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APPENDIX A: DRP MATRICES

Table 5.1: DRP for QF and FR variation for video “football”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100	99.02	67.84	51.55	41.42	34.64	29.25	25.63	22.71	20.18	18.27	16.69	15.38	14.14	13.21	12.41	11.51	10.89	10.33	9.75
29	98	98.01	66.45	50.7	40.65	33.91	28.78	25.2	22.29	19.89	18.04	16.45	15.17	13.94	13.02	12.23	11.37	10.74	10.19	9.63
28	95.89	96.05	65.14	49.79	39.9	33.38	28.3	24.78	21.99	19.55	17.67	16.15	14.89	13.75	12.84	12.05	11.23	10.62	10.07	9.52
27	92.73	92.68	62.91	48.11	38.67	32.25	27.42	24.06	21.25	19.01	17.21	15.75	14.49	13.35	12.48	11.73	10.92	10.31	9.77	9.27
26	90.62	90.67	61.64	47.19	37.92	31.57	26.93	23.59	20.86	18.65	16.89	15.48	14.26	13.14	12.29	11.54	10.73	10.18	9.64	9.11
25	88.07	88.12	60.06	46.06	37.03	30.92	26.39	23.13	20.48	18.34	16.66	15.26	14.06	12.95	12.11	11.36	10.58	10.03	9.48	8.97
24	85.21	85.22	58.31	44.68	36.01	30.07	25.65	22.54	19.99	17.88	16.23	14.85	13.69	12.64	11.81	11.11	10.4	9.84	9.31	8.85
23	81.6	81.57	55.84	42.8	34.53	28.86	24.63	21.62	19.18	17.21	15.62	14.28	13.26	12.18	11.41	10.75	10.03	9.5	8.99	8.53
22	79.27	79.31	54.43	41.81	33.71	28.21	24.17	21.19	18.83	16.85	15.3	14.05	13.02	11.99	11.24	10.57	9.84	9.35	8.83	8.4
21	76.54	76.57	52.63	40.48	32.69	27.43	23.48	20.66	18.35	16.5	14.99	13.74	12.69	11.71	11	10.35	9.66	9.17	8.72	8.25
20	73.51	73.54	50.47	38.92	31.43	26.29	22.52	19.82	17.64	15.87	14.37	13.19	12.2	11.29	10.58	9.98	9.35	8.87	8.4	7.99
19	71.41	71.4	49.24	38.03	30.79	25.84	22.17	19.5	17.37	15.6	14.25	13.05	12.09	11.15	10.51	9.88	9.21	8.77	8.33	7.91
18	68.18	68.23	47.17	36.49	29.62	24.87	21.34	18.87	16.75	15.13	13.78	12.68	11.69	10.92	10.21	9.61	8.99	8.54	8.12	7.69
17	65.44	65.4	45.4	35.15	28.58	24.02	20.68	18.21	16.26	14.68	13.39	12.32	11.39	10.61	9.94	9.37	8.81	8.39	7.93	7.58
16	63.52	63.54	44.22	34.34	27.92	23.57	20.21	17.84	15.94	14.39	13.13	12.11	11.24	10.42	9.78	9.21	8.65	8.22	7.83	7.43
15	60.62	60.6	42.32	32.86	26.83	22.61	19.56	17.32	15.57	14.02	12.8	11.79	10.92	10.19	9.54	9.01	8.47	8.04	7.67	7.28
14	56.96	57.03	40.04	31.09	25.38	21.48	18.52	16.44	14.72	13.28	12.19	11.32	10.51	9.72	9.18	8.66	8.14	7.76	7.4	7.03
13	54.05	54.07	37.98	29.54	24.27	20.49	17.74	15.77	14.11	12.78	11.69	10.8	10.07	9.36	8.83	8.38	7.85	7.49	7.15	6.82
12	51	51.03	35.92	28.09	23.09	19.7	17.02	15.17	13.62	12.33	11.32	10.52	9.83	9.12	8.65	8.18	7.71	7.37	7.05	6.72
11	51.01	50.96	36.13	28.55	23.44	19.97	17.4	15.46	13.96	12.63	11.65	10.8	10.1	9.42	8.95	8.46	8.03	7.65	7.34	7.02
10	44.76	44.73	32	25.17	20.77	17.82	15.51	13.87	12.52	11.39	10.53	9.8	9.16	8.64	8.12	7.69	7.35	7.05	6.77	6.45



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Table 5.4: DRP for QF and FR variation for video “bus”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.95	67.39	51.25	40.48	33.80	28.46	24.90	21.73	19.34	17.32	15.79	14.39	13.19	12.17	11.39	10.52	9.88	9.34	8.77
29	97.99	98.01	65.81	50.25	39.67	32.98	27.84	24.27	21.24	18.91	16.92	15.40	14.04	12.91	11.91	11.13	10.30	9.66	9.11	8.58
28	95.42	95.46	64.08	49.04	38.76	32.15	27.21	23.78	20.71	18.48	16.61	15.08	13.74	12.61	11.72	10.92	10.10	9.49	8.96	8.44
27	92.63	92.60	62.35	47.59	37.72	31.34	26.51	23.13	20.25	18.03	16.22	14.73	13.40	12.36	11.43	10.65	9.89	9.28	8.76	8.26
26	90.23	90.24	60.82	46.57	36.84	30.59	25.98	22.59	19.82	17.65	15.85	14.42	13.18	12.13	11.23	10.48	9.70	9.15	8.62	8.15
25	87.55	87.54	59.10	45.18	35.93	29.87	25.38	22.10	19.36	17.29	15.54	14.12	12.92	11.88	11.00	10.25	9.54	8.97	8.46	7.98
24	85.38	85.35	57.72	44.22	35.10	29.18	24.87	21.67	19.05	16.94	15.24	13.90	12.67	11.69	10.83	10.14	9.41	8.86	8.33	7.88
23	81.70	81.74	55.46	42.47	33.71	28.09	23.97	20.91	18.29	16.33	14.76	13.37	12.26	11.34	10.48	9.82	9.10	8.56	8.10	7.63
22	79.22	79.31	53.95	41.25	32.85	27.43	23.24	20.36	17.96	15.97	14.44	13.12	12.09	11.14	10.31	9.65	9.02	8.46	8.00	7.50
21	76.56	76.50	52.03	39.90	31.72	26.39	22.50	19.65	17.28	15.44	13.95	12.66	11.60	10.67	9.94	9.28	8.61	8.13	7.71	7.30
20	73.87	73.84	50.21	38.48	30.64	25.63	21.76	19.01	16.78	15.02	13.56	12.38	11.30	10.46	9.70	9.10	8.42	7.94	7.54	7.12
19	70.46	70.42	48.08	36.90	29.41	24.60	20.90	18.38	16.10	14.51	13.08	11.88	10.95	10.07	9.37	8.83	8.18	7.74	7.33	6.89
18	67.20	67.18	45.98	35.21	28.18	23.50	20.14	17.62	15.45	13.81	12.56	11.43	10.47	9.71	8.99	8.46	7.84	7.40	7.01	6.66
17	64.74	64.79	44.30	33.96	27.27	22.65	19.40	17.07	15.01	13.39	12.14	11.05	10.16	9.42	8.81	8.23	7.65	7.23	6.83	6.48
16	61.38	61.37	42.04	32.30	25.89	21.62	18.46	16.13	14.15	12.73	11.50	10.55	9.64	8.95	8.30	7.81	7.28	6.92	6.56	6.31
15	56.78	56.78	38.85	29.82	23.86	19.96	17.04	14.97	13.19	11.86	10.76	9.81	9.05	8.36	7.78	7.30	6.79	6.48	6.11	5.82
14	54.47	54.61	37.62	28.91	23.24	19.37	16.65	14.64	12.93	11.60	10.56	9.67	8.92	8.25	7.70	7.25	6.80	6.44	6.15	5.80
13	51.51	51.52	35.60	27.57	22.17	18.53	15.93	14.13	12.52	11.27	10.23	9.36	8.68	8.06	7.51	7.08	6.62	6.27	6.05	5.73
12	49.51	49.53	34.47	26.69	21.55	18.07	15.57	13.89	12.24	10.97	10.02	9.25	8.53	7.88	7.45	7.00	6.61	6.22	5.98	5.66
11	49.47	49.55	34.55	26.81	21.69	18.25	15.83	14.00	12.45	11.24	10.37	9.47	8.81	8.18	7.67	7.23	6.81	6.51	6.20	5.90
10	41.81	41.81	29.10	22.58	18.28	15.45	13.36	11.92	10.57	9.57	8.84	8.08	7.51	6.98	6.58	6.25	5.91	5.59	5.37	5.11

