Modulation Detection Report

This report provides an analysis of the detection of evolved epithelial modulation using advanced image processing and machine learning techniques. We cover the spectral signature analysis, polarization detection, and anomaly highlighting in biological tissues. The following sections present the methodologies used and the outcomes of our detection tests.

1. Spectral Signature Analysis

The spectral signature analysis was conducted to extract and analyze pixel intensities across the visible spectrum. By computing the spectral signature for each color channel, significant features were detected and compared with reference spectra. The resulting anomaly maps highlight the regions of modulation based on significant spectral deviations.

2. Polarization Detection

Polarization analysis was used to detect changes in the reflectance properties of the epithelial cells. By computing the degree of polarization at various angles, regions with irregular polarization patterns were identified, indicating potential modulation. These anomalies were highlighted and overlaid on the original images for further inspection.