

Samsung ICR18650-22F 2200mAh (Green)



Official specifications:

- Nominal Capacity: 2200mAh
- Charging Voltage: 4.2V ±0.05 V
- Nominal Voltage: 3.6V
- Charging Method: CC-CV (constant voltage with limited current)
- Charging Current: Standard charge: 1100mA, Rapid charge : 2200mA
- Charging Time: Standard charge: 3hours, Rapid charge: 2.5hours
- Max. Charge Current: 2200mA
- Max. Discharge Current: 4400mA
- Discharge Cut-off Voltage: 2.75V
- Cycle life: 300 cycles to 68%
- Cell Weight: 44.5g max
- Cell Dimension: Diameter(max.):18.4mm, Height: 65mm max
- Operating Temperature: Charge : 0 to 45°C, Discharge: -20 to 60°C
- Storage Temperature 1 year: -20~25°C, 3 months : -20~45°C, 1 month : -20~60°C

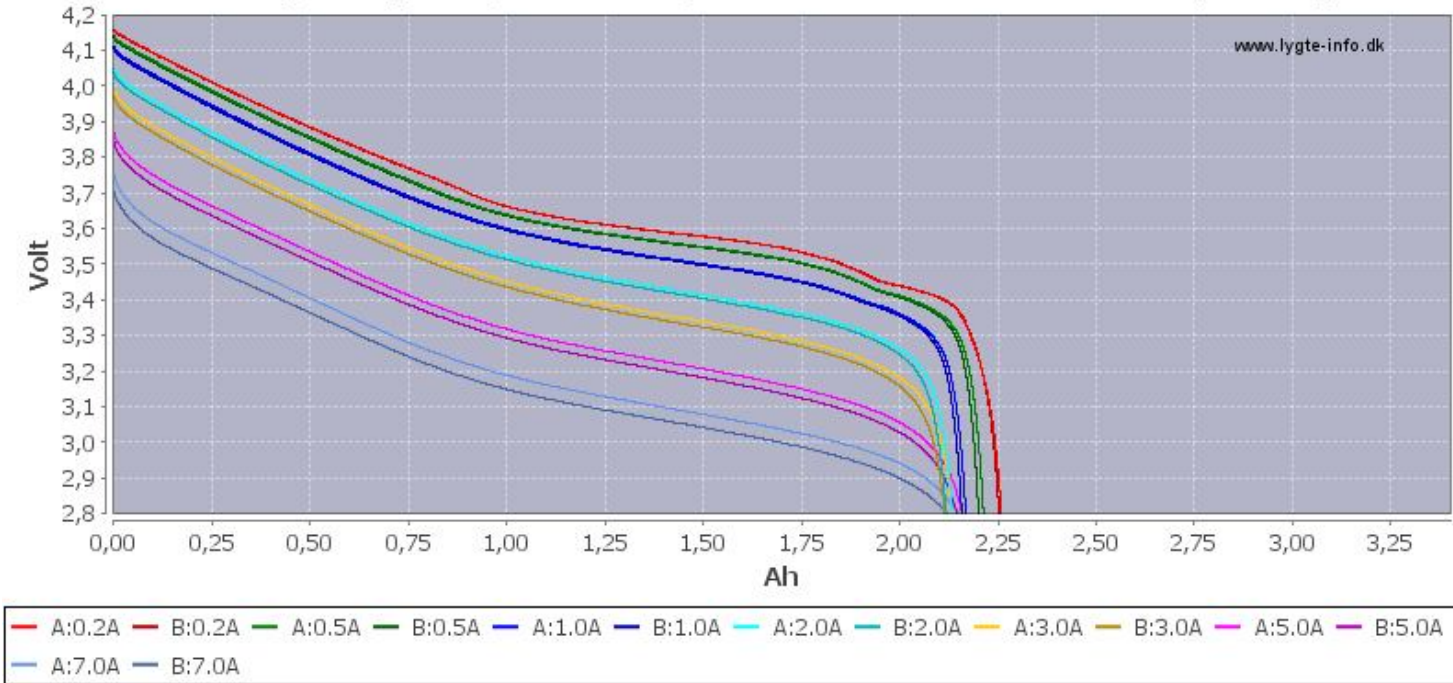
Name	Samsung ICR18650-22F 2200mAh (Green)					
Cell	Samsung ICR18650-22F					
Supplier	Akkuteile.de				Date:	4-2015
Size	Weight:	41.1 g	Length:	64.9 mm	Diameter:	18.3 mm
Info	Top:	flat	Bottom:	metal	Rated A:	4.4
Test condition	Charge voltage:		4.2	Termination current:		0,1
Test current (A)	0,2	0,5	1	2	3	5
Measured capacity (Ah)	2,255	2,207	2,163	2,126	2,125	2,153
Measured energy (Wh)	8,302	8,083	7,840	7,540	7,375	7,170
PCB protection trip current (A)	NA					
Calculated internal resistance (ohm)	0,11					