Table 5.5: DRP for QF and FR variation for video “akiyo”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100	100	64.76	49.86	41.21	35.77	27.41	24.6	22.67	20.59	19.19	18.26	17.43	16.41	15.47	14.88	14.34	13.69	13.89	12.92
29	100	99.93	64.65	49.47	41.06	35.53	27.41	24.5	22.49	20.44	18.99	18.1	17.31	16.33	15.23	14.73	14.22	13.53	13.73	12.75
28	98.03	97.93	62.55	47.81	39.86	34.45	26.76	24.02	22.15	20.14	18.77	17.86	17.08	16.07	15.14	14.59	14.07	13.44	13.62	12.67
27	94.44	94.35	60.3	46.03	38.42	33.38	25.94	23.27	21.46	19.54	18.21	17.33	16.56	15.63	14.71	14.21	13.7	13.09	13.26	12.35
26	93.74	93.69	59.85	45.74	38.18	33.06	25.34	22.79	21.06	19.2	17.91	17.06	16.36	15.41	14.54	14.03	13.56	12.99	13.14	12.25
25	91.94	91.76	58.73	44.78	37.48	32.33	24.66	22.19	20.5	18.67	17.45	16.62	15.9	15	14.15	13.69	13.21	12.64	12.79	11.96
24	88.72	88.5	56.7	43.45	36.5	31.38	24.64	22.22	20.56	18.76	17.54	16.71	16	15.12	14.29	13.82	13.38	12.83	12.95	12.13
23	84.58	84.43	54.29	41.76	35.18	30.33	23.89	21.59	19.99	18.3	17.14	16.33	15.67	14.82	14.03	13.57	13.16	12.63	12.76	11.97
22	83.21	82.99	53.75	41.43	34.7	30.11	23.47	21.21	19.65	18	16.87	16.09	15.44	14.64	13.88	13.42	12.99	12.5	12.62	11.87
21	81.39	81.36	52.54	40.43	33.87	29.48	22.7	20.56	19.07	17.51	16.45	15.73	15.1	14.33	13.6	13.19	12.79	12.29	12.41	11.7
20	79.77	79.66	51.19	39.45	33.09	28.78	22.05	19.95	18.58	17.07	16.07	15.36	14.75	14.01	13.3	12.91	12.55	12.07	12.17	11.5
19	75.83	75.78	49.29	38.33	32.11	28.12	22.12	20.09	18.66	17.2	16.19	15.5	14.91	14.17	13.52	13.12	12.72	12.28	12.37	11.69
18	72.95	72.85	47.32	36.72	30.99	27.04	21.73	19.76	18.42	17	16.04	15.39	14.81	14.1	13.45	13.07	12.71	12.28	12.37	11.74
17	71.44	71.32	46.79	36.57	30.78	26.97	21.18	19.26	17.99	16.62	15.69	15.07	14.53	13.87	13.25	12.89	12.54	12.14	12.22	11.62
16	70.17	70.08	45.93	36.14	30.39	26.76	20.93	19.13	17.86	16.57	15.64	15.03	14.54	13.86	13.28	12.94	12.61	12.21	12.29	11.72
15	65.91	65.82	43.72	34.6	29.43	25.8	20.5	18.78	17.58	16.36	15.52	14.91	14.38	13.81	13.3	12.94	12.63	12.26	12.32	11.78
14	64.04	64.03	42.59	33.72	28.71	25.44	20.45	18.81	17.62	16.44	15.63	15.06	14.59	14.02	13.49	13.15	12.83	12.48	12.54	12.04
13	62.65	62.58	42.05	33.51	28.66	25.42	20.25	18.68	17.56	16.44	15.67	15.14	14.68	14.12	13.63	13.33	13.04	12.71	12.76	12.26
12	59.7	59.6	40.23	32.19	27.65	24.73	19.84	18.4	17.35	16.34	15.61	15.13	14.71	14.19	13.74	13.47	13.21	12.89	12.92	12.49
11	61.91	61.87	42.32	34.19	29.48	26.48	21.49	20.03	18.99	17.97	17.24	16.75	16.32	15.82	15.35	15.09	14.82	14.5	14.53	14.11
10	54.68	54.61	38.03	31.04	27.09	24.44	19.98	18.65	17.76	16.87	16.24	15.79	15.4	15	14.6	14.34	14.1	13.84	13.86	13.49

