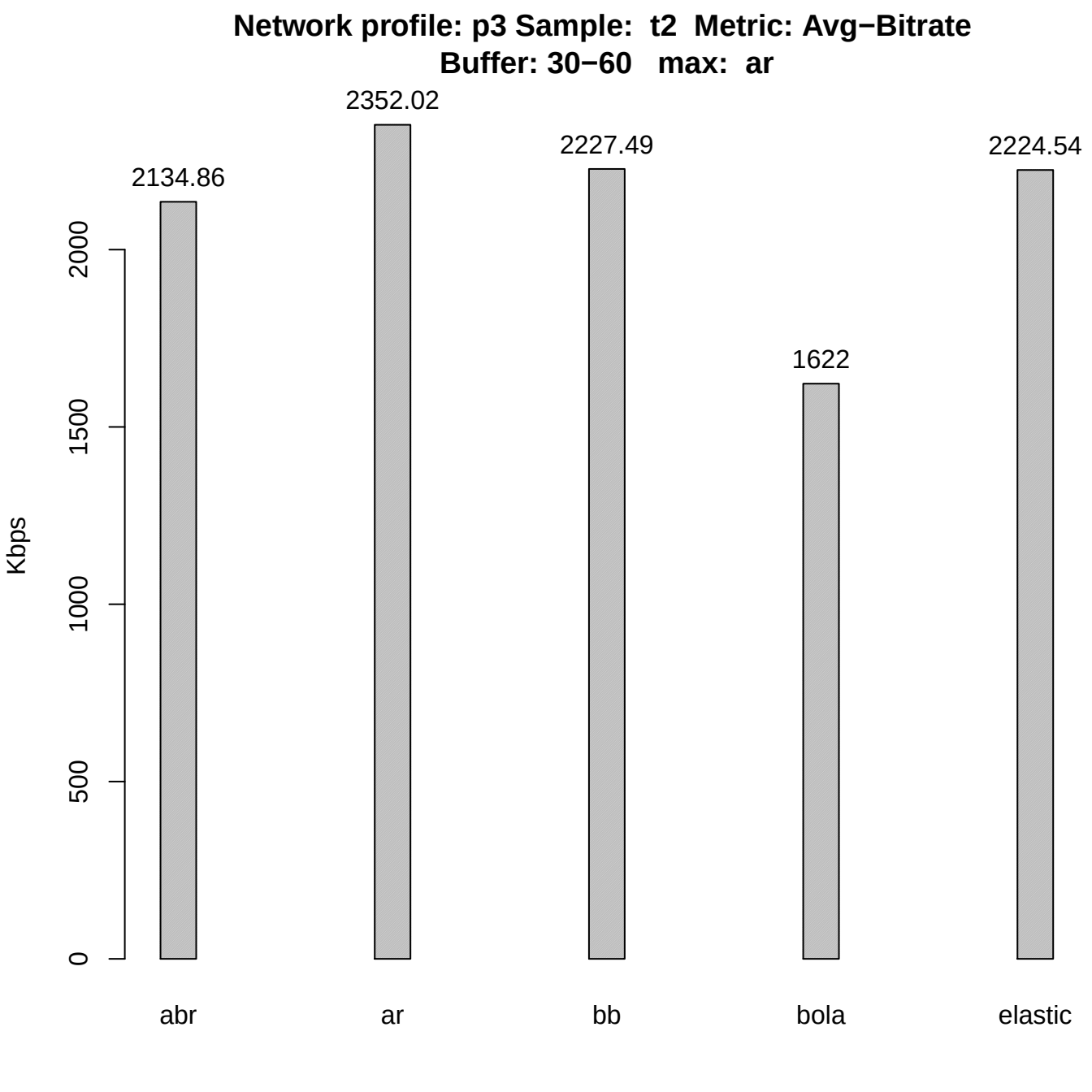

Network profile: p2 Sample: t7 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.31586
0.242274
0.321927
0.322091
0.200165
abr
ar
bb
bola
elastic

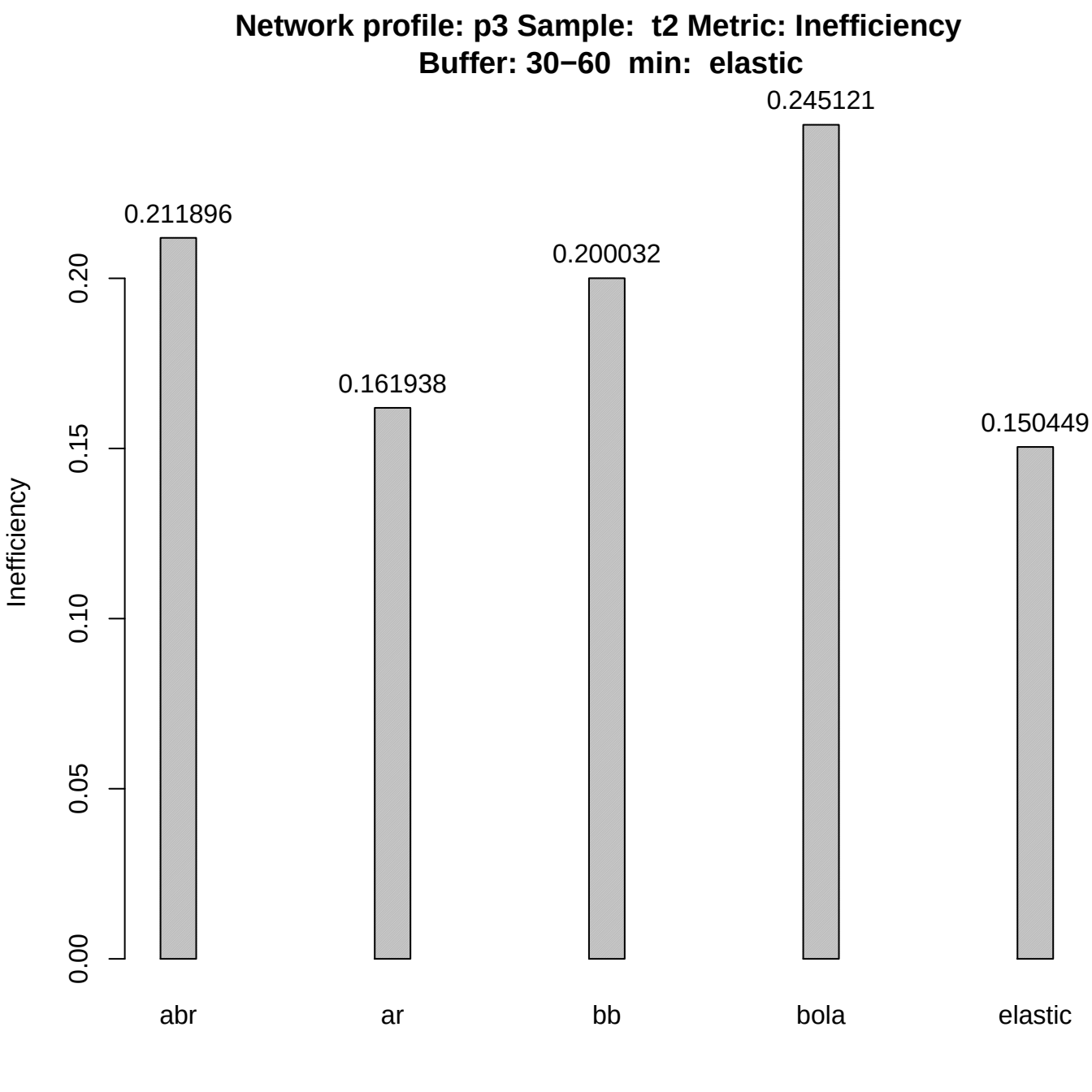

Network profile: p2 Sample: t7 Metric: # quality change
Buffer: 30−60 min: bb
Quality changes
0
20
40
60
80
100
120
124
34
16
28
40
abr
ar
bb
bola
elastic

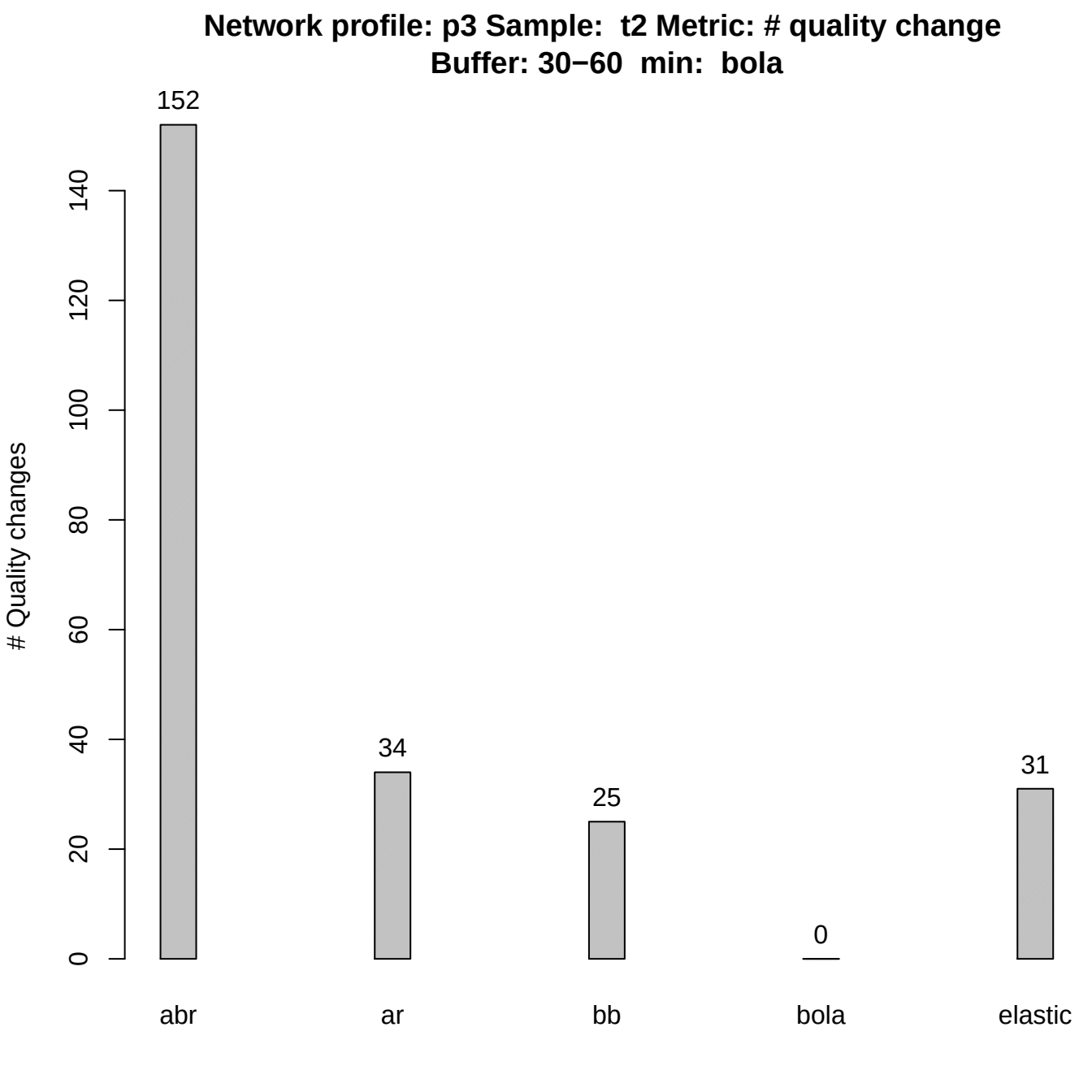

Network profile: p3 Sample: t1 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
1551.67
1919.16
1904.97
1200
1812.58
abr
ar
bb
bola
elastic

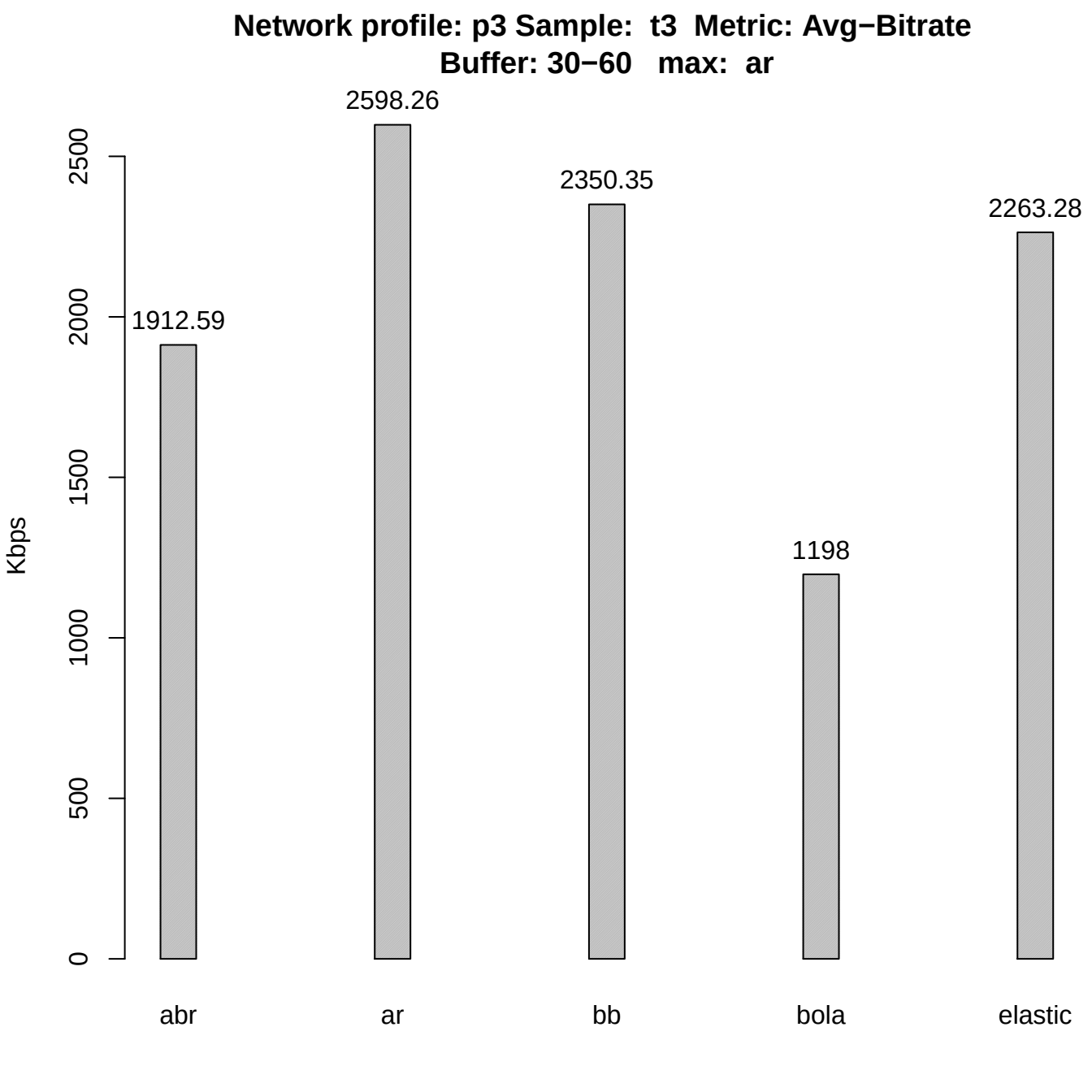

Network profile: p3 Sample: t1 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.319468
0.209612
0.237765
0.369505
0.196962
abr
ar
bb
bola
elastic

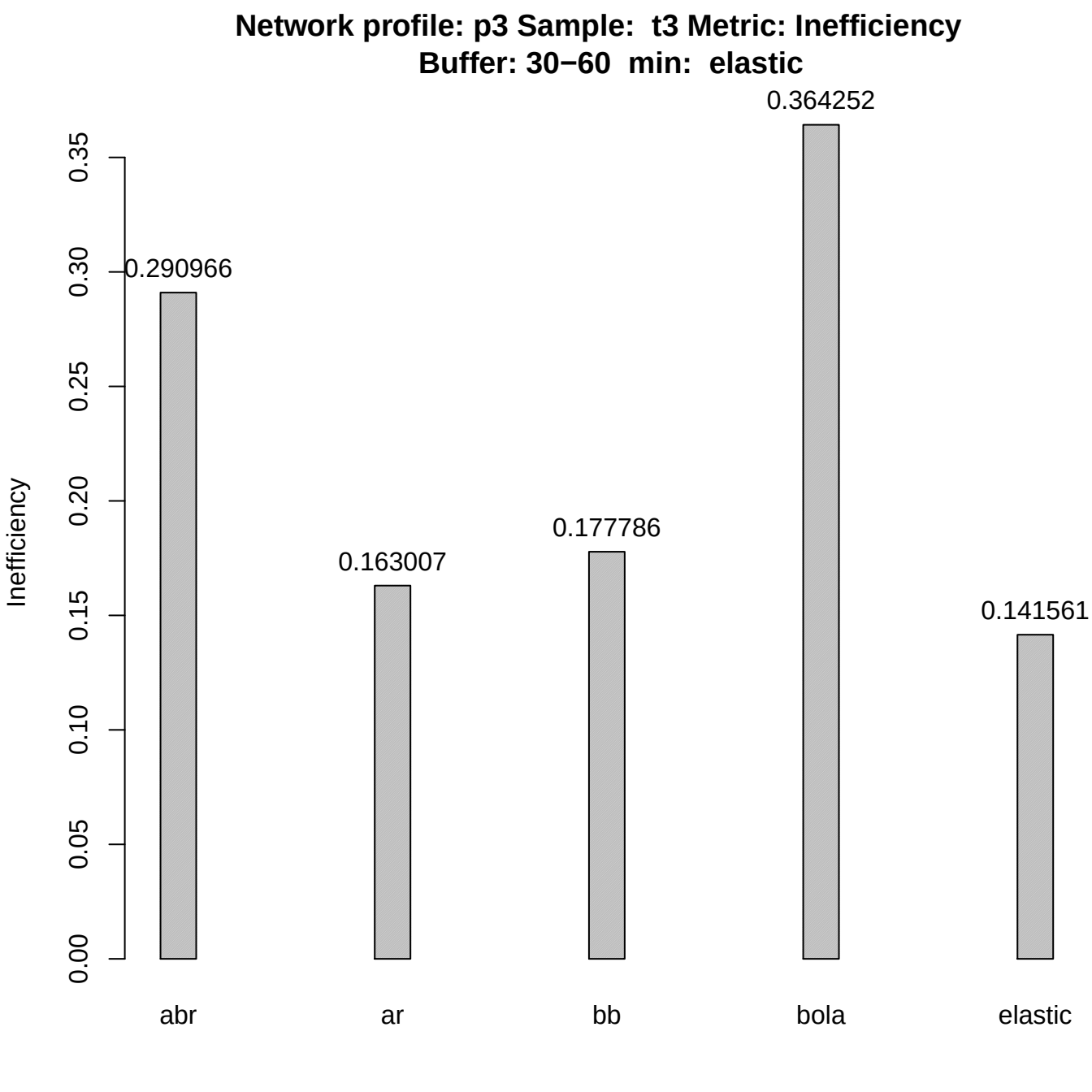

Network profile: p3 Sample: t1 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
120
140
142
65
57
0
50
abr
ar
bb
bola
elastic

