

Table 1. Power (in percentages) for the F -statistic, and Greenhouse-Geisser (F - GG) and Huyhn-Feldt adjusted F-tests (F - HF) by sample size (N), and epsilon values (ϵ) for 3 repeated measures ($K = 3$), distribution 3 ($\gamma_1 = 0.4, \gamma_2 = 0.8$), and mean pattern 0, 0, 1.

N	$\epsilon = .50$			$\epsilon = .60$			$\epsilon = .70$			$\epsilon = .80$			$\epsilon = .90$		
	F	F - GG	F - HF	F	F - GG	F - HF	F	F - GG	F - HF	F	F - GG	F - HF	F	F - GG	F - HF
10	31.75	23.64	23.69	36.65	29.43	30.56	33.24	28.17	29.67	36.61	32.02	34.46	34.91	31.47	34.09
15	36.75	27.78	27.81	43.91	35.23	35.99	39.94	34.24	35.32	43.53	38.75	40.56	41.79	38.57	40.55
20	42.20	32.11	32.13	50.12	40.19	40.78	45.65	39.48	40.33	50.58	45.28	46.77	48.17	44.96	46.59
25	46.54	35.64	35.66	56.34	45.44	45.95	50.17	43.68	44.41	56.65	51.14	52.41	53.89	50.64	52.04
30	51.23	39.84	39.86	61.82	50.18	50.62	55.50	48.68	49.30	61.19	55.40	56.48	59.30	56.10	57.31
40	58.87	46.35	46.36	70.91	58.44	58.78	62.83	55.80	56.30	71.27	65.35	66.20	68.44	65.33	66.26
50	65.78	52.93	52.94	78.26	65.71	65.99	69.86	62.91	63.32	78.64	72.92	73.57	76.06	73.21	73.92
60	70.85	57.67	57.68	84.27	72.28	72.51	75.45	68.62	68.95	84.31	79.04	79.54	81.46	78.77	79.33
70	75.96	63.19	63.20	88.50	77.36	77.55	79.81	73.36	73.64	88.66	84.03	84.42	85.28	82.91	83.35
80	80.64	68.20	68.21	91.98	82.08	82.23	83.53	77.51	77.73	91.80	87.79	88.09	88.99	87.02	87.35
90	83.53	71.67	71.67	94.11	85.28	85.41	87.16	81.70	81.89	94.07	90.72	90.95	91.79	90.06	90.32
100	86.05	74.83	74.84	96.05	88.67	88.76	89.35	84.38	84.54	95.83	93.03	93.20	93.78	92.29	92.50
120	90.70	80.96	80.96	98.07	92.85	92.91	93.38	89.44	89.55	97.93	96.10	96.20	96.48	95.47	95.59
150	94.55	87.15	87.16	99.37	96.55	96.58	96.73	94.17	94.23	99.29	98.43	98.47	98.56	98.03	98.09
180	96.86	91.47	91.47	99.81	98.41	98.42	98.40	96.79	96.82	99.77	99.38	99.40	99.49	99.25	99.27
210	98.50	94.75	94.75	100.00	100.00	100.00	99.25	98.27	98.29	100.00	100.00	100.00	100.00	100.00	100.00
240	99.10	96.56	96.56	100.00	100.00	100.00	99.68	99.10	99.11	100.00	100.00	100.00	100.00	100.00	100.00
270	99.50	97.75	97.75	100.00	100.00	100.00	99.82	99.48	99.49	100.00	100.00	100.00	100.00	100.00	100.00
300	99.76	98.59	98.59	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 2. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 3$, distribution 3 ($\gamma_1 = 0.4, \gamma_2 = 0.8$), and linear mean pattern.

N	$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	35.24	26.08	26.14	35.93	29.27	30.27	34.49	29.11	30.71	36.53	32.10	34.46	35.63	32.30	34.88
15	41.82	31.24	31.28	42.26	34.60	35.29	42.14	36.00	37.17	43.54	38.92	40.63	40.92	37.90	39.78
20	48.97	37.16	37.19	48.72	40.10	40.63	47.60	40.85	41.80	49.45	44.49	45.87	47.10	44.14	45.70
25	53.88	40.90	40.92	53.91	44.65	45.09	52.76	45.70	46.49	54.97	49.87	51.02	52.61	49.62	50.93
30	59.60	45.94	45.96	58.36	48.60	48.97	58.14	50.64	51.34	59.58	54.29	55.29	56.87	53.90	55.00
40	68.37	53.85	53.86	66.69	56.26	56.56	67.37	59.63	60.18	69.40	63.97	64.74	65.70	62.82	63.68
50	75.73	60.83	60.84	73.61	63.09	63.33	74.40	66.63	67.07	76.24	71.07	71.67	72.53	69.78	70.46
60	81.91	67.66	67.67	79.82	69.62	69.81	80.12	72.84	73.19	82.15	77.31	77.78	78.64	76.20	76.74
70	86.04	72.48	72.49	84.18	74.39	74.55	84.64	77.78	78.07	86.63	82.21	82.58	82.58	80.38	80.80
80	89.54	77.07	77.08	87.58	78.71	78.84	88.50	82.36	82.60	90.11	86.24	86.53	86.16	84.09	84.43
90	92.49	81.34	81.34	90.75	82.51	82.62	90.70	85.20	85.39	92.49	89.09	89.32	89.39	87.59	87.86
100	94.22	84.17	84.18	92.82	85.64	85.73	93.15	88.37	88.53	94.50	91.69	91.86	91.69	90.15	90.36
120	97.08	89.78	89.78	95.80	90.07	90.13	96.02	92.49	92.59	97.09	95.16	95.26	94.94	93.80	93.93
150	98.81	94.15	94.15	98.21	94.71	94.75	98.39	96.36	96.41	98.84	97.78	97.83	97.81	97.17	97.23
180	99.59	97.02	97.02	99.32	97.23	97.25	99.42	98.35	98.37	99.63	99.14	99.16	98.99	98.64	98.67
210	99.84	98.41	98.41	99.70	98.56	98.57	99.76	99.20	99.21	100.00	100.00	100.00	99.53	99.34	99.36
240	100.00	100.00	100.00	99.90	99.30	99.31	100.00	100.00	100.00	100.00	100.00	100.00	99.77	99.66	99.67
270	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 3. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 3$, distribution 6 (gamma $\alpha = 4$; $\gamma_1 = 1$, $\gamma_2 = 1.5$), and mean pattern 0, 0, 1.

N	$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	28.65	21.20	21.25	37.74	30.64	31.77	33.45	28.12	29.56	37.42	32.78	35.28	35.52	32.01	34.60
15	35.03	26.01	26.04	45.14	36.70	37.48	39.66	33.70	34.72	44.05	39.16	40.96	42.40	39.03	41.00
20	39.90	29.89	29.91	51.33	41.85	42.45	45.25	38.82	39.66	50.55	45.25	46.72	48.79	45.53	47.15
25	44.34	33.51	33.53	56.49	45.96	46.46	50.07	43.47	44.17	56.37	50.76	51.98	54.41	51.12	52.49
30	49.20	37.56	37.57	61.59	50.34	50.76	54.67	47.80	48.43	61.77	55.94	56.99	58.94	55.68	56.85
40	58.67	45.57	45.58	70.67	58.48	58.82	62.59	55.40	55.91	71.48	65.50	66.33	68.44	65.24	66.16
50	65.17	51.59	51.60	78.04	65.73	66.00	69.66	62.53	62.94	78.96	73.14	73.78	75.34	72.32	73.03
60	71.90	58.26	58.27	83.33	71.45	71.67	75.49	68.65	68.98	84.31	79.02	79.51	81.02	78.28	78.83
70	76.56	63.10	63.11	88.30	77.34	77.52	80.56	74.02	74.30	88.51	83.75	84.13	85.33	82.84	83.27
80	80.60	67.57	67.58	91.57	81.69	81.83	84.31	78.24	78.48	91.74	87.65	87.94	89.15	86.98	87.32
90	83.88	71.44	71.45	93.68	84.87	84.99	87.38	81.90	82.09	94.35	90.93	91.15	92.00	90.21	90.47
100	86.90	75.40	75.40	95.64	88.14	88.24	89.66	84.64	84.80	95.82	92.92	93.09	93.97	92.41	92.61
120	91.37	81.41	81.41	97.81	92.36	92.42	93.41	89.52	89.63	97.94	96.05	96.15	96.53	95.46	95.58
150	95.61	88.21	88.22	99.26	96.21	96.24	96.72	94.15	94.21	99.31	98.37	98.41	98.65	98.11	98.16
180	97.73	92.65	92.65	99.77	98.28	98.29	98.52	96.91	96.94	100.00	100.00	100.00	99.44	99.15	99.17
210	98.85	95.35	95.35	100.00	100.00	100.00	99.24	98.30	98.31	100.00	100.00	100.00	100.00	100.00	100.00
240	99.45	97.21	97.21	100.00	100.00	100.00	99.62	99.07	99.08	100.00	100.00	100.00	100.00	100.00	100.00
270	99.70	98.16	98.16	100.00	100.00	100.00	99.85	99.54	99.55	100.00	100.00	100.00	100.00	100.00	100.00
300	98.85	98.91	98.91	100.00	100.00	100.00	99.93	99.77	99.77	100.00	100.00	100.00	100.00	100.00	100.00

Table 4. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 3$, distribution 6 (gamma $\alpha = 4$; $\gamma_1 = 1$, $\gamma_2 = 1.5$), and linear mean pattern.