Table 5.6: DRP for QF and FR variation for video “city”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.98	60.98	44.02	32.70	26.31	21.24	18.15	15.37	13.41	11.80	10.66	9.63	8.82	8.10	7.58	7.02	6.64	6.30	5.96
29	97.78	97.78	59.27	43.01	31.99	25.57	20.77	17.65	14.99	13.10	11.57	10.41	9.41	8.63	7.94	7.44	6.90	6.53	6.19	5.86
28	94.79	94.67	57.54	41.77	31.09	24.86	20.21	17.19	14.63	12.79	11.32	10.20	9.22	8.46	7.80	7.29	6.78	6.41	6.08	5.77
27	91.84	91.79	55.87	40.51	30.25	24.09	19.68	16.75	14.25	12.46	11.05	9.97	9.03	8.28	7.69	7.10	6.60	6.25	5.93	5.63
26	89.89	89.38	54.45	39.54	29.43	23.69	19.22	16.36	13.91	12.19	10.77	9.71	8.79	8.08	7.44	6.98	6.49	6.14	5.82	5.54
25	85.71	85.69	52.23	37.93	28.28	22.61	18.43	15.71	13.36	11.71	10.37	9.35	8.48	7.79	7.19	6.74	6.27	5.95	5.64	5.37
24	82.97	82.94	50.71	36.83	27.53	22.05	18.01	15.34	13.10	11.50	10.19	9.20	8.35	7.68	7.10	6.66	6.21	5.89	5.60	5.33
23	79.21	79.17	48.48	35.19	26.34	21.12	17.27	14.73	12.58	11.06	9.83	8.88	8.06	7.42	6.87	6.45	6.02	5.71	5.44	5.18
22	76.51	76.48	46.88	34.04	25.48	20.45	16.73	14.29	12.22	10.74	9.54	8.64	7.85	7.24	6.71	6.29	5.88	5.58	5.32	5.07
21	73.50	73.47	45.06	32.74	24.54	19.68	16.13	13.77	11.79	10.38	9.23	8.36	7.61	7.02	6.51	6.12	5.73	5.44	5.18	4.95
20	70.55	70.52	43.29	31.37	23.52	18.86	15.48	13.21	11.33	9.99	8.89	8.06	7.34	6.77	6.29	5.92	5.54	5.27	5.03	4.80
19	68.04	68.02	42.01	30.56	22.98	18.51	15.19	13.03	11.18	9.86	8.81	7.99	7.30	6.74	6.26	5.90	5.54	5.26	5.02	4.80
18	64.36	64.32	39.71	28.93	21.77	17.55	14.46	12.40	10.66	9.43	8.44	7.66	7.01	6.49	6.05	5.70	5.36	5.11	4.88	4.67
17	61.02	61.00	37.81	27.50	20.77	16.77	13.82	11.90	10.29	9.11	8.16	7.43	6.81	6.32	5.91	5.56	5.24	5.00	4.79	4.59
16	58.48	58.46	36.32	26.45	20.01	16.19	13.38	11.53	9.97	8.86	7.95	7.26	6.66	6.19	5.79	5.47	5.17	4.93	4.72	4.54
15	55.49	55.49	34.52	25.23	19.13	15.50	12.86	11.10	9.62	8.56	7.70	7.04	6.49	6.04	5.65	5.35	5.06	4.84	4.64	4.47
14	52.98	52.97	33.11	24.28	18.49	15.04	12.53	10.85	9.45	8.42	7.61	6.98	6.43	6.00	5.63	5.34	5.06	4.85	4.66	4.49
13	49.18	49.14	30.86	22.66	17.33	14.15	11.82	10.29	8.97	8.05	7.29	6.71	6.21	5.80	5.46	5.19	4.93	4.73	4.56	4.40
12	46.40	46.38	29.23	21.57	16.56	13.56	11.38	9.94	8.70	7.83	7.12	6.56	6.10	5.72	5.40	5.15	4.90	4.73	4.56	4.41
11	46.70	46.68	29.56	21.91	16.91	13.90	11.72	10.28	9.05	8.17	7.46	6.92	6.44	6.07	5.75	5.50	5.25	5.07	4.91	4.76
10	40.22	40.21	25.62	19.12	14.85	12.30	10.44	9.20	8.17	7.40	6.80	6.33	5.91	5.60	5.33	5.11	4.90	4.74	4.60	4.46

Table 5.7: DRP for QF and FR variation for video “mobile”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	100.00	68.08	52.55	41.23	34.22	28.59	24.85	21.36	18.81	16.65	14.97	13.43	12.20	11.08	10.23	9.31	8.63	8.02	7.43
29	97.87	97.86	66.47	51.33	40.38	33.41	28.01	24.24	20.89	18.41	16.31	14.64	13.16	11.95	10.87	10.02	9.14	8.49	7.88	7.31
28	94.36	94.36	64.07	49.49	38.93	32.22	27.01	23.39	20.15	17.76	15.73	14.13	12.70	11.54	10.51	9.68	8.83	8.20	7.61	7.06
27	91.31	91.31	62.01	47.88	37.64	31.15	26.12	22.62	19.48	17.17	15.21	13.66	12.27	11.15	10.15	9.36	8.54	7.93	7.35	6.83
26	87.68	87.67	59.54	45.90	36.08	29.84	25.02	21.66	18.68	16.46	14.58	13.10	11.79	10.71	9.76	9.00	8.22	7.63	7.09	6.59
25	84.26	84.25	57.19	44.07	34.64	28.66	24.05	20.81	17.95	15.83	14.02	12.59	11.33	10.31	9.39	8.65	7.90	7.34	6.81	6.33
24	81.61	81.60	55.47	42.75	33.65	27.86	23.40	20.27	17.50	15.44	13.69	12.30	11.08	10.07	9.19	8.47	7.75	7.20	6.69	6.22
23	77.93	77.92	52.96	40.82	32.12	26.61	22.33	19.36	16.72	14.76	13.09	11.79	10.62	9.66	8.82	8.13	7.44	6.92	6.43	5.98
22	74.70	74.70	50.82	39.11	30.77	25.46	21.38	18.53	16.00	14.12	12.54	11.27	10.16	9.24	8.44	7.79	7.13	6.63	6.17	5.74
21	71.41	71.40	48.53	37.32	29.35	24.30	20.40	17.68	15.28	13.47	11.97	10.75	9.71	8.83	8.07	7.45	6.82	6.34	5.89	5.49
20	68.17	68.17	46.34	35.56	27.95	23.12	19.42	16.83	14.55	12.84	11.41	10.25	9.26	8.42	7.69	7.10	6.51	6.05	5.64	5.25
19	65.48	65.48	44.67	34.37	27.07	22.44	18.88	16.39	14.18	12.53	11.15	10.03	9.07	8.26	7.57	6.99	6.41	5.97	5.56	5.18
18	62.62	62.62	42.70	32.86	25.88	21.44	18.04	15.66	13.56	11.99	10.67	9.61	8.69	7.92	7.26	6.71	6.16	5.74	5.35	5.00
17	59.52	59.51	40.69	31.36	24.73	20.51	17.27	15.02	13.00	11.51	10.25	9.24	8.36	7.63	6.99	6.47	5.93	5.54	5.17	4.83
16	56.76	56.75	38.87	29.97	23.66	19.63	16.55	14.38	12.46	11.04	9.83	8.87	8.03	7.34	6.73	6.23	5.72	5.34	4.99	4.67
15	54.08	54.07	37.07	28.62	22.61	18.76	15.82	13.75	11.93	10.57	9.42	8.51	7.70	7.04	6.47	5.99	5.51	5.16	4.81	4.51
14	50.50	50.49	34.69	26.77	21.20	17.61	14.89	12.95	11.27	10.00	8.94	8.08	7.34	6.72	6.17	5.74	5.29	4.95	4.64	4.35
13	46.77	46.76	32.13	24.74	19.59	16.27	13.76	11.99	10.44	9.27	8.29	7.51	6.83	6.27	5.77	5.37	4.96	4.65	4.36	4.10
12	42.93	42.93	29.49	22.65	17.96	14.91	12.64	11.01	9.61	8.55	7.67	6.96	6.35	5.83	5.39	5.01	4.64	4.36	4.10	3.86
11	43.32	43.32	29.82	22.96	18.22	15.17	12.88	11.25	9.83	8.76	7.88	7.16	6.54	6.02	5.57	5.20	4.83	4.54	4.28	4.04
10	36.98	36.97	25.55	19.78	15.77	13.17	11.21	9.81	8.60	7.68	6.92	6.30	5.76	5.32	4.93	4.62	4.30	4.05	3.82	3.62

