

ZERO-ONE DOUBLE ACCEPTANCE SAMPLING PLAN FOR TRUNCATED LIFE TESTS BASED ON INVERSE RAYLEIGH DISTRIBUTION

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ABSTRACT

This paper proposes a zero one double sampling plan for the truncated life tests assuming that the lifetime of the product follows an inverse Rayleigh distribution. The minimum sample sizes necessary to ensure the specified life percentile are obtained for the specified consumer's confidence level. The operating characteristic values of the designed sampling plan and the minimum percentile ratios for the specified producer's risk are obtained. Numerical illustration is provided to explain the use of constructed tables.

KEYWORDS: Zero one Double Sampling Plan, Truncated Life Tests, Producers Risk, Consumer's Confidence Level and Operating Characteristic Function