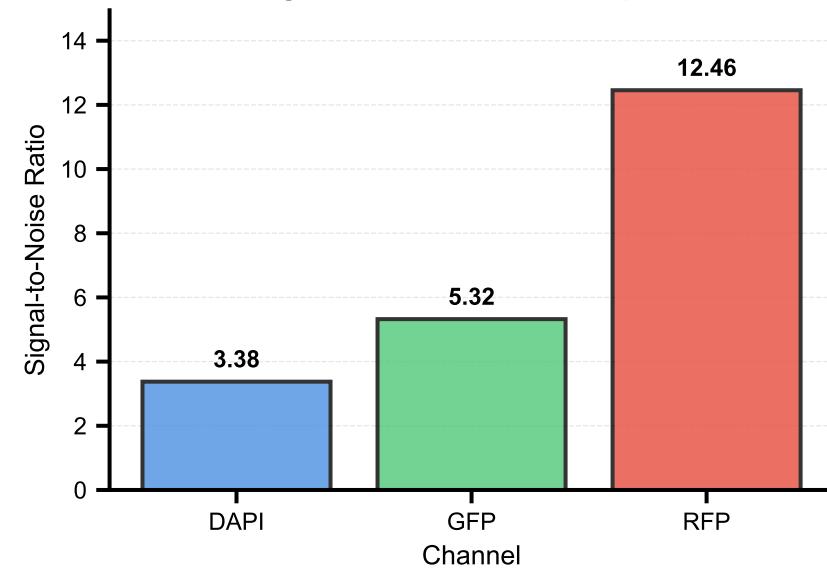
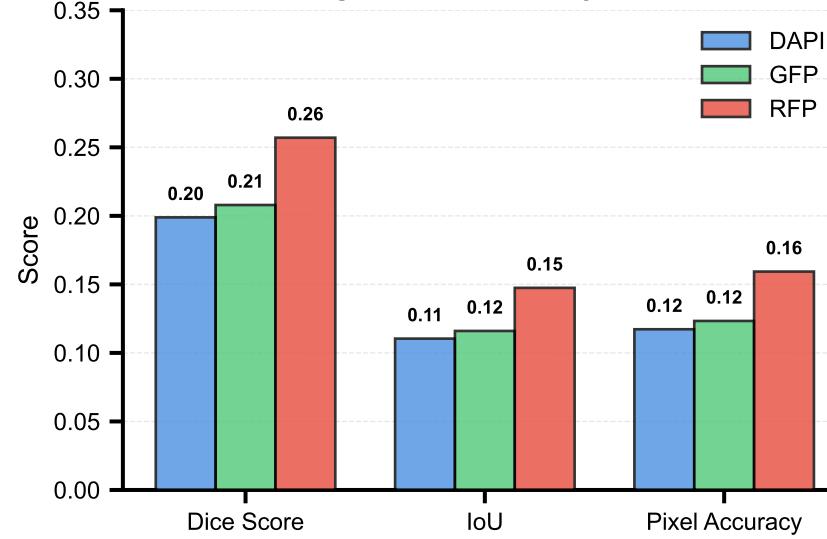


