$$u^{* (1)} = \left\{ \frac{x}{L} \ 0 \right\}$$

$$u^{* (2)} = \left\{ 0 \ \sin\left(\frac{2\pi y}{3L}\right) \right\}$$

$$u^{* (3)} = \left\{ 0 \ \frac{y}{L} \sin^2\left(\frac{\pi x}{L}\right) \right\}$$

$$u^{* (4)} = \left\{ \sin\left(\frac{2\pi x}{3L}\right) \ 0 \right\}$$