N	$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	33.52	24.45	24.51	38.94	32.48	33.54	35.54	29.78	31.36	36.57	32.20	34.58	35.31	31.95	34.42
15	40.88	30.05	30.09	43.83	36.48	37.16	41.72	35.35	36.49	43.08	38.46	40.12	41.79	38.73	40.56
20	47.59	35.28	35.31	50.58	42.37	42.90	47.96	40.96	41.89	50.40	45.50	46.88	48.03	44.97	46.49
25	53.52	40.10	40.12	54.88	46.14	46.57	53.83	46.43	47.23	55.99	50.88	52.04	53.01	49.99	51.26
30	59.24	44.72	44.75	58.80	49.59	49.96	58.68	51.06	51.76	60.45	55.09	56.07	57.29	54.35	55.43
40	68.83	53.30	53.32	67.64	57.60	57.88	67.53	59.57	60.13	69.44	64.12	64.87	65.69	62.90	63.74
50	76.31	60.72	60.74	73.32	63.25	63.48	74.42	66.63	67.08	76.53	71.26	71.85	73.06	70.24	70.90
60	82.39	67.10	67.12	79.31	69.49	69.67	80.33	73.06	73.43	82.08	77.10	77.56	78.29	75.69	76.21
70	87.30	73.13	73.15	84.01	74.58	74.73	84.59	77.89	78.18	87.06	82.65	83.00	82.83	80.53	80.94
80	90.67	77.87	77.88	86.88	78.03	78.15	88.27	82.21	82.45	90.02	85.97	86.25	85.99	83.89	84.22
90	93.22	81.79	81.80	90.07	82.01	82.11	91.10	85.70	85.89	92.45	88.98	89.20	89.20	87.35	87.61
100	95.21	85.24	85.25	92.44	85.11	85.19	93.59	88.93	89.09	94.40	91.42	91.59	91.82	90.21	90.42
120	97.62	90.28	90.29	95.48	89.68	89.74	96.19	92.77	92.87	97.04	94.96	95.07	94.79	93.56	93.69
150	99.11	94.80	94.80	98.00	94.29	94.32	98.55	96.65	96.70	98.85	97.74	97.78	97.72	97.01	97.08
180	99.71	97.39	97.39	99.06	96.68	96.70	99.39	98.34	98.37	99.58	99.03	99.05	98.83	98.41	98.44
210	99.91	98.71	98.71	99.65	98.41	98.42	100.00	100.00	100.00	100.00	100.00	100.00	99.57	99.36	99.37
240	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.80	99.68	99.68
270	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 5. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 3$, distribution 9 (gamma $\alpha = 2$; $\gamma_1 = 1.41$, $\gamma_2 = 3$), and mean pattern 0, 0, 1.

N	$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	28.78	21.16	21.21	39.63	32.59	33.79	33.63	28.10	29.50	37.87	33.00	35.46	36.08	32.32	34.88
15	34.34	25.35	25.38	45.92	37.69	38.47	39.76	33.66	34.68	44.80	39.76	41.56	42.89	39.36	41.30
20	39.38	29.22	29.24	51.49	42.23	42.83	45.58	39.00	39.83	51.81	46.32	47.77	49.18	45.76	47.35
25	44.99	33.75	33.77	57.27	47.04	47.53	50.68	43.84	44.55	57.18	51.44	52.66	54.86	51.39	52.74
30	49.27	37.23	37.25	62.50	51.69	52.11	55.18	48.11	48.73	62.53	56.53	57.59	59.58	56.13	57.30
40	58.77	45.39	45.41	71.20	59.42	59.75	63.22	56.01	56.51	71.65	65.58	66.38	68.41	65.12	66.01
50	65.38	51.43	51.45	77.98	66.06	66.32	70.62	63.36	63.78	78.66	72.84	73.45	75.42	72.37	73.06
60	71.48	57.35	57.36	83.60	72.02	72.24	75.70	68.80	69.14	84.40	79.02	79.50	80.99	78.18	78.72
70	76.77	62.90	62.91	87.81	77.09	77.26	80.25	73.79	74.07	88.38	83.54	83.91	85.65	83.12	83.55
80	80.74	67.28	67.29	91.17	81.43	81.57	84.31	78.27	78.51	91.62	87.37	87.65	89.28	87.05	87.37
90	85.08	72.43	72.44	93.54	84.78	84.89	87.10	81.58	81.77	93.97	90.34	90.56	91.71	89.75	90.00
100	87.68	75.88	75.88	95.37	87.78	87.88	90.10	85.22	85.38	95.75	92.76	92.92	93.67	92.03	92.22
120	92.17	82.24	82.24	97.59	92.00	92.06	93.59	89.72	89.83	97.91	95.95	96.04	96.65	95.51	95.63
150	95.94	88.51	88.51	99.19	96.04	96.07	96.89	94.38	94.45	99.27	98.28	98.32	98.63	98.03	98.08
180	98.00	93.07	93.07	99.74	98.12	98.14	98.38	96.84	96.87	100.00	100.00	100.00	99.47	99.17	99.19
210	99.00	95.64	95.64	100.00	100.00	100.00	99.24	98.30	98.32	100.00	100.00	100.00	99.80	99.66	99.66
240	99.50	97.32	97.32	100.00	100.00	100.00	99.65	99.14	99.15	100.00	100.00	100.00	100.00	100.00	100.00
270	99.75	98.40	98.40	100.00	100.00	100.00	99.85	99.56	99.56	100.00	100.00	100.00	100.00	100.00	100.00
300	99.89	99.06	99.06	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 6. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 3$, distribution 9 (gamma $\alpha = 2$; $\gamma_1 = 1.41$, $\gamma_2 = 3$), and linear mean pattern.

N	$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	33.62	24.43	24.49	39.54	33.15	34.25	35.49	29.44	30.97	37.00	32.42	34.71	36.43	32.88	35.33
15	40.58	29.58	29.62	44.70	37.60	38.29	41.94	35.42	36.55	44.35	39.65	41.35	43.01	39.73	41.57
20	47.61	34.96	34.99	50.40	42.52	43.05	48.21	41.05	41.97	50.32	45.38	46.72	48.78	45.67	47.16
25	54.47	40.39	40.42	55.15	46.72	47.15	53.85	46.39	47.18	55.65	50.46	51.59	53.72	50.67	51.92
30	59.93	44.91	44.93	58.95	49.90	50.26	58.87	51.06	51.76	60.93	55.55	56.52	58.11	55.07	56.15
40	69.94	53.85	53.87	67.60	58.01	58.28	67.44	59.51	60.06	69.69	64.18	64.91	66.09	63.17	63.98
50	77.61	61.40	61.42	73.71	64.01	64.23	74.81	67.08	67.53	76.71	71.41	71.99	72.94	70.15	70.79
60	83.53	68.05	68.07	79.27	69.68	69.86	80.44	73.10	73.46	82.02	77.01	77.46	78.01	75.36	75.86
70	87.96	73.67	73.68	83.30	74.06	74.20	85.01	78.35	78.64	86.10	81.43	81.79	82.58	80.14	80.54
80	91.28	78.29	78.30	86.81	78.20	78.32	88.58	82.54	82.78	89.96	85.91	86.18	86.30	84.11	84.43
90	93.83	82.34	82.35	89.56	81.49	81.59	90.87	85.50	85.70	92.56	89.03	89.24	89.33	87.41	87.67
100	95.87	86.09	86.10	91.93	84.62	84.71	93.36	88.74	88.90	94.46	91.45	91.62	91.70	89.97	90.18
120	97.86	90.65	90.65	95.19	89.42	89.48	96.14	92.76	92.87	96.89	94.72	94.82	94.73	93.42	93.55
150	99.32	95.30	95.30	97.86	94.08	94.11	98.46	96.57	96.62	98.80	97.62	97.67	97.50	96.70	96.76
180	99.79	97.68	97.68	98.96	96.50	96.52	99.38	98.33	98.36	99.56	98.96	98.99	98.90	98.45	98.48
210	99.93	98.87	98.87	99.58	98.14	98.15	99.78	99.26	99.28	100.00	100.00	100.00	99.52	99.28	99.29
240	100.00	100.00	100.00	99.82	98.98	98.99	100.00	100.00	100.00	100.00	100.00	100.00	99.75	99.61	99.62
270	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.90	99.84	99.84
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.95	99.92	99.92

Table 7. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 3$, distribution 11 (gamma $\alpha = 0.75$; $\gamma_1 = 2.31$, $\gamma_2 = 8$), and mean pattern 0, 0, 1.

N	$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	28.37	20.89	20.96	42.98	36.07	37.27	35.46	29.27	30.62	39.84	34.31	36.63	38.35	33.87	36.25
15	33.44	24.48	24.52	49.09	41.19	42.00	41.30	34.79	35.79	47.04	41.42	43.14	45.40	41.24	43.10
20	38.47	28.28	28.30	54.01	45.20	45.81	46.99	40.07	40.90	53.12	47.26	48.64	50.84	46.83	48.32
25	43.99	32.55	32.57	58.95	49.29	49.78	51.84	44.74	45.45	58.91	52.86	54.02	56.28	52.40	53.67
30	49.43	36.87	36.89	63.68	53.45	53.86	56.13	48.87	49.49	63.11	56.88	57.87	61.05	57.23	58.33
40	58.48	44.54	44.56	71.22	60.23	60.54	64.16	56.79	57.28	72.39	66.18	66.92	69.05	65.43	66.27
50	66.46	51.74	51.75	78.12	66.92	67.16	71.06	63.90	64.31	79.42	73.42	74.00	76.26	72.91	73.56
60	73.54	58.63	58.64	82.93	72.04	72.23	76.39	69.57	69.90	84.63	79.14	79.58	81.52	78.41	78.92
70	78.98	64.33	64.34	87.11	76.68	76.83	80.61	74.16	74.44	88.27	83.21	83.55	85.78	82.94	83.34
80	83.13	69.12	69.13	90.58	81.17	81.30	85.21	79.34	79.57	91.42	86.96	87.23	88.99	86.53	86.84
90	86.52	73.39	73.40	93.26	84.83	84.94	87.81	82.46	82.65	93.86	90.09	90.30	91.89	89.75	89.99
100	89.44	77.25	77.26	94.79	87.23	87.31	90.11	85.27	85.43	95.53	92.37	92.53	93.70	91.83	92.02
120	93.26	83.20	83.20	97.24	91.56	91.61	93.91	90.19	90.30	97.76	95.60	95.70	96.58	95.29	95.40
150	96.84	89.76	89.76	98.90	95.38	95.41	96.86	94.41	94.47	99.20	98.10	98.14	98.56	97.83	97.88
180	98.49	93.79	93.79	99.60	97.64	97.65	98.55	97.08	97.11	99.71	99.18	99.20	99.40	99.02	99.04
210	99.33	96.38	96.38	99.86	98.80	98.80	99.26	98.38	98.39	99.90	99.66	99.67	99.77	99.59	99.60
240	99.72	97.91	97.91	100.00	100.00	100.00	99.67	99.18	99.18	100.00	100.00	100.00	99.92	99.84	99.84
270	99.85	98.75	98.75	100.00	100.00	100.00	99.84	99.56	99.56	100.00	100.00	100.00	100.00	100.00	100.00
300	99.95	99.33	99.33	100.00	100.00	100.00	99.92	99.76	99.77	100.00	100.00	100.00	100.00	100.00	100.00

Table 8. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 3$, distribution 11 (gamma $\alpha = 0.75$; $\gamma_1 = 2.31$, $\gamma_2 = 8$), and linear mean pattern.