The datasheet for this cell says 2008, i.e. it is a old design, this can also be seen on the limited capacity and current capabilities.



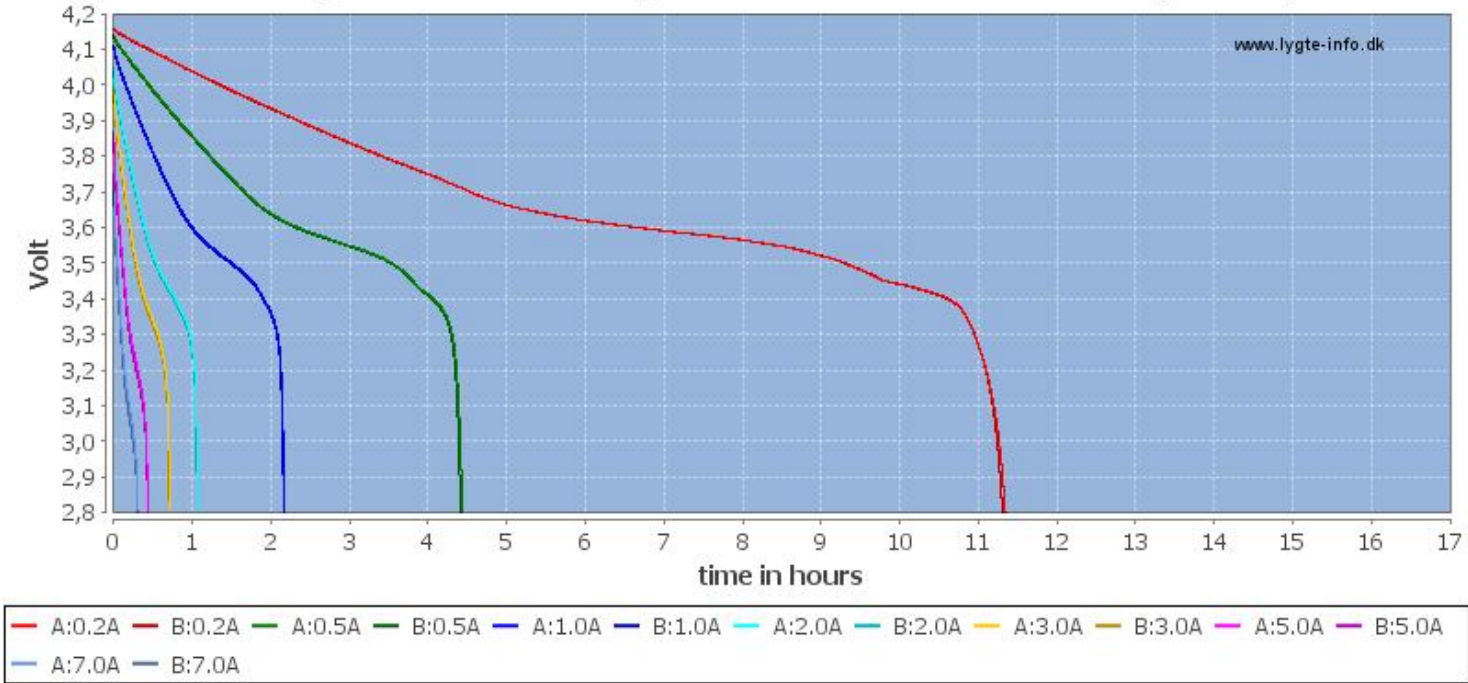


