

Case II: Log-logistic Distribution

ARL Table for shape parameter increase from the in-control value in LL(1.15,0.6)

α	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	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+
1.15	4.11	95.70	195.27	100.01	201.17	97.26	195.62	99.43	204.35	96.83	193.93	98.76	200.84
1.20	3.14	122.39	266.22	138.63	236.80	118.24	278.15	145.56	218.23	108.77	279.99	131.11	171.55
1.25	2.57	154.18	360.76	185.92	270.05	140.72	386.61	184.06	229.91	115.54	407.43	134.67	145.51
1.30	2.19	190.26	493.83	242.50	325.14	167.39	544.29	213.31	240.39	120.15	585.97	122.75	127.45