N	$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	34.64	25.12	25.21	43.78	37.56	38.67	37.74	31.00	32.49	39.75	34.46	36.67	39.69	35.39	37.73
15	42.11	30.42	30.47	48.30	41.61	42.31	43.93	36.77	37.87	46.55	41.32	42.95	45.76	42.02	43.74
20	48.89	35.45	35.49	52.53	45.28	45.81	50.07	42.54	43.45	52.33	47.04	48.34	49.92	46.50	47.86
25	55.22	40.34	40.37	57.64	49.75	50.16	55.25	47.45	48.23	56.94	51.46	52.52	55.53	52.15	53.31
30	61.74	45.75	45.78	61.54	53.28	53.63	59.88	51.96	52.64	62.15	56.60	57.52	59.80	56.53	57.54
40	72.18	55.03	55.05	68.26	59.50	59.75	68.10	60.10	60.65	70.44	64.80	65.49	66.55	63.46	64.22
50	79.56	62.49	62.51	73.75	64.61	64.81	75.58	67.82	68.27	77.28	71.77	72.31	73.32	70.37	70.97
60	85.69	69.55	69.57	79.35	70.43	70.59	80.58	73.31	73.67	82.06	76.93	77.34	78.49	75.72	76.19
70	89.75	74.96	74.97	83.02	74.40	74.53	85.11	78.46	78.75	86.59	81.91	82.23	82.97	80.43	80.80
80	92.97	79.90	79.91	86.38	78.23	78.34	88.60	82.77	83.01	89.62	85.39	85.65	85.94	83.54	83.84
90	95.17	83.84	83.85	89.29	81.68	81.77	91.21	86.02	86.21	92.21	88.47	88.68	88.81	86.68	86.92
100	96.80	87.26	87.27	91.27	84.23	84.31	93.57	89.12	89.28	94.06	90.77	90.93	91.04	89.11	89.30
120	98.53	91.92	91.92	94.52	88.75	88.80	96.26	93.00	93.10	96.79	94.43	94.53	94.32	92.82	92.95
150	99.57	96.06	96.07	97.30	93.23	93.26	98.38	96.52	96.57	98.63	97.30	97.35	97.30	96.36	96.42
180	99.89	98.19	98.19	98.71	96.05	96.07	99.35	98.33	98.36	99.47	98.77	98.79	98.77	98.20	98.24
210	100.00	100.00	100.00	99.43	97.77	97.78	99.75	99.24	99.25	99.79	99.44	99.45	99.38	99.04	99.06
240	100.00	100.00	100.00	99.74	98.72	98.73	100.00	100.00	100.00	99.93	99.76	99.76	99.71	99.52	99.53
270	100.00	100.00	100.00	99.87	99.23	99.24	100.00	100.00	100.00	100.00	100.00	100.00	99.86	99.76	99.76
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.94	99.89	99.89