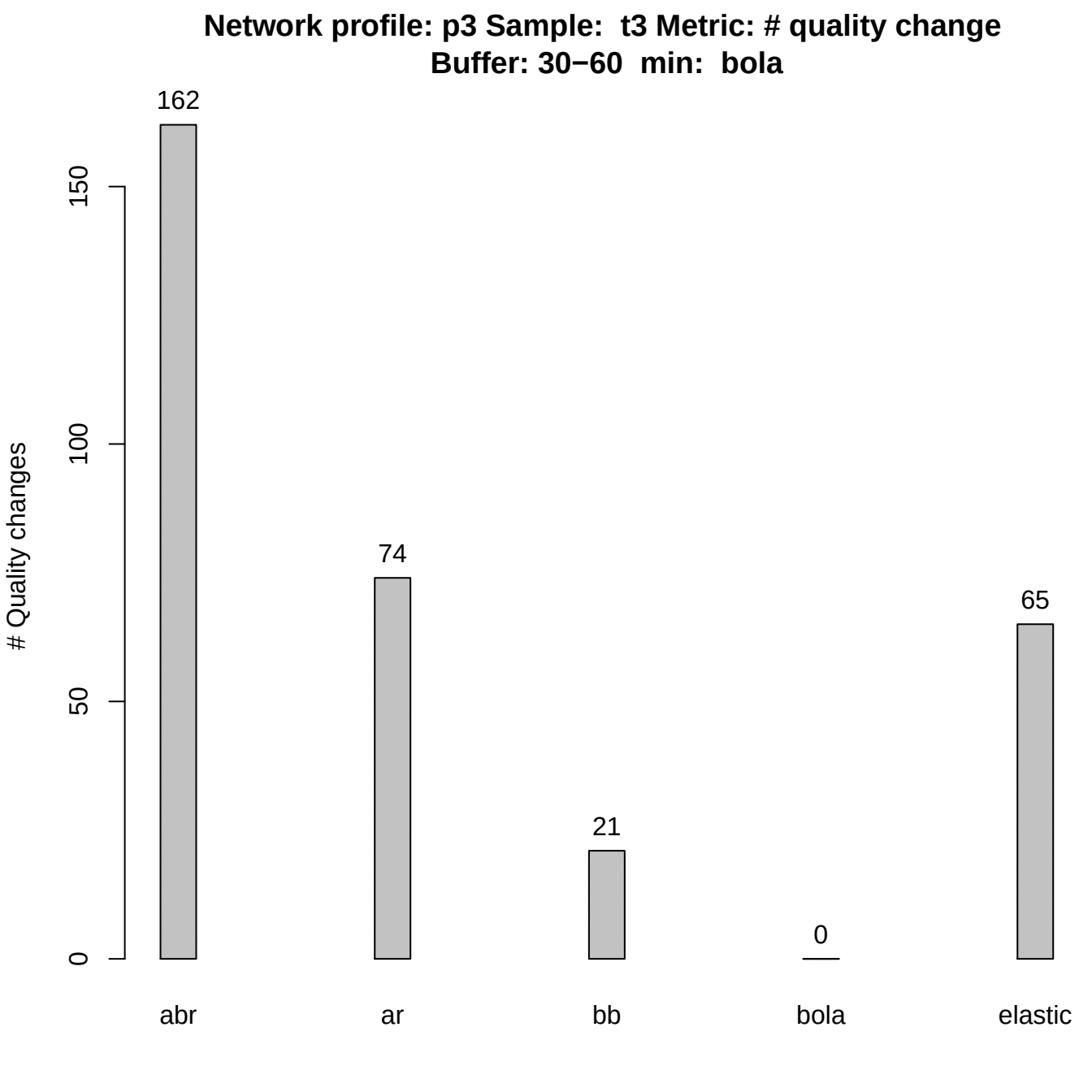

Network profile: p3 Sample: t2 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2134.86
2352.02
2227.49
1622
2224.54
abr
ar
bb
bola
elastic

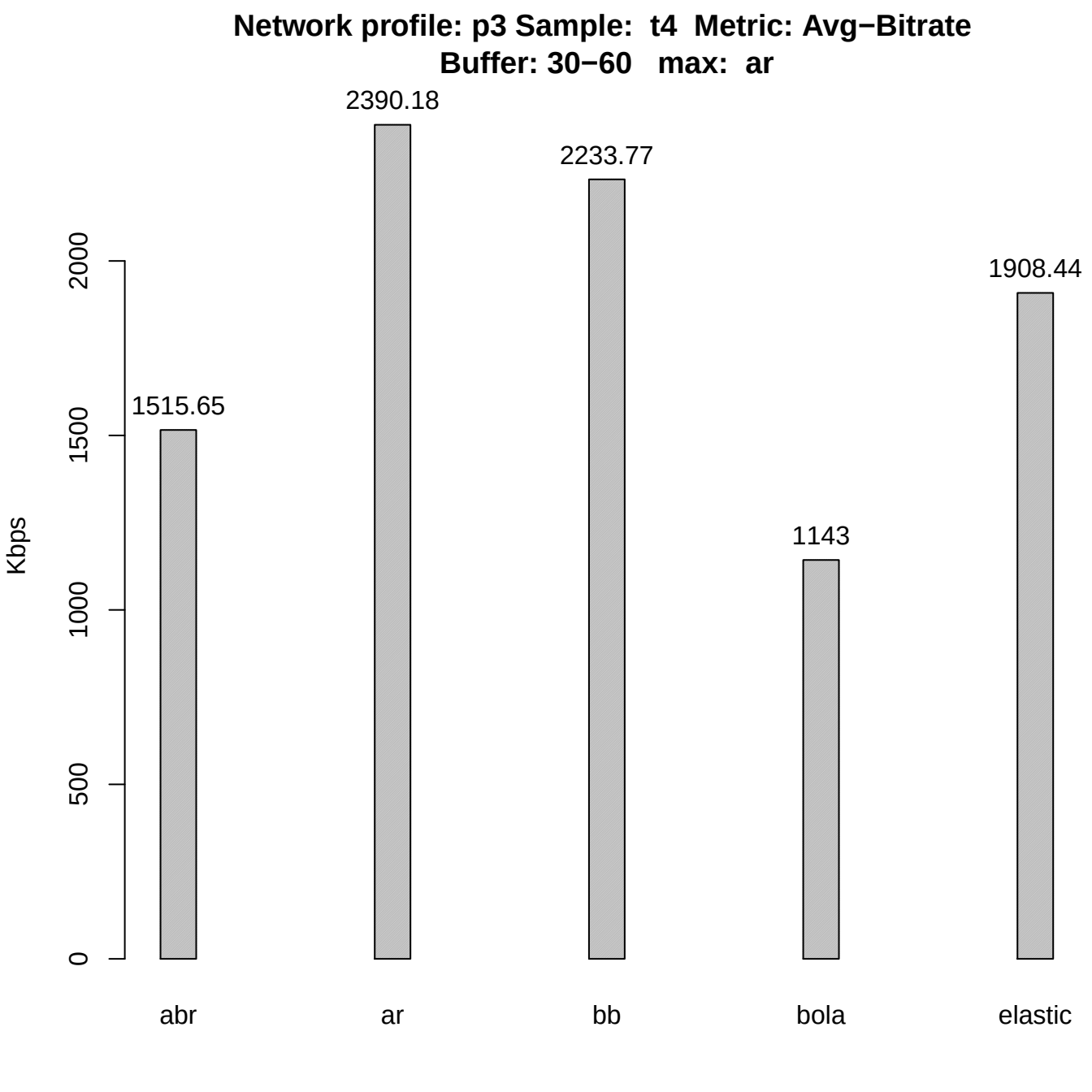

Network profile: p3 Sample: t2 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.211896
0.161938
0.200032
0.245121
0.150449
abr
ar
bb
bola
elastic

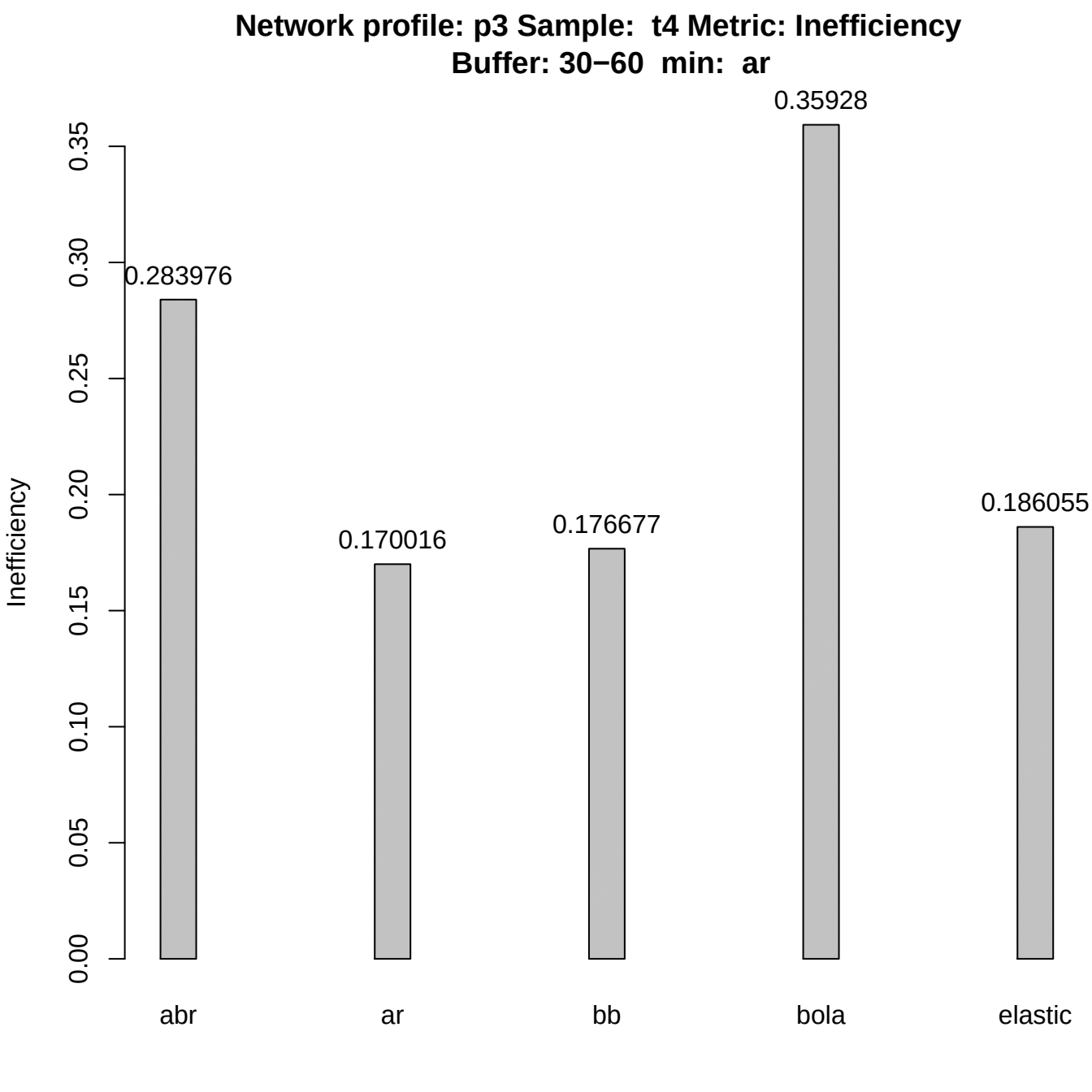

Network profile: p3 Sample: t2 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
120
140
152
34
25
0
31
abr
ar
bb
bola
elastic

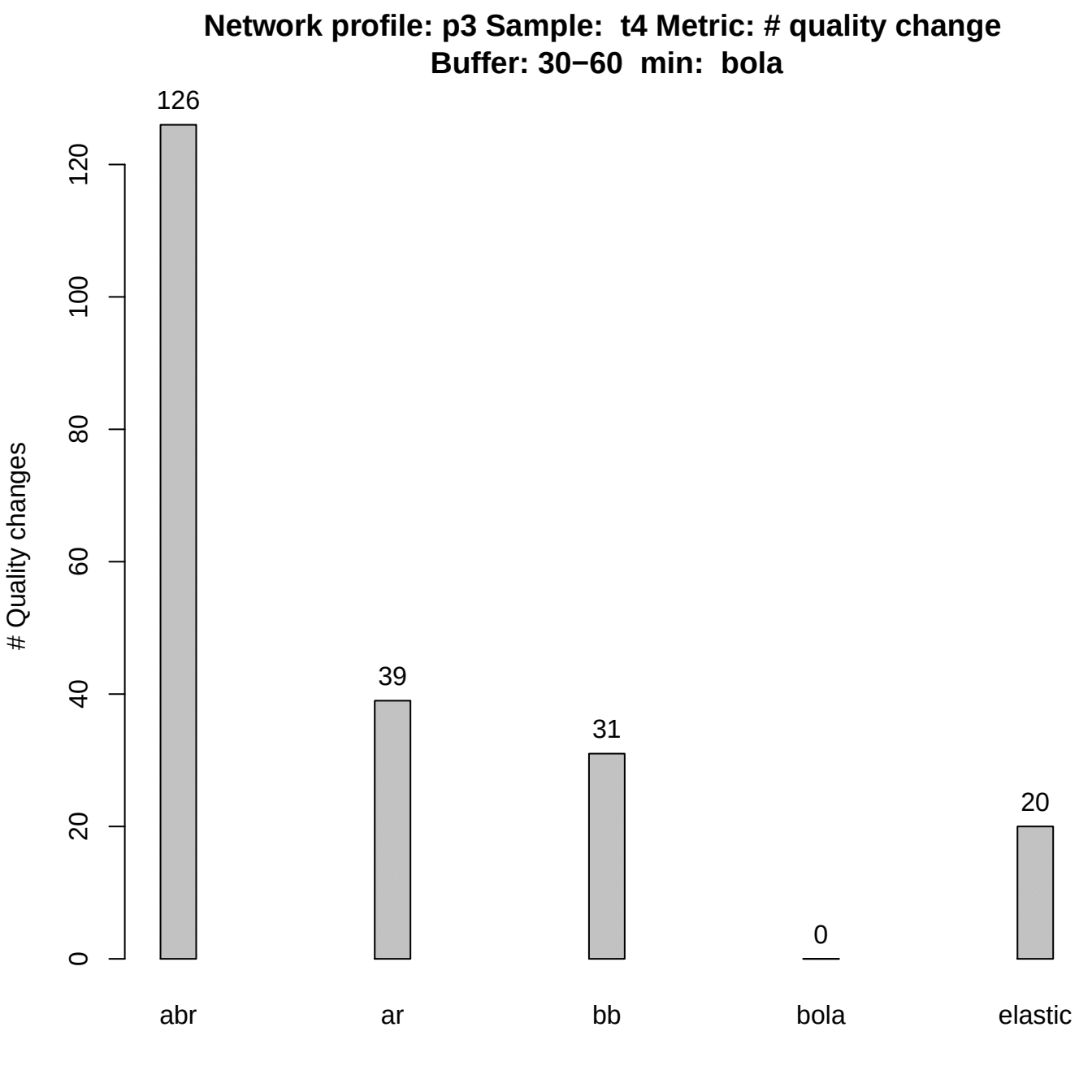

Network profile: p3 Sample: t3 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
2500
1912.59
2598.26
2350.35
1198
2263.28
abr
ar
bb
bola
elastic

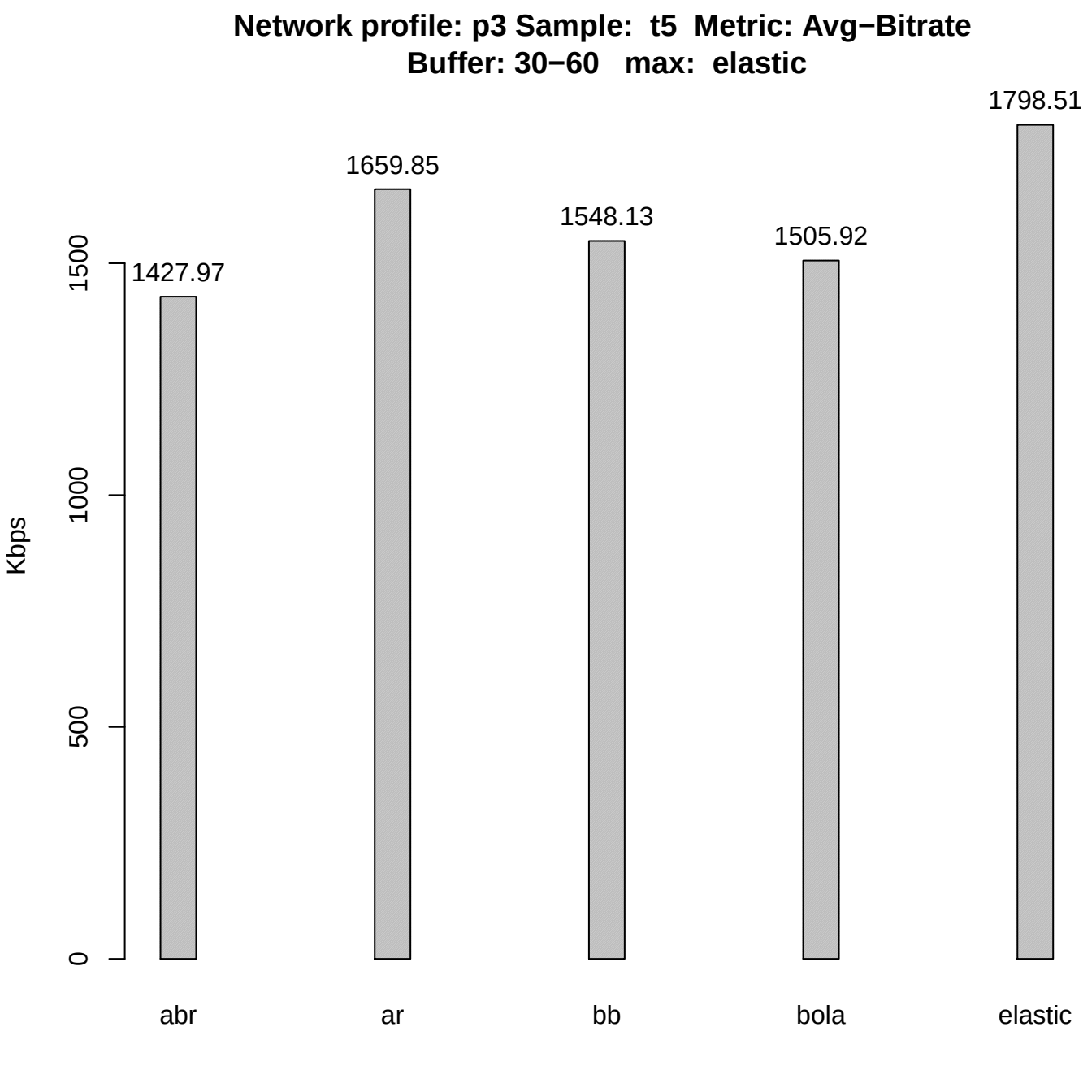

Network profile: p3 Sample: t3 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.290966
0.163007
0.177786
0.364252
0.141561
abr
ar
bb
bola
elastic

