



# Advanced MicroBeam

## Advantages of High Takeoff Angle (TOA)

High x-ray takeoff angles provide the following advantages:

1. Less absorption of light element x-rays in the sample
2. Less sensitivity to surface texture
3. Detection deeper into pits and crevices.

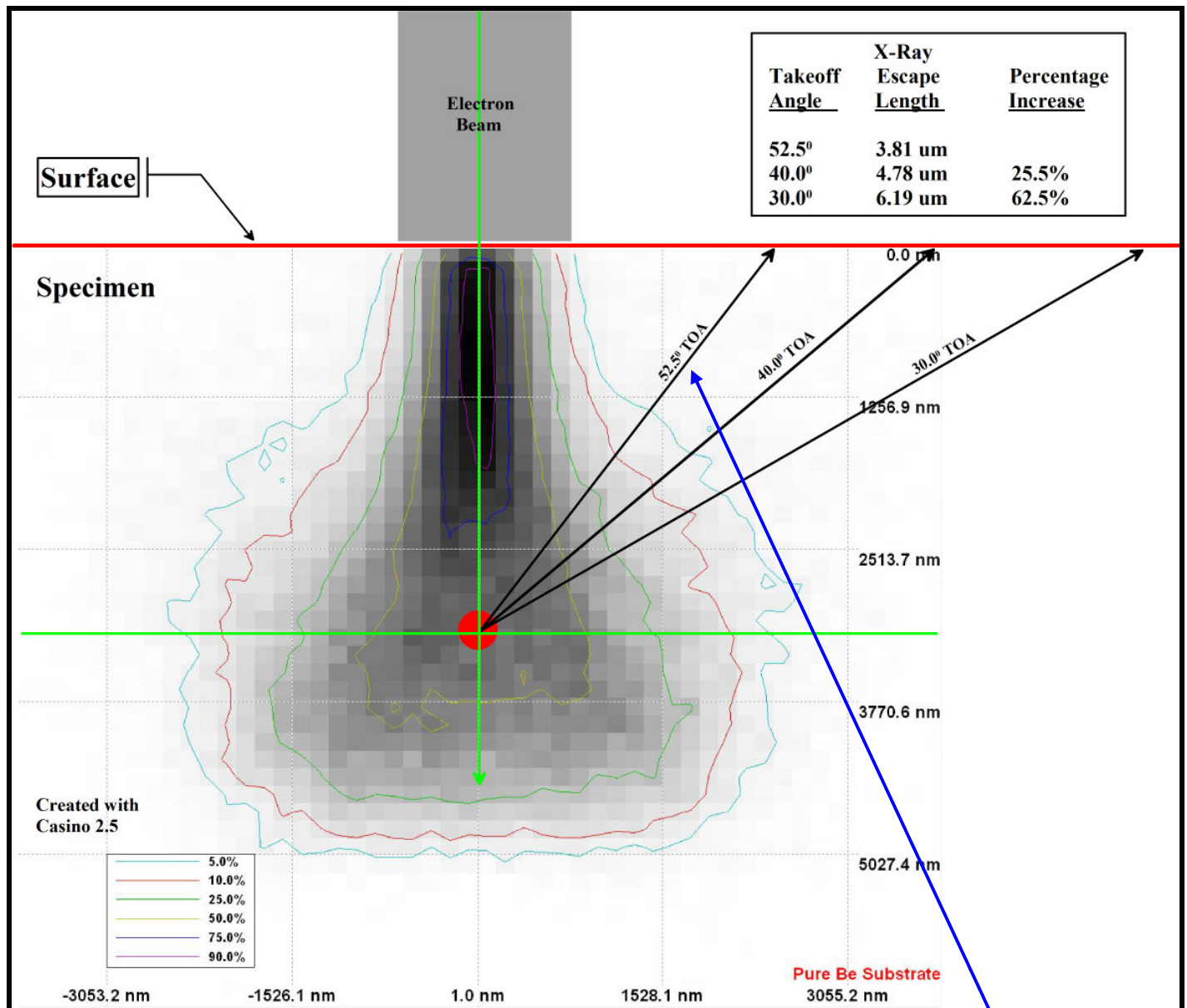