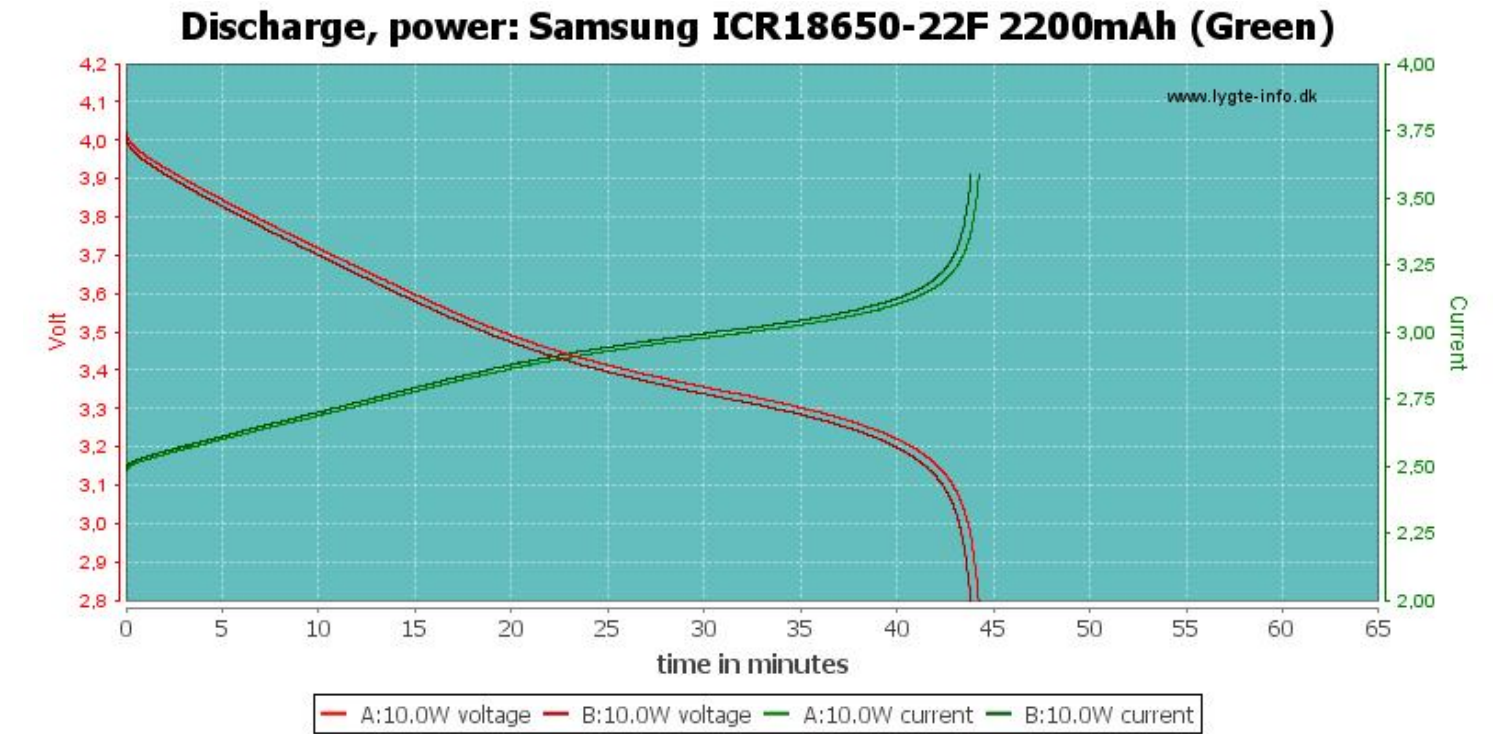
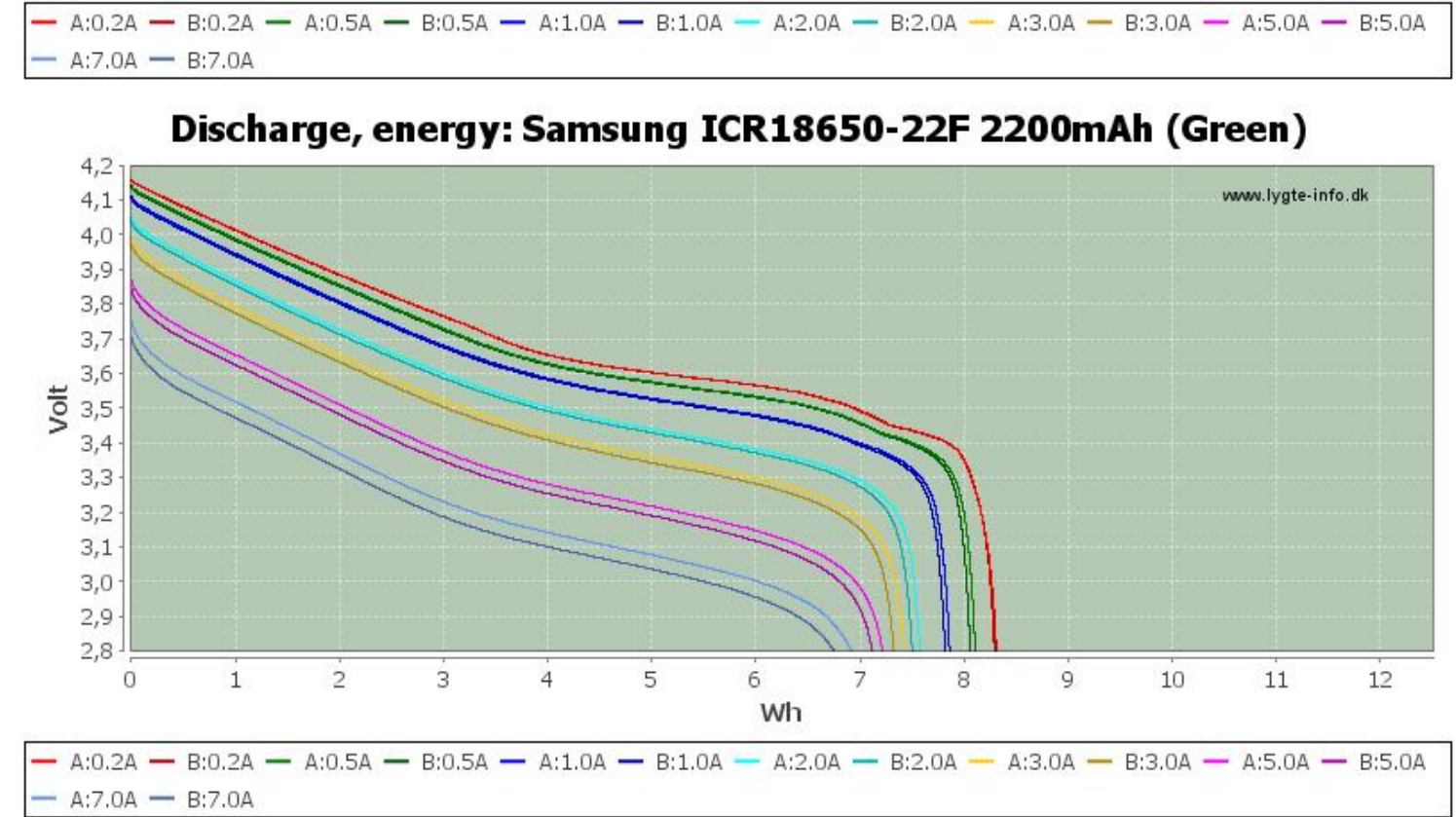
