

# OCT test targets – Comparison Guide

| Product        | Best for   | Key structures/features  | Geometry/size   | Material/optical note  |
|----------------|--|--|---|--|
| OCT Multilayer | Depth resolution, contrast vs depth                    | 10, 20, 50 layers;<br>50 $\mu\text{m}$ layer thickness<br>Glossy or Matte finish   | Phantom<br>22×22×5 mm,<br>layer feature 7 mm $\varnothing$ , 0.5 mm height for the 10 layer version | Substrate: $\mu_a = 0.19 \text{ cm}^{-1}$ , $\mu_s' = 8 \text{ cm}^{-1}$ @780 nm;<br>layer: $\mu_a = 0.05 \text{ cm}^{-1}$ , $\mu_s' = 3 \text{ cm}^{-1}$ @780 nm, $n = 1.5$ |
| OCT PSF        | PSF, axial/lateral resolution, distortion, focus       | FeO nanoparticles (<1 $\mu\text{m}$ or <100 nm)<br>Low/High concentration<br>Glossy or Matte finish                      | Cylinder 10 mm $\varnothing$ × 10 mm height   | BioPixS polymer, $n = 1.5$ ,<br>Glossy or Matte finish   |
| OCT Pyramid    | Resolution, distortion, FoV, focus                     | Step width 40, 80, 120 $\mu\text{m}$ ;<br>step height 50 $\mu\text{m}$<br>Positive or negative<br>Glossy or Matte finish | Pyramid 7×7×4.5 mm, overall 22×22×6.5 mm  | $\mu_a = 0.19 \text{ cm}^{-1}$ , $\mu_s' = 8 \text{ cm}^{-1}$ @780 nm, $n = 1.5$ ,<br>Glossy or Matte finish   |
| OCT USAF       | Lateral resolution, alignment, calibration, distortion | USAF Groups 2 - 8, PSF, Ronchi 10 & 100 lines/mm, alignment markers<br>Positive or negative<br>Glossy or Matte finish    | Overall 21×21×3 mm, feature depth 0.5 mm  | Substrate: $\mu_a = 0.22 \text{ cm}^{-1}$ , $\mu_s' = 12.3 \text{ cm}^{-1}$ @780 nm, $n = 1.5$ ,<br>Glossy or Matte finish   |