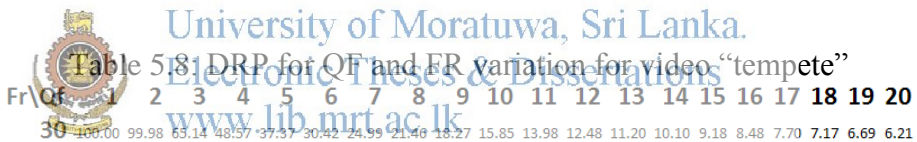


Table 5.8: DRP for QF and FR variation for video “tempete”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.98	63.14	48.57	37.37	30.42	24.99	21.46	18.27	15.85	13.98	12.48	11.20	10.10	9.18	8.48	7.70	7.17	6.69	6.21
29	97.97	97.92	63.46	47.45	36.53	29.58	24.44	20.87	17.80	15.48	13.65	12.16	10.91	9.86	8.97	8.26	7.53	7.01	6.54	6.09
28	94.97	94.94	61.58	46.04	35.47	28.76	23.75	20.29	17.32	15.08	13.29	11.84	10.65	9.63	8.76	8.07	7.36	6.86	6.40	5.96
27	91.86	91.82	59.56	44.51	34.28	27.78	22.96	19.61	16.73	14.58	12.84	11.45	10.29	9.31	8.48	7.81	7.13	6.64	6.20	5.77
26	88.29	88.26	57.25	42.76	32.94	26.69	22.05	18.84	16.09	14.03	12.37	11.04	9.93	8.97	8.18	7.54	6.90	6.42	5.98	5.58
25	85.53	85.50	55.55	41.47	31.95	25.89	21.44	18.31	15.67	13.67	12.06	10.77	9.69	8.77	8.00	7.38	6.75	6.30	5.88	5.48
24	82.46	82.43	53.58	40.00	30.84	24.96	20.69	17.67	15.12	13.19	11.65	10.39	9.37	8.49	7.75	7.15	6.54	6.10	5.70	5.32
23	79.00	78.96	51.32	38.30	29.52	23.93	19.82	16.94	14.51	12.67	11.19	10.00	9.02	8.17	7.46	6.88	6.32	5.89	5.51	5.15
22	75.39	75.35	49.03	36.55	28.18	22.84	18.92	16.19	13.86	12.10	10.69	9.57	8.63	7.83	7.16	6.62	6.07	5.67	5.31	4.96
21	72.60	72.57	47.24	35.23	27.18	22.03	18.28	15.64	13.41	11.72	10.38	9.29	8.38	7.62	6.97	6.45	5.93	5.55	5.19	4.85
20	69.55	69.52	45.25	33.67	25.96	21.02	17.44	14.93	12.81	11.20	9.92	8.88	8.03	7.28	6.68	6.18	5.68	5.31	4.98	4.66
19	66.66	66.63	43.47	32.40	25.02	20.29	16.86	14.42	12.41	10.85	9.62	8.62	7.80	7.09	6.50	6.02	5.54	5.18	4.86	4.56
18	63.94	63.92	41.77	31.20	24.13	19.61	16.32	13.98	12.02	10.55	9.36	8.40	7.60	6.93	6.36	5.90	5.44	5.10	4.79	4.50
17	60.68	60.67	39.78	29.72	22.97	18.68	15.54	13.35	11.48	10.06	8.95	8.03	7.29	6.64	6.10	5.67	5.22	4.90	4.62	4.33
16	57.99	57.96	38.05	28.46	22.04	17.94	14.94	12.84	11.06	9.70	8.63	7.76	7.05	6.43	5.92	5.51	5.09	4.79	4.50	4.23
15	55.36	55.34	36.40	27.31	21.19	17.26	14.41	12.40	10.71	9.41	8.38	7.56	6.86	6.28	5.79	5.39	4.98	4.69	4.43	4.17
14	51.96	51.94	34.22	25.68	19.93	16.26	13.58	11.71	10.12	8.92	7.96	7.19	6.55	6.00	5.54	5.18	4.80	4.52	4.27	4.03
13	48.10	48.08	31.73	23.81	18.53	15.13	12.67	10.93	9.47	8.36	7.48	6.76	6.16	5.66	5.24	4.90	4.55	4.30	4.07	3.85
12	44.79	44.77	29.63	22.28	17.39	14.23	11.98	10.36	9.01	7.53	6.71	6.50	5.95	5.48	5.09	4.77	4.46	4.21	4.00	3.80
11	45.18	45.17	29.99	22.61	17.70	14.54	12.27	10.65	9.28	8.25	7.43	6.76	6.21	5.73	5.34	5.02	4.70	4.46	4.25	4.04
10	39.05	39.05	26.09	19.80	15.56	12.85	10.87	9.46	8.28	7.38	6.67	6.09	5.60	5.18	4.84	4.56	4.27	4.07	3.88	3.70