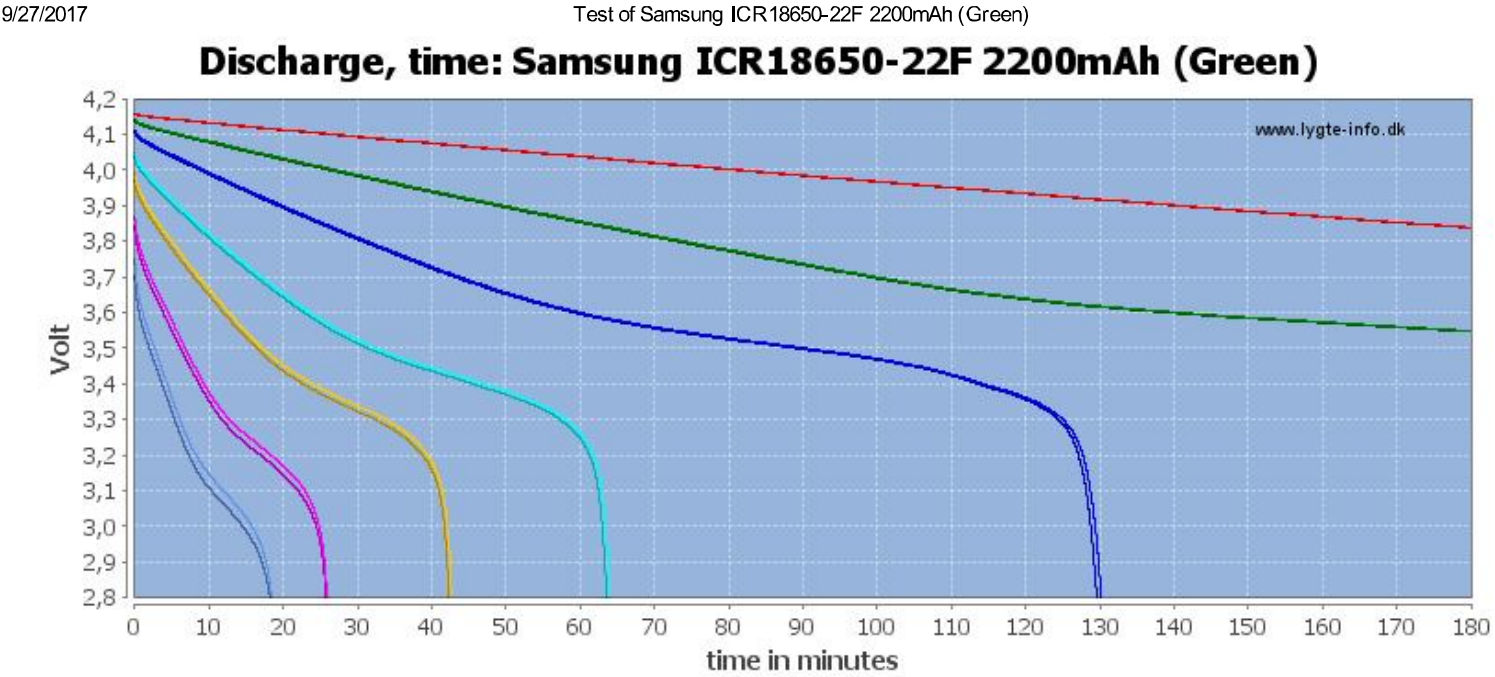
Discharge, capacity: Samsung ICR18650-22F 2200mAh (Green)

