

See: <https://devzone.nordicsemi.com/blogs/943/measuring-lithium-battery-voltage-with-nrf52/>

Maximum voltage: $4.2\text{ V} * (2\text{ M}/(0.8\text{ M}+2\text{ M})) = 3\text{ V}$
Minimum voltage: $2.7\text{ V} * (2\text{ M}/(0.8\text{ M}+2\text{ M})) = 1.93\text{ V}$
ADC value at $4.2\text{ V} - 12\text{ bit setup}$: $3\text{ V} * (1/5) / 0.6\text{ V} * 4095 = 4095$
ADC value at $2.7\text{ V} - 12\text{ bit setup}$: $1.93\text{ V} * (1/5) / 0.6\text{ V} * 4095 = 2634$
Usable ADC resolution - 12 bit setup: $4095 - 2634 = 1461$