APPENDIX B: VQV MATRICES

Table 5.3: VQV for QF and FR variation for video “football”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.58	98.08	97.40	96.52	95.59	94.52	93.64	92.58	91.61	90.63	89.74	88.79	87.94	87.05	86.24	85.29	84.55	83.74	82.93
29	99.91	99.49	97.99	97.31	96.44	95.51	94.44	93.56	92.50	91.53	90.55	89.66	88.71	87.86	86.97	86.16	85.22	84.48	83.67	82.86
28	99.81	99.39	97.89	97.21	96.33	95.41	94.34	93.46	92.40	91.43	90.46	89.57	88.62	87.77	86.88	86.07	85.13	84.39	83.58	82.77
27	99.68	99.26	97.77	97.09	96.21	95.29	94.22	93.34	92.29	91.32	90.34	89.46	88.51	87.66	86.77	85.97	85.02	84.28	83.47	82.67
26	99.53	99.11	97.62	96.94	96.07	95.14	94.08	93.20	92.15	91.18	90.21	89.32	88.37	87.53	86.64	85.84	84.89	84.15	83.35	82.54
25	99.35	98.93	97.44	96.77	95.89	94.97	93.91	93.03	91.98	91.02	90.04	89.16	88.21	87.37	86.49	85.68	84.74	84.00	83.20	82.39
24	99.14	98.72	97.23	96.56	95.69	94.76	93.70	92.83	91.78	90.82	89.85	88.96	88.02	87.18	86.30	85.49	84.55	83.82	83.02	82.21
23	98.88	98.46	96.98	96.31	95.44	94.52	93.46	92.59	91.54	90.58	89.61	88.73	87.79	86.95	86.07	85.27	84.33	83.60	82.80	82.00
22	98.57	98.15	96.67	96.00	95.14	94.22	93.17	92.30	91.25	90.30	89.33	88.45	87.52	86.68	85.80	85.00	84.07	83.34	82.54	81.74
21	98.20	97.78	96.31	95.64	94.78	93.87	92.81	91.95	90.91	89.96	88.99	88.12	87.19	86.35	85.48	84.68	83.75	83.02	82.23	81.43
20	97.75	97.34	95.87	95.21	94.35	93.44	92.39	91.53	90.50	89.55	88.59	87.72	86.79	85.96	85.09	84.30	83.37	82.65	81.86	81.06
19	97.22	96.81	95.35	94.69	93.83	92.93	91.89	91.03	90.00	89.06	88.11	87.24	86.32	85.49	84.63	83.84	82.92	82.20	81.41	80.62
18	96.58	96.17	94.72	94.07	93.22	92.32	91.28	90.43	89.41	88.47	87.53	86.67	85.75	84.93	84.07	83.29	82.37	81.66	80.87	80.09
17	95.81	95.41	93.97	93.32	92.48	91.58	90.56	89.72	88.70	87.77	86.83	85.98	85.07	84.26	83.40	82.63	81.72	81.01	80.23	79.46
16	94.89	94.49	93.07	92.42	91.59	90.71	89.69	88.86	87.85	86.93	86.00	85.16	84.25	83.45	82.60	81.83	80.93	80.23	79.46	78.69
15	93.79	93.40	91.99	91.35	90.53	89.65	88.65	87.83	86.83	85.92	85.00	84.17	83.28	82.48	81.64	80.89	79.99	79.30	78.54	77.78
14	92.47	92.08	90.70	90.07	89.25	88.39	87.40	86.59	85.61	84.71	83.81	82.98	82.11	81.32	80.50	79.75	78.87	78.18	77.44	76.69
13	90.89	90.51	89.14	88.53	87.73	86.88	85.91	85.11	84.15	83.26	82.37	81.56	80.70	79.93	79.12	78.38	77.52	76.85	76.11	75.38
12	89.00	88.62	87.29	86.68	85.90	85.07	84.12	83.34	82.39	81.53	80.66	79.86	79.02	78.26	77.47	76.75	75.90	75.25	74.52	73.80
11	86.72	86.36	85.06	84.47	83.71	82.90	81.97	81.21	80.29	79.45	78.60	77.83	77.00	76.27	75.49	74.79	73.97	73.33	72.62	71.92
10	84.00	83.65	82.39	81.82	81.08	80.30	79.40	78.66	77.77	76.95	76.13	75.38	74.59	73.87	73.12	72.44	71.65	71.02	70.34	69.66

