

Log normal Distribution

ARL Table for scale parameter increase from the in-control value in LN(0, 1)

σ	μ_X	$n = 5$				$n = 10$				$n = 20$			
		\bar{X} chart		\tilde{X} chart		\bar{X} chart		\tilde{X} chart		\bar{X} chart		\tilde{X} chart	
		ARL	SDRL	ARL	SDRL	ARL	SDRL	ARL	SDRL	ARL	SDRL	ARL	SDRL
1.00	1.6	10.82	11.28	7.77	8.29	2.73	3.19	2.24	2.67	100.04	101.36	97.88	98.67
1.10	1.8	5.43	5.87	4.14	4.59	2.03	2.49	1.55	1.97	40.06	40.61	42.91	43.00
1.20	2.1	2.04	2.45	1.43	1.86	0.68	1.07	0.44	0.80	16.15	16.75	19.98	20.45
1.50	3.1	0.94	1.35	0.61	0.99	0.22	0.52	0.12	0.36	2.54	3.01	3.89	4.38
1.75	4.6	0.42	0.77	0.25	0.56	0.05	0.24	0.02	0.16	0.94	1.35	1.59	2.05
2.00	7.4	0.06	0.26	0.03	0.17	0.00	0.03	0.00	0.02	0.44	0.79	0.79	1.18