Multi-Channel Fluorescence Microscopy Analysis: Comprehensive Overview

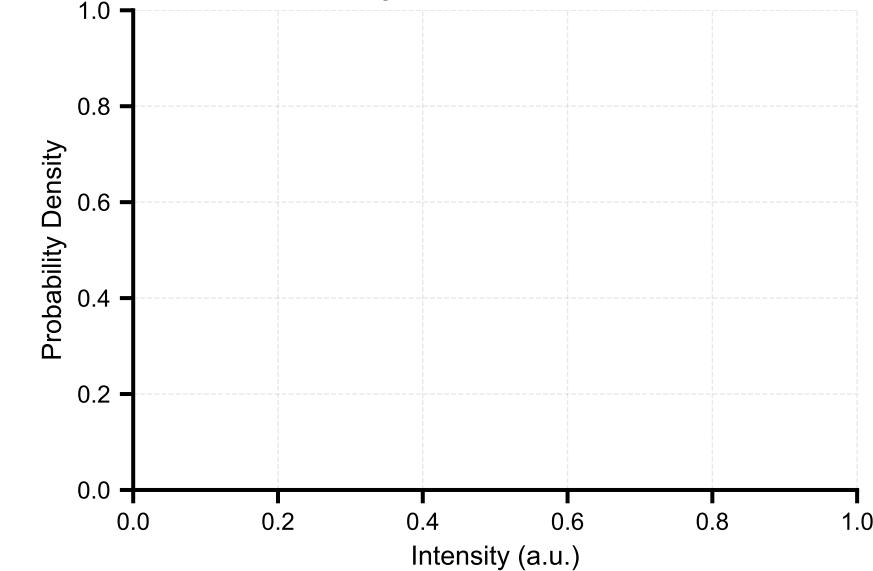
A. Signal-to-Noise Ratio Comparison



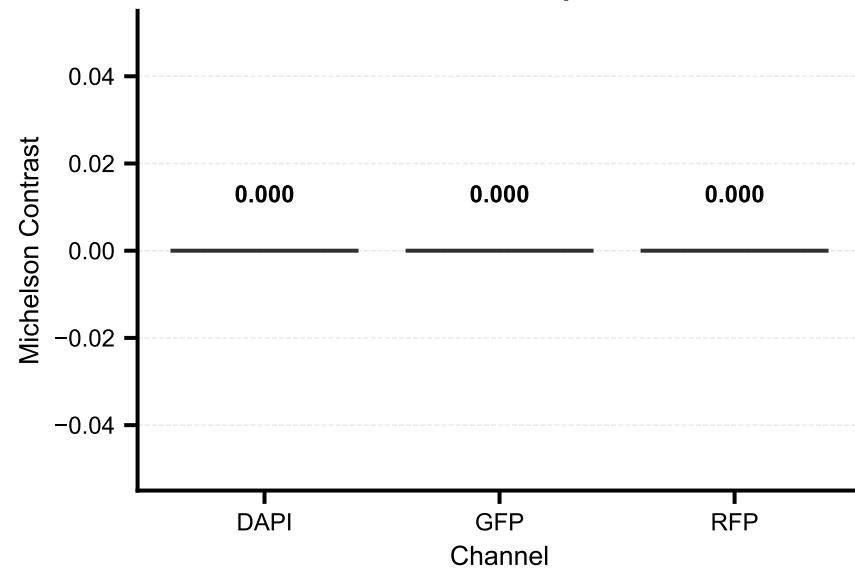
B. Segmentation Quality Metrics



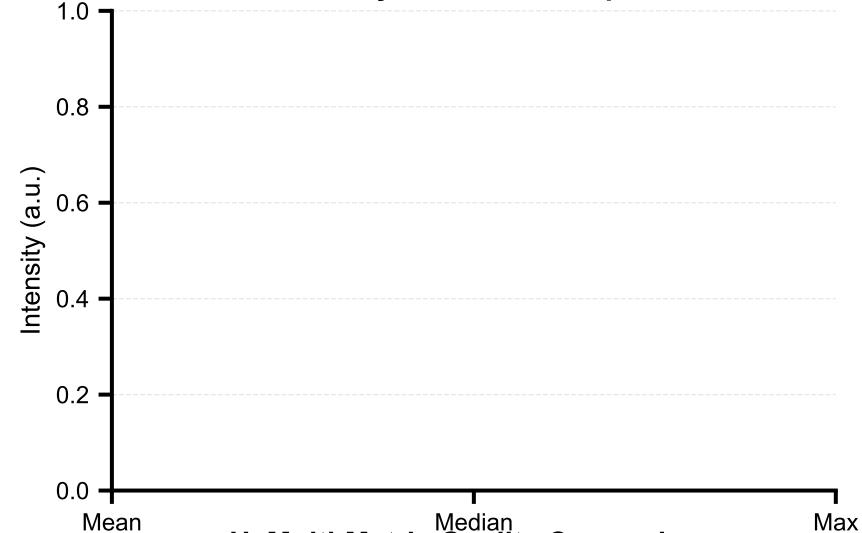
C. Intensity Distribution Comparison



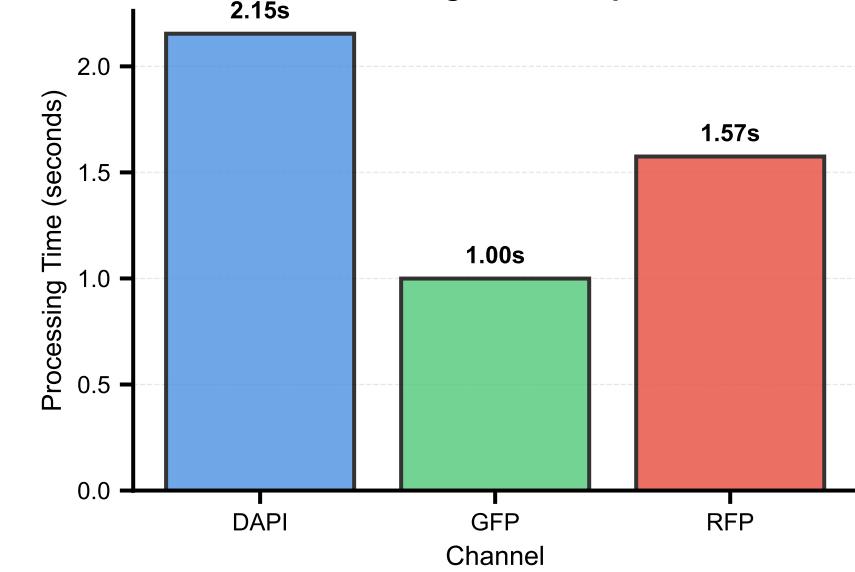
D. Contrast Comparison