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Table 5.9: VQV for QF and FR variation for video “akiyo”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.94	98.85	98.58	98.35	97.94	97.57	97.30	97.30	96.66	96.35	96.03	95.72	95.43	95.13	94.79	94.43	94.18	93.85	93.61
29	100.00	99.94	98.85	98.58	98.35	97.94	97.57	97.30	97.30	96.66	96.35	96.03	95.72	95.43	95.13	94.79	94.43	94.18	93.85	93.61
28	99.99	99.93	98.84	98.57	98.34	97.93	97.56	97.29	97.29	96.65	96.34	96.02	95.71	95.42	95.12	94.78	94.42	94.17	93.84	93.60
27	99.99	99.93	98.84	98.57	98.34	97.93	97.56	97.29	97.29	96.65	96.34	96.02	95.71	95.42	95.12	94.78	94.42	94.17	93.84	93.60
26	99.98	99.92	98.83	98.56	98.33	97.92	97.55	97.28	97.28	96.64	96.33	96.01	95.70	95.41	95.11	94.77	94.41	94.16	93.83	93.59
25	99.97	99.91	98.82	98.55	98.32	97.91	97.54	97.27	97.27	96.63	96.32	96.00	95.69	95.40	95.10	94.76	94.40	94.15	93.82	93.58
24	99.95	99.89	98.80	98.53	98.30	97.90	97.53	97.26	97.26	96.62	96.31	95.99	95.68	95.39	95.09	94.75	94.39	94.14	93.81	93.57
23	99.93	99.87	98.78	98.52	98.29	97.88	97.51	97.24	97.24	96.60	96.29	95.97	95.66	95.37	95.07	94.73	94.37	94.12	93.79	93.55
22	99.91	99.85	98.76	98.49	98.26	97.85	97.48	97.21	97.21	96.57	96.26	95.94	95.63	95.34	95.04	94.70	94.34	94.09	93.76	93.52
21	99.87	99.81	98.72	98.45	98.22	97.81	97.44	97.17	97.17	96.53	96.22	95.90	95.60	95.31	95.01	94.67	94.31	94.06	93.73	93.49
20	99.82	99.76	98.67	98.40	98.17	97.76	97.39	97.12	97.12	96.48	96.18	95.86	95.55	95.26	94.96	94.62	94.26	94.01	93.68	93.44
19	99.75	99.69	98.60	98.33	98.10	97.69	97.32	97.06	97.06	96.42	96.11	95.79	95.48	95.19	94.89	94.55	94.19	93.94	93.61	93.37
18	99.65	99.59	98.51	98.24	98.01	97.60	97.23	96.96	96.96	96.32	96.02	95.70	95.39	95.10	94.80	94.46	94.10	93.85	93.52	93.29
17	99.52	99.46	98.38	98.11	97.88	97.47	97.10	96.84	96.84	96.20	95.89	95.57	95.26	94.97	94.68	94.34	93.98	93.73	93.40	93.16
16	99.34	99.28	98.20	97.93	97.70	97.30	96.93	96.66	96.66	96.03	95.72	95.40	95.09	94.80	94.51	94.17	93.81	93.56	93.23	93.00
15	99.10	99.04	97.96	97.69	97.46	97.06	96.69	96.42	96.42	95.79	95.48	95.16	94.86	94.57	94.27	93.94	93.58	93.33	93.00	92.77
14	98.76	98.70	97.63	97.36	97.13	96.73	96.36	96.10	96.10	95.47	95.16	94.84	94.54	94.25	93.95	93.62	93.26	93.02	92.69	92.45
13	98.31	98.25	97.18	96.91	96.68	96.28	95.92	95.65	95.65	95.02	94.72	94.40	94.10	93.81	93.52	93.18	92.83	92.58	92.26	92.02
12	97.68	97.62	96.56	96.29	96.07	95.67	95.31	95.04	95.04	94.42	94.11	93.80	93.50	93.22	92.92	92.59	92.24	91.99	91.67	91.44
11	96.82	96.76	95.71	95.45	95.23	94.83	94.47	94.21	94.21	93.59	93.29	92.98	92.68	92.40	92.11	91.78	91.43	91.19	90.87	90.64
10	95.65	95.59	94.55	94.29	94.07	93.68	93.33	93.07	93.07	92.46	92.16	91.85	91.56	91.28	90.99	90.67	90.32	90.08	89.77	89.54

Table 5.10: VQV for QF and FR variation for video “bus”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.86	98.61	98.13	97.48	96.82	96.04	95.42	94.63	93.92	93.19	92.52	91.75	91.07	90.36	89.71	88.96	88.34	87.68	87.05
29	99.96	99.82	98.57	98.09	97.44	96.78	96.00	95.38	94.59	93.88	93.15	92.48	91.71	91.03	90.32	89.67	88.92	88.30	87.64	87.01
28	99.90	99.76	98.51	98.03	97.38	96.73	95.95	95.33	94.54	93.83	93.10	92.43	91.66	90.98	90.27	89.62	88.87	88.25	87.59	86.97
27	99.84	99.70	98.45	97.97	97.32	96.66	95.88	95.26	94.47	93.77	93.04	92.37	91.60	90.92	90.21	89.56	88.81	88.20	87.54	86.91
26	99.75	99.61	98.37	97.89	97.24	96.58	95.80	95.19	94.40	93.69	92.96	92.29	91.52	90.85	90.14	89.49	88.74	88.12	87.46	86.84
25	99.65	99.51	98.27	97.79	97.14	96.48	95.71	95.09	94.30	93.59	92.87	92.20	91.43	90.75	90.05	89.40	88.65	88.03	87.38	86.75
24	99.53	99.39	98.15	97.67	97.02	96.36	95.59	94.97	94.18	93.48	92.75	92.08	91.32	90.64	89.93	89.29	88.54	87.92	87.27	86.64
23	99.38	99.24	97.99	97.52	96.87	96.22	95.44	94.82	94.04	93.33	92.61	91.94	91.18	90.50	89.80	89.15	88.40	87.79	87.13	86.51
22	99.19	99.05	97.81	97.33	96.69	96.03	95.26	94.64	93.86	93.16	92.43	91.77	91.00	90.33	89.62	88.98	88.24	87.62	86.97	86.34
21	98.95	98.81	97.58	97.10	96.46	95.81	95.03	94.42	93.64	92.94	92.21	91.55	90.79	90.12	89.41	88.77	88.03	87.41	86.76	86.14
20	98.67	98.53	97.29	96.82	96.18	95.53	94.76	94.15	93.37	92.67	91.95	91.29	90.53	89.85	89.15	88.51	87.77	87.16	86.51	85.89
19	98.31	98.17	96.94	96.47	95.83	95.18	94.42	93.81	93.03	92.33	91.62	90.96	90.20	89.53	88.83	88.19	87.46	86.85	86.20	85.58
18	97.87	97.74	96.51	96.04	95.41	94.76	94.00	93.39	92.62	91.92	91.21	90.55	89.80	89.13	88.44	87.80	87.07	86.46	85.82	85.20
17	97.33	97.20	95.98	95.51	94.88	94.24	93.48	92.88	92.11	91.42	90.71	90.05	89.30	88.64	87.95	87.32	86.59	85.99	85.34	84.73
16	96.67	96.53	95.33	94.86	94.23	93.60	92.84	92.24	91.48	90.79	90.09	89.44	88.70	88.04	87.35	86.72	86.00	85.40	84.76	84.15
15	95.85	95.72	94.52	94.06	93.44	92.80	92.06	91.46	90.70	90.02	89.32	88.68	87.94	87.29	86.61	85.99	85.27	84.68	84.04	83.44
14	94.84	94.71	93.52	93.07	92.45	91.83	91.09	90.50	89.75	89.08	88.38	87.75	87.02	86.37	85.70	85.08	84.37	83.78	83.16	82.56
13	93.60	93.47	92.30	91.85	91.24	90.62	89.89	89.31	88.57	87.91	87.22	86.60	85.87	85.24	84.57	83.97	83.26	82.68	82.07	81.48
12	92.06	91.93	90.78	90.34	89.74	89.13	88.42	87.85	87.12	86.46	85.79	85.18	84.47	83.84	83.19	82.59	81.90	81.33	80.72	80.14
11	90.17	90.04	88.92	88.48	87.90	87.30	86.60	86.04	85.33	84.69	84.03	83.43	82.73	82.12	81.48	80.89	80.22	79.66	79.06	78.49
10	87.84	87.71	86.62	86.19	85.62	85.04	84.36	83.81	83.12	82.50	81.86	81.27	80.59	79.99	79.37	78.80	78.14	77.60	77.02	76.46

