Provide a clear and organized presentation. Show all of your work and completely simplify your answer. Evaluate the following integral:

$$\int \frac{e^{\sqrt{x}}}{\sqrt{x} \cdot \sqrt{e^{2\sqrt{x}} - 1} \cdot \ln\left(e^{\sqrt{x}} + \sqrt{e^{2\sqrt{x}} - 1}\right)} \, dx$$