Case ii: Weibull Distribution

ARL Table for shape parameter increase from the in-control state in Wei(0.8,1.0)

		$n=5$				$n=10$				$n=20$			
		$\bar{X}$ chart		$\tilde{X}$ chart		$\bar{X}$ chart		$\tilde{X}$ chart		$\bar{X}$ chart		$\tilde{X}$ chart	
α	μ_X	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+
0.80	1.13	96.95	195.95	98.57	199.75	98.04	198.59	98.82	205.15	97.47	195.52	99.00	201.79
0.85	1.09	165.46	446.78	168.69	228.50	165.91	518.79	162.50	186.43	158.83	587.36	118.06	124.59
0.90	1.05	265.44	1095.60	229.78	263.28	260.24	1454.95	162.59	165.89	220.87	1926.33	76.14	76.48
0.95	1.02	419.78	2910.44	284.86	306.39	371.49	4392.57	150.31	151.81	282.32	7080.70	48.14	48.57

ARL Table for scale parameter increase from the in-control state in Wei(0.8,1.0)

		$n=5$				$n=10$				$n=20$			
		$\bar{X}$ chart		$\tilde{X}$ chart		$\bar{X}$ chart		$\tilde{X}$ chart		$\bar{X}$ chart		$\tilde{X}$ chart	
β	μ_X	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+	ARL	ARL^+
1.00	1.13	96.95	195.95	98.57	199.75	98.04	198.59	98.82	205.15	97.47	195.52	99.00	201.79
1.25	1.42	43.11	47.94	55.33	62.33	31.82	33.16	41.91	43.99	19.18	19.62	24.43	25.17
1.50	1.70	18.31	18.37	27.08	27.93	10.52	10.54	15.07	15.36	4.85	4.84	6.48	6.59
1.75	1.98	9.35	9.46	14.89	15.13	4.61	4.67	7.01	7.00	1.85	1.87	2.49	2.47
2.00	2.27	5.61	5.69	9.35	9.19	2.53	2.49	3.85	3.78	0.87	0.85	1.16	1.15
2.50	2.83	2.69	2.67	4.55	4.44	1.00	1.01	1.51	1.52	0.25	0.25	0.33	0.33
3.00	3.40	1.52	1.51	2.58	2.59	0.49	0.49	0.74	0.73	0.08	0.08	0.10	0.10