ABLE A5 Sample Sizes for Nonparametric Tolerance Limits When $r + m = 1$[a]

$1 - \alpha$	$q = 0.500$	0.700	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
.500	1	2	3	4	5	7	14	28	35	69
.700	2	4	5	6	8	12	24	48	60	120
.750	2	4	5	7	9	14	28	55	69	138
.800	3	5	6	8	10	16	32	64	80	161
.850	3	6	7	9	12	19	37	75	94	189
.900	4	7	9	11	15	22	45	91	144	230
.950	5	9	11	14	19	29	59	119	149	299
.975	6	11	13	17	23	36	72	146	183	368
.980	6	11	14	18	25	38	77	155	194	390
.990	7	13	17	21	29	44	90	182	228	459
.995	8	15	19	24	33	51	104	210	263	528
.999	10	20	25	31	43	66	135	273	342	688

[a]The quantity tabled is the sample size n such that $q^n \leq \alpha$, for use in finding the tolerance limits

$$P(X^{(1)} \leq p \text{ of the population}) \geq 1 - \alpha$$

$$P(q \text{ of the population} \leq X^{(n)}) \geq 1 - \alpha$$

described in Section 3.3.

ABLE A6 Sample Sizes for Nonparametric Tolerance Limits When $r + m = 2$[a]

$1 - \alpha$	$q = 0.500$	0.700	0.750	0.800	0.850	0.900	0.950	0.975	0.980	0.990
.500	3	6	7	9	11	17	34	67	84	168
.700	5	8	10	12	16	24	49	97	122	244
.750	5	9	10	13	18	27	53	107	134	269
.800	5	9	11	14	19	29	59	119	149	299
.850	6	10	13	16	22	33	67	134	168	337
.900	7	12	15	18	25	38	77	155	194	388
.950	8	14	18	22	30	46	93	188	236	473
.975	9	17	20	26	35	54	110	221	277	555
.980	9	17	21	27	37	56	115	231	290	581
.990	11	20	24	31	42	64	130	263	330	662
.995	12	22	27	34	47	72	146	294	369	740
.999	14	27	33	42	58	89	181	366	458	920

[a]The quantity tabled is the sample size n such that $q^n + nq^{n-1}(1 - q) \leq \alpha$ for use in finding the tolerance limits

$$P(X^{(r)} \leq q \text{ of the population} \leq X^{(n+1-m)}) \geq 1 - \alpha$$

hen $r + m = 2$.