Solutions of S_{EM} have metric and gauge field ($F = dA$)

$$ds^2 = -V(r)dt^2 + r^2 d\Omega_2^2 + \frac{dr^2}{V(r)} \quad , \quad A = \mu\left(1 - \frac{r_0}{r}\right)dt$$

$$V(r) = 1 + \frac{r^2}{L^2} + \frac{\Theta^2}{r^2} - \frac{M}{r}.$$

where $d\Omega_2^2$ is the metric of the 2-sphere. All parameters of the solution, and the thermodynamics are determined in terms of the chemical potential μ, and the Hawking temperature of horizon, T.