Table 5.11: VQV for QF and FR variation for video “city”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.79	98.10	97.44	95.58	95.69	94.68	93.90	92.90	92.02	91.13	90.29	89.40	88.61	87.77	87.01	86.16	85.46	84.68	83.95
29	99.96	99.75	98.06	97.40	96.51	95.65	94.64	93.86	92.86	91.98	91.09	90.26	89.36	88.57	87.73	86.97	86.12	85.42	84.64	83.91
28	99.90	99.69	98.01	97.35	96.46	95.60	94.59	93.81	92.81	91.93	91.04	90.21	89.31	88.52	87.69	86.93	86.08	85.38	84.60	83.87
27	99.84	99.63	97.94	97.28	96.39	95.54	94.53	93.75	92.75	91.87	90.98	90.15	89.26	88.47	87.63	86.87	86.02	85.32	84.54	83.81
26	99.76	99.55	97.86	97.20	96.32	95.46	94.45	93.67	92.68	91.80	90.91	90.08	89.18	88.40	87.56	86.80	85.95	85.25	84.47	83.75
25	99.66	99.45	97.76	97.11	96.22	95.36	94.36	93.58	92.58	91.71	90.82	89.99	89.09	88.31	87.47	86.71	85.87	85.17	84.39	83.66
24	99.54	99.33	97.64	96.99	96.10	95.25	94.24	93.46	92.47	91.59	90.71	89.88	88.98	88.20	87.36	86.61	85.76	85.06	84.29	83.56
23	99.38	99.18	97.50	96.84	95.96	95.10	94.10	93.32	92.33	91.45	90.57	89.74	88.85	88.06	87.23	86.47	85.63	84.93	84.16	83.43
22	99.20	98.99	97.31	96.66	95.77	94.92	93.92	93.15	92.15	91.28	90.40	89.57	88.68	87.90	87.07	86.31	85.47	84.77	84.00	83.28
21	98.97	98.76	97.09	96.43	95.55	94.70	93.70	92.93	91.94	91.07	90.19	89.37	88.48	87.69	86.86	86.11	85.27	84.58	83.80	83.08
20	98.68	98.47	96.81	96.16	95.28	94.43	93.43	92.66	91.68	90.81	89.93	89.11	88.22	87.44	86.61	85.86	85.02	84.33	83.56	82.84
19	98.33	98.12	96.46	95.81	94.94	94.09	93.10	92.33	91.35	90.48	89.61	88.79	87.91	87.13	86.30	85.56	84.72	84.03	83.27	82.55
18	97.90	97.69	96.04	95.39	94.52	93.68	92.69	91.93	90.95	90.09	89.21	88.40	87.52	86.75	85.92	85.18	84.35	83.66	82.90	82.18
17	97.36	97.16	95.51	94.87	94.00	93.17	92.18	91.42	90.45	89.59	88.73	87.92	87.04	86.27	85.46	84.72	83.89	83.21	82.45	81.74
16	96.70	96.50	94.87	94.23	93.37	92.54	91.56	90.81	89.84	88.99	88.13	87.32	86.45	85.69	84.88	84.14	83.32	82.64	81.89	81.18
15	95.89	95.69	94.07	93.44	92.58	91.76	90.79	90.04	89.08	88.24	87.39	86.59	85.73	84.97	84.16	83.43	82.62	81.95	81.20	80.50
14	94.89	94.69	93.08	92.46	91.61	90.80	89.84	89.10	88.15	87.32	86.47	85.68	84.83	84.08	83.28	82.56	81.76	81.09	80.35	79.66
13	93.65	93.45	91.87	91.25	90.42	89.61	88.67	87.94	87.00	86.18	85.34	84.57	83.72	82.98	82.20	81.48	80.69	80.03	79.30	78.62
12	92.12	91.93	90.37	89.76	88.94	88.15	87.22	86.50	85.58	84.77	83.95	83.19	82.36	81.63	80.86	80.16	79.37	78.73	78.01	77.34
11	90.24	90.05	88.53	87.93	87.13	86.35	85.44	84.73	83.83	83.04	82.24	81.49	80.67	79.96	79.20	78.52	77.75	77.12	76.41	75.76
10	87.92	87.73	86.25	85.67	84.88	84.13	83.24	82.55	81.67	80.90	80.12	79.39	78.60	77.90	77.16	76.50	75.75	75.13	74.45	73.81

Table 5.12: VQV for QF and FR variation for video “mobile”

Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.95	98.71	98.26	97.59	96.97	96.16	95.57	94.74	94.06	93.30	92.66	91.84	91.19	90.43	89.80	88.99	88.36	87.60	86.91
29	99.99	99.94	98.70	98.25	97.58	96.96	96.15	95.56	94.73	94.05	93.29	92.65	91.83	91.18	90.42	89.79	88.98	88.35	87.59	86.90
28	99.98	99.93	98.69	98.24	97.57	96.95	96.14	95.55	94.72	94.04	93.28	92.64	91.82	91.17	90.41	89.78	88.97	88.34	87.58	86.89
27	99.96	99.91	98.67	98.22	97.55	96.93	96.12	95.53	94.70	94.02	93.26	92.62	91.80	91.15	90.39	89.76	88.95	88.32	87.56	86.87
26	99.93	99.88	98.64	98.20	97.53	96.91	96.10	95.51	94.68	94.00	93.24	92.60	91.78	91.13	90.37	89.74	88.93	88.30	87.54	86.85
25	99.90	99.85	98.61	98.16	97.50	96.88	96.07	95.48	94.65	93.97	93.21	92.57	91.75	91.10	90.34	89.71	88.90	88.27	87.52	86.83
24	99.86	99.81	98.58	98.13	97.46	96.84	96.03	95.44	94.61	93.93	93.17	92.53	91.71	91.07	90.31	89.68	88.87	88.24	87.48	86.79
23	99.81	99.76	98.52	98.07	97.41	96.79	95.98	95.39	94.56	93.88	93.12	92.49	91.67	91.02	90.26	89.63	88.82	88.19	87.43	86.75
22	99.74	99.69	98.46	98.01	97.34	96.72	95.91	95.32	94.50	93.82	93.06	92.42	91.60	90.96	90.20	89.57	88.76	88.13	87.38	86.69
21	99.65	99.60	98.37	97.92	97.25	96.63	95.83	95.24	94.41	93.74	92.98	92.34	91.52	90.87	90.12	89.49	88.68	88.05	87.30	86.61
20	99.54	99.49	98.25	97.81	97.14	96.52	95.72	95.13	94.30	93.63	92.87	92.23	91.42	90.77	90.01	89.39	88.58	87.95	87.20	86.51
19	99.39	99.34	98.11	97.66	96.99	96.38	95.57	94.99	94.16	93.48	92.73	92.09	91.28	90.63	89.88	89.25	88.45	87.82	87.06	86.38
18	99.19	99.14	97.91	97.47	96.80	96.19	95.38	94.80	93.97	93.30	92.55	91.91	91.10	90.45	89.70	89.07	88.27	87.65	86.89	86.21
17	98.94	98.89	97.66	97.21	96.55	95.94	95.14	94.55	93.73	93.06	92.31	91.67	90.86	90.22	89.47	88.84	88.04	87.42	86.67	85.98
16	98.60	98.55	97.33	96.89	96.23	95.61	94.82	94.23	93.41	92.74	92.00	91.36	90.56	89.91	89.17	88.54	87.75	87.12	86.37	85.69
15	98.17	98.12	96.90	96.46	95.80	95.19	94.40	93.82	93.00	92.33	91.59	90.96	90.16	89.52	88.77	88.15	87.36	86.74	85.99	85.32
14	97.60	97.55	96.34	95.90	95.25	94.64	93.85	93.27	92.46	91.80	91.06	90.43	89.63	89.00	88.26	87.64	86.85	86.24	85.50	84.82
13	96.86	96.81	95.61	95.17	94.52	93.92	93.14	92.57	91.76	91.10	90.37	89.75	88.95	88.32	87.59	86.98	86.19	85.58	84.85	84.18
12	95.89	95.84	94.65	94.22	93.58	92.99	92.21	91.64	90.85	90.20	89.47	88.85	88.07	87.44	86.71	86.11	85.33	84.73	84.00	83.34
11	94.63	94.59	93.41	92.99	92.35	91.77	91.00	90.44	89.65	89.01	88.29	87.69	86.91	86.30	85.58	84.98	84.21	83.62	82.90	82.25
10	92.99	92.94	91.79	91.37	90.75	90.17	89.42	88.87	88.10	87.47	86.76	86.17	85.40	84.80	84.09	83.51	82.75	82.17	81.46	80.82



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Table 5.13: VQV for QF and FR variation for video “tempete”

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Fr\Qf	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
30	100.00	99.85	98.66	98.24	97.66	97.08	96.39	95.85	95.14	94.53	93.87	93.27	92.60	92.00	91.36	90.73	90.10	89.55	88.94	88.34
29	99.98	99.83	98.64	98.22	97.64	97.06	96.37	95.83	95.12	94.51	93.85	93.25	92.58	91.98	91.34	90.76	90.08	89.53	88.92	88.32
28	99.95	99.80	98.61	98.19	97.61	97.03	96.34	95.80	95.09	94.48	93.82	93.22	92.55	91.95	91.31	90.73	90.05	89.50	88.89	88.29
27	99.91	99.76	98.57	98.15	97.57	96.99	96.30	95.76	95.05	94.44	93.79	93.19	92.52	91.92	91.28	90.70	90.02	89.47	88.86	88.26
26	99.86	99.71	98.52	98.10	97.53	96.95	96.26	95.72	95.01	94.40	93.74	93.14	92.47	91.87	91.23	90.66	89.98	89.43	88.82	88.22
25	99.80	99.65	98.47	98.05	97.47	96.89	96.20	95.66	94.95	94.34	93.68	93.09	92.42	91.82	91.18	90.60	89.92	89.37	88.76	88.17
24	99.73	99.58	98.39	97.97	97.39	96.82	96.13	95.59	94.88	94.27	93.61	93.02	92.35	91.75	91.11	90.53	89.85	89.31	88.70	88.10
23	99.63	99.48	98.30	97.88	97.30	96.72	96.04	95.50	94.79	94.18	93.52	92.93	92.26	91.66	91.02	90.45	89.77	89.22	88.61	88.01
22	99.51	99.36	98.18	97.76	97.18	96.61	95.92	95.38	94.67	94.07	93.41	92.81	92.15	91.55	90.91	90.34	89.66	89.11	88.51	87.91
21	99.36	99.21	98.03	97.61	97.03	96.46	95.77	95.24	94.53	93.92	93.27	92.67	92.01	91.41	90.77	90.20	89.52	88.98	88.37	87.77
20	99.17	99.02	97.84	97.42	96.85	96.27	95.59	95.05	94.35	93.74	93.09	92.49	91.83	91.23	90.60	90.02	89.35	88.80	88.20	87.60
19	98.92	98.77	97.60	97.18	96.61	96.03	95.35	94.82	94.11	93.51	92.86	92.26	91.60	91.01	90.38	89.80	89.13	88.59	87.98	87.39
18	98.61	98.47	97.29	96.88	96.31	95.73	95.05	94.52	93.82	93.22	92.57	91.98	91.32	90.73	90.09	89.52	88.85	88.31	87.71	87.12
17	98.23	98.08	96.91	96.50	95.93	95.36	94.68	94.15	93.45	92.85	92.20	91.61	90.96	90.37	89.74	89.17	88.50	87.96	87.36	86.77
16	97.73	97.59	96.42	96.01	95.45	94.88	94.20	93.68	92.98	92.39	91.74	91.16	90.50	89.91	89.29	88.72	88.06	87.52	86.92	86.34
15	97.11	96.97	95.81	95.40	94.84	94.28	93.61	93.08	92.39	91.80	91.16	90.58	89.92	89.34	88.72	88.16	87.50	86.96	86.37	85.79
14	96.32	96.18	95.03	94.63	94.07	93.51	92.85	92.33	91.64	91.06	90.42	89.84	89.20	88.62	88.00	87.44	86.79	86.26	85.67	85.09
13	95.33	95.19	94.05	93.65	93.10	92.55	91.89	91.37	90.70	90.12	89.49	88.92	88.28	87.70	87.09	86.54	85.89	85.37	84.79	84.22
12	94.07	93.93	92.81	92.42	91.87	91.33	90.68	90.17	89.50	88.93	88.31	87.74	87.11	86.55	85.95	85.40	84.76	84.24	83.67	83.11
11	92.49	92.35	91.25	90.86	90.32	89.79	89.15	88.65	87.99	87.43	86.82	86.26	85.64	85.09	84.50	83.96	83.33	82.82	82.26	81.70
10	90.48	90.34	89.27	88.89	88.36	87.84	87.21	86.72	86.08	85.53	84.93	84.39	83.78	83.24	82.66	82.14	81.52	81.02	80.47	79.93