# Appendix A

We have used similarity scores of SDK vendor A → L, N, and VTB of the SDK test performed at NIST [6] to test our proposed fingerprint image quality metrics. Appendix A contains results for all SDK vendors for all datasets described in section 1.2, and is organized as follows:

The effects of quality on ROCs are reported in sections 1-20. Each of these sections contains results for one vendor. There are 20 figures per vendor corresponding to 20 different datasets described in section 1.2 of the report. Each of the figures, consists of three sections:

- The first section of each figure contains a ranked set of ROC curves for image quality levels 1-5.

- The second section of each figure contains a table showing operating-threshold and its corresponding FAR and TAR values for the aggregated population as well as FAR and TAR values for each image quality level computed at the operating-threshold. As explained, Fixing the threshold across various levels of quality corresponds to an operational situation in which threshold is set once for an application. The operating-threshold is picked based upon a specific false accept rate (FAR = 1%) on an aggregated population.

- The third section of each figure contains a plot of the values given in the second section. Specifically, it shows false accept rate and true accept rate of probe sets of different quality at the fixed operating-threshold. The red square marks the false accept rate and the true accept rate of the whole dataset at the fixed operating-threshold.

Section 21 reports distributions of qualities for different datasets.
Each section is capsulated in a separate file.