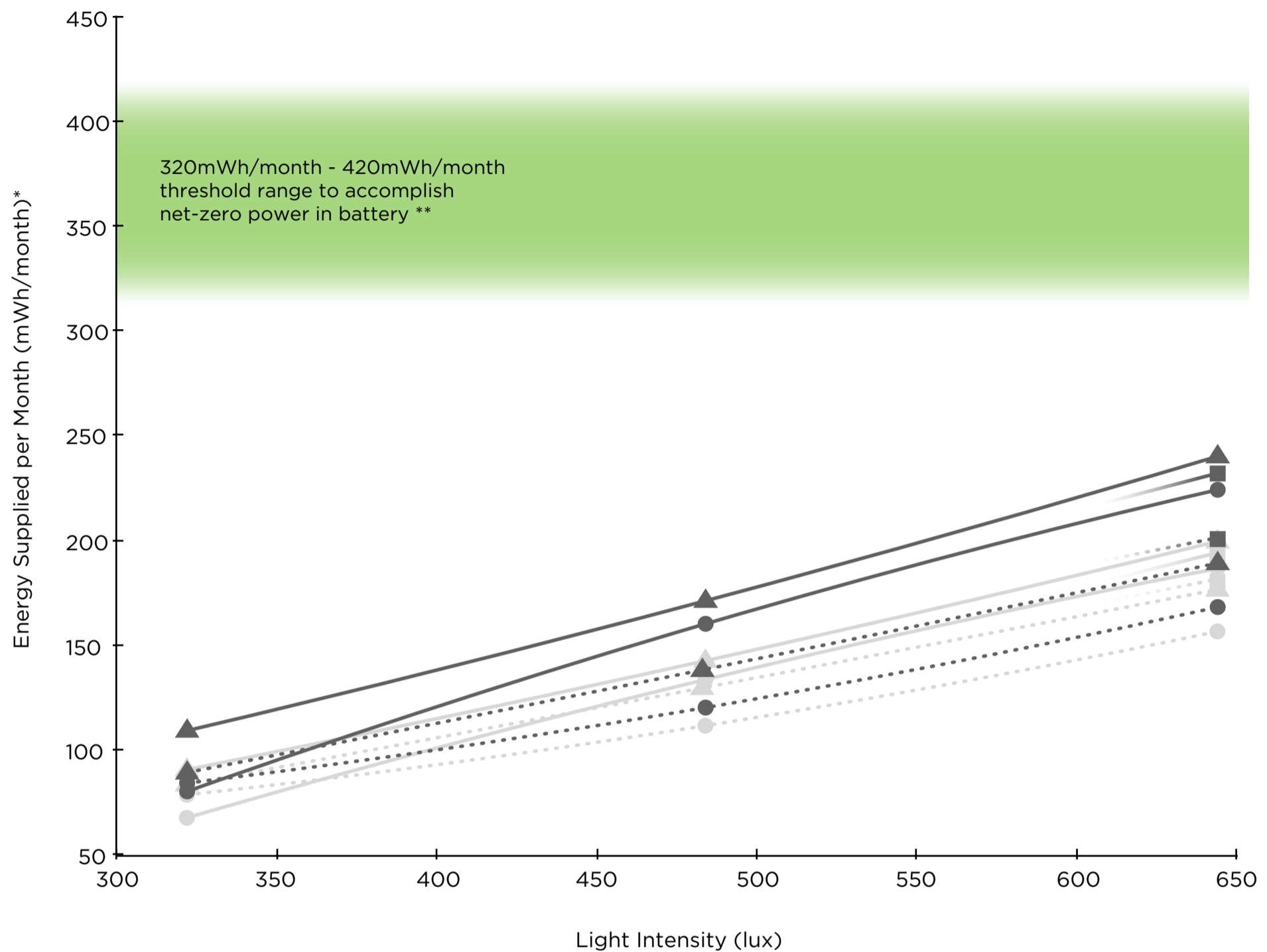


Monthly Energy Supply to 3.7V LiPo Battery VS Light Intensity varying 3 capacitors and 2 solar cells



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Sinonar Solar SS5520_AY11
3.276 in²

—————
FlexSolarCells Powerfilm SP3-37
3.672 in²

● 2200 µF capacitor
▲ 4700 µF capacitor
■ 9400 µF capacitor

Faded data represents adjustment
for anticipated solar cell of 3.0 in²

Notes:

- * At average conditions of 7 hours/day, 23 days/month = 161 hours/month.
- ** Assumes 100mAh/month lost to lock usage and battery degradation.
- ** Assumes charging a nominal 3.7V LiPo battery (100mAh/month at 3.2 - 4.2V = 320 - 420mWh/month) Does not account for power usage from the charging components.

Experimental Setup:

Solar Cell > Snub Diode > Capacitor > Voltage Trigger Circuit 8212 (w/ 3906 transistor) > LTC3105 Voltage Booster > LiPo Charging IC > 3.7V LiPo battery