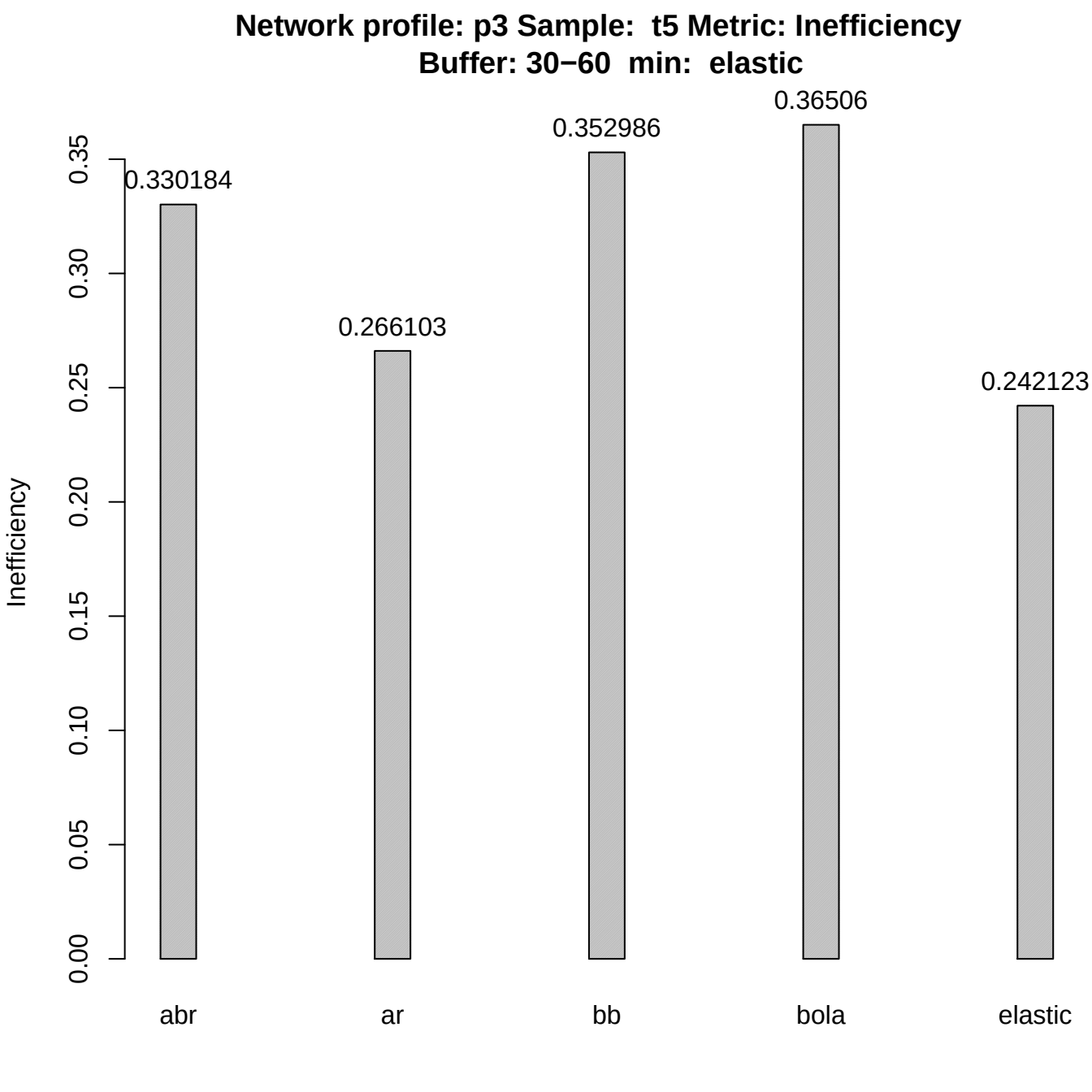

Network profile: p3 Sample: t3 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
50
100
150
162
74
21
0
65
abr
ar
bb
bola
elastic

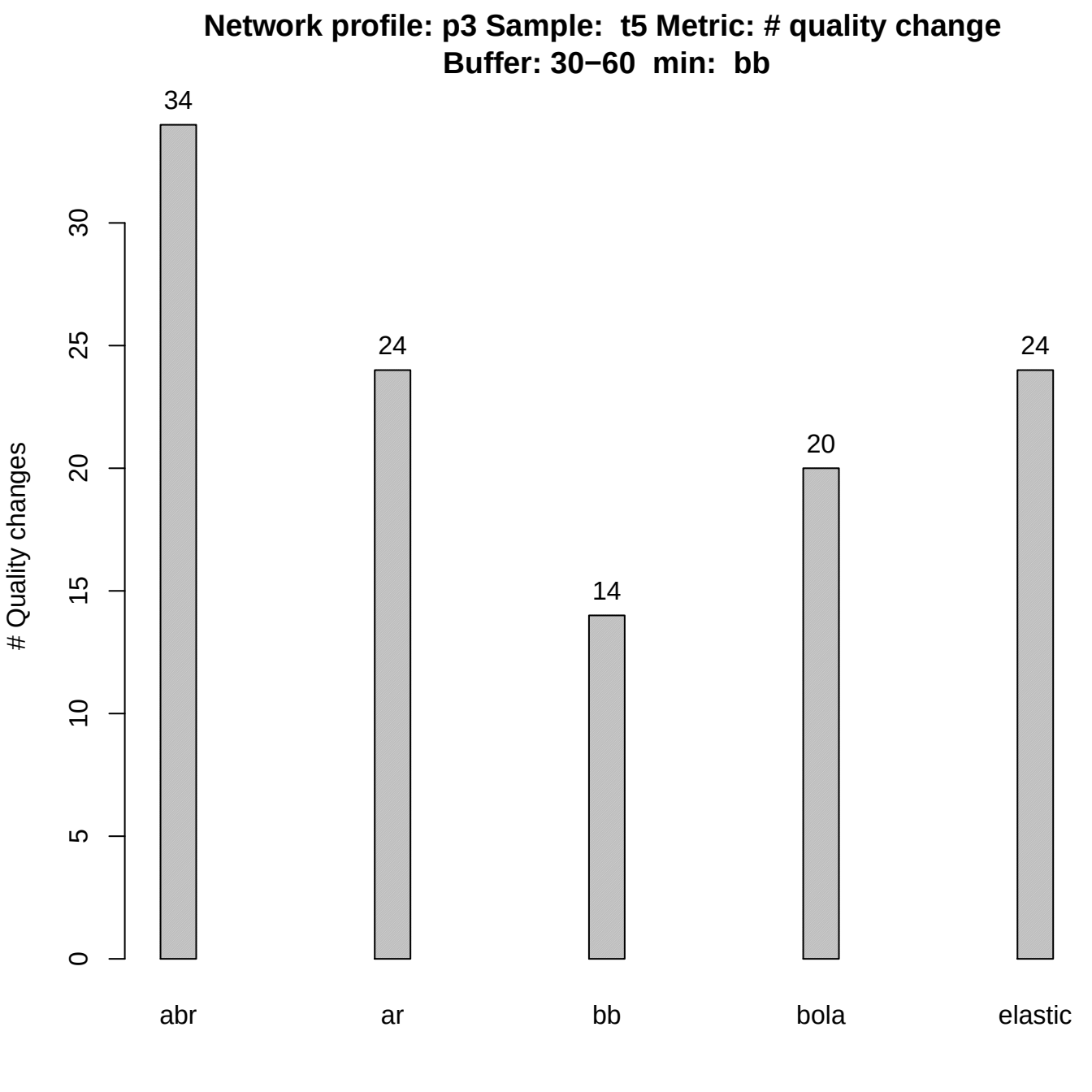

Network profile: p3 Sample: t4 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
1515.65
2390.18
2233.77
1143
1908.44
abr
ar
bb
bola
elastic

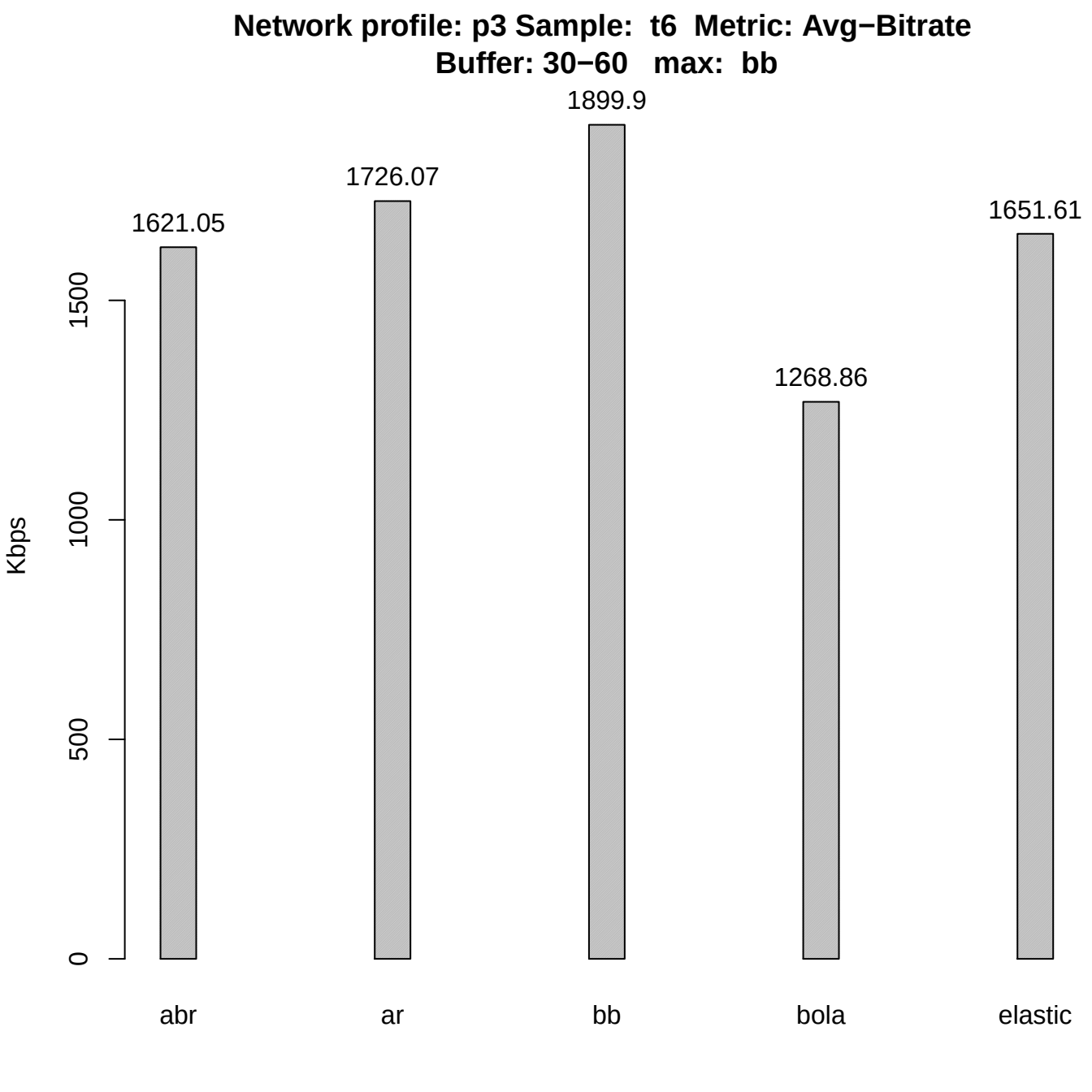

Network profile: p3 Sample: t4 Metric: Inefficiency
Buffer: 30−60 min: ar
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.283976
0.170016
0.176677
0.35928
0.186055
abr
ar
bb
bola
elastic

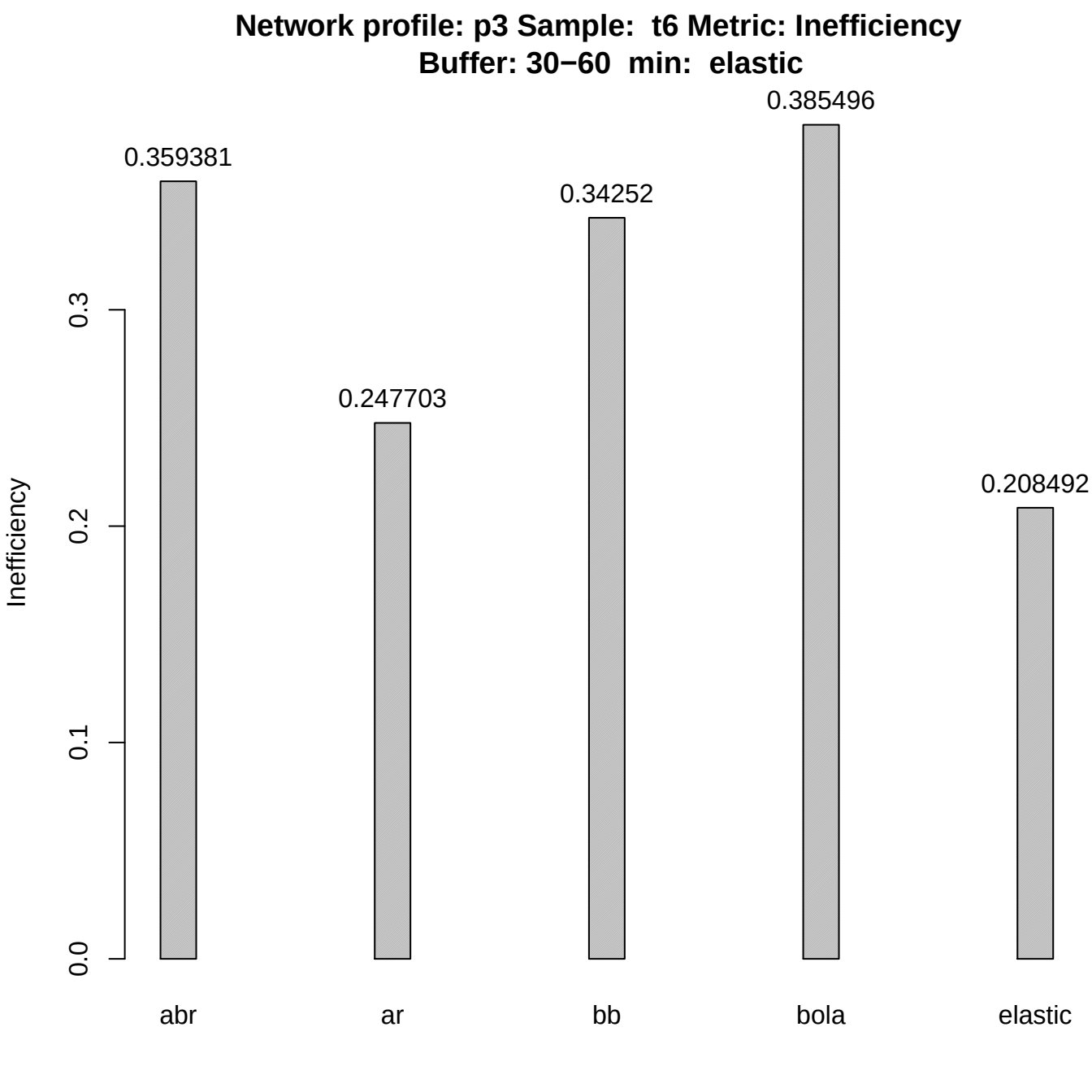

Network profile: p3 Sample: t4 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
120
126
39
31
0
20
abr
ar
bb
bola
elastic

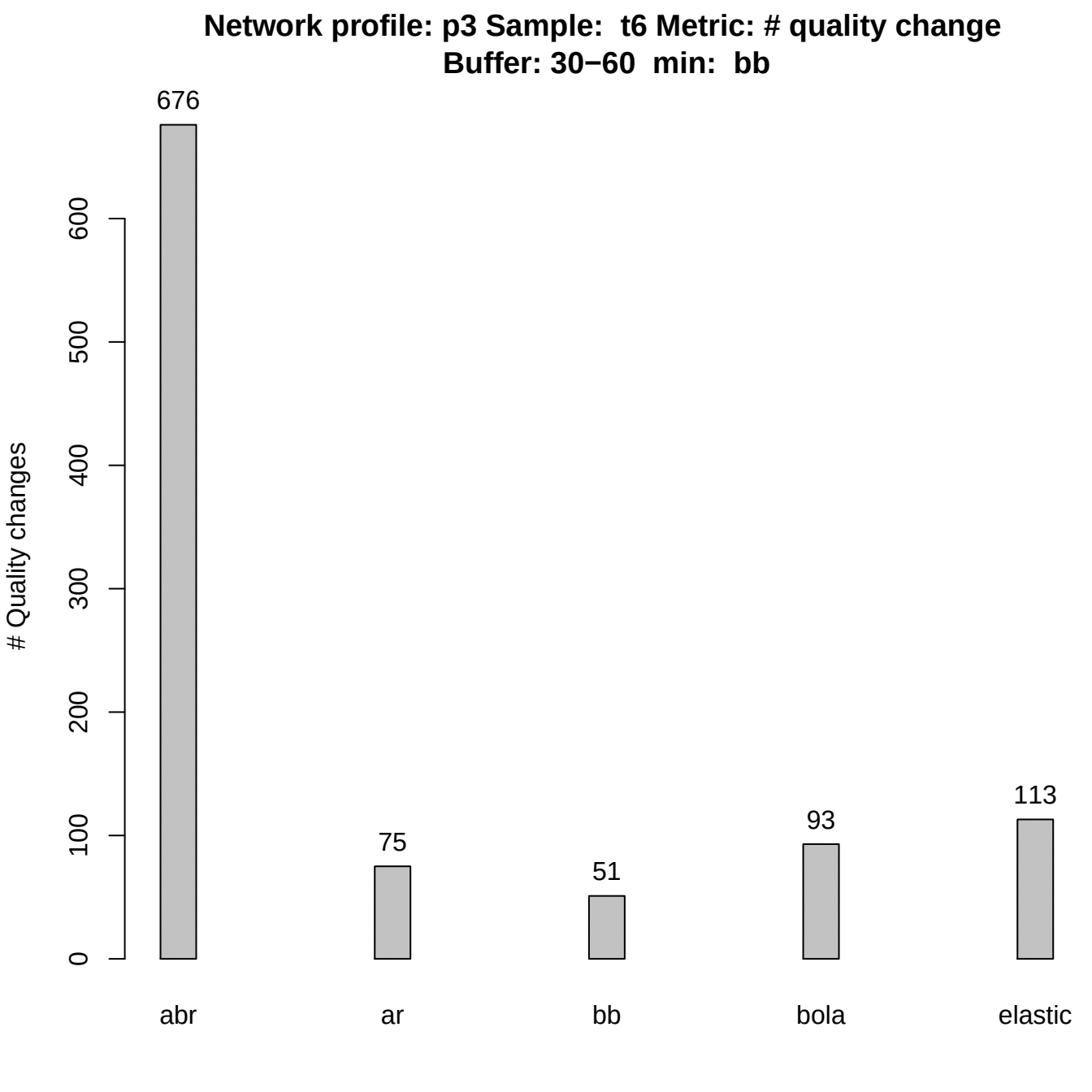

Network profile: p3 Sample: t5 Metric: Avg−Bitrate
Buffer: 30−60 max: elastic
Kbps
0
500
1000
1500
1427.97
1659.85
1548.13
1505.92
1798.51
abr
ar
bb
bola
elastic