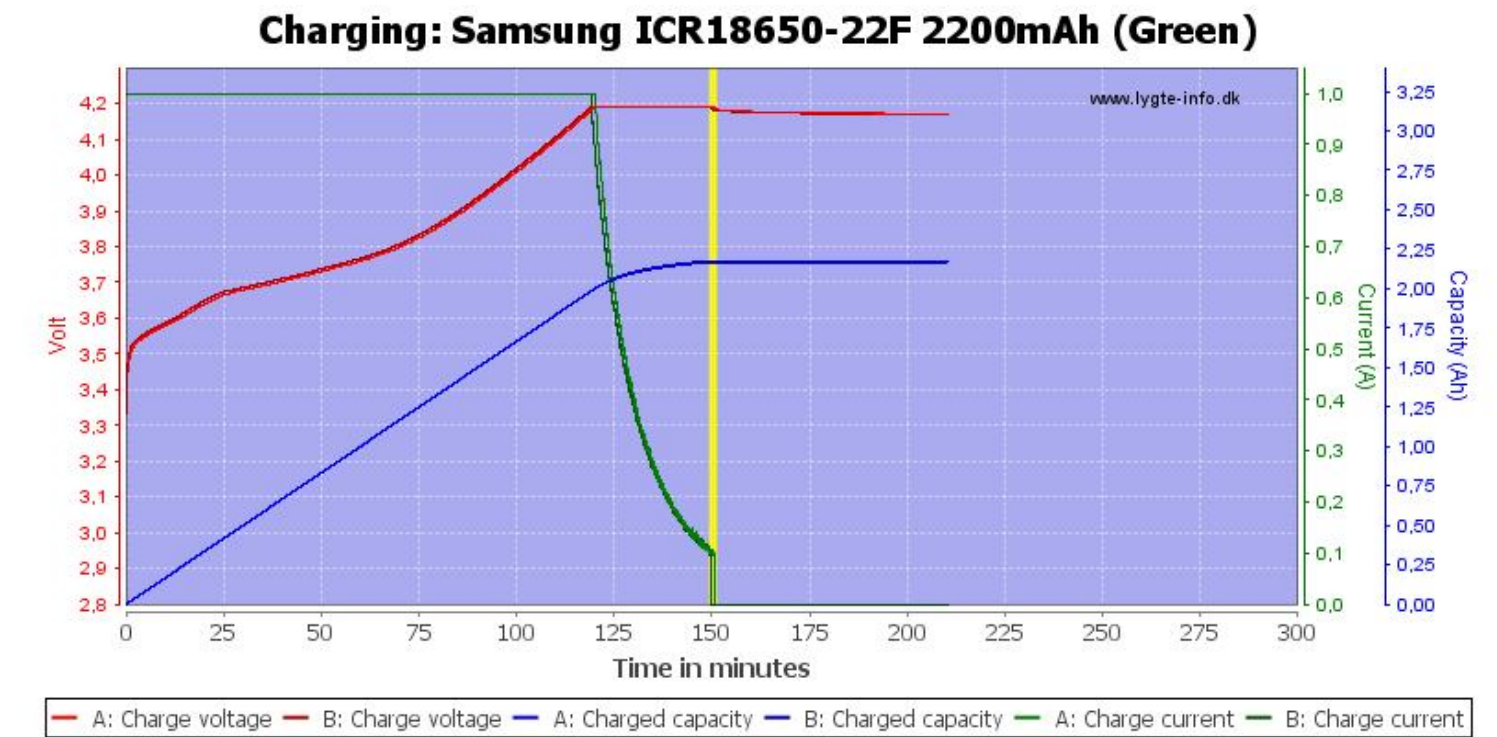
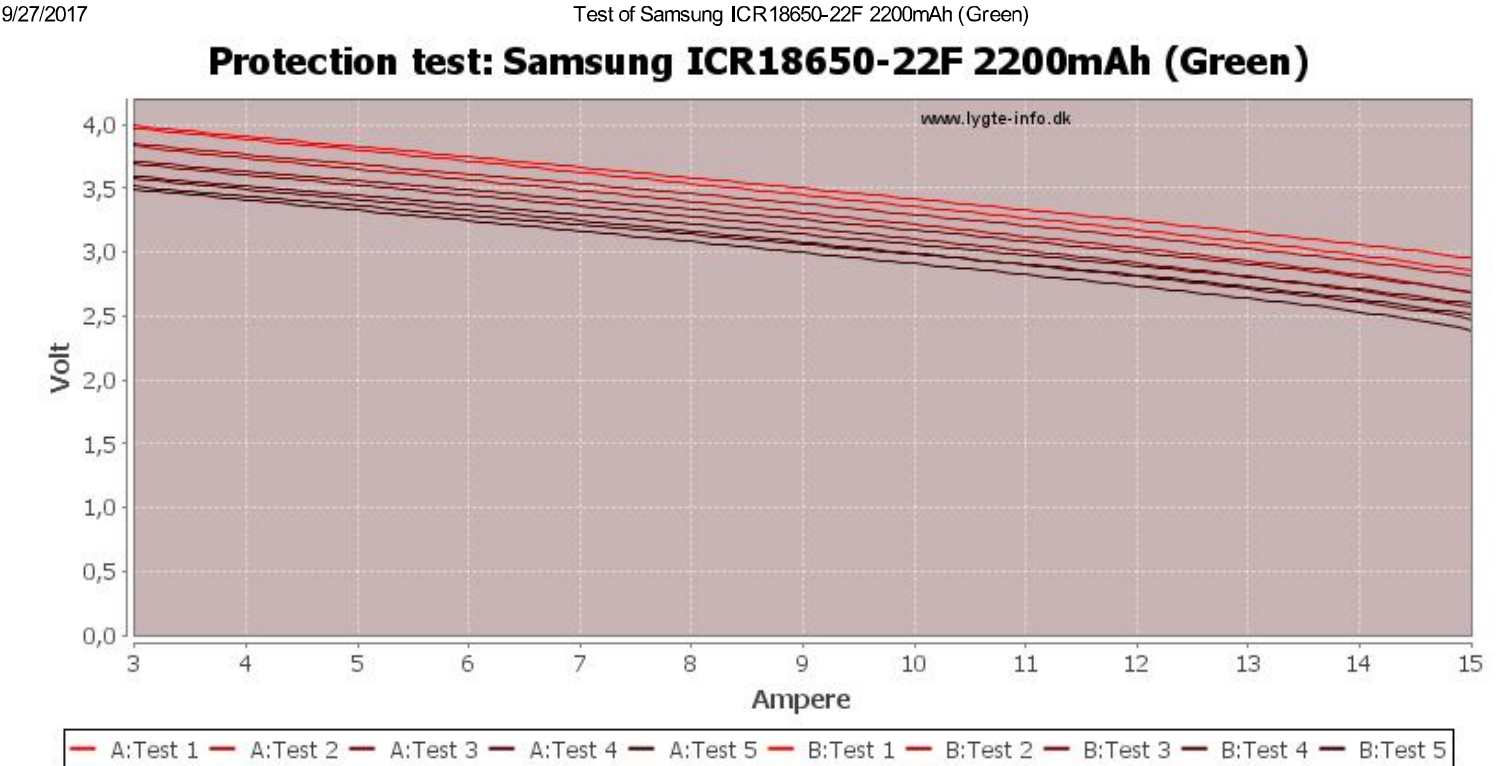


The discharge curves looks good enough, good tracking between the cell when not overloaded.

Discharge, time: Samsung ICR18650-22F 2200mAh (Green)







Conclusion

Not the most interesting battery today, but the cell is good enough within its limited capabilities and it can easily surpass some cheap brands.

Notes and links

- [How is the test done and how to read the charts](#)
- [How is a protected LiIon battery constructed](#)
- [More about button top and flat top batteries](#)
- [Compare to 18650 and other batteries](#)