

## Testing:

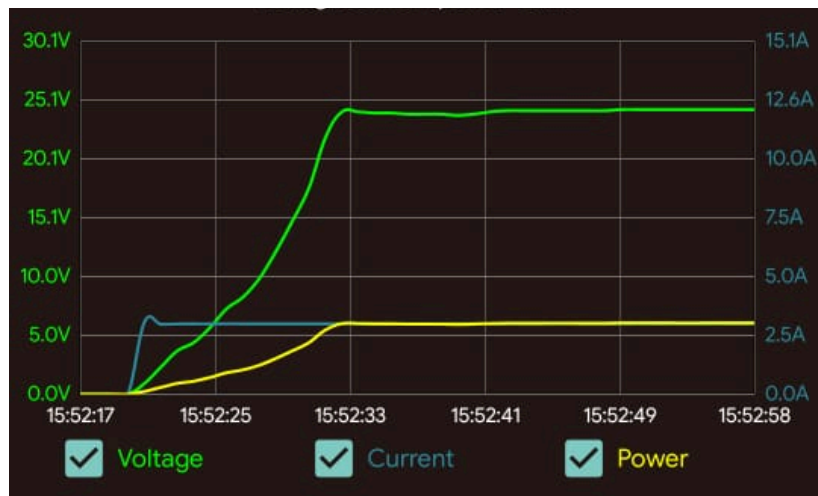
### Test Equipment:

- Multimeter
- Electronic Load 180W
- Regulated Power Supply (RPS) 0 to 30V

### Test Cases:

Functional Test of DCDC Module (Voltage Range):

- Varying resolution (10mV) up to 24V.

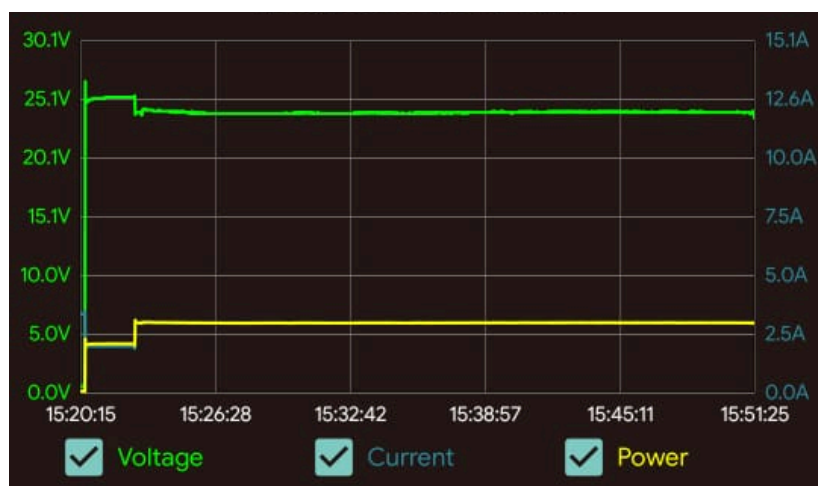


Functional Test of DCDC Module (Current Range):

- Varying current (100mA steps) up to 3 Amps.

Continuous Loading Test:

- Loading the module to 3 Amps at 24V, monitoring temperature, voltage, and current variations over x hours.



## Craft Power - Nidhi Prayas Milestone 1 Pre-read

### Line Regulation Test:

- Monitoring set voltage, output voltage, and voltage difference for every 100mV from 0V to 24V.
- TBD

### Load Regulation Test:

- Monitoring set voltage, output voltage, current, temperature, and voltage difference for every 500mA steps from 0 to 3 Amps. Tables for each current with 24 readings.
- TBD
- Short Circuit Test - TBD
- Gradual Overloading Test - Done Pass
- Sudden Overloading Test - Done Pass
- Validation of CV Mode - Done Pass
- Validation of CC Mode - Done Pass

### Test Setup Equipment:

Each test case was conducted using the specified equipment in a controlled environment to ensure accuracy and consistency in results.

Craft Power's meticulous approach to prototype development and testing ensured thorough validation of the power supply system's functionality, performance, and reliability, laying the foundation for subsequent refinement and optimization efforts.