$$\int_{d\mu_\ell(x)}^{\partial_\ell \Omega} {}^x\mathfrak{e}_y^{-1} = {}^y\Delta^{-\ell a/2}$$

$$\bigwedge_z^{z| \leqslant \ell} \bigwedge_\varkappa^{\varkappa| \leqslant \ell} \int_{d\mu_\ell(x)}^{\partial_\ell \Omega} {}^x\mathfrak{e}_y^{-1}\, {}^xE_z^\varkappa = (\ell a/2)_\varkappa\, {}^y\Delta^{-\ell a/2\ y^{-1}} E_z^\varkappa$$

$$\sum_\varkappa^{\varkappa| \leqslant \ell} \int_{d\mu_\ell(x)}^{\partial_\ell \Omega} {}^x\mathfrak{e}_y^{-1}\, {}^xE_z^\varkappa = \int_{d\mu_\ell(x)}^{\partial_\ell \Omega} {}^x\mathfrak{e}_y^{-1} \sum_\varkappa^{\varkappa| \leqslant \ell} {}^xE_z^\varkappa \underset{z| \leqslant \ell}{=} \int_{d\mu_\ell(x)}^{\partial_\ell \Omega} {}^x\mathfrak{e}_y^{-1} \sum_\varkappa {}^xE_z^\varkappa = \int_{d\mu_\ell(x)}^{\partial_\ell \Omega} {}^x\mathfrak{e}_y^{-1}\, {}^x\mathfrak{e}_z = \int_{d\mu_\ell(x)}^{\partial_\ell \Omega} {}^x\mathfrak{e}_{y-z}^{-1}$$

$$\underset{\text{LAS}}{=} {}^{y-z}\Delta^{-\ell a/2} = {}^{y^{1/2}\left(1 - y^{-1/2} z y^{-1/2}\right) y^{1/2}}\Delta^{-\ell a/2} = {}^y\Delta^{-\ell a/2\ 1 - y^{-1/2} z y^{-1/2}}\Delta^{-\ell a/2} = {}^y\Delta^{-\ell a/2} \sum_\varkappa^{\varkappa| \leqslant \ell} (\ell a/2)_\varkappa\, {}^{y^{-1}}E_z^\varkappa \underset{\text{hom}}{\Longrightarrow}$$