(f)Quasar Luminosity Functions in Host Halo Mass bins

All SMBHs
$11 < \log M_{\mathrm{peak}} < 12$
$12 < \log M_{\mathrm{peak}} < 13$
$13 < \log M_{\mathrm{peak}} < 14$
$14 < \log M_{\mathrm{peak}} < 15$

z=3.0

Number Density [Mpc^{-3} dex^{-1}]

Bolometric Luminosity [ergs s^{-1}]