Table 9. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 3 ($\gamma_1 = 0.4, \gamma_2 = 0.8$), and mean pattern 0, 0, 1, 1.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	41.61	26.51	26.78	41.10	27.03	28.08	40.62	29.64	31.84	40.94	31.01	34.04	41.44	33.56	37.46	41.72	34.08	38.62	41.72	35.22	40.33
15	47.82	30.56	30.73	48.59	32.02	32.73	49.11	36.40	37.97	48.63	37.74	39.99	49.79	41.48	44.40	48.78	41.42	44.85	49.48	43.67	47.58
20	53.80	34.70	34.83	56.22	37.53	38.10	54.10	40.28	41.53	55.03	43.35	45.19	56.59	48.02	50.37	55.31	48.01	50.81	56.57	51.18	54.36
25	59.17	38.08	38.19	61.98	41.74	42.23	61.24	46.32	47.38	61.04	48.82	50.40	63.01	54.31	56.28	61.32	53.99	56.36	62.66	57.69	60.33
30	64.56	42.05	42.14	68.44	46.94	47.37	66.52	50.63	51.55	67.00	54.30	55.68	66.99	58.21	59.87	66.88	59.73	61.77	68.70	64.07	66.29
40	73.41	48.99	49.07	76.97	54.22	54.57	74.84	58.34	59.06	75.85	63.17	64.27	76.32	67.80	69.04	75.45	68.79	70.32	77.40	73.51	75.11
50	80.68	55.68	55.75	84.37	61.97	62.26	81.91	65.54	66.12	82.51	70.56	71.43	82.71	74.76	75.70	82.91	76.90	78.07	83.78	80.48	81.65
60	85.91	61.15	61.21	89.30	68.15	68.40	87.35	71.98	72.46	87.52	76.49	77.18	87.91	81.05	81.77	87.73	82.55	83.43	88.55	85.92	86.77
70	90.08	66.83	66.87	92.90	73.67	73.87	91.11	77.14	77.52	91.54	82.09	82.63	91.57	85.62	86.17	91.36	87.06	87.72	91.58	89.42	90.03
80	93.01	71.10	71.14	95.31	78.13	78.30	93.66	81.17	81.49	94.24	86.07	86.49	93.87	88.85	89.26	94.29	90.76	91.24	94.29	92.62	93.06
90	95.19	75.26	75.29	96.85	81.80	81.94	95.81	84.84	85.11	95.91	89.14	89.47	96.02	92.01	92.32	96.06	93.32	93.68	96.13	94.86	95.17
100	96.74	78.92	78.95	98.17	85.72	85.84	97.09	87.88	88.09	97.24	91.67	91.93	97.01	93.66	93.90	97.19	94.95	95.21	97.34	96.35	96.57
120	98.46	84.53	84.55	99.26	90.62	90.70	98.77	92.47	92.60	98.79	95.21	95.37	98.71	96.67	96.80	98.73	97.42	97.55	98.74	98.17	98.28
150	99.56	90.85	90.87	99.83	95.09	95.13	99.63	96.18	96.25	99.67	98.00	98.07	99.59	98.67	98.73	99.64	99.11	99.16	99.63	99.42	99.45
180	99.88	94.71	94.71	99.96	97.55	97.57	99.90	98.22	98.26	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
210	99.97	96.88	96.88	99.99	98.85	98.86	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
240	99.99	98.27	98.27	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
270	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 10. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 3 ($\gamma_1 = 0.4, \gamma_2 = 0.8$), and linear mean pattern.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	42.37	27.82	28.08	41.11	27.41	28.42	41.42	30.93	33.14	40.40	30.79	33.76	41.00	33.34	37.19	40.94	33.38	37.84	40.97	34.61	39.63
15	48.05	31.72	31.88	48.14	32.32	32.99	48.26	36.23	37.73	46.53	36.26	38.39	48.77	40.83	43.58	47.79	40.45	43.83	48.99	43.34	47.15
20	54.39	36.29	36.42	54.48	37.27	37.80	55.18	41.97	43.18	52.90	41.82	43.55	55.40	47.39	49.61	54.74	47.39	50.17	54.91	49.78	52.83
25	59.81	40.10	40.20	60.16	41.75	42.20	60.35	46.31	47.31	59.08	47.44	48.94	60.74	52.60	54.45	60.90	53.66	56.04	62.11	57.20	59.80
30	63.92	43.50	43.59	66.38	46.99	47.39	65.12	50.64	51.49	63.95	51.94	53.25	65.92	57.85	59.41	66.60	59.45	61.52	65.72	61.22	63.41
40	72.29	50.73	50.80	74.81	54.67	54.99	73.03	57.92	58.59	72.71	60.63	61.65	74.91	66.98	68.16	75.00	68.28	69.84	74.40	70.43	72.05
50	79.73	57.40	57.46	82.59	62.70	62.96	79.70	64.74	65.27	80.37	68.62	69.46	80.73	73.20	74.10	81.92	75.88	77.05	81.59	78.26	79.45
60	84.65	62.66	62.71	86.86	68.00	68.22	85.24	70.99	71.43	85.06	74.13	74.80	86.05	79.22	79.92	87.30	82.15	83.04	86.86	84.09	84.98
70	89.13	68.75	68.79	90.99	73.91	74.10	89.66	76.66	77.03	89.03	79.24	79.79	89.46	83.45	83.99	90.71	86.30	86.97	90.07	87.80	88.46
80	92.05	73.12	73.15	93.39	77.81	77.96	92.00	80.28	80.57	92.40	83.96	84.39	92.59	87.55	87.96	93.64	90.05	90.55	93.30	91.53	92.00
90	94.14	76.54	76.57	95.63	81.87	82.00	94.37	83.97	84.21	94.64	87.41	87.75	94.57	90.24	90.57	95.65	92.75	93.12	94.88	93.45	93.80
100	96.00	80.37	80.40	97.04	85.38	85.49	96.05	86.90	87.10	96.09	89.94	90.21	95.97	92.37	92.62	96.87	94.53	94.81	96.49	95.37	95.62
120	97.85	85.31	85.33	98.60	90.07	90.15	98.06	91.58	91.71	98.02	93.83	94.00	97.86	95.46	95.61	98.59	97.23	97.38	98.16	97.50	97.64
150	99.37	91.62	91.64	99.55	94.61	94.65	99.37	95.69	95.76	99.32	97.07	97.16	99.20	97.97	98.03	99.58	99.01	99.06	99.41	99.14	99.19
180	99.78	94.92	94.93	99.87	97.20	97.22	99.80	97.88	97.92	99.78	98.71	98.75	99.77	99.23	99.26	100.00	100.00	100.00	99.82	99.72	99.73
210	99.93	97.19	97.20	99.97	98.65	98.66	99.92	98.89	98.91	100.00	100.00	100.00	99.91	99.66	99.67	100.00	100.00	100.00	100.00	100.00	100.00
240	99.97	98.29	98.29	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
270	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 11. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 6 (gamma $\alpha = 4$; $\gamma_1 = 1$, $\gamma_2 = 1.5$), and mean pattern 0, 0, 1, 1.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	43.28	28.70	28.99	40.91	26.84	27.89	42.63	32.19	34.50	40.34	30.06	32.98	42.64	34.79	38.66	41.76	34.04	38.50	42.56	35.81	40.79
15	48.94	32.49	32.67	48.78	31.75	32.47	49.21	37.21	38.77	48.41	37.01	39.21	50.27	42.19	45.02	49.00	41.47	44.88	50.65	44.60	48.42
20	54.08	35.64	35.78	56.43	37.06	37.64	55.64	42.35	43.59	54.98	42.82	44.65	57.43	49.00	51.29	55.99	48.60	51.40	57.20	51.69	54.84
25	60.09	39.96	40.07	62.39	41.30	41.79	61.01	46.69	47.70	61.22	48.56	50.16	62.53	53.97	55.83	61.70	54.32	56.66	63.26	58.12	60.69
30	64.32	43.17	43.26	68.09	45.84	46.28	66.36	51.20	52.08	67.45	54.48	55.90	68.49	60.04	61.63	67.22	59.95	61.96	68.22	63.48	65.63
40	73.54	50.57	50.64	78.18	54.81	55.18	74.73	58.77	59.46	76.13	63.30	64.41	76.24	67.81	69.00	76.09	69.29	70.82	77.54	73.53	75.10
50	79.98	55.96	56.02	85.21	62.23	62.53	81.70	65.92	66.47	82.99	70.89	71.78	82.71	74.98	75.88	82.68	76.61	77.76	83.34	79.95	81.11
60	85.08	61.78	61.84	90.13	68.52	68.77	86.71	71.63	72.08	88.20	77.31	78.02	87.00	79.97	80.66	87.90	82.61	83.48	88.34	85.60	86.42
70	89.45	66.91	66.95	93.55	74.10	74.32	90.79	76.85	77.22	92.00	82.64	83.20	91.25	85.08	85.62	91.38	86.93	87.58	91.92	89.72	90.33
80	92.33	71.10	71.14	95.90	78.84	79.02	93.43	81.08	81.38	94.32	86.48	86.91	93.83	88.72	89.12	93.99	90.30	90.79	94.33	92.58	93.02
90	94.59	74.95	74.98	97.40	82.90	83.05	95.28	84.38	84.62	95.96	89.32	89.66	95.88	91.67	91.97	95.99	93.12	93.48	95.88	94.51	94.83
100	96.22	78.53	78.56	98.42	86.28	86.40	96.79	87.29	87.49	97.57	92.34	92.60	96.96	93.52	93.75	97.29	95.02	95.28	97.42	96.42	96.63
120	98.24	84.65	84.67	99.39	91.03	91.11	98.47	91.63	91.77	98.97	95.74	95.89	98.68	96.54	96.67	98.69	97.30	97.44	98.74	98.17	98.28
150	99.43	90.36	90.37	99.87	95.55	95.59	99.57	95.90	95.97	99.69	98.17	98.24	99.53	98.48	98.54	99.63	99.05	99.10	99.59	99.36	99.40
180	99.83	94.13	94.14	99.97	97.86	97.88	99.87	97.97	98.00	100.00	100.00	100.00	99.85	99.38	99.40	100.00	100.00	100.00	99.87	99.78	99.79
210	99.95	96.50	96.51	99.99	99.01	99.02	99.96	99.03	99.05	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
240	99.98	97.99	97.99	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
270	99.99	98.89	98.89	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 12. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 6 (gamma $\alpha = 4$; $\gamma_1 = 1$, $\gamma_2 = 1.5$), and linear mean pattern.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	43.02	29.36	29.63	40.23	26.34	27.30	43.08	32.81	35.04	38.38	28.65	31.42	42.58	34.97	38.88	39.85	32.28	36.62	41.36	34.60	39.41
15	49.45	33.68	33.85	47.28	31.29	31.95	49.29	37.98	39.49	45.67	35.03	37.12	49.15	41.67	44.40	47.81	40.33	43.65	49.36	43.36	47.08
20	54.95	37.85	37.98	54.96	36.83	37.37	55.31	43.01	44.17	52.35	40.86	42.61	54.87	47.25	49.37	55.44	47.79	50.58	55.56	50.12	53.15
25	59.82	41.60	41.70	61.07	41.67	42.13	58.98	45.96	46.89	59.27	47.01	48.52	61.49	53.66	55.44	61.39	53.84	56.19	61.55	56.50	59.05
30	64.12	44.87	44.96	66.41	46.10	46.50	65.47	51.68	52.48	63.99	51.50	52.83	66.11	58.07	59.58	66.44	59.12	61.14	67.25	62.48	64.64
40	73.01	52.18	52.25	75.57	54.46	54.79	73.10	58.78	59.40	73.08	60.56	61.64	73.85	65.92	67.04	75.15	68.28	69.82	75.38	71.38	72.96
50	78.33	57.31	57.37	82.98	62.18	62.46	79.96	65.63	66.14	80.18	68.25	69.12	80.31	72.81	73.67	82.19	76.11	77.28	81.51	78.08	79.26
60	84.64	63.83	63.88	88.07	68.52	68.76	84.50	70.57	70.98	85.74	74.80	75.50	85.48	78.72	79.38	87.40	82.09	82.98	86.30	83.49	84.36
70	88.45	68.84	68.88	91.45	73.66	73.86	88.87	76.02	76.36	89.78	80.09	80.65	88.82	82.67	83.19	91.07	86.65	87.32	90.18	87.88	88.53
80	91.55	73.27	73.30	94.32	78.52	78.68	91.86	80.16	80.44	92.77	84.29	84.75	92.03	86.80	87.20	93.65	89.99	90.49	92.97	91.15	91.62
90	93.47	76.35	76.38	96.20	82.75	82.89	94.00	83.52	83.75	94.94	87.88	88.24	93.97	89.38	89.69	95.80	92.90	93.27	95.15	93.75	94.08
100	95.35	80.01	80.03	97.33	85.74	85.86	95.36	86.06	86.24	96.30	90.31	90.60	95.61	91.72	91.96	96.91	94.61	94.88	96.35	95.20	95.46
120	97.49	85.12	85.14	98.92	90.92	90.99	97.65	90.84	90.97	98.23	94.23	94.41	97.81	95.22	95.36	98.63	97.29	97.44	98.29	97.63	97.76
150	99.08	90.74	90.75	99.67	95.35	95.39	99.14	95.03	95.10	99.44	97.49	97.57	99.13	97.76	97.83	99.63	99.10	99.15	99.43	99.15	99.19
180	99.69	94.46	94.47	99.92	97.71	97.73	99.71	97.35	97.39	99.85	99.01	99.04	99.75	99.13	99.16	100.00	100.00	100.00	99.83	99.72	99.74
210	99.88	96.54	96.54	99.97	98.82	98.83	99.90	98.69	98.71	100.00	100.00	100.00	99.90	99.60	99.61	100.00	100.00	100.00	100.00	100.00	100.00
240	99.96	98.08	98.08	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
270	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 13. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 9 (gamma $\alpha = 2$; $\gamma_1 = 1.41$, $\gamma_2 = 3$), and mean pattern 0, 0, 1, 1.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	44.29	30.16	30.47	41.89	27.39	28.49	43.85	33.58	35.94	41.29	30.65	33.55	44.36	36.24	40.13	42.40	34.24	38.57	43.92	36.62	41.56
15	49.84	33.76	33.94	49.60	32.34	33.10	50.16	38.67	40.24	49.32	37.61	39.86	50.82	42.71	45.48	49.86	41.98	45.30	50.95	44.40	48.08
20	55.19	37.38	37.52	56.91	37.28	37.88	56.23	43.37	44.60	55.55	43.19	45.04	57.78	49.50	51.70	56.38	48.56	51.27	58.14	52.24	55.27
25	59.95	40.74	40.85	63.26	41.97	42.49	61.53	47.88	48.89	61.81	48.93	50.52	63.38	54.83	56.66	62.12	54.43	56.72	63.22	57.75	60.24
30	65.19	44.60	44.69	69.42	46.73	47.19	66.16	51.55	52.40	67.32	54.21	55.62	67.92	59.48	61.01	67.73	60.27	62.24	68.62	63.57	65.69
40	73.18	50.94	51.01	78.68	54.98	55.36	75.02	59.59	60.26	76.56	63.50	64.62	76.30	67.86	69.01	75.93	68.88	70.37	76.88	72.60	74.14
50	79.38	56.43	56.49	85.79	62.64	62.95	81.32	65.80	66.34	83.24	71.00	71.90	82.47	74.72	75.58	82.89	76.73	77.84	83.52	80.00	81.12
60	84.86	62.10	62.15	90.42	68.85	69.12	86.31	71.51	71.94	88.38	77.59	78.30	87.70	80.72	81.39	87.65	82.25	83.10	88.26	85.37	86.18
70	88.76	66.83	66.87	93.86	74.49	74.71	90.16	76.35	76.71	91.86	82.50	83.06	90.92	84.69	85.20	91.59	87.10	87.73	91.67	89.31	89.91
80	91.78	71.03	71.07	96.22	79.50	79.68	93.01	80.56	80.85	94.43	86.63	87.06	93.46	88.14	88.54	93.82	90.07	90.54	94.05	92.18	92.61
90	94.02	74.64	74.67	97.70	83.60	83.75	95.13	84.16	84.40	96.30	89.85	90.19	95.46	91.07	91.37	95.70	92.63	92.99	96.01	94.56	94.87
100	95.87	78.36	78.39	98.52	86.59	86.72	96.52	86.93	87.12	97.65	92.54	92.80	96.82	93.16	93.39	97.26	94.92	95.17	97.20	96.10	96.31
120	97.94	84.04	84.06	99.46	91.49	91.57	98.33	91.37	91.50	98.97	95.82	95.97	98.43	96.02	96.15	98.73	97.33	97.46	98.62	97.97	98.08
150	99.33	90.05	90.07	99.89	95.80	95.84	99.48	95.51	95.57	99.69	98.21	98.27	99.49	98.34	98.39	99.62	99.02	99.07	99.58	99.32	99.36
180	99.79	93.97	93.98	99.97	97.99	98.01	99.85	97.72	97.76	100.00	100.00	100.00	99.86	99.36	99.39	99.89	99.66	99.67	99.88	99.79	99.80
210	99.93	96.33	96.34	99.99	99.06	99.07	99.95	98.85	98.86	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
240	99.98	97.73	97.74	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
270	99.99	98.68	98.68	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 14. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 9 (gamma $\alpha = 2$; $\gamma_1 = 1.41$, $\gamma_2 = 3$), and linear mean pattern.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	45.28	31.34	31.64	40.58	26.42	27.40	43.90	34.07	36.29	38.28	28.08	30.69	43.87	36.16	39.96	41.52	33.27	37.57	42.05	34.85	39.53
15	49.80	34.84	35.02	47.75	31.29	31.95	50.57	39.75	41.25	46.38	35.20	37.28	50.33	42.86	45.50	48.57	40.47	43.73	49.91	43.48	47.10
20	55.55	38.96	39.10	54.70	36.32	36.87	55.67	44.00	45.14	52.89	40.88	42.62	56.42	48.69	50.78	55.64	47.64	50.36	55.62	49.76	52.69
25	60.26	42.62	42.72	61.43	41.51	41.98	60.76	48.30	49.23	59.34	46.79	48.32	61.60	53.82	55.53	61.38	53.51	55.83	62.02	56.59	59.07
30	64.59	45.93	46.02	67.11	46.20	46.61	65.02	51.82	52.61	64.51	51.68	53.04	66.36	58.39	59.85	66.88	59.23	61.25	66.41	61.49	63.58
40	72.29	52.58	52.65	76.33	54.69	55.04	73.43	59.65	60.26	73.89	61.01	62.11	74.15	66.36	67.44	75.48	68.43	69.96	75.36	71.11	72.66
50	78.86	58.91	58.97	83.44	62.28	62.57	79.27	65.37	65.85	80.75	68.69	69.57	80.57	73.14	73.96	82.39	76.16	77.31	81.48	77.82	78.99
60	83.79	64.10	64.14	88.63	68.86	69.10	84.24	70.77	71.16	85.91	74.90	75.62	85.15	78.33	78.97	87.27	81.80	82.69	86.53	83.55	84.42
70	87.47	68.24	68.28	92.23	74.49	74.70	88.11	75.51	75.83	90.15	80.31	80.89	88.92	82.78	83.28	90.89	86.33	87.00	90.10	87.70	88.34
80	90.59	72.67	72.71	94.76	79.21	79.37	91.00	79.29	79.56	93.02	84.69	85.15	91.72	86.28	86.67	93.82	90.15	90.64	92.87	90.93	91.40
90	92.81	75.95	75.97	96.55	83.21	83.35	93.29	82.83	83.05	95.07	88.04	88.40	93.90	89.19	89.49	95.69	92.70	93.07	94.81	93.27	93.61
100	94.82	79.67	79.69	97.68	86.38	86.49	95.26	86.02	86.20	96.67	90.89	91.17	95.70	91.80	92.03	97.06	94.69	94.96	96.31	95.10	95.36
120	97.04	84.55	84.57	99.03	91.34	91.42	97.47	90.43	90.55	98.40	94.62	94.79	97.55	94.73	94.88	98.71	97.34	97.48	98.20	97.48	97.61
150	98.92	90.50	90.51	99.74	95.69	95.73	99.03	94.66	94.73	99.54	97.75	97.83	99.09	97.59	97.66	99.59	99.00	99.06	99.38	99.07	99.12
180	99.60	94.12	94.12	99.93	97.87	97.89	99.65	97.15	97.19	99.86	99.04	99.07	99.66	98.90	98.93	99.88	99.66	99.67	99.80	99.68	99.70
210	99.86	96.49	96.49	99.98	98.96	98.97	99.86	98.44	98.46	100.00	100.00	100.00	99.88	99.51	99.52	100.00	100.00	100.00	100.00	100.00	100.00
240	99.95	97.82	97.82	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
270	99.98	98.78	98.78	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 15. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 11 (gamma $\alpha = 0.75$; $\gamma_1 = 2.31$, $\gamma_2 = 8$), and mean pattern 0, 0, 1, 1.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	48.12	34.85	35.20	44.61	29.59	30.84	46.95	37.14	39.49	43.38	31.80	34.63	47.26	38.55	42.23	43.69	34.45	38.40	45.48	36.76	41.14
15	53.05	38.29	38.50	52.41	34.71	35.58	52.37	41.62	43.17	50.88	38.68	40.84	53.60	45.15	47.78	51.18	42.34	45.40	52.71	45.14	48.48
20	57.07	40.77	40.92	59.12	39.24	39.93	58.31	46.55	47.75	57.22	44.22	46.02	58.60	50.26	52.29	57.46	48.85	51.37	59.09	52.16	54.94
25	61.36	43.74	43.85	65.29	43.66	44.23	63.12	50.40	51.38	63.55	50.12	51.71	63.93	55.55	57.24	63.77	55.46	57.60	64.51	58.22	60.53
30	65.61	46.72	46.82	71.36	48.42	48.93	66.91	53.46	54.26	68.81	55.35	56.74	68.62	60.15	61.55	68.64	60.57	62.41	68.55	62.68	64.62
40	72.66	52.27	52.34	80.28	56.67	57.07	74.78	60.56	61.17	77.56	64.43	65.53	76.57	68.28	69.32	76.79	69.35	70.74	77.28	72.39	73.82
50	79.01	57.93	57.99	86.82	63.89	64.23	81.60	67.27	67.76	84.04	71.96	72.84	82.37	74.52	75.30	82.83	76.21	77.27	83.09	78.99	80.05
60	84.01	62.92	62.96	91.46	70.41	70.68	85.75	71.86	72.25	88.54	77.71	78.41	87.09	79.91	80.52	87.48	81.72	82.52	88.12	84.71	85.49
70	87.66	67.08	67.12	94.45	75.64	75.86	89.59	76.49	76.81	92.27	83.13	83.68	90.57	84.18	84.65	91.15	86.22	86.83	91.58	88.83	89.40
80	90.92	71.45	71.49	96.74	80.78	80.96	92.26	80.02	80.29	94.66	87.00	87.43	93.08	87.54	87.91	93.93	89.92	90.37	93.82	91.66	92.08
90	92.97	74.54	74.57	97.89	84.24	84.39	94.27	83.29	83.51	96.42	90.16	90.49	94.92	90.09	90.38	95.69	92.40	92.74	95.68	93.95	94.26
100	94.83	77.89	77.92	98.72	87.48	87.61	95.96	86.31	86.49	97.56	92.52	92.77	96.53	92.61	92.83	96.90	94.21	94.46	96.95	95.62	95.84
120	97.27	83.33	83.35	99.54	92.10	92.18	97.91	90.53	90.65	98.94	95.88	96.02	98.25	95.55	95.68	98.65	97.08	97.21	98.45	97.65	97.77
150	98.99	89.36	89.37	99.90	96.07	96.11	99.29	94.87	94.94	99.71	98.31	98.37	99.36	97.96	98.01	99.58	98.86	98.91	99.51	99.18	99.22
180	99.63	93.13	93.14	99.98	98.16	98.18	99.77	97.26	97.29	100.00	100.00	100.00	99.79	99.13	99.16	99.87	99.57	99.59	99.84	99.71	99.72
210	99.86	95.66	95.67	100.00	100.00	100.00	99.92	98.58	98.60	100.00	100.00	100.00	99.93	99.63	99.64	100.00	100.00	100.00	99.94	99.89	99.89
240	99.95	97.26	97.26	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.98	99.96	99.97
270	99.98	98.35	98.35	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 16. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 4$, distribution 11 (gamma $\alpha = 0.75$; $\gamma_1 = 2.31$, $\gamma_2 = 8$), and linear mean pattern.