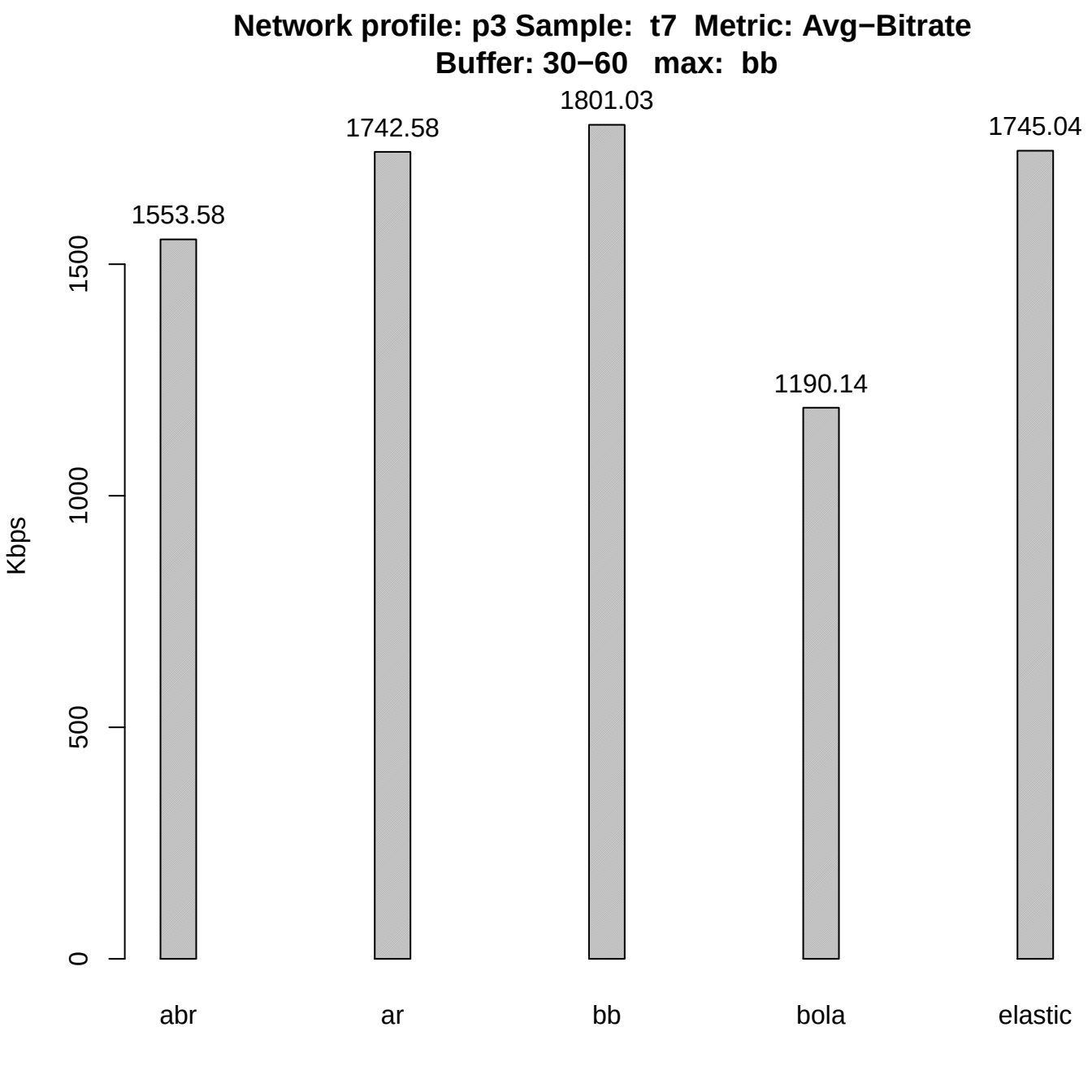

Network profile: p3 Sample: t5 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
0.330184
0.266103
0.352986
0.36506
0.242123
abr
ar
bb
bola
elastic

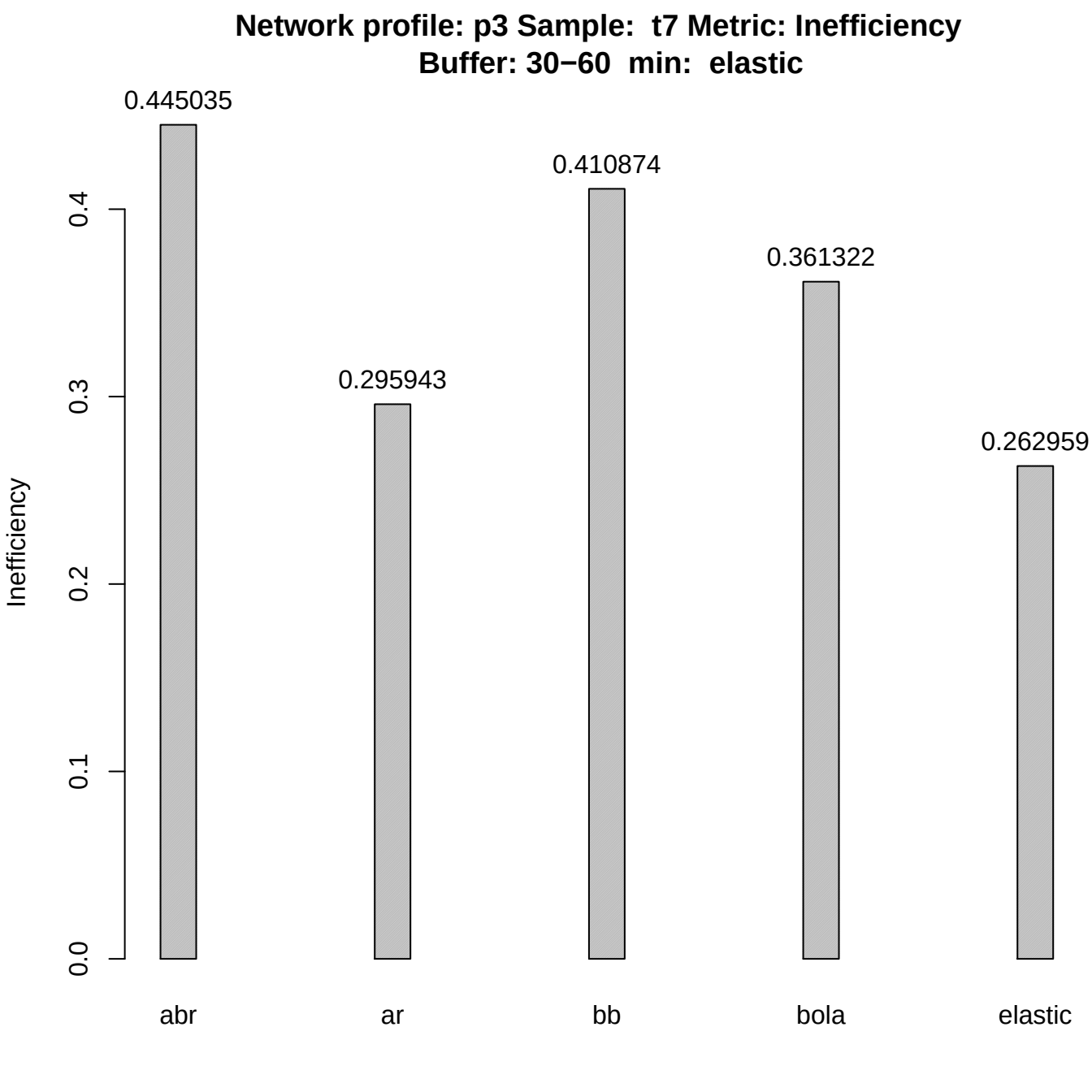

Network profile: p3 Sample: t5 Metric: # quality change
Buffer: 30−60 min: bb
Quality changes
0
5
10
15
20
25
30
34
24
14
20
24
abr
ar
bb
bola
elastic

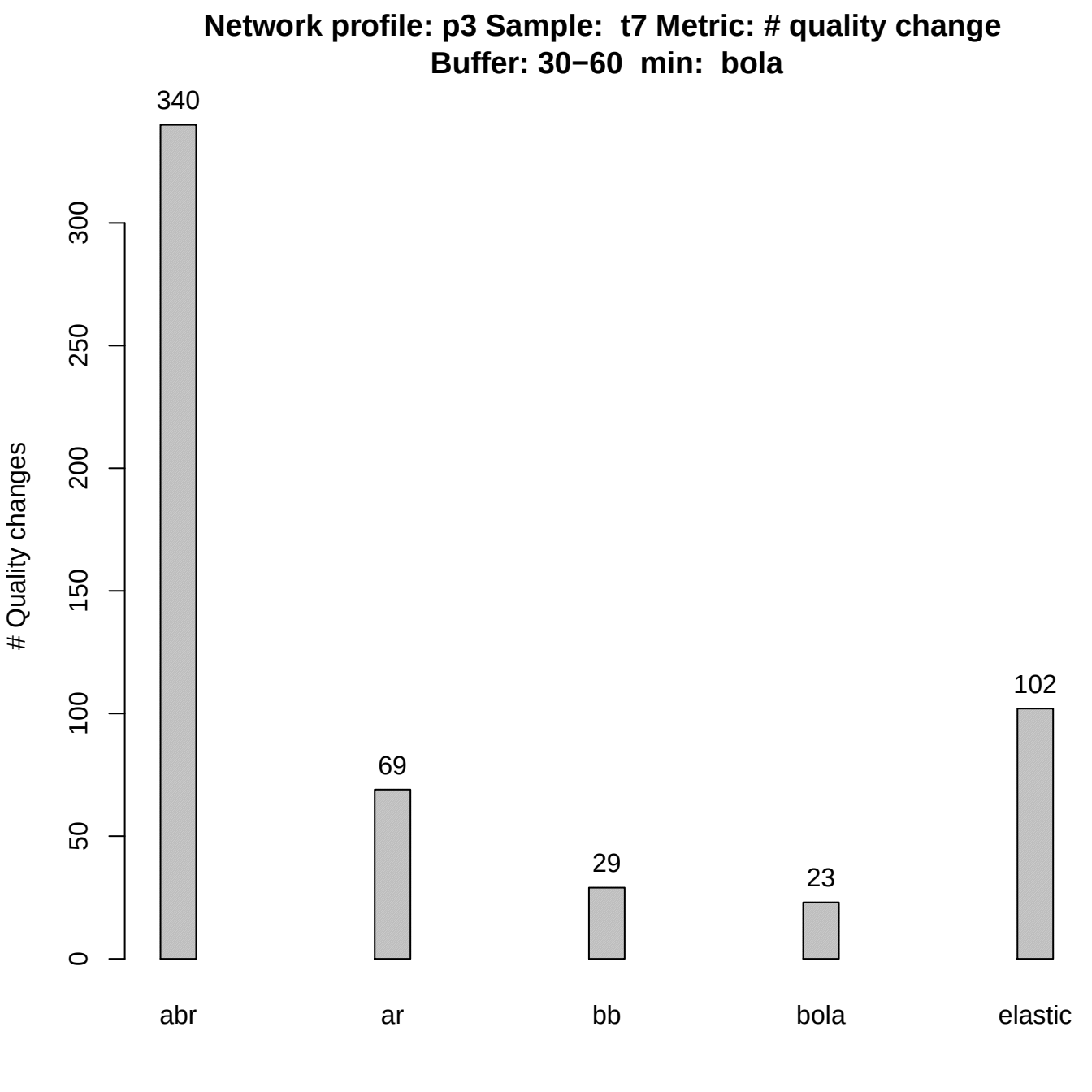

Network profile: p3 Sample: t6 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
Kbps
0
500
1000
1500
1621.05
1726.07
1899.9
1268.86
1651.61
abr
ar
bb
bola
elastic

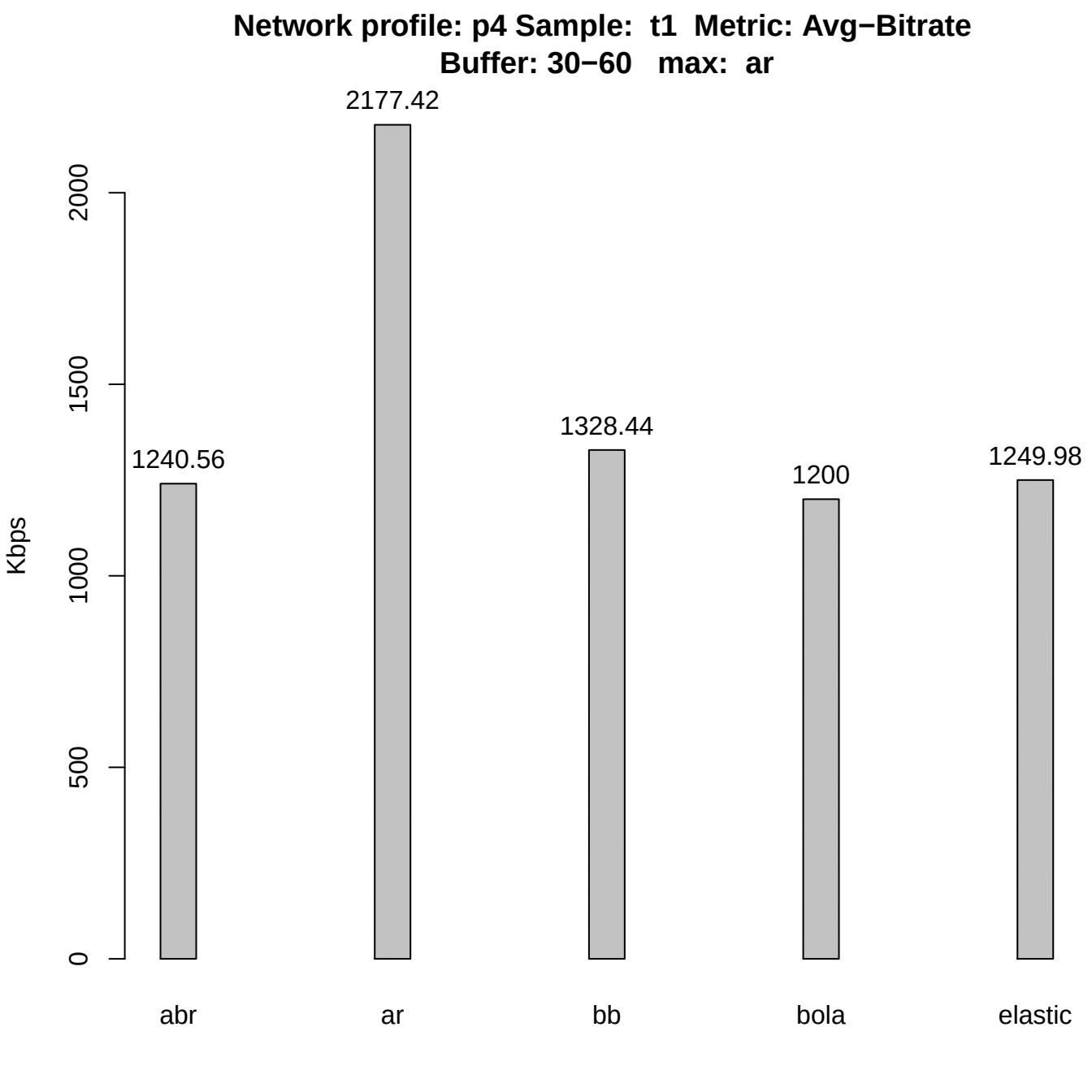

Network profile: p3 Sample: t6 Metric: Inefficiency
Buffer: 30−60 min: elastic
0.359381
0.247703
0.34252
0.385496
0.208492
Inefficiency
0.0
0.1
0.2
0.3
abr
ar
bb
bola
elastic

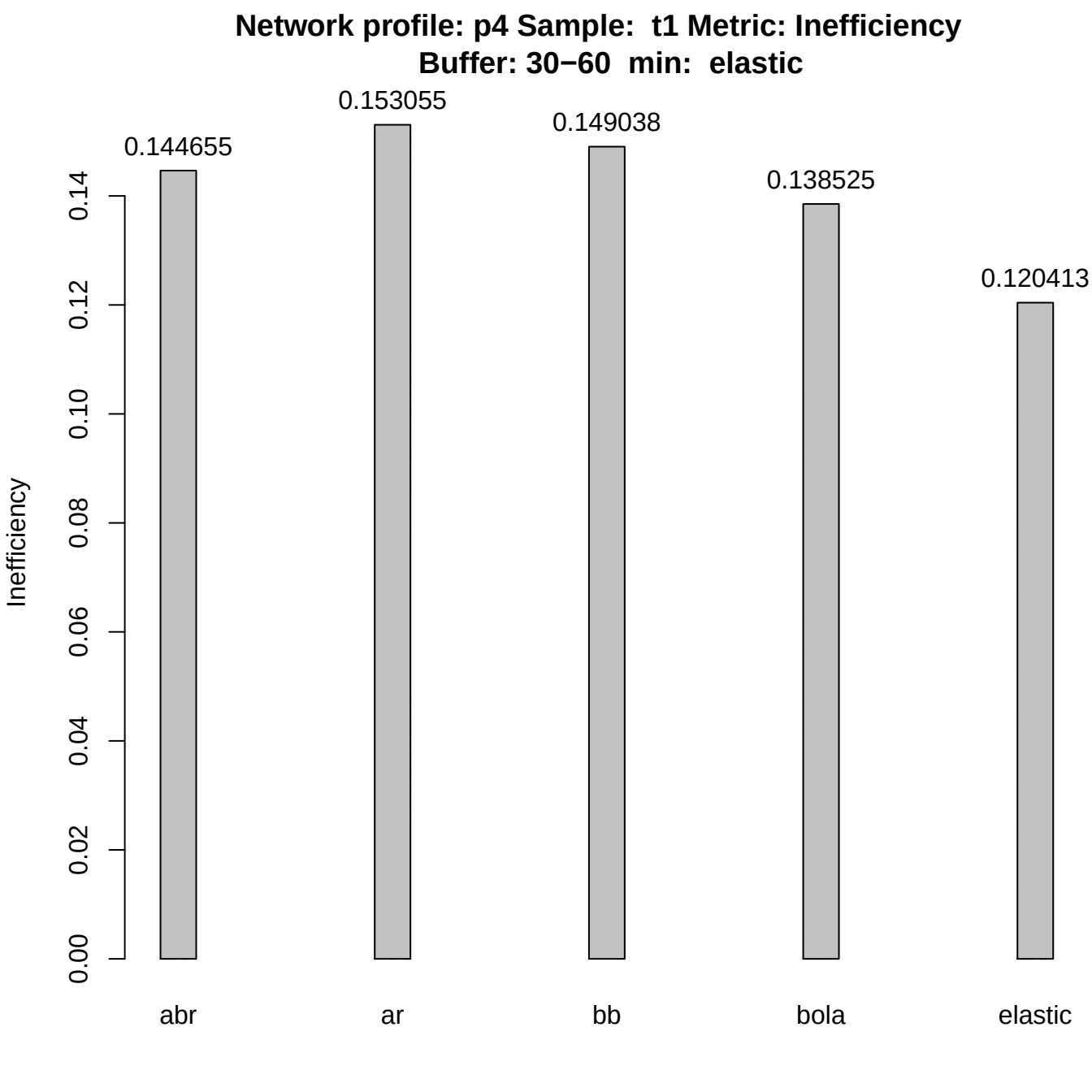

Network profile: p3 Sample: t6 Metric: # quality change
Buffer: 30−60 min: bb
Quality changes
0
100
200
300
400
500
600
676
75
51
93
113
abr
ar
bb
bola
elastic

