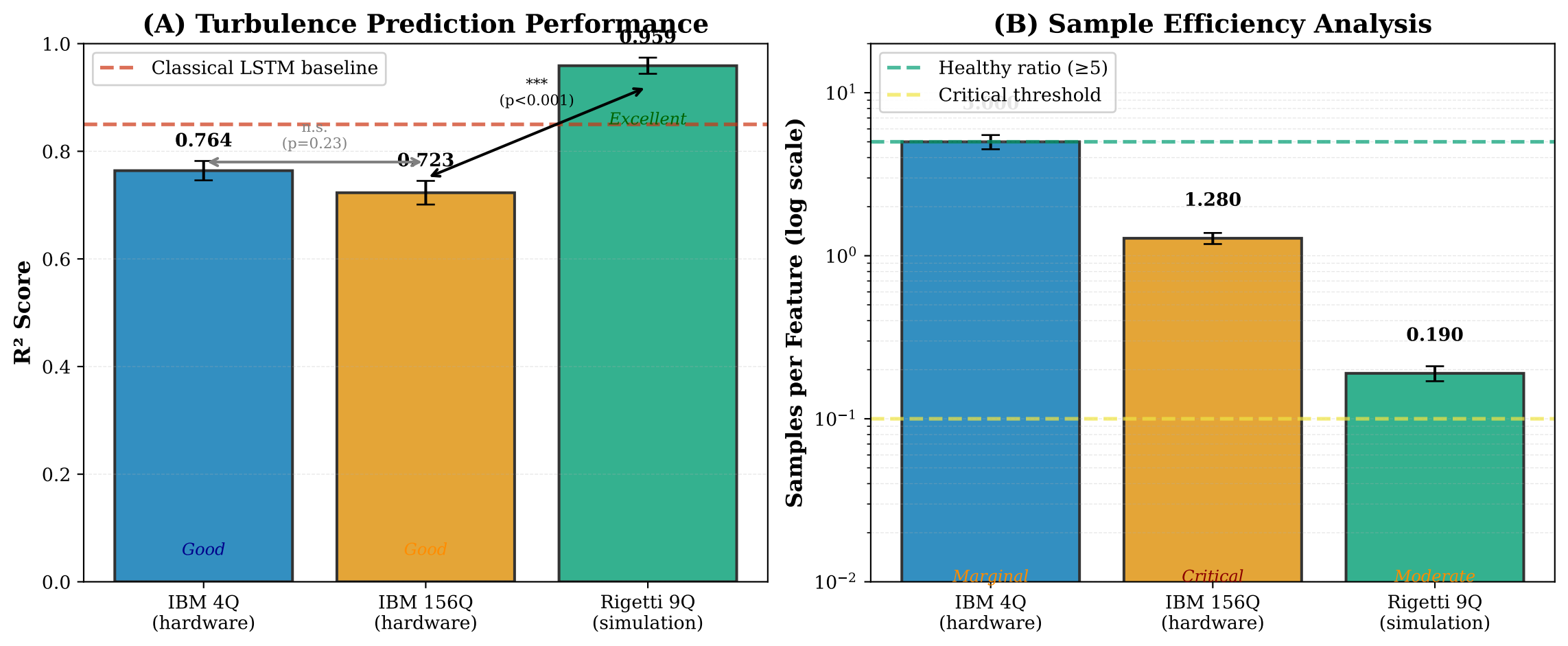
(A) Turbulence Prediction Performance
Classical LSTM baseline
R² Score
1.0
0.8
0.6
0.4
0.2
0.0
0.764
0.723
0.959
n.s.
(p=0.23)
***
(p<0.001)
Excellent
Good
Good
IBM 4Q
(hardware)
IBM 156Q
(hardware)
Rigetti 9Q
(simulation)
(B) Sample Efficiency Analysis
Healthy ratio (≥5)
Critical threshold
Samples per Feature (log scale)
10^{1}
10^{0}
10^{-1}
10^{-2}
1.280
0.190
Marginal
Critical
Moderate
IBM 4Q
(hardware)
IBM 156Q
(hardware)
Rigetti 9Q
(simulation)