N	$\varepsilon = .33$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	49.04	36.61	36.95	42.49	27.73	28.83	47.90	38.47	40.70	40.10	28.88	31.46	46.09	37.96	41.46	42.76	33.29	37.20	44.01	35.53	39.77
15	53.30	39.20	39.39	49.96	32.70	33.47	53.41	43.47	44.95	47.38	35.29	37.32	52.93	45.18	47.68	50.61	41.48	44.59	50.55	43.01	46.26
20	58.02	42.85	42.99	57.26	37.88	38.49	57.66	46.79	47.90	54.23	41.33	43.07	57.61	49.92	51.86	56.79	47.93	50.50	57.45	50.54	53.28
25	62.07	46.03	46.14	63.61	42.69	43.21	62.28	50.71	51.61	60.36	46.98	48.50	62.43	54.72	56.30	62.57	53.94	56.15	62.88	56.59	58.87
30	65.46	48.52	48.61	69.15	47.41	47.87	65.50	53.47	54.22	66.15	52.61	53.99	67.55	59.90	61.23	67.20	58.77	60.68	67.74	61.98	63.93
40	72.66	54.68	54.75	78.26	56.07	56.45	73.63	60.95	61.52	74.88	61.57	62.68	74.17	66.48	67.46	76.04	68.45	69.90	75.77	70.83	72.29
50	77.64	59.28	59.33	85.38	64.04	64.35	78.97	66.17	66.61	81.48	69.07	69.97	80.64	73.34	74.09	82.40	75.67	76.78	81.96	77.84	78.93
60	82.60	64.20	64.24	90.02	70.45	70.72	83.42	70.74	71.10	87.11	75.98	76.70	85.02	78.19	78.77	87.67	81.87	82.71	86.46	83.07	83.89
70	86.68	69.07	69.11	93.38	76.00	76.22	86.98	74.82	75.11	91.02	81.38	81.96	88.19	81.80	82.27	91.09	86.22	86.87	90.32	87.59	88.20
80	89.38	72.32	72.35	95.61	80.58	80.76	90.39	79.15	79.39	93.69	85.47	85.93	91.09	85.42	85.78	93.83	89.82	90.30	92.66	90.41	90.87
90	91.97	76.08	76.10	97.12	84.36	84.50	92.29	81.84	82.04	95.63	88.84	89.20	93.22	88.14	88.43	95.63	92.41	92.77	94.67	92.89	93.23
100	93.78	79.00	79.03	98.21	87.64	87.76	94.35	85.03	85.20	97.06	91.62	91.90	94.91	90.57	90.80	97.01	94.48	94.75	96.34	94.96	95.21
120	96.41	84.37	84.38	99.23	92.07	92.15	96.84	89.58	89.70	98.58	95.03	95.20	97.25	94.13	94.27	98.52	96.98	97.12	98.04	97.18	97.32
150	98.47	89.74	89.75	99.81	96.21	96.25	98.67	93.82	93.89	99.60	97.98	98.05	98.94	97.16	97.23	99.59	98.95	99.00	99.34	98.98	99.03
180	99.31	93.28	93.29	99.96	98.21	98.23	99.52	96.62	96.66	99.89	99.18	99.21	99.57	98.60	98.63	99.87	99.61	99.63	99.76	99.61	99.63
210	99.75	95.88	95.88	100.00	100.00	100.00	99.79	97.97	97.99	100.00	100.00	100.00	99.83	99.35	99.36	100.00	100.00	100.00	99.91	99.84	99.84
240	99.90	97.42	97.42	100.00	100.00	100.00	99.92	98.87	98.88	100.00	100.00	100.00	99.93	99.66	99.67	100.00	100.00	100.00	100.00	100.00	100.00
270	99.96	98.36	98.37	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 17. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 6$, distribution 3 ($\gamma_1 = 0.4, \gamma_2 = 0.8$), and mean pattern 0, 0, 0, 1, 1, 1.