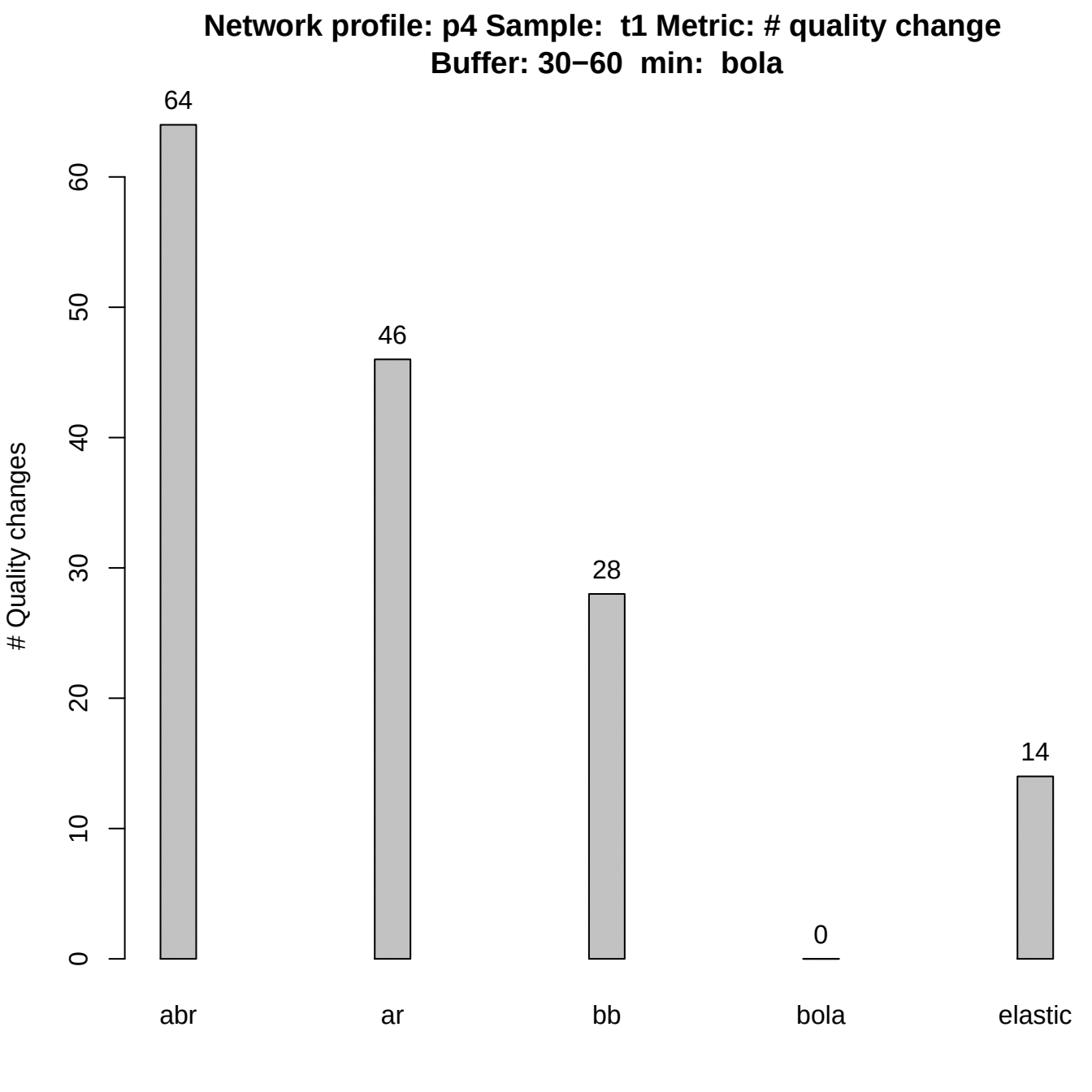

Network profile: p3 Sample: t7 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
1553.58
1742.58
1801.03
1190.14
1745.04
Kbps
0
500
1000
1500
abr
ar
bb
bola
elastic

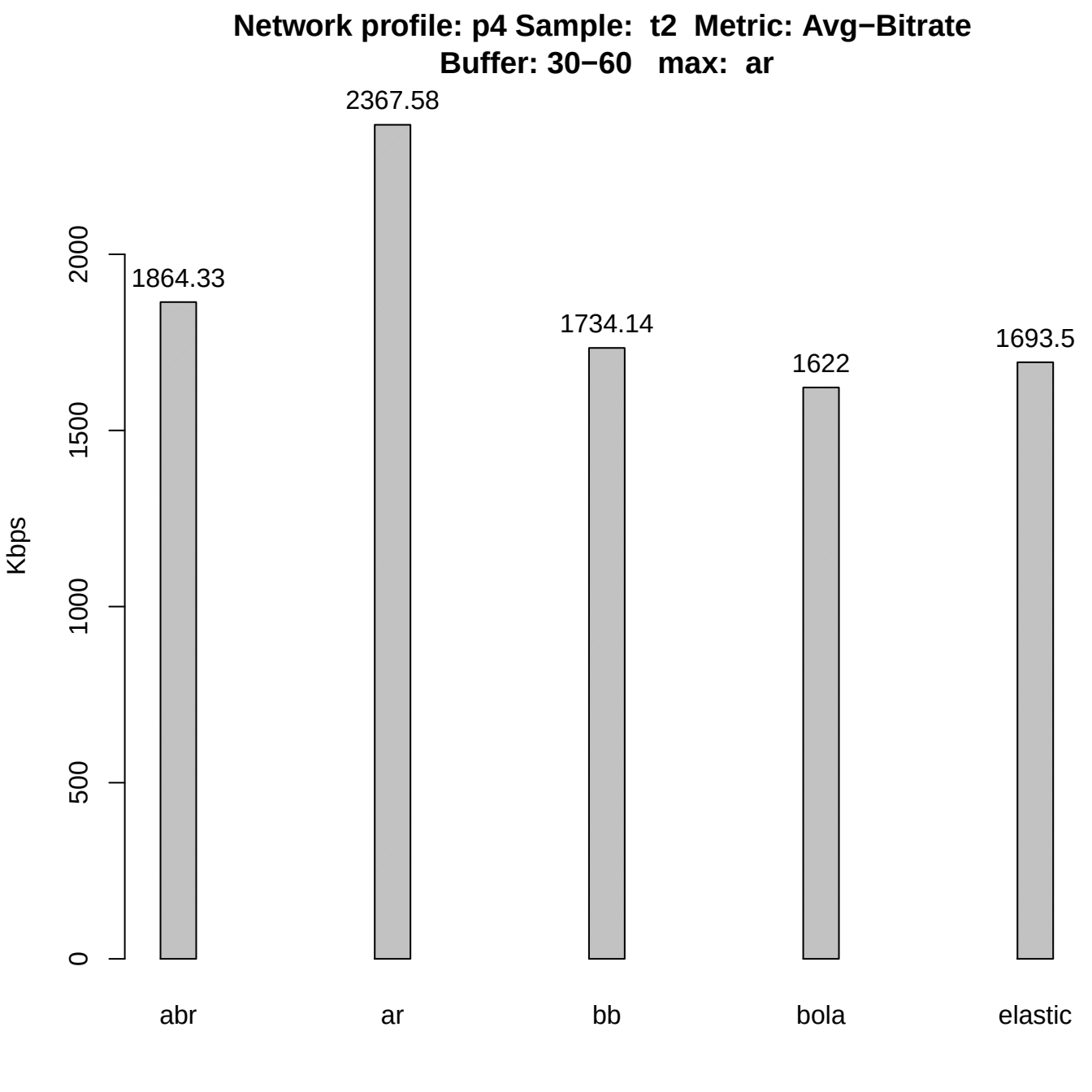

Network profile: p3 Sample: t7 Metric: Inefficiency
Buffer: 30−60 min: elastic
0.445035
0.295943
0.410874
0.361322
0.262959
Inefficiency
0.0
0.1
0.2
0.3
0.4
abr
ar
bb
bola
elastic

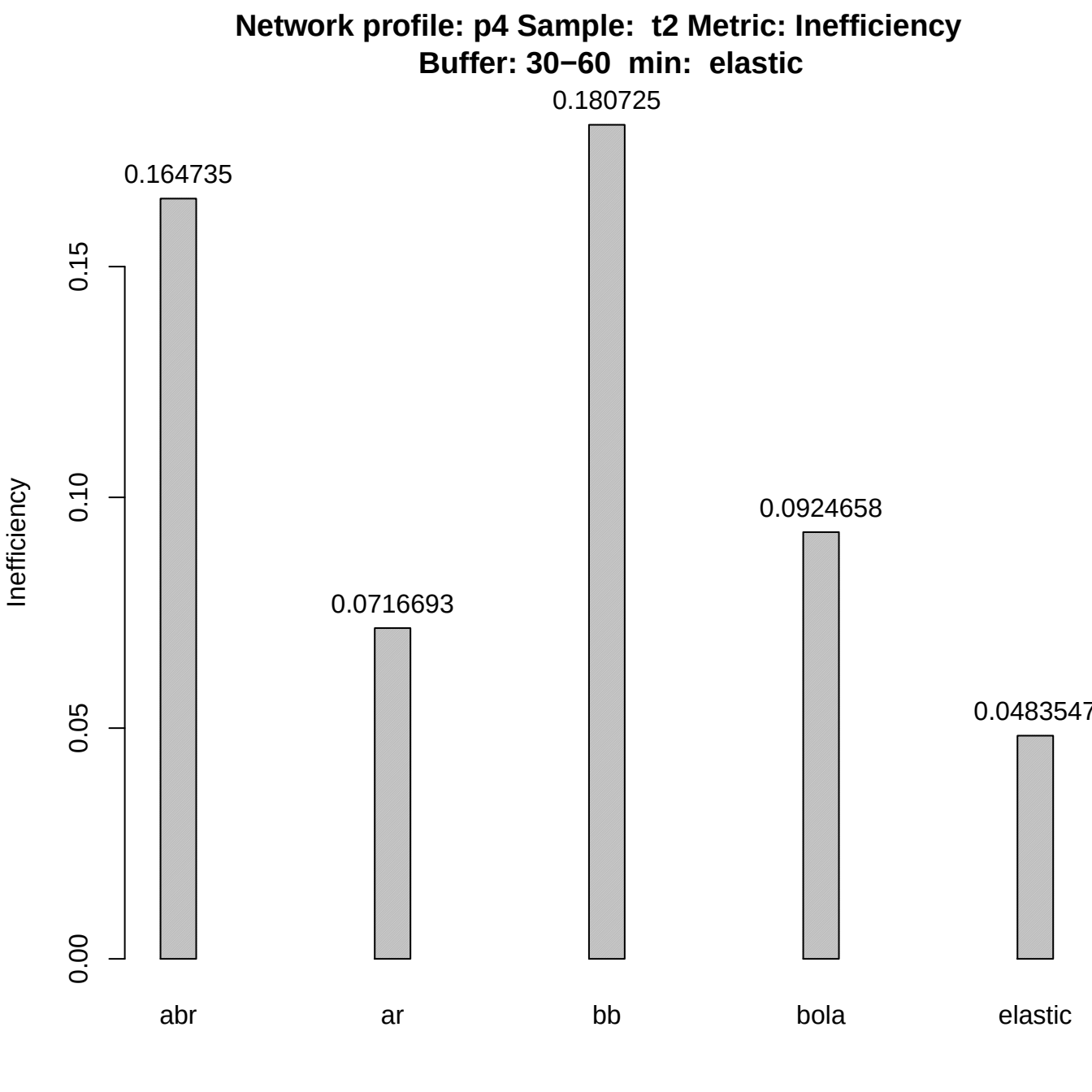

Network profile: p3 Sample: t7 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
50
100
150
200
250
300
340
69
29
23
102
abr
ar
bb
bola
elastic

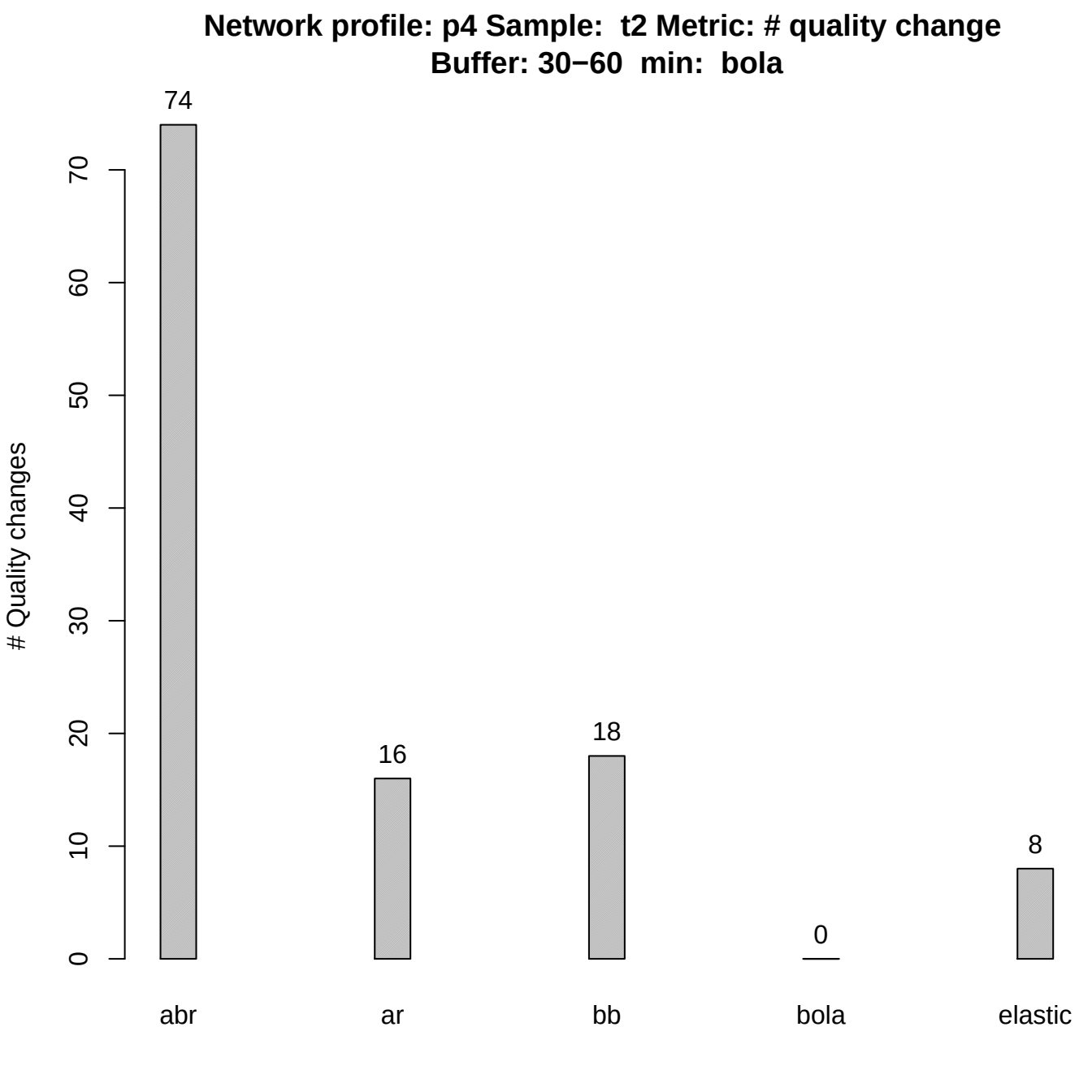

Network profile: p4 Sample: t1 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
1240.56
2177.42
1328.44
1200
1249.98
abr
ar
bb
bola
elastic

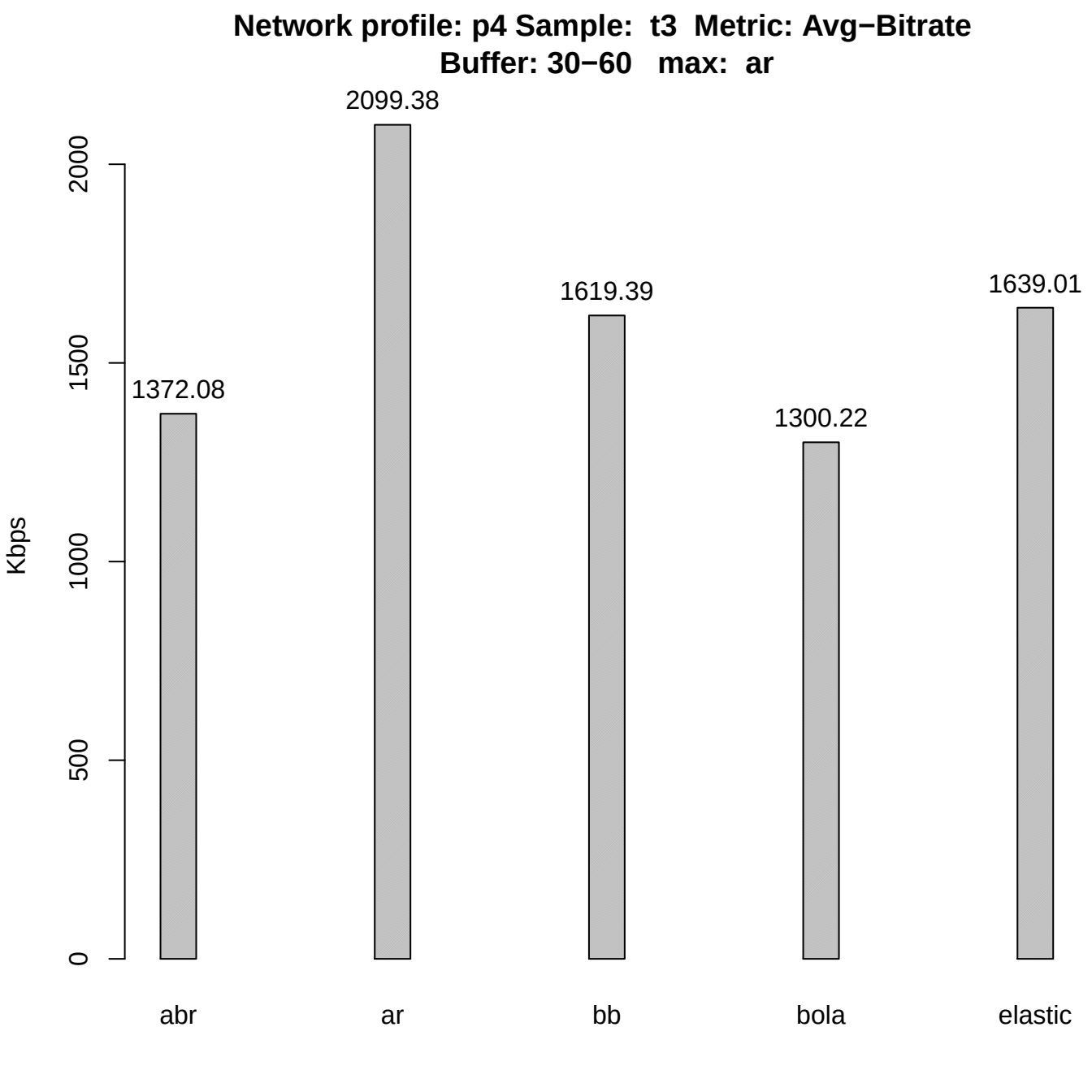

Network profile: p4 Sample: t1 Metric: Inefficiency
Buffer: 30−60 min: elastic
0.144655
0.153055
0.149038
0.138525
0.120413
Inefficiency
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
abr
ar
bb
bola
elastic