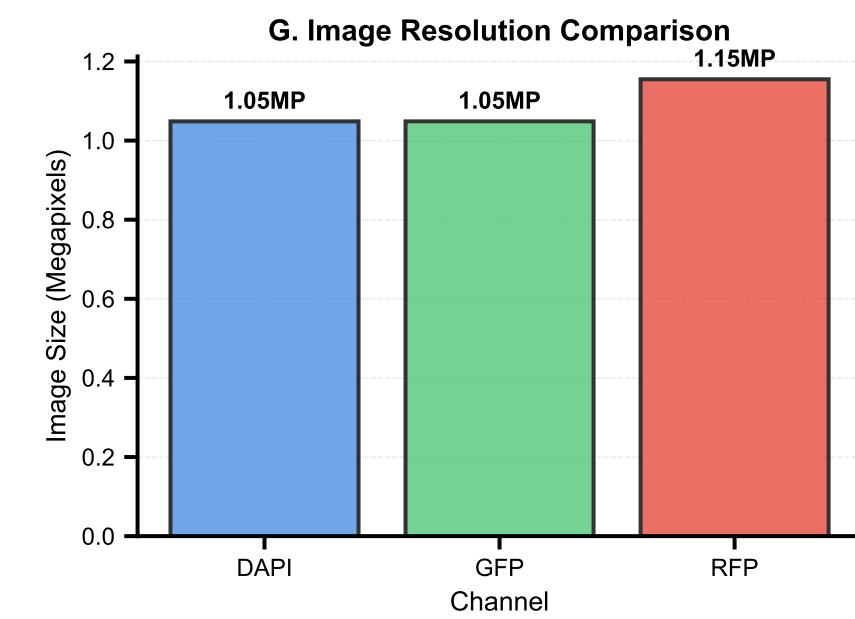
E. Intensity Statistics Comparison



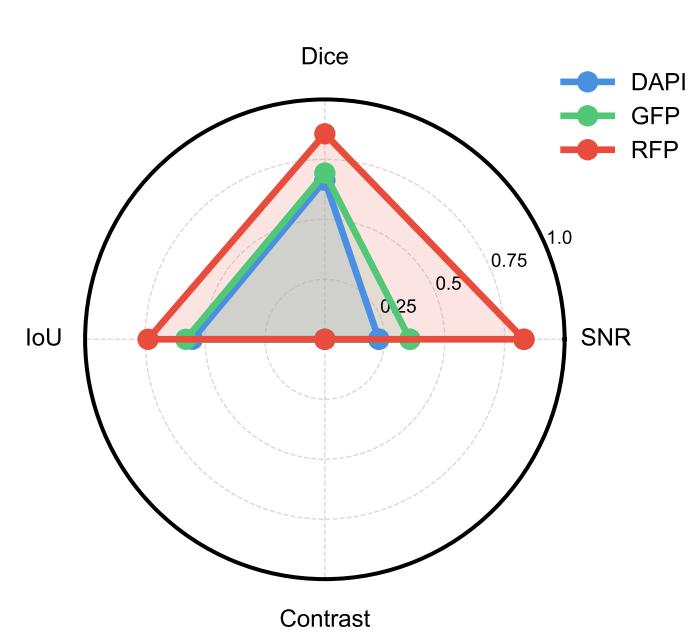
F. Processing Time Comparison



G. Image Resolution Comparison



H. Multi-Metric Quality Comparison



I. Summary Statistics

Channel	Dimensions	SNR	Dice	Time
DAPI	1024×1024	3.38	0.199	2.15s
GFP	1024×1024	5.32	0.208	1.00s
RFP	1272×908	12.46	0.257	1.57s