Subspace test for multivariate normal distribution

Suppose $\mathbf{X}_1, \mathbf{X}_2, \ldots, \mathbf{X}_n$ are i.i.d. observations from a multivariate normal distribution $N(\mu, \mathbf{\Sigma})$ where $\mathbf{\Sigma}$ is known. Further assume that $\mathbf{R}$ is a given matrix and $\mathbf{r}$ a given vector. Use the likelihood ratio procedure to produce a test statistic for

$$H_0 \colon \mathbf{R}\mu = \mathbf{r} \qquad \text{vs.} \qquad H_1 \colon \mathbf{R}\mu \neq \mathbf{r}\,.$$

Give explicit formulae for the test statistic and the critical values.