N	$\varepsilon = .20$			$\varepsilon = .30$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$			
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	
10	49.97	25.76	26.01	50.51	29.84	32.22	51.67	33.55	37.90	51.52	33.60	38.74	51.35	35.44	41.96	51.23	37.22	44.88	51.14	38.07	47.05	49.97	25.76	26.01	
15	57.82	29.77	29.93	58.94	35.18	36.85	58.78	39.01	41.97	59.97	41.27	45.13	59.61	43.78	48.73	60.33	46.77	52.63	60.40	48.48	55.29	57.82	29.77	29.93	
20	64.05	32.94	33.05	65.48	39.68	40.97	66.19	44.77	47.11	67.58	48.28	51.51	67.50	51.44	55.50	68.11	55.23	59.94	67.79	56.89	62.37	64.05	32.94	33.05	
25	70.80	37.08	37.18	71.52	44.20	45.28	72.48	50.42	52.37	73.57	54.04	56.76	73.73	57.99	61.40	74.33	62.09	65.96	74.22	64.25	68.76	70.80	37.08	37.18	
30	76.86	41.32	41.40	76.96	48.60	49.54	77.64	55.00	56.71	78.59	59.25	61.58	78.93	63.75	66.61	79.48	68.11	71.31	79.89	70.95	74.63	76.86	41.32	41.40	
40	84.73	47.49	47.56	85.13	56.32	57.08	84.94	63.04	64.34	86.80	69.12	70.89	86.83	73.52	75.62	87.25	77.87	80.09	87.85	80.92	83.37	84.73	47.49	47.56	
50	90.63	53.97	54.03	90.89	63.58	64.21	90.56	70.22	71.25	92.13	77.01	78.36	92.13	81.15	82.66	92.50	85.17	86.70	92.47	87.23	88.87	90.63	53.97	54.03	
60	94.15	58.79	58.84	94.07	69.11	69.63	94.50	77.06	77.86	95.27	83.02	84.03	95.40	86.79	87.87	95.26	89.62	90.66	95.41	91.69	92.75	94.15	58.79	58.84	
70	96.70	64.73	64.77	96.60	74.72	75.15	96.62	81.79	82.42	97.27	87.36	88.12	97.19	90.44	91.22	97.21	93.14	93.83	97.55	95.07	95.73	96.70	64.73	64.77	
80	98.16	69.37	69.41	97.92	78.61	78.97	98.05	85.93	86.43	98.46	90.91	91.46	98.47	93.66	94.20	98.47	95.60	96.06	98.44	96.68	97.11	98.16	69.37	69.41	
90	98.96	73.41	73.44	98.87	83.02	83.31	98.82	88.98	89.38	99.14	93.47	93.88	99.13	95.64	96.01	99.09	97.09	97.39	99.15	97.98	98.25	98.96	73.41	73.44	
100	99.44	76.91	76.94	99.36	86.09	86.33	99.40	91.89	92.19	99.54	95.38	95.67	99.52	97.07	97.32	99.52	98.18	98.38	99.56	98.84	99.00	99.44	76.91	76.94	
120	99.86	83.65	83.67	99.81	91.28	91.44	99.80	95.22	95.40	99.87	97.79	97.94	99.85	98.73	98.84	99.84	99.25	99.33	100.00	100.00	100.00	99.86	83.65	83.67	
150	99.98	89.73	89.75	99.97	95.39	95.47	99.96	97.98	98.06	99.98	99.25	99.30	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.98	89.73	89.75	
180	99.99	93.89	93.90	99.99	97.73	97.77	99.99	99.12	99.15	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	93.89	93.90	
210	99.99	96.38	96.39	99.99	98.91	98.93	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	96.38	96.39	
240	99.99	97.90	97.90	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.90	97.90	
270	100.00	98.78	98.78	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.78	98.78	
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 18. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 6$, distribution 3 ($\gamma_1 = 0.4, \gamma_2 = 0.8$), and linear mean pattern.

N	$\varepsilon = .20$			$\varepsilon = .30$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	49.72	26.46	26.71	52.14	31.69	34.11	49.23	32.19	36.22	50.34	32.84	37.80	50.78	34.99	41.55	51.85	37.63	45.31	51.01	37.98	46.81	49.72	26.46	26.71
15	55.40	29.40	29.55	60.28	37.51	39.14	56.73	38.45	41.26	58.97	40.41	44.17	60.60	44.50	49.54	61.23	47.61	53.48	59.97	48.40	55.11	55.40	29.40	29.55
20	63.24	34.52	34.64	66.41	42.27	43.53	63.24	43.63	45.83	66.51	47.45	50.57	68.25	52.06	56.15	68.93	56.05	60.78	67.84	57.17	62.57	63.24	34.52	34.64
25	68.25	37.61	37.70	72.64	46.74	47.83	69.50	49.23	51.06	73.13	53.87	56.55	74.68	58.94	62.34	75.02	62.71	66.59	74.33	64.72	69.09	68.25	37.61	37.70
30	74.65	42.22	42.30	77.57	51.26	52.17	74.46	53.53	55.11	78.71	59.79	62.11	80.01	64.70	67.60	79.86	68.43	71.64	78.50	69.78	73.39	74.65	42.22	42.30
40	82.12	48.05	48.11	85.55	59.66	60.37	81.43	60.66	61.86	86.32	69.11	70.87	87.44	74.31	76.37	87.68	78.50	80.69	86.56	79.75	82.17	82.12	48.05	48.11
50	88.04	54.38	54.43	90.58	66.41	66.98	88.09	68.70	69.65	91.62	76.67	78.01	92.54	81.63	83.12	92.54	85.29	86.80	91.69	86.59	88.19	88.04	54.38	54.43
60	92.36	59.80	59.85	94.42	72.84	73.30	91.74	74.14	74.91	94.77	82.24	83.25	95.70	87.28	88.33	95.44	89.94	90.97	95.03	91.29	92.36	92.36	59.80	59.85
70	95.16	65.25	65.29	96.47	77.51	77.89	94.71	79.34	79.96	97.07	87.25	88.00	97.48	91.03	91.77	97.45	93.67	94.33	97.12	94.52	95.20	95.16	65.25	65.29
80	97.04	69.71	69.75	97.83	81.76	82.07	96.33	82.64	83.14	98.33	90.67	91.23	98.60	93.88	94.40	98.41	95.66	96.11	98.31	96.59	97.01	97.04	69.71	69.75
90	98.21	73.51	73.55	98.74	85.19	85.44	97.69	86.46	86.86	99.07	93.38	93.79	99.25	95.91	96.26	99.16	97.32	97.60	98.96	97.77	98.05	98.21	73.51	73.55
100	98.88	77.32	77.35	99.25	87.86	88.06	98.56	89.30	89.62	99.51	95.47	95.76	99.59	97.24	97.48	99.54	98.29	98.48	99.43	98.65	98.82	98.88	77.32	77.35
120	99.62	83.17	83.19	99.79	92.62	92.75	99.41	93.12	93.33	99.85	97.70	97.85	99.87	98.79	98.90	99.85	99.29	99.37	99.80	99.48	99.54	99.62	83.17	83.19
150	99.93	89.61	89.62	99.95	96.52	96.59	99.86	96.70	96.80	99.97	99.24	99.29	100.00	100.00	100.00	100.00	100.00	100.00	99.96	99.88	99.90	99.93	89.61	89.62
180	99.98	93.68	93.69	99.99	98.23	98.27	99.96	98.32	98.37	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.98	93.68	93.69	
210	99.99	96.18	96.18	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	96.18	96.18
240	99.99	97.73	97.74	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.73	97.74
270	99.99	98.70	98.70	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	98.70	98.70
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 19. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 6$, distribution 6 (gamma $\alpha = 4$; $\gamma_1 = 1$, $\gamma_2 = 1.5$), and mean pattern 0, 0, 0, 1, 1, 1.

N	F	$\varepsilon = .20$			$\varepsilon = .30$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
		F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	50.78	27.65	27.91	51.65	31.72	34.17	51.58	34.25	38.41	52.35	34.11	39.23	49.87	33.81	40.14	53.21	38.68	46.34	51.27	37.57	46.33	50.78	27.65	27.91	
15	57.85	31.15	31.31	58.76	36.41	38.04	59.36	40.42	43.30	59.84	40.86	44.66	59.56	43.04	47.99	61.47	47.73	53.51	60.73	48.13	54.99	57.85	31.15	31.31	
20	64.29	34.70	34.82	65.03	40.36	41.61	66.92	46.60	48.89	67.64	48.18	51.35	67.31	50.71	54.80	68.24	55.25	59.85	68.44	56.81	62.35	64.29	34.70	34.82	
25	70.05	38.06	38.16	71.54	45.35	46.43	72.14	50.82	52.70	73.47	53.69	56.39	73.96	57.69	61.17	74.58	62.23	66.02	74.42	63.93	68.48	70.05	38.06	38.16	
30	75.86	41.95	42.03	76.00	48.66	49.57	77.21	55.59	57.20	79.21	59.80	62.16	79.28	63.64	66.58	79.53	68.02	71.19	80.16	70.85	74.59	75.86	41.95	42.03	
40	83.47	47.56	47.63	84.37	56.41	57.13	85.06	63.79	65.01	87.07	69.34	71.14	87.23	73.76	75.92	86.96	77.43	79.61	87.73	80.54	83.06	83.47	47.56	47.63	
50	89.87	54.20	54.26	89.92	63.45	64.04	90.67	71.12	72.09	92.01	76.82	78.18	91.95	80.74	82.31	91.96	84.38	85.89	92.69	87.38	89.05	89.87	54.20	54.26	
60	93.96	60.36	60.42	93.74	69.00	69.49	93.91	76.17	76.94	95.18	82.85	83.88	95.42	86.90	88.00	95.30	89.60	90.63	95.94	92.28	93.34	93.96	60.36	60.42	
70	96.37	64.87	64.91	96.19	74.45	74.86	96.35	81.39	82.00	97.32	87.71	88.47	97.37	90.85	91.63	97.27	93.08	93.77	97.60	95.11	95.79	96.37	64.87	64.91	
80	97.75	68.78	68.81	97.73	79.09	79.43	97.68	85.10	85.58	98.46	91.02	91.58	98.49	93.72	94.27	98.35	95.27	95.74	98.63	96.96	97.39	97.75	68.78	68.81	
90	98.74	73.31	73.35	98.69	82.48	82.77	98.71	88.48	88.87	99.17	93.78	94.18	99.16	95.80	96.17	99.07	97.00	97.31	99.21	98.12	98.38	98.74	73.31	73.35	
100	99.30	76.78	76.81	99.25	85.64	85.88	99.17	90.85	91.15	99.56	95.65	95.94	99.56	97.24	97.49	99.46	98.00	98.21	99.59	98.92	99.07	99.30	76.78	76.81	
120	99.79	82.90	82.92	99.75	90.36	90.53	99.70	94.49	94.67	99.88	97.87	98.02	99.87	98.83	98.94	99.83	99.17	99.26	99.89	99.65	99.70	99.79	82.90	82.92	
150	99.97	89.40	89.42	99.95	94.97	95.05	99.95	97.71	97.79	99.98	99.28	99.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.97	89.40	89.42	
180	99.99	93.43	93.44	99.99	97.47	97.51	99.99	98.96	99.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	93.43	93.44	
210	99.99	96.07	96.08	99.99	98.76	98.78	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	96.07	96.08	
240	99.99	97.68	97.68	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.68	97.68	
270	99.99	98.64	98.64	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	98.64	98.64	
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

Table 20. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 6$, distribution 6 (gamma $\alpha = 4$; $\gamma_1 = 1$, $\gamma_2 = 1.5$), and linear mean pattern.

