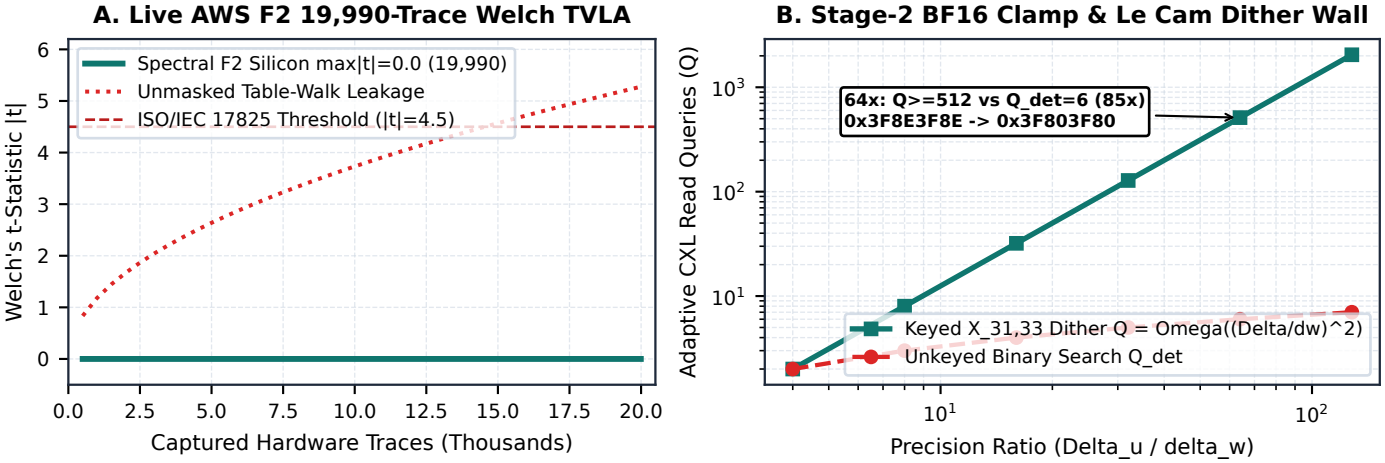

A. Live AWS F2 19,990-Trace Welch TVLA
Spectral F2 Silicon max|t|=0.0 (19,990)
Unmasked Table-Walk Leakage
ISO/IEC 17825 Threshold (|t|=4.5)
Welch's t-Statistic |t|
Captured Hardware Traces (Thousands)
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
0
1
2
3
4
5
6
B. Stage-2 BF16 Clamp & Le Cam Dither Wall
64x: Q>=512 vs Q_det=6 (85x)
0x3F8E3F8E -> 0x3F803F80
Keyed X_31,33 Dither Q = Omega((Delta/dw)^2)
Unkeyed Binary Search Q_det
Adaptive CXL Read Queries (Q)
Precision Ratio (Delta_u / delta_w)
10^1
10^2
10^3