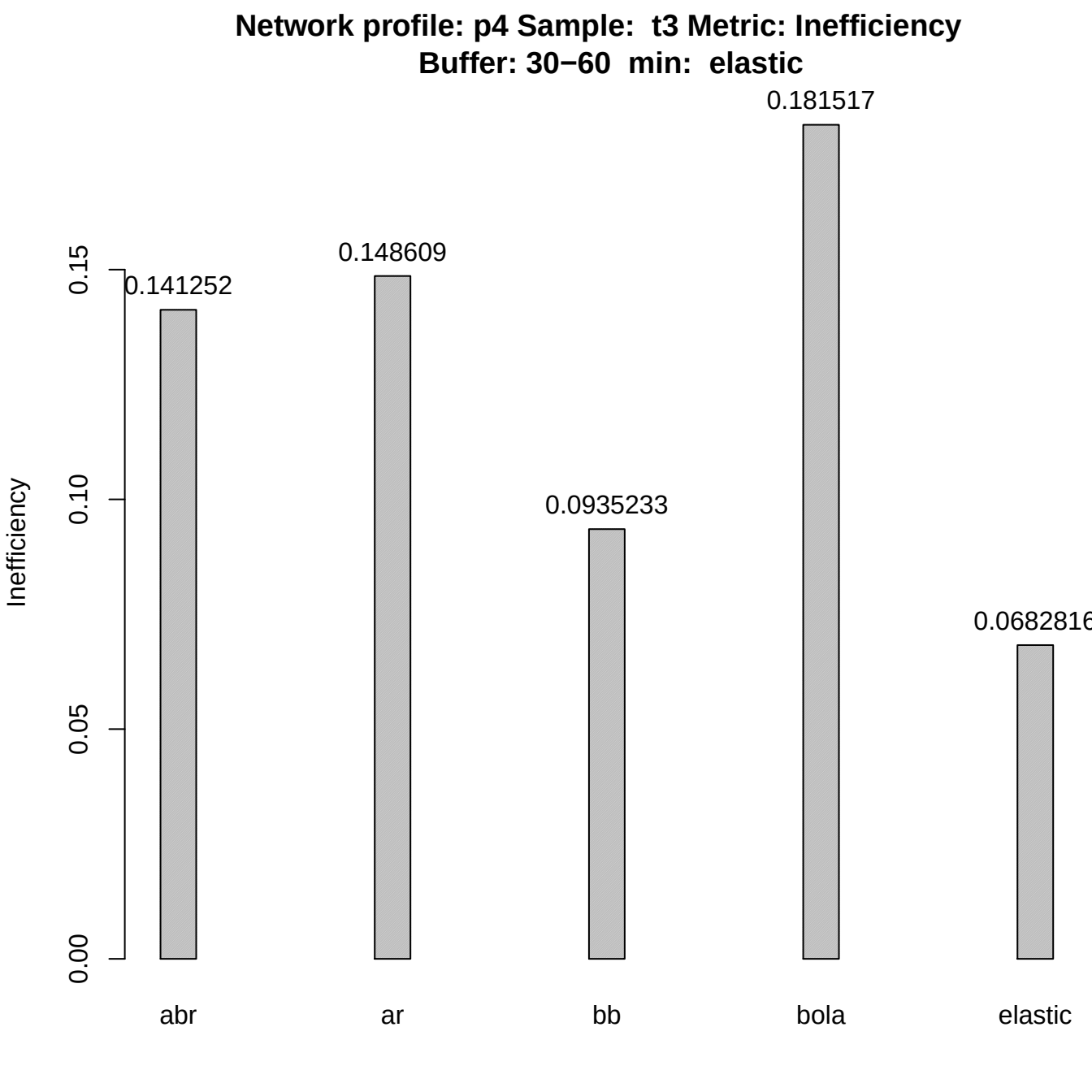

Network profile: p4 Sample: t1 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
10
20
30
40
50
60
64
46
28
0
14
abr
ar
bb
bola
elastic

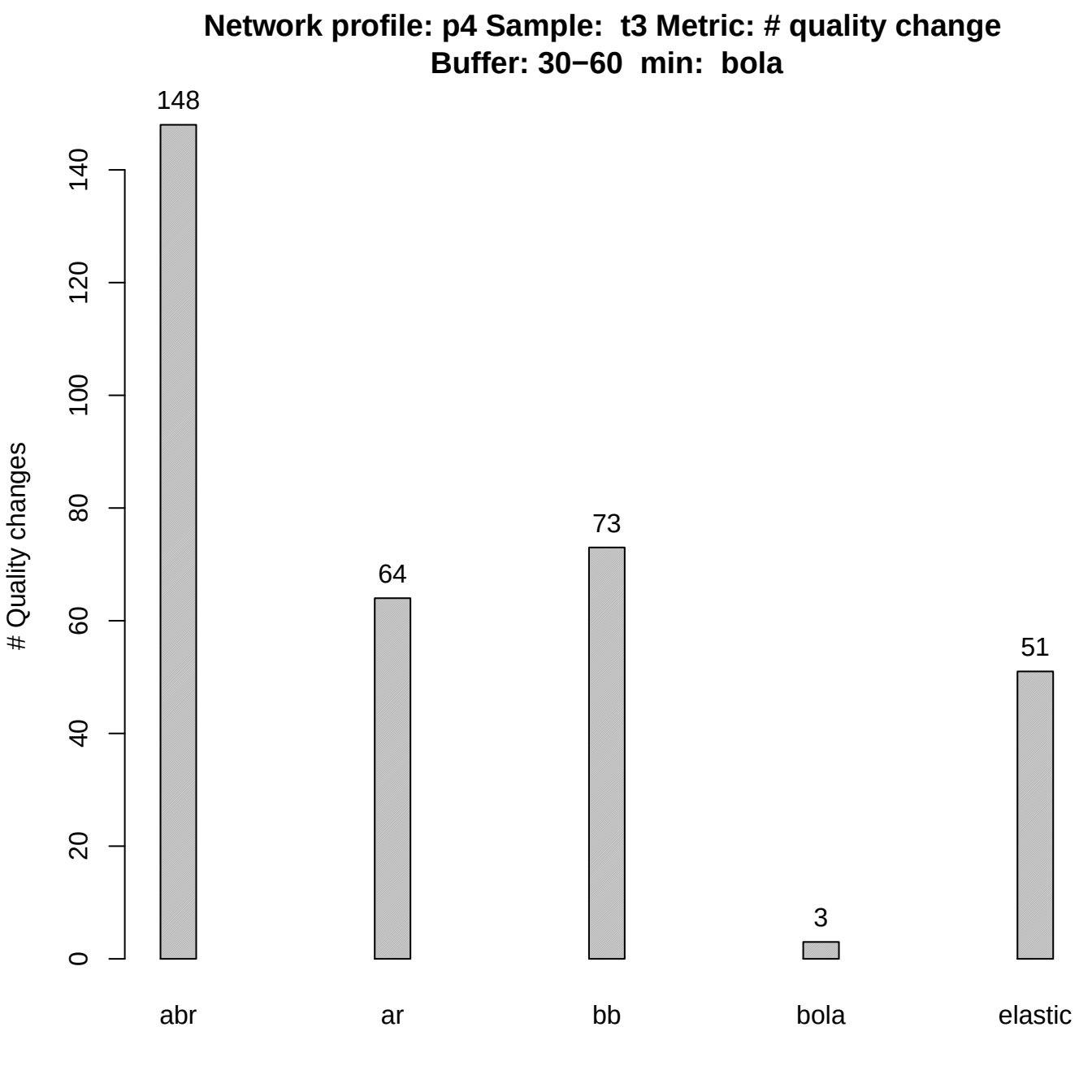

Network profile: p4 Sample: t2 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
1864.33
2367.58
1734.14
1622
1693.5
abr
ar
bb
bola
elastic

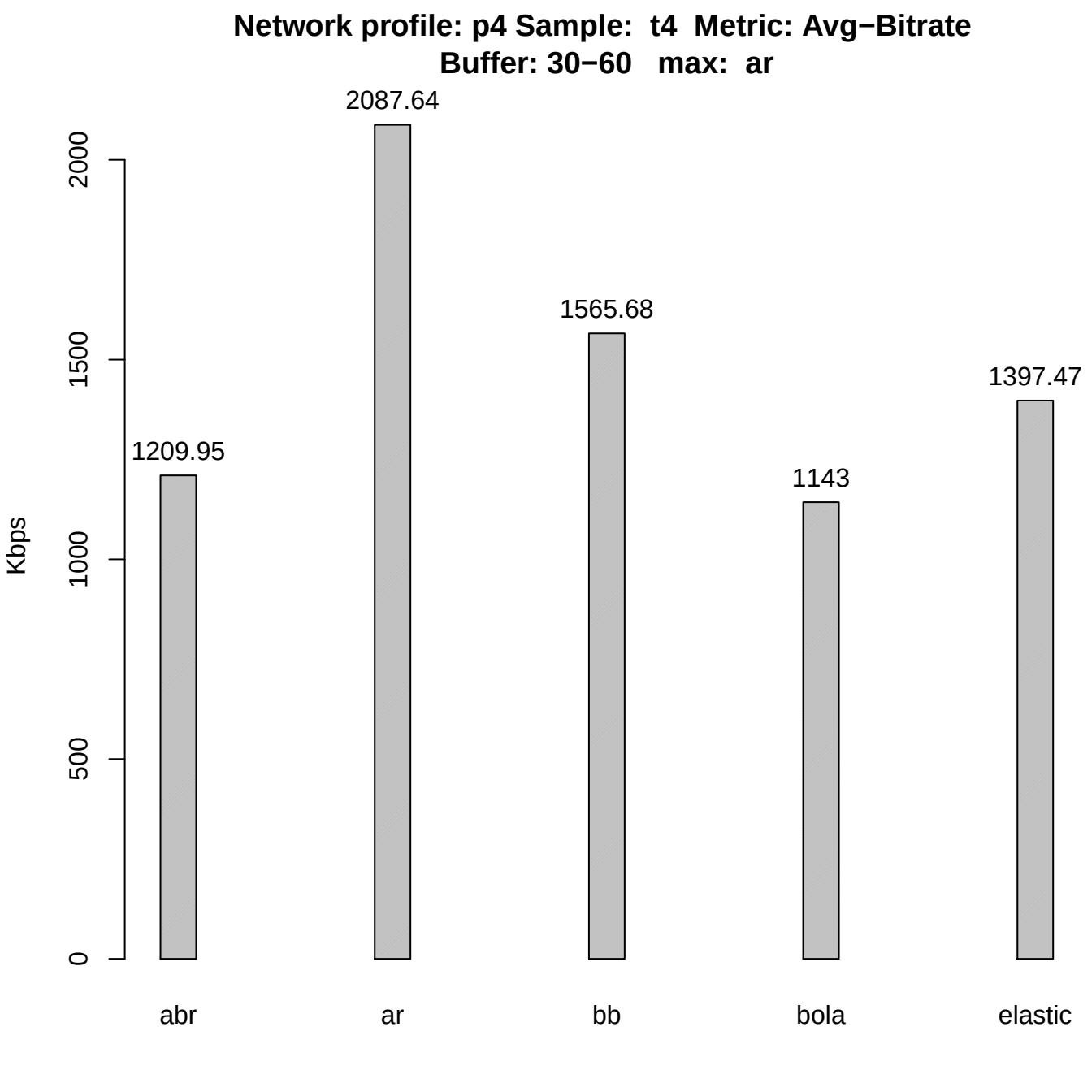

Network profile: p4 Sample: t2 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.164735
0.0716693
0.180725
0.0924658
0.0483547
abr
ar
bb
bola
elastic

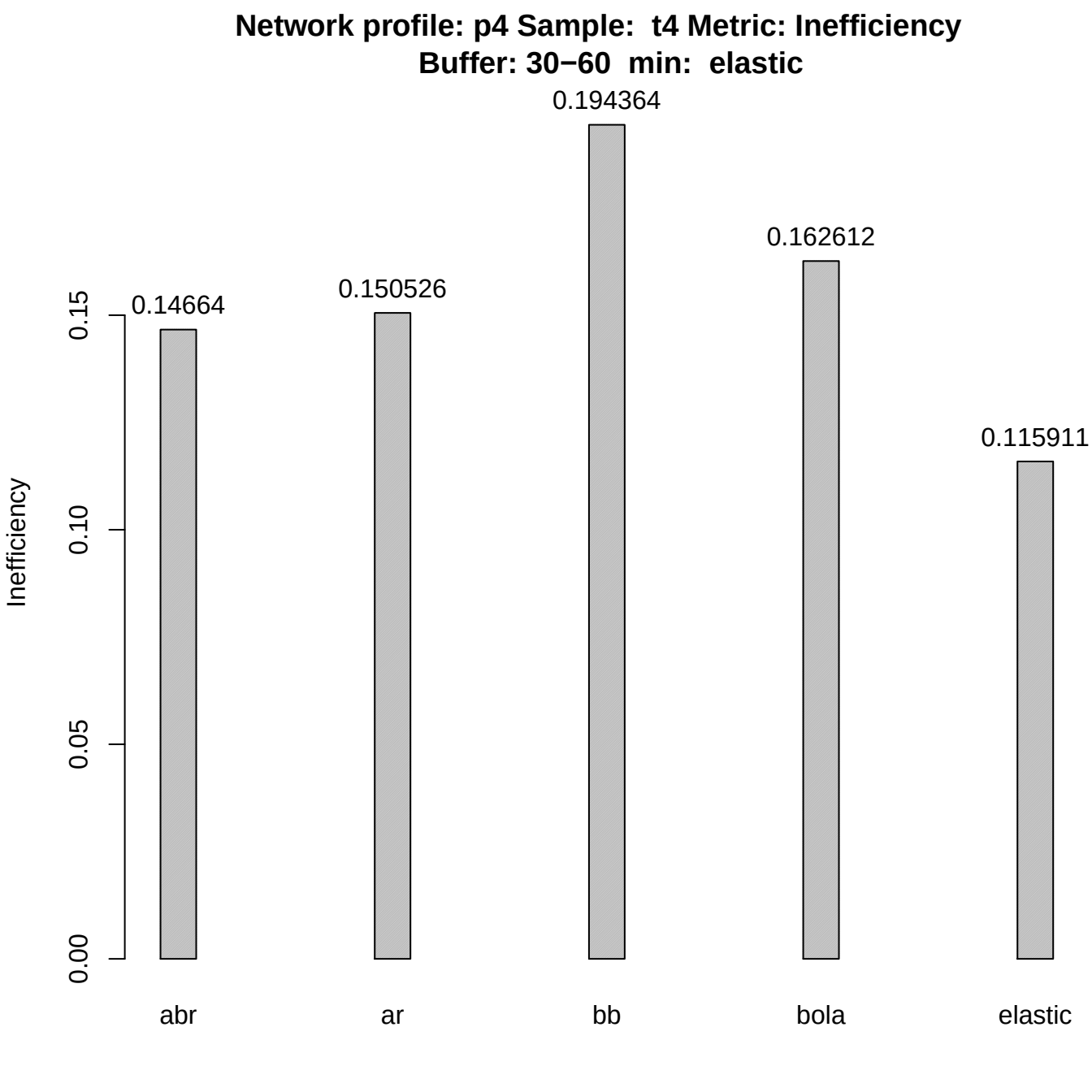

Network profile: p4 Sample: t2 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
10
20
30
40
50
60
70
74
16
18
0
8
abr
ar
bb
bola
elastic

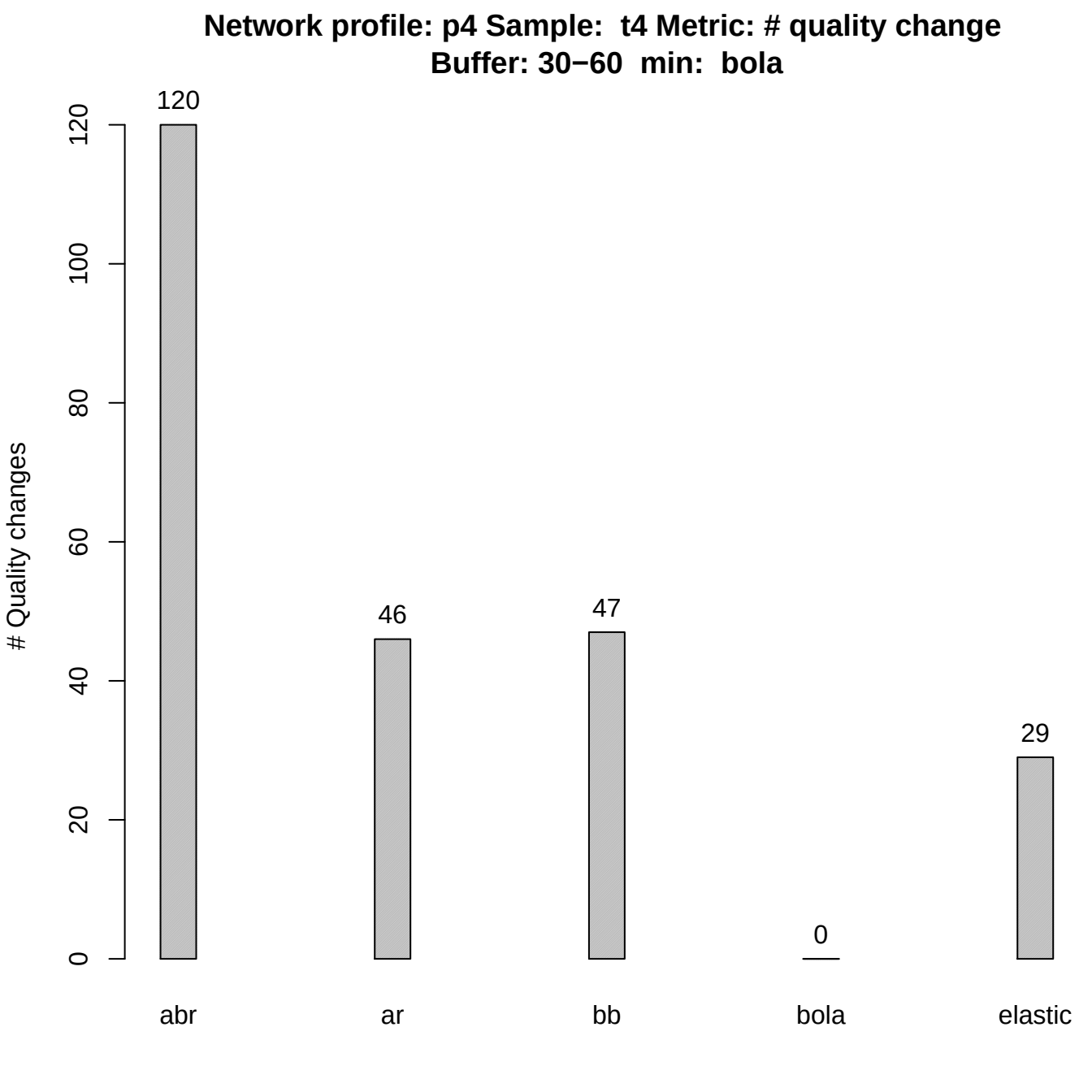

Network profile: p4 Sample: t3 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
1372.08
2099.38
1619.39
1300.22
1639.01
abr
ar
bb
bola
elastic