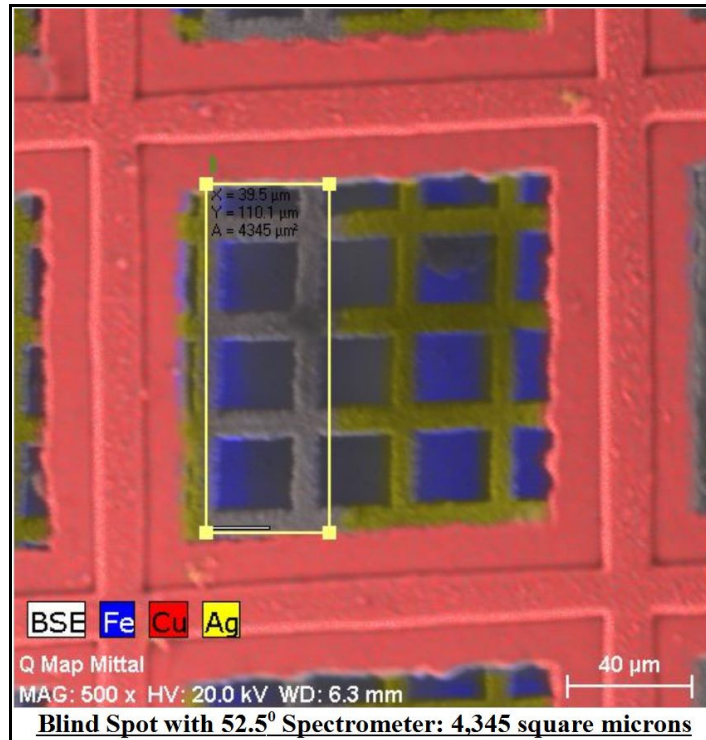
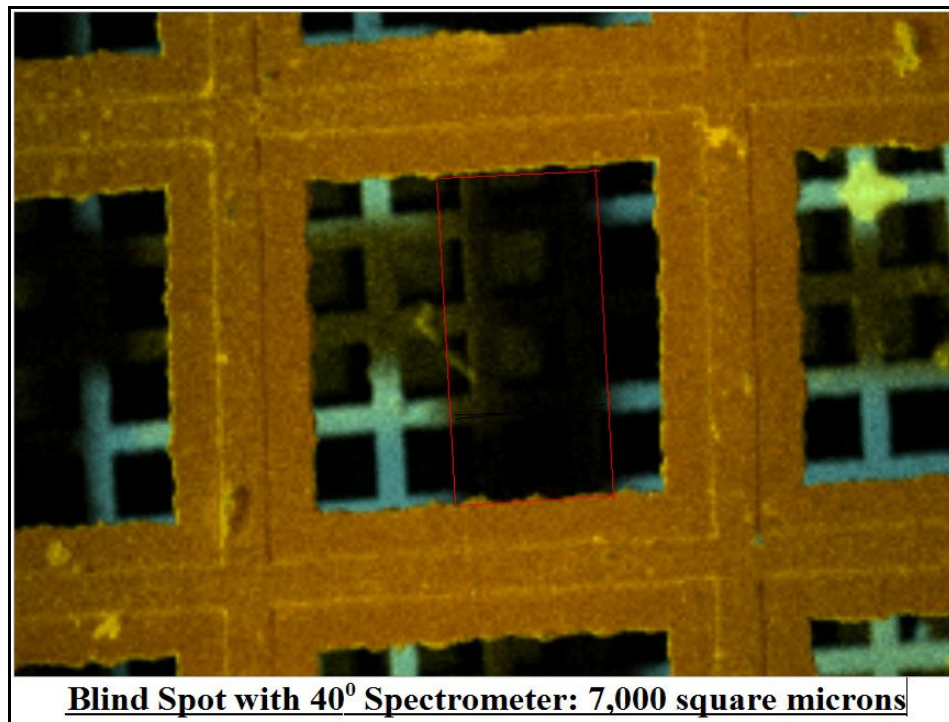


Figure 1: X-rays travel a shorter distance (3.8  $\mu\text{m}$ ) to escape the sample



*Figure 2: 2-Layer X-Ray Map with 52.5° TOA – 4,345 micron<sup>2</sup> blind zone*



*Figure 3: 2 Layer X-Ray Map with 40° TOA - 7,000 micron<sup>2</sup> blind zone*