

Table 10. Performance by error category: Flow-based slicing proves more effective for identifying security-related issues, while function-level context plays a crucial role in understanding logic errors. Performance issues are the most difficult to detect, as they often remain subtle until they become significantly problematic.

Category	KBI↑	FAR ₁ ↓	CPI ₁ ↑	FAR ₂ ↓	CPI ₂ ↑
<i>Left Flow</i>					
Overall	20.00	75.37	22.07	43.52	29.54
Security	25.81	73.92	25.94	48.96	34.28
Logic	8.33	75.00	12.50	0.00	15.38
Performance	0.00	0.00	0.00	0.00	0.00
<i>Full Flow</i>					
Overall	20.00	77.96	20.97	67.59	24.73
Security	25.81	72.31	26.71	67.71	28.69
Logic	8.33	97.22	4.17	66.67	13.33
Performance	0.00	0.00	0.00	0.00	0.00
<i>Original Diff</i>					
Overall	11.11	90.11	10.46	71.00	16.07
Security	16.13	88.87	13.17	71.00	20.73
Logic	0.00	0.00	0.00	0.00	0.00
Performance	0.00	0.00	0.00	0.00	0.00
<i>Parent Function</i>					
Overall	11.11	89.48	10.81	65.33	16.83
Security	3.23	91.94	4.61	50.00	6.06
Logic	33.33	81.39	23.89	69.17	32.03
Performance	0.00	0.00	0.00	0.00	0.00