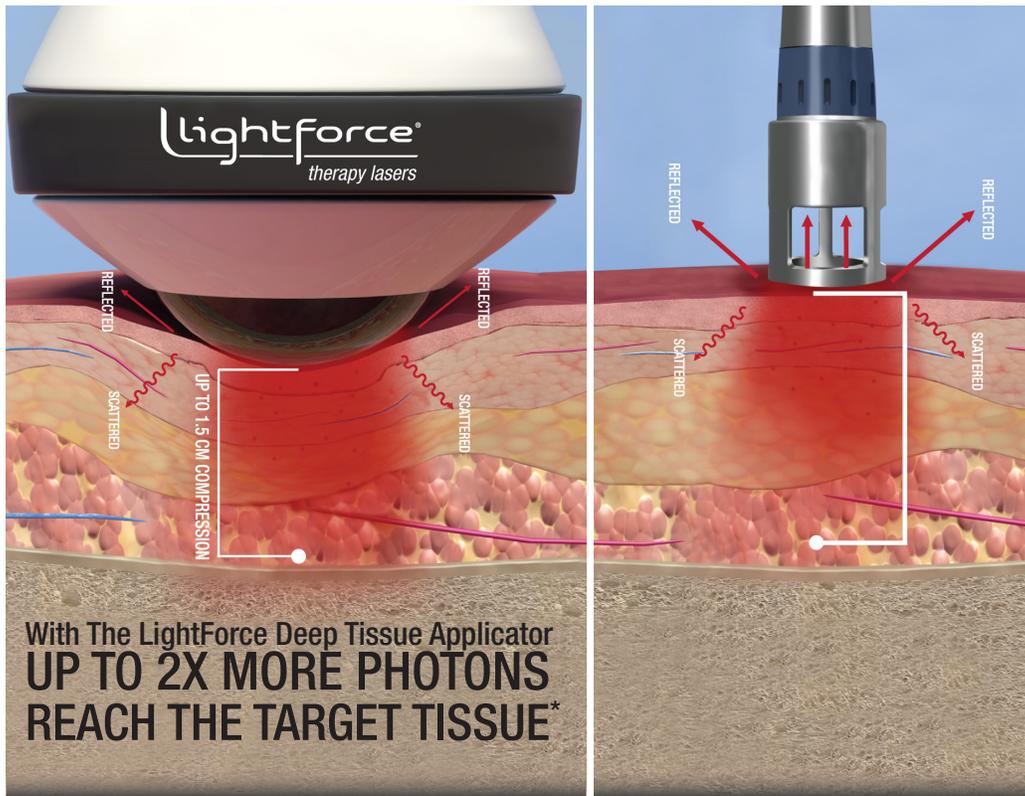


3 Key Factors for Maximizing Delivery of Therapeutic Dosage of Photons to Deep Tissues



1 Minimizing Light Loss Due To Blood Absorption

- Applying pressure disperses blood (blanching)
- Blanching increases photon penetration to deeper tissues
- The maximum dose is delivered to target tissue

Blood absorption is a barrier to photon penetration. The amount of photons available to deeper tissues is reduced.

2 Minimizing Light Loss Due To Reflection Off The Skin Surface by Treating In Contact

Fused silica composition of deep tissue applicator minimizes loss of light as it passes through lens into skin due to similar refractive index.

Depending on the design of the system and procedural application, there is a 5% to >30% loss of photons from reflection when treating off contact due to the refractive index differences between air and skin. When treating off contact, higher power is necessary to deliver the same amount of photons at depth.

3 Selecting The Appropriate Wavelength

- Light losses in dark skin are approximately 10 times greater than in light skin
- Most efficient wavelengths for treating deep tissues in light skin 800-830 nm
- Most efficient wavelengths for treating deep tissues in dark skin 900-980 nm