N	$\varepsilon = .20$			$\varepsilon = .30$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	49.83	27.62	27.87	52.94	33.55	35.98	50.49	34.29	38.31	50.63	32.59	37.50	51.15	35.17	41.73	53.15	38.62	46.24	51.31	37.63	46.24	49.83	27.62	27.87
15	57.03	32.07	32.23	60.02	38.63	40.22	56.97	39.68	42.41	59.67	40.55	44.35	61.08	44.59	49.61	61.42	47.71	53.48	60.41	48.06	54.74	57.03	32.07	32.23
20	62.89	35.49	35.60	65.72	42.46	43.69	63.37	44.79	46.89	67.05	47.27	50.42	68.27	51.75	55.81	68.56	55.42	60.01	67.18	56.00	61.39	62.89	35.49	35.60
25	68.32	39.31	39.40	72.18	47.91	48.93	68.93	49.27	51.01	73.33	53.42	56.11	74.35	58.13	61.57	74.54	62.35	66.09	73.82	63.67	68.07	68.32	39.31	39.40
30	72.77	41.84	41.92	77.12	52.51	53.38	73.12	53.14	54.62	78.57	59.06	61.42	79.94	64.34	67.24	79.72	68.44	71.54	78.83	69.74	73.40	72.77	41.84	41.92
40	81.25	48.84	48.91	84.41	59.49	60.16	81.08	60.84	61.99	86.87	69.26	71.07	87.81	74.30	76.41	87.36	77.96	80.12	87.21	80.27	82.73	81.25	48.84	48.91
50	87.19	54.93	54.99	89.94	66.45	66.99	86.89	67.41	68.31	91.98	76.83	78.21	92.72	81.73	83.23	92.30	85.00	86.47	91.82	86.72	88.36	87.19	54.93	54.99
60	91.54	60.25	60.30	93.35	71.75	72.19	90.81	73.12	73.84	95.37	83.11	84.15	95.94	87.45	88.51	95.17	89.60	90.60	95.19	91.56	92.62	91.54	60.25	60.30
70	94.41	65.26	65.30	96.06	77.26	77.62	94.36	79.06	79.64	97.20	87.46	88.24	97.53	91.11	91.86	97.18	93.05	93.74	97.19	94.66	95.35	94.41	65.26	65.30
80	96.48	69.67	69.70	97.40	80.76	81.06	96.05	82.49	82.96	98.48	91.08	91.65	98.68	94.04	94.56	98.40	95.52	95.97	98.40	96.75	97.17	96.48	69.67	69.70
90	97.75	73.28	73.31	98.45	84.66	84.90	97.40	85.84	86.22	99.16	93.75	94.16	99.28	96.00	96.35	99.02	97.00	97.30	99.13	98.05	98.31	97.75	73.28	73.31
100	98.60	77.16	77.19	99.03	87.62	87.81	98.34	88.74	89.05	99.58	95.78	96.06	99.60	97.32	97.55	99.46	98.07	98.27	99.45	98.72	98.89	98.60	77.16	77.19
120	99.47	82.85	82.87	99.65	91.76	91.89	99.28	92.69	92.89	99.86	97.86	98.01	99.90	98.86	98.97	99.85	99.27	99.34	99.82	99.55	99.61	99.47	82.85	82.87
150	99.90	89.07	89.09	99.93	95.72	95.79	99.81	96.32	96.42	99.98	99.34	99.39	100.00	100.00	100.00	100.00	100.00	100.00	99.96	99.90	99.91	99.90	89.07	89.09
180	99.98	93.42	93.43	99.98	97.91	97.94	99.95	98.20	98.25	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.98	93.42	93.43	
210	99.99	95.73	95.74	99.99	98.98	99.00	99.99	99.13	99.16	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	95.73	95.74	
240	99.99	97.50	97.50	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.50	97.50
270	99.99	98.48	98.49	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	98.48	98.49
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 21. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 6$, distribution 9 (gamma $\alpha = 2$; $\gamma_1 = 1.41$, $\gamma_2 = 3$), and mean pattern 0, 0, 0, 1, 1, 1.

N	$\varepsilon = .20$			$\varepsilon = .30$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	51.28	28.59	28.87	52.26	32.92	35.40	53.31	36.27	40.47	52.19	33.62	38.50	51.28	34.31	40.58	53.34	38.40	45.81	51.14	36.61	44.90	51.28	28.59	28.87
15	58.54	32.62	32.80	59.24	37.57	39.20	60.18	41.56	44.46	60.46	41.15	44.90	59.86	42.76	47.59	61.86	47.75	53.30	60.82	47.37	53.97	58.54	32.62	32.80
20	64.12	35.60	35.73	65.80	41.87	43.14	66.70	46.58	48.82	68.08	48.26	51.38	67.78	50.61	54.70	68.68	55.48	59.93	68.57	56.20	61.65	64.12	35.60	35.73
25	70.55	39.51	39.61	71.44	46.15	47.20	72.40	51.79	53.64	74.50	54.59	57.28	74.22	57.64	61.08	74.64	62.22	65.89	74.98	63.85	68.34	70.55	39.51	39.61
30	75.58	42.55	42.64	76.36	50.11	51.01	77.28	56.28	57.84	79.33	59.84	62.16	79.60	63.71	66.66	79.37	67.72	70.75	80.18	70.39	74.11	75.58	42.55	42.64
40	83.68	49.07	49.14	84.18	57.34	58.05	84.75	63.77	64.97	87.01	69.34	71.10	87.32	73.59	75.74	86.92	77.24	79.35	88.08	80.56	83.07	83.68	49.07	49.14
50	89.29	54.53	54.59	89.72	63.64	64.22	90.20	70.89	71.82	92.21	77.20	78.54	92.47	81.33	82.89	92.13	84.47	85.93	92.84	87.38	89.04	89.29	54.53	54.59
60	93.26	59.87	59.92	93.36	69.29	69.76	93.65	76.20	76.94	95.40	83.19	84.20	95.65	87.10	88.20	95.21	89.37	90.38	95.92	92.16	93.22	93.26	59.87	59.92
70	95.91	65.00	65.04	95.85	74.24	74.63	95.87	80.77	81.36	97.32	87.74	88.50	97.48	91.12	91.89	97.06	92.59	93.28	97.64	95.10	95.78	95.91	65.00	65.04
80	97.48	69.39	69.43	97.54	78.73	79.06	97.49	84.73	85.20	98.45	91.03	91.60	98.60	93.99	94.52	98.28	95.02	95.50	98.68	97.02	97.43	97.48	69.39	69.43
90	98.57	73.53	73.57	98.40	81.94	82.21	98.41	87.86	88.23	99.13	93.68	94.09	99.25	96.02	96.38	99.00	96.71	97.03	99.30	98.26	98.51	98.57	73.53	73.57
100	99.12	76.58	76.61	99.08	85.39	85.61	99.09	90.61	90.90	99.53	95.53	95.82	99.60	97.39	97.63	99.42	97.84	98.05	99.62	98.97	99.12	99.12	76.58	76.61
120	99.72	82.70	82.73	99.69	89.98	90.14	99.68	94.35	94.52	99.86	97.85	97.99	99.88	98.85	98.96	99.82	99.11	99.20	99.90	99.67	99.72	99.72	82.70	82.73
150	99.95	89.18	89.19	99.94	94.58	94.67	99.93	97.31	97.40	99.98	99.32	99.37	100.00	100.00	100.00	99.97	99.78	99.80	100.00	100.00	100.00	99.95	89.18	89.19
180	99.99	93.04	93.05	99.98	97.10	97.15	99.99	98.86	98.90	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	93.04	93.05
210	99.99	95.84	95.85	99.99	98.58	98.60	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	95.84	95.85
240	99.99	97.53	97.53	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.53	97.53
270	99.99	98.52	98.52	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	98.52	98.52
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 22. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 6$, distribution 9 (gamma $\alpha = 2$; $\gamma_1 = 1.41$, $\gamma_2 = 3$), and linear mean pattern.