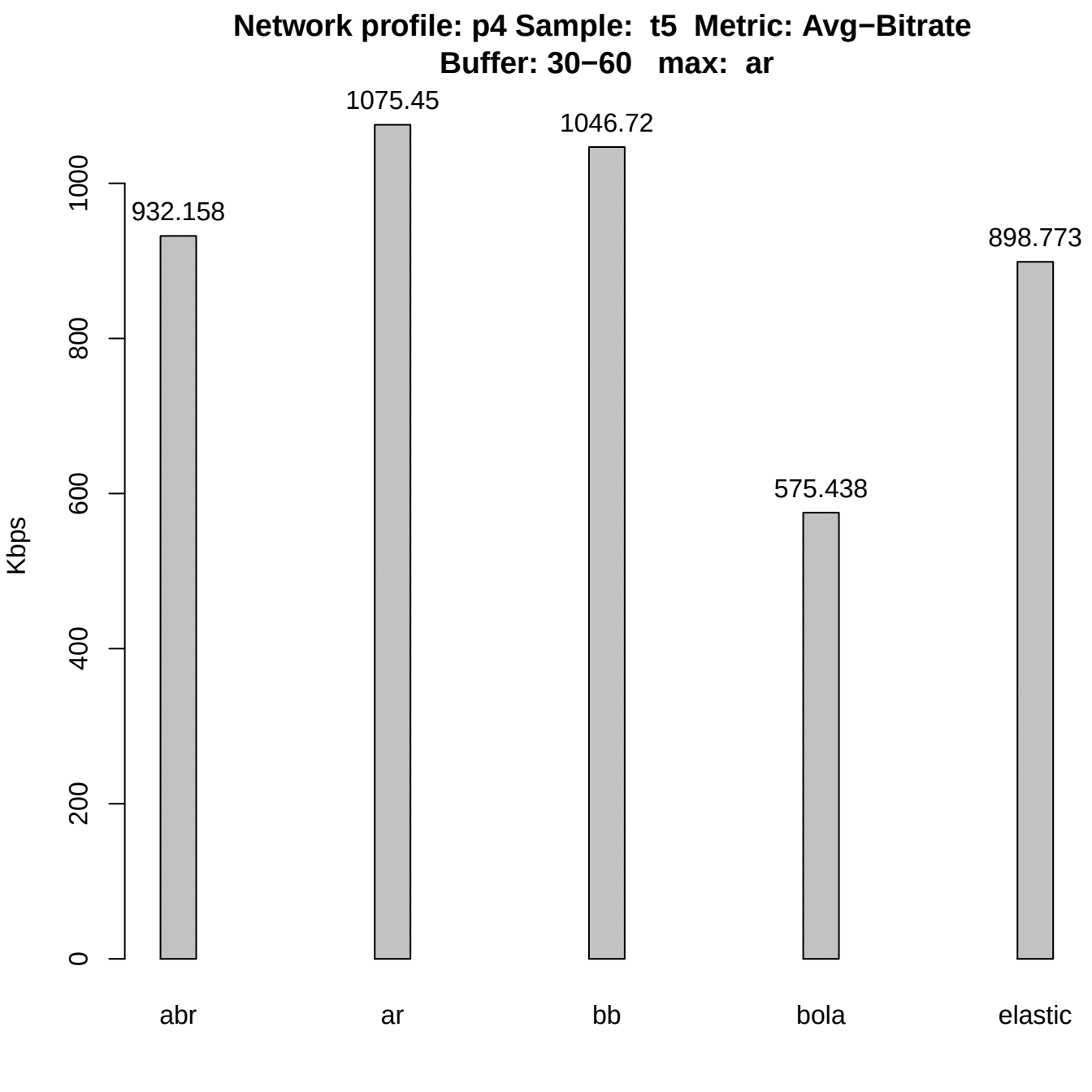

Network profile: p4 Sample: t3 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.141252
0.148609
0.0935233
0.181517
0.0682816
abr
ar
bb
bola
elastic

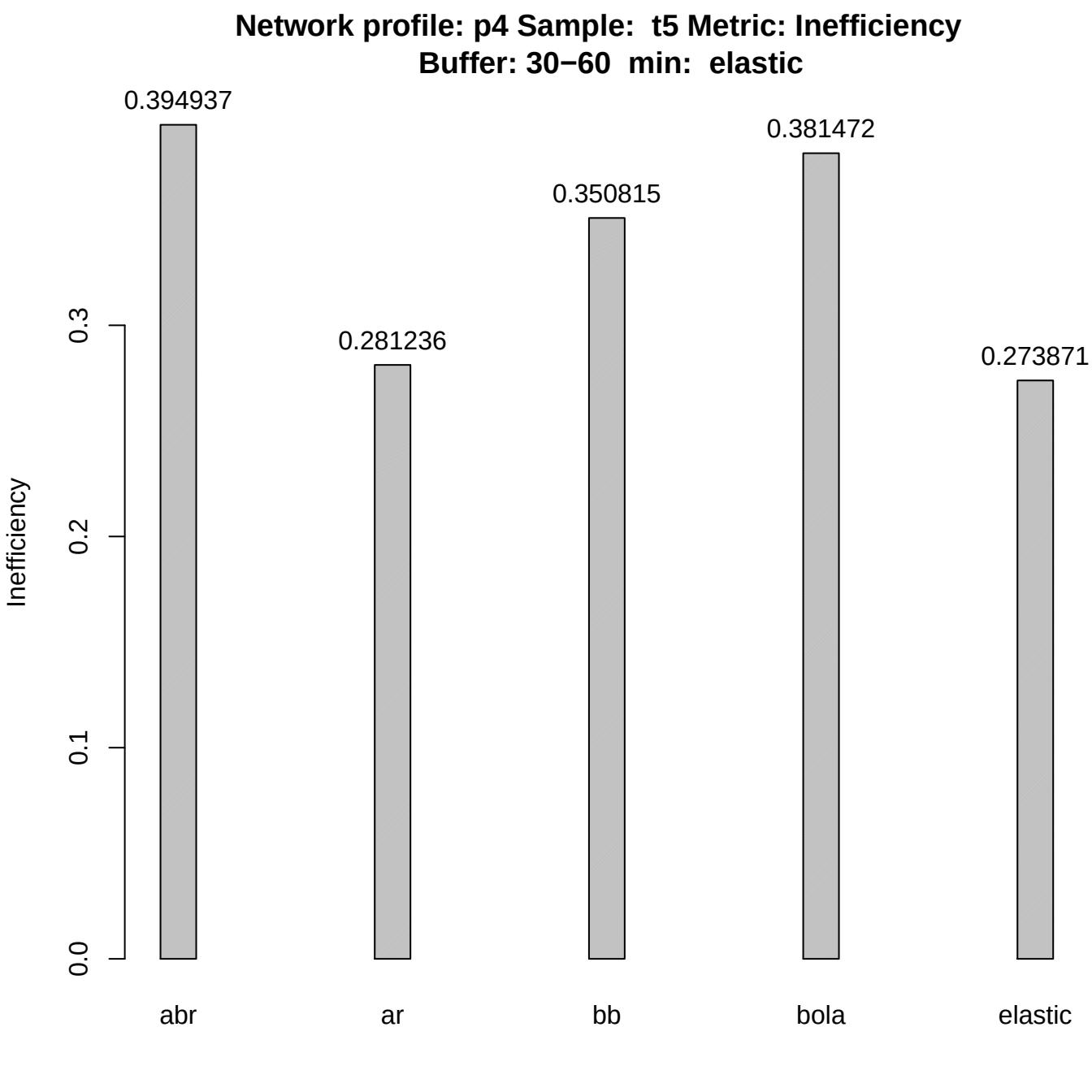

Network profile: p4 Sample: t3 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
120
140
148
64
73
3
51
abr
ar
bb
bola
elastic

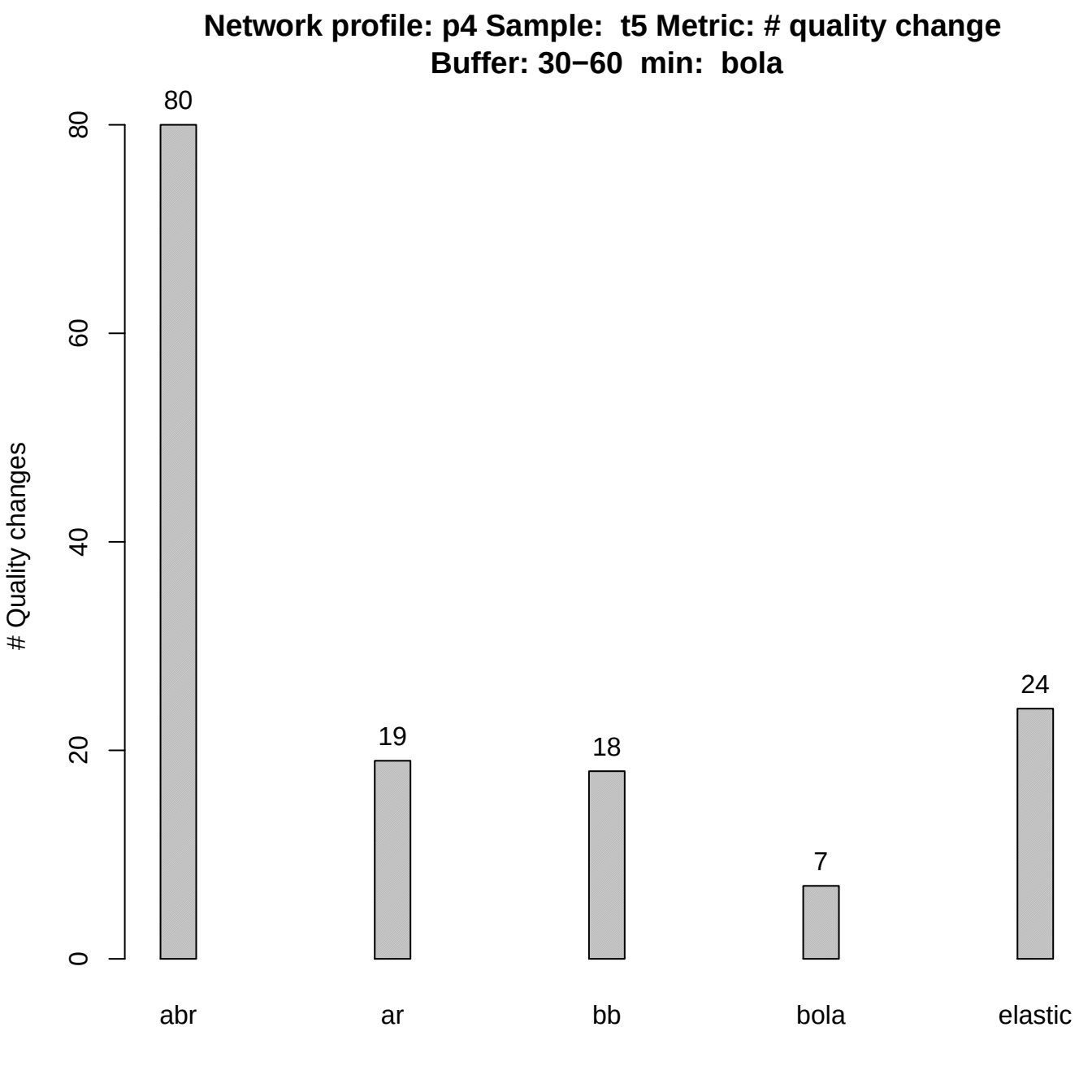

Network profile: p4 Sample: t4 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
500
1000
1500
2000
1209.95
2087.64
1565.68
1143
1397.47
abr
ar
bb
bola
elastic

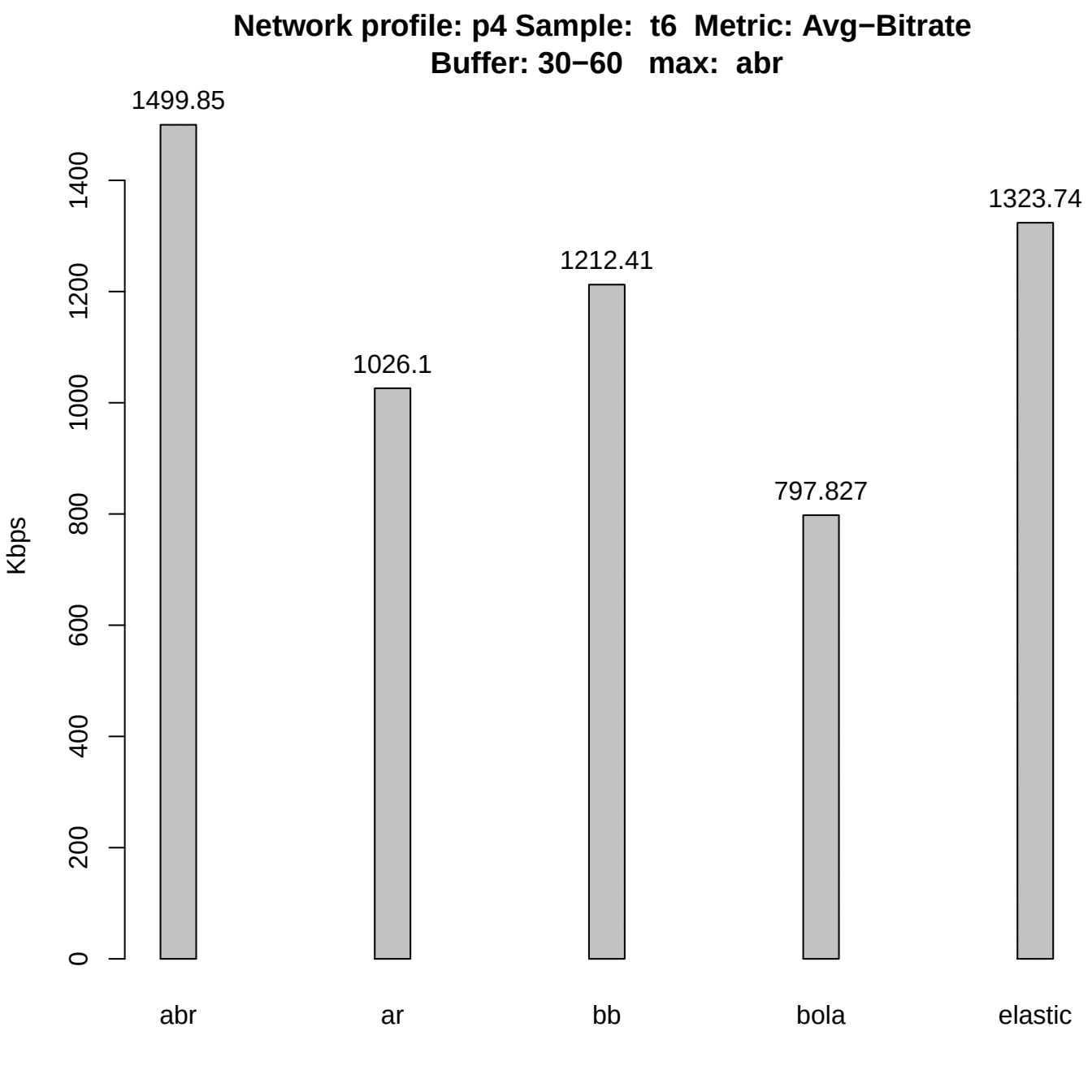

Network profile: p4 Sample: t4 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.00
0.05
0.10
0.15
0.14664
0.150526
0.194364
0.162612
0.115911
abr
ar
bb
bola
elastic