N	$\varepsilon = .20$			$\varepsilon = .30$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	51.79	30.27	30.57	53.82	35.32	37.78	52.18	36.16	40.22	50.73	32.29	37.09	52.27	35.54	42.00	53.67	38.68	46.06	50.97	36.75	44.90	51.79	30.27	30.57
15	57.67	33.73	33.90	60.44	39.98	41.57	58.25	41.31	43.98	59.94	40.30	44.06	60.83	43.82	48.71	62.36	48.48	54.03	59.71	46.58	53.01	57.67	33.73	33.90
20	63.18	37.03	37.15	66.12	44.07	45.27	64.06	45.90	47.98	67.26	47.09	50.24	68.72	51.97	56.00	69.02	55.68	60.14	68.01	56.03	61.32	63.18	37.03	37.15
25	68.26	40.29	40.39	72.21	48.88	49.89	69.60	50.93	52.65	73.96	53.54	56.27	74.55	58.17	61.53	75.05	62.58	66.21	74.08	63.32	67.70	68.26	40.29	40.39
30	72.86	43.59	43.67	76.35	52.40	53.23	73.92	54.75	56.19	79.15	59.32	61.69	80.24	64.57	67.44	79.93	68.42	71.43	79.40	69.78	73.41	72.86	43.59	43.67
40	80.58	49.85	49.92	83.99	60.03	60.67	81.17	61.72	62.81	86.95	69.17	70.98	87.59	73.84	75.92	87.30	77.72	79.80	87.03	79.72	82.19	80.58	49.85	49.92
50	86.38	55.18	55.24	89.32	66.54	67.06	86.74	67.95	68.83	92.15	76.99	78.38	92.65	81.53	83.02	92.17	84.66	86.09	92.25	87.03	88.66	86.38	55.18	55.24
60	90.98	60.91	60.96	93.20	72.18	72.60	90.83	73.76	74.46	95.39	83.07	84.11	95.79	87.10	88.16	95.18	89.39	90.38	95.32	91.61	92.68	90.98	60.91	60.96
70	93.67	64.72	64.76	95.40	76.71	77.05	93.69	78.17	78.73	97.45	87.91	88.68	97.64	91.12	91.86	97.09	92.84	93.52	97.29	94.77	95.45	93.67	64.72	64.76
80	95.89	69.42	69.45	97.14	80.80	81.08	95.73	82.15	82.60	98.55	91.33	91.90	98.72	94.11	94.62	98.34	95.30	95.75	98.43	96.78	97.21	95.89	69.42	69.45
90	97.41	73.59	73.62	98.26	84.49	84.72	97.06	85.31	85.68	99.23	93.98	94.38	99.27	95.91	96.26	98.97	96.76	97.07	99.10	98.01	98.28	97.41	73.59	73.62
100	98.37	77.13	77.16	98.83	86.96	87.15	98.09	88.13	88.43	99.59	95.84	96.12	99.63	97.36	97.59	99.36	97.81	98.01	99.48	98.78	98.95	98.37	77.13	77.16
120	99.31	82.41	82.43	99.59	91.43	91.56	99.19	92.23	92.43	99.88	98.03	98.17	99.88	98.82	98.92	99.82	99.13	99.21	99.84	99.56	99.62	99.31	82.41	82.43
150	99.84	88.61	88.63	99.91	95.53	95.60	99.78	96.07	96.17	100.00	100.00	100.00	99.98	99.68	99.71	99.97	99.80	99.82	99.97	99.92	99.93	99.84	88.61	88.63
180	99.96	92.79	92.80	99.98	97.70	97.73	99.94	97.97	98.02	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.96	92.79	92.80	
210	99.99	95.60	95.60	99.99	98.83	98.85	99.98	99.02	99.05	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	95.60	95.60
240	99.99	97.25	97.25	100.00	100.00	100.00	99.99	99.55	99.57	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.25	97.25
270	99.99	98.25	98.25	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	98.25	98.25
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 23. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ϵ) for $K = 6$, distribution 11 (gamma $\alpha = 0.75$; $\gamma_1 = 2.31$, $\gamma_2 = 8$), and mean pattern 0, 0, 0, 1, 1, 1.

N	$\epsilon = .20$			$\epsilon = .30$			$\epsilon = .40$			$\epsilon = .50$			$\epsilon = .60$			$\epsilon = .70$			$\epsilon = .80$			$\epsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	54.99	33.71	34.07	54.50	36.43	38.90	55.54	39.15	43.31	54.62	34.96	39.65	52.66	34.17	40.01	54.64	38.45	45.13	52.00	35.53	42.83	54.99	33.71	34.07
15	60.61	36.41	36.61	61.46	41.46	43.14	62.05	44.71	47.50	62.53	42.41	45.99	61.01	42.58	47.23	62.63	47.54	52.62	61.41	46.06	52.11	60.61	36.41	36.61
20	65.67	39.13	39.27	66.89	44.96	46.23	67.42	48.83	50.98	69.33	48.96	51.91	69.08	50.82	54.74	69.52	55.38	59.47	69.55	55.16	60.25	65.67	39.13	39.27
25	70.89	42.10	42.22	72.07	48.91	49.93	72.63	53.36	55.11	74.92	54.71	57.25	74.98	57.34	60.69	74.76	61.54	64.89	75.45	62.49	66.77	70.89	42.10	42.22
30	75.55	45.21	45.30	76.42	52.07	52.95	77.24	57.69	59.15	79.76	60.27	62.48	80.38	63.58	66.45	79.92	67.44	70.29	80.99	69.56	73.16	75.55	45.21	45.30
40	82.62	50.45	50.52	83.66	58.78	59.45	84.27	64.76	65.86	87.34	69.60	71.29	87.92	73.71	75.83	86.84	76.54	78.51	88.44	79.85	82.31	82.62	50.45	50.52
50	88.47	56.49	56.55	88.83	64.51	65.04	89.03	70.35	71.20	92.19	77.20	78.48	92.84	81.48	83.02	91.81	83.49	84.88	93.35	87.16	88.80	88.47	56.49	56.55
60	92.02	60.96	61.01	92.63	69.79	70.23	92.85	75.91	76.58	95.33	83.05	84.02	95.80	87.02	88.11	94.78	88.24	89.21	96.10	91.87	92.93	92.02	60.96	61.01
70	94.90	65.53	65.57	95.15	74.46	74.83	95.31	80.27	80.81	97.26	87.51	88.24	97.69	91.23	91.98	96.86	91.91	92.59	97.85	95.03	95.70	94.90	65.53	65.57
80	96.75	69.86	69.89	96.80	78.08	78.38	96.97	83.92	84.35	98.42	91.04	91.58	98.73	94.16	94.68	98.10	94.49	94.96	98.84	97.07	97.47	96.75	69.86	69.89
90	97.95	73.61	73.64	98.03	81.86	82.11	98.10	87.24	87.58	99.08	93.45	93.85	99.27	96.03	96.38	98.83	96.14	96.46	99.34	98.21	98.46	97.95	73.61	73.64
100	98.74	76.70	76.73	98.79	84.94	85.15	98.78	89.64	89.92	99.49	95.45	95.73	99.61	97.40	97.64	99.32	97.39	97.62	99.65	98.94	99.09	98.74	76.70	76.73
120	99.49	82.08	82.10	99.51	89.43	89.57	99.53	93.42	93.60	99.84	97.74	97.88	99.89	98.89	98.99	99.77	98.84	98.94	99.90	99.67	99.72	99.49	82.08	82.10
150	99.90	88.54	88.56	99.89	93.87	93.95	99.90	96.86	96.95	99.97	99.25	99.30	100.00	100.00	100.00	99.96	99.68	99.71	100.00	100.00	100.00	99.90	88.54	88.56
180	99.97	92.56	92.57	99.97	96.67	96.72	99.97	98.49	98.53	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.97	92.56	92.57
210	99.99	95.34	95.35	99.99	98.21	98.24	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	95.34	95.35
240	99.99	97.13	97.13	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.13	97.13
270	99.99	98.25	98.25	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	98.25	98.25
300	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 24. Power (in percentages) for the F -statistic, F -GG, and F -HF by N and epsilon values (ε) for $K = 6$, distribution 11 (gamma $\alpha = 0.75$; $\gamma_1 = 2.31$, $\gamma_2 = 8$), and linear mean pattern.

N	$\varepsilon = .20$			$\varepsilon = .30$			$\varepsilon = .40$			$\varepsilon = .50$			$\varepsilon = .60$			$\varepsilon = .70$			$\varepsilon = .80$			$\varepsilon = .90$		
	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF	F	F -GG	F -HF
10	54.80	34.93	35.27	56.71	39.70	42.17	54.70	39.59	43.56	52.21	32.41	36.98	53.33	35.23	41.15	55.24	39.16	45.80	51.97	35.66	42.83	54.80	34.93	35.27
15	59.83	38.24	38.43	62.34	43.56	45.16	59.70	44.04	46.64	61.30	40.54	44.16	62.31	44.27	48.93	63.65	48.58	53.58	61.26	46.02	51.94	59.83	38.24	38.43
20	64.26	40.46	40.60	67.27	47.25	48.41	65.54	48.83	50.83	68.47	47.25	50.31	69.31	51.52	55.36	70.36	56.35	60.37	68.62	54.65	59.57	64.26	40.46	40.60
25	68.73	43.26	43.36	72.88	51.87	52.84	69.66	52.30	53.90	75.18	53.98	56.65	75.56	58.31	61.53	75.55	62.37	65.67	75.32	62.81	66.97	68.73	43.26	43.36
30	73.00	46.07	46.16	76.78	55.13	55.93	74.43	56.62	57.97	80.12	59.64	61.97	80.72	64.49	67.25	80.37	68.32	71.07	80.27	69.22	72.70	73.00	46.07	46.16
40	79.95	51.55	51.62	83.53	61.63	62.23	80.84	62.87	63.88	87.73	69.39	71.19	88.19	74.21	76.20	86.97	76.86	78.79	87.51	79.35	81.75	79.95	51.55	51.62
50	85.42	56.82	56.88	88.66	67.20	67.68	86.09	68.58	69.36	92.80	77.47	78.84	93.11	81.75	83.18	91.86	83.73	85.08	92.45	86.55	88.17	85.42	56.82	56.88
60	89.47	61.50	61.55	92.16	72.33	72.71	89.92	73.61	74.24	95.81	83.59	84.62	96.01	87.11	88.13	94.86	88.52	89.47	95.69	91.64	92.69	89.47	61.50	61.55
70	92.42	65.55	65.58	94.58	76.41	76.72	92.97	77.77	78.28	97.55	87.96	88.72	97.63	90.80	91.52	96.70	91.83	92.50	97.43	94.72	95.39	92.42	65.55	65.58
80	94.90	69.91	69.94	96.35	80.27	80.52	94.94	81.26	81.68	98.69	91.58	92.14	98.66	93.70	94.20	98.08	94.48	94.94	98.57	96.82	97.24	94.90	69.91	69.94
90	96.47	73.28	73.31	97.58	83.50	83.72	96.47	84.31	84.65	99.29	94.17	94.56	99.28	95.70	96.05	98.85	96.34	96.65	99.15	98.00	98.27	96.47	73.28	73.31
100	97.59	76.56	76.58	98.37	86.11	86.28	97.60	87.43	87.70	99.62	95.96	96.24	99.61	97.14	97.37	99.29	97.41	97.63	99.53	98.81	98.97	97.59	76.56	76.58
120	98.93	81.80	81.81	99.37	90.48	90.60	98.86	91.33	91.52	99.90	98.12	98.26	99.89	98.72	98.82	99.75	98.88	98.97	99.85	99.59	99.64	98.93	81.80	81.81
150	99.70	88.15	88.16	99.83	94.73	94.80	99.63	95.19	95.30	100.00	100.00	100.00	100.00	100.00	100.00	99.95	99.67	99.70	99.97	99.91	99.92	99.70	88.15	88.16
180	99.91	92.13	92.14	99.96	97.11	97.14	99.90	97.39	97.45	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.91	92.13	92.14
210	99.97	94.77	94.77	99.99	98.41	98.43	99.97	98.63	98.66	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.97	94.77	94.77
240	99.99	96.71	96.72	100.00	100.00	100.00	99.99	99.32	99.33	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	96.71	96.72
270	99.99	97.88	97.88	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	97.88	97.88
300	99.99	98.69	98.69	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.99	98.69	98.69