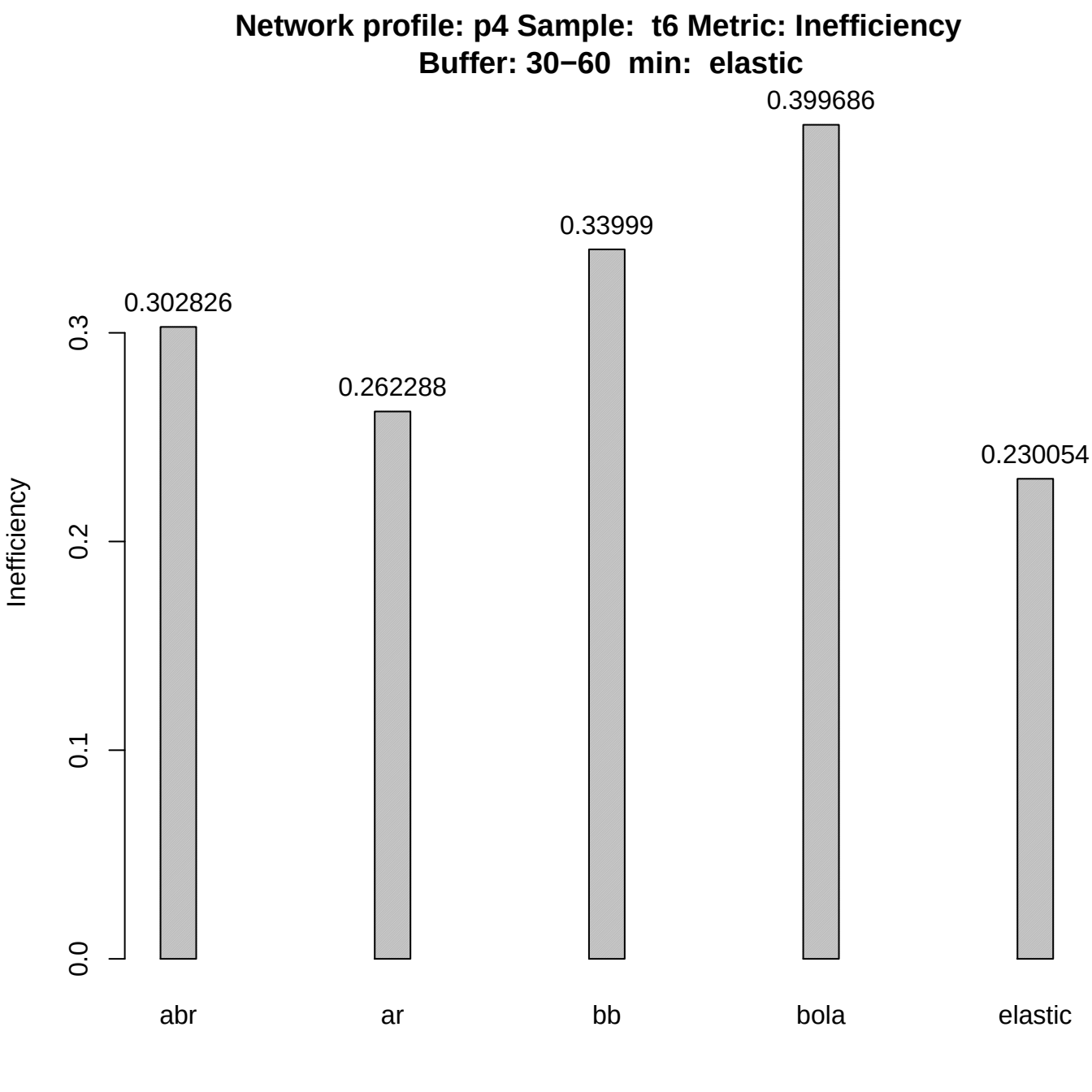

Network profile: p4 Sample: t4 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
100
120
120
46
47
0
29
abr
ar
bb
bola
elastic

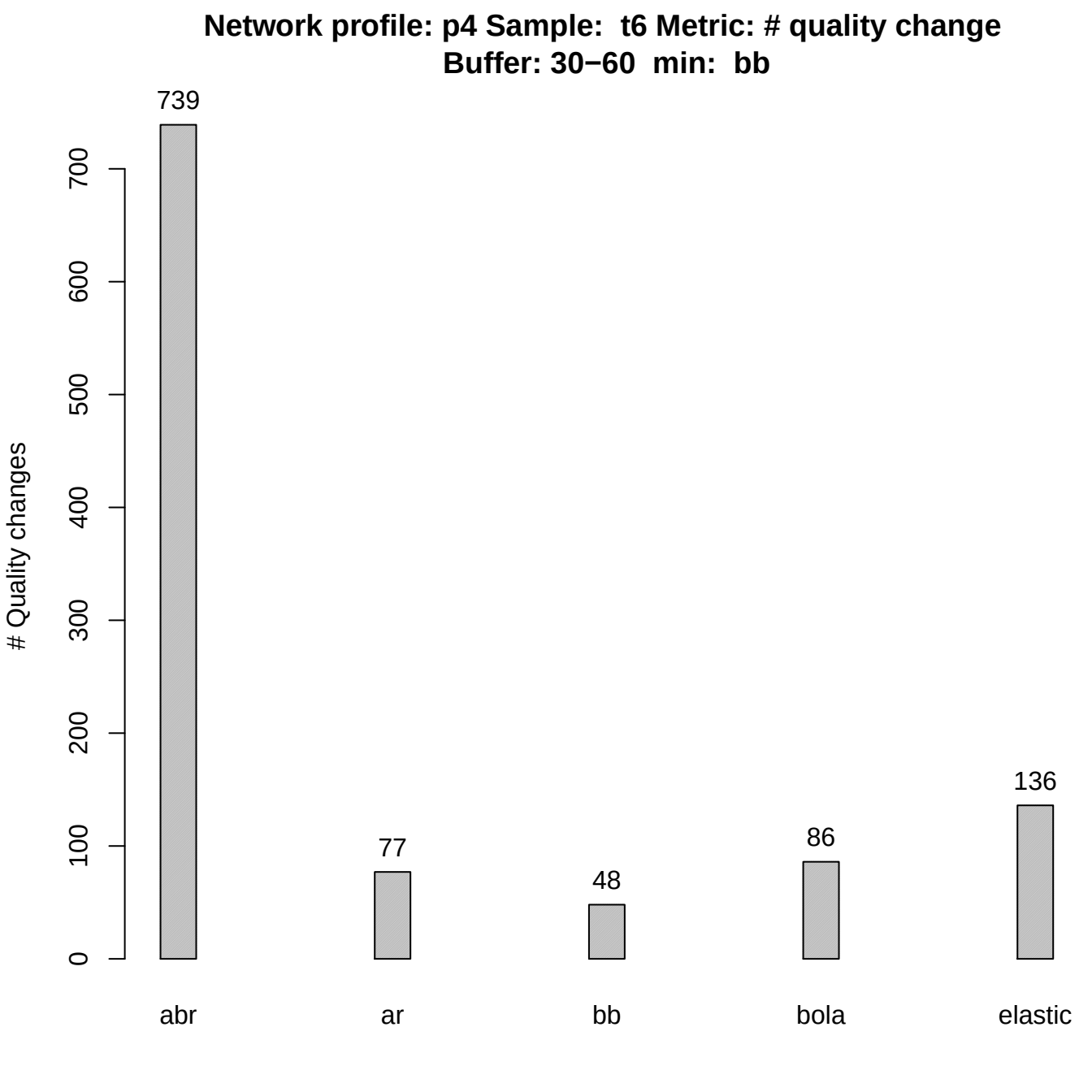

Network profile: p4 Sample: t5 Metric: Avg−Bitrate
Buffer: 30−60 max: ar
Kbps
0
200
400
600
800
1000
932.158
1075.45
1046.72
575.438
898.773
abr
ar
bb
bola
elastic

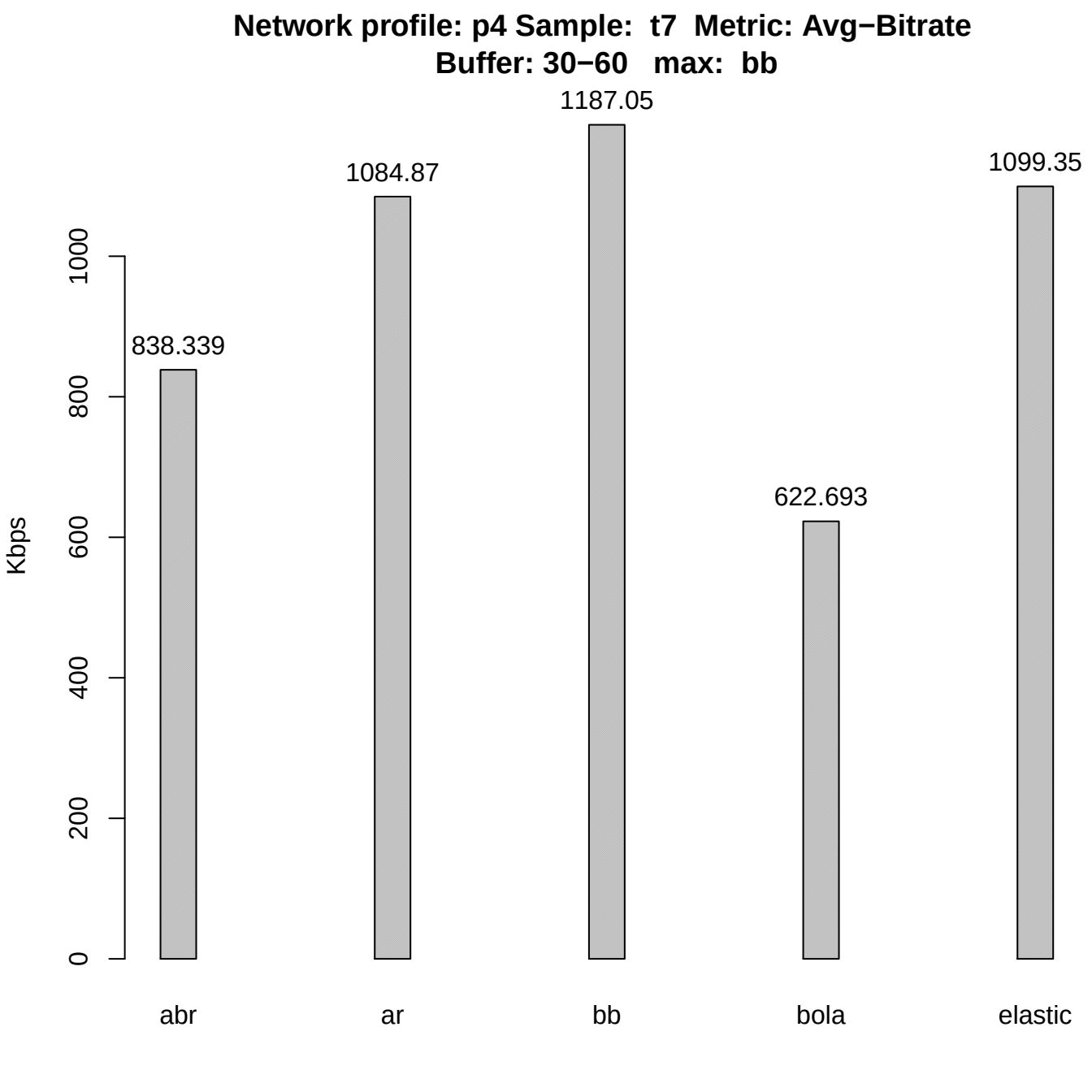

Network profile: p4 Sample: t5 Metric: Inefficiency
Buffer: 30−60 min: elastic
0.394937
0.281236
0.350815
0.381472
0.273871
Inefficiency
0.0
0.1
0.2
0.3
abr
ar
bb
bola
elastic

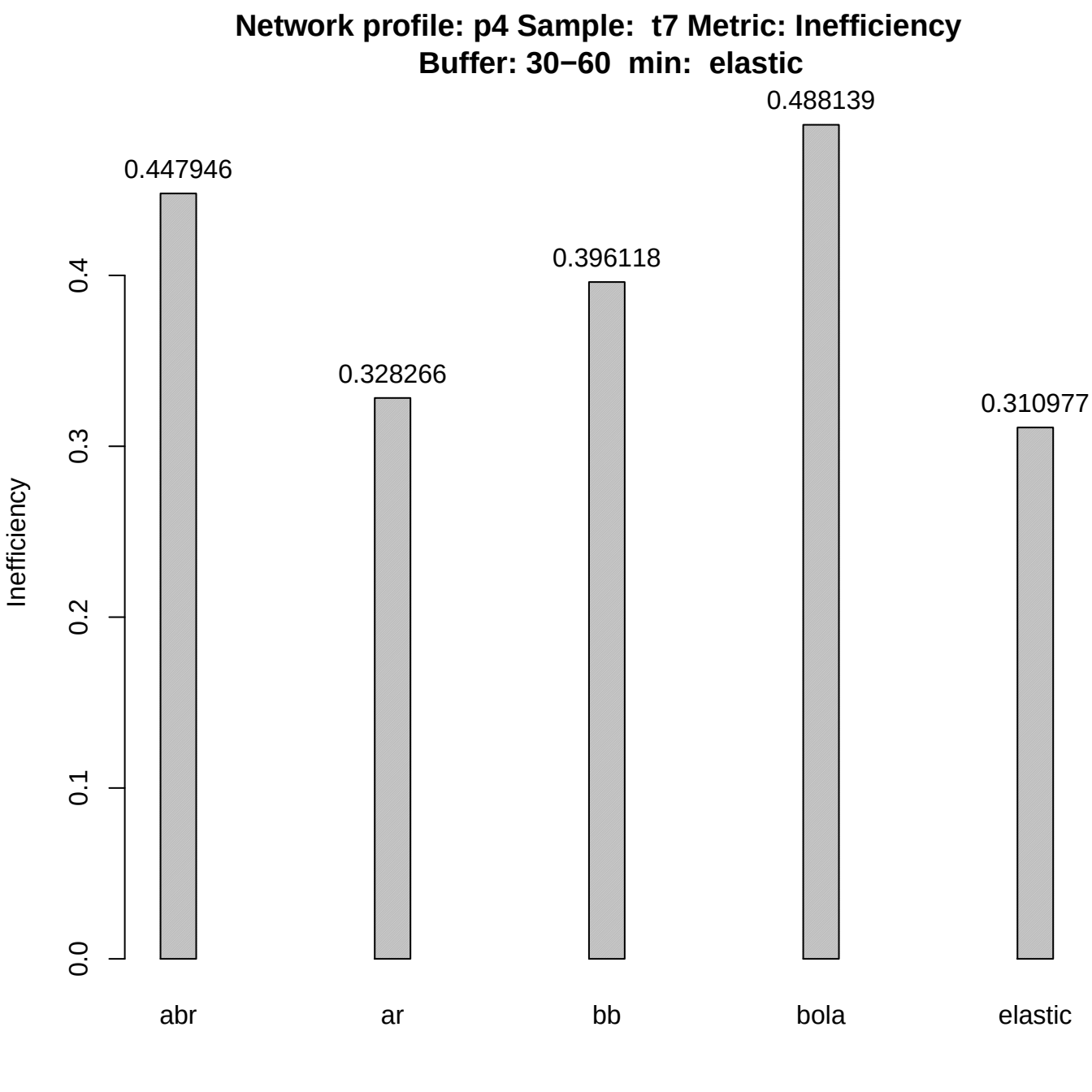

Network profile: p4 Sample: t5 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
20
40
60
80
80
19
18
7
24
abr
ar
bb
bola
elastic

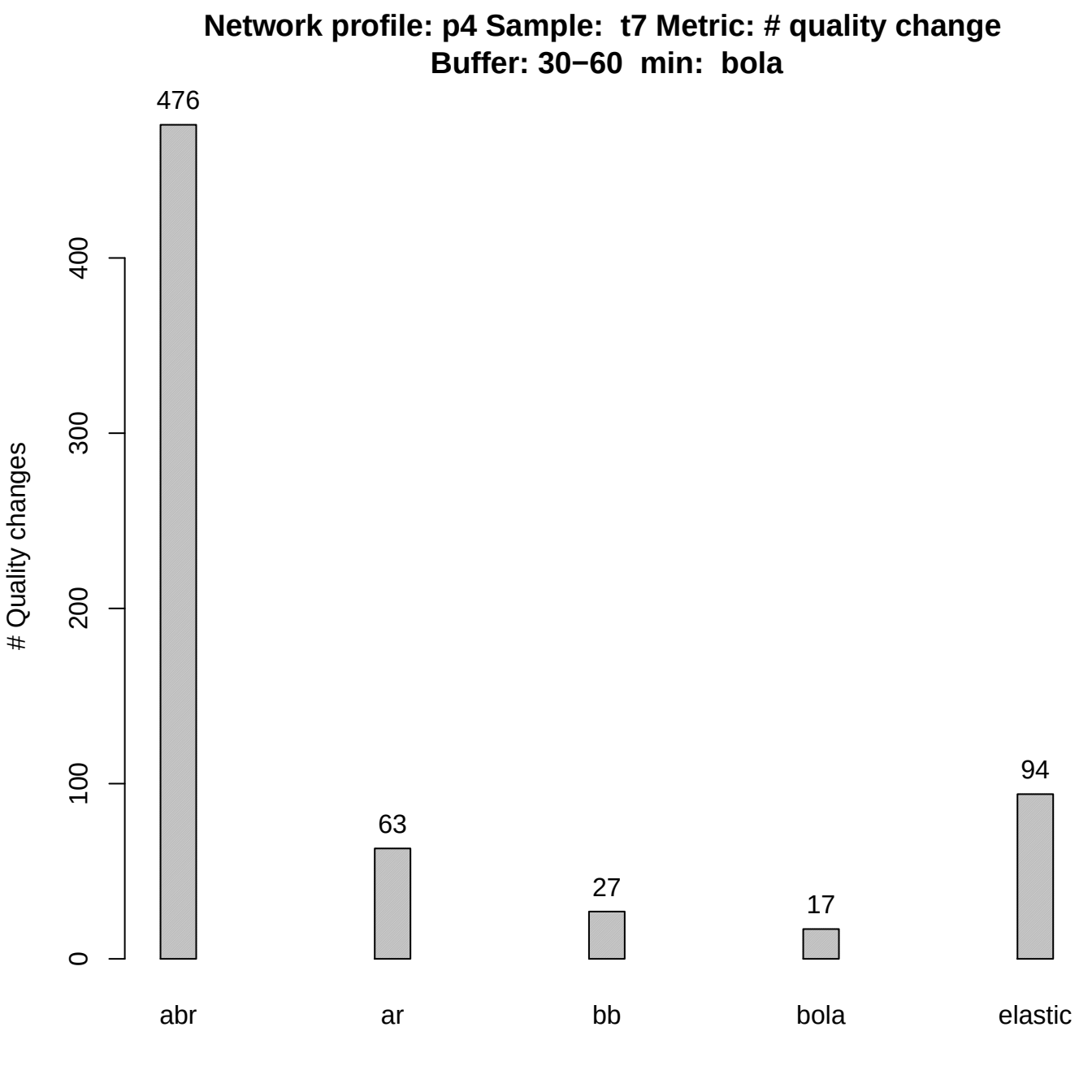

Network profile: p4 Sample: t6 Metric: Avg−Bitrate
Buffer: 30−60 max: abr
Kbps
0
200
400
600
800
1000
1200
1400
1499.85
1026.1
1212.41
797.827
1323.74
abr
ar
bb
bola
elastic


Network profile: p4 Sample: t6 Metric: Inefficiency
Buffer: 30−60 min: elastic
Inefficiency
0.0
0.1
0.2
0.3
0.302826
0.262288
0.33999
0.399686
0.230054
abr
ar
bb
bola
elastic


Network profile: p4 Sample: t6 Metric: # quality change
Buffer: 30−60 min: bb
Quality changes
0
100
200
300
400
500
600
700
739
77
48
86
136
abr
ar
bb
bola
elastic


Network profile: p4 Sample: t7 Metric: Avg−Bitrate
Buffer: 30−60 max: bb
Kbps
0
200
400
600
800
1000
838.339
1084.87
1187.05
622.693
1099.35
abr
ar
bb
bola
elastic


Network profile: p4 Sample: t7 Metric: Inefficiency
Buffer: 30−60 min: elastic
0.447946
0.328266
0.396118
0.488139
0.310977
Inefficiency
0.0
0.1
0.2
0.3
0.4
abr
ar
bb
bola
elastic


Network profile: p4 Sample: t7 Metric: # quality change
Buffer: 30−60 min: bola
Quality changes
0
100
200
300
400
476
63
27
17
94
abr
ar
bb
bola
elastic