

## Thruster Report

**Magnetic Field:** 265 mT  
**Anode Power:** 428 W  
**Anode Current:** 6.0 A  
**Propellant:** Argon 1.500 mg/s

**Thruster Details:** Nagoya magnet, LaB6 cathode, 1 mm orifice, copper anode, 80 mm internal diameter.

Thrust	Thrust Eff.	ISP	Total DOF	Coverage Factor	Exp. Uncertainty	Std. Uncertainty
7.7 mN	4.6 %	524.2 sec	13	2.11	3.1 mN	1.5 mN

### Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.1 mN	0.8 mN	0.4 mN	0.2 mN	0.2 mN	0.0 mN
DOF	6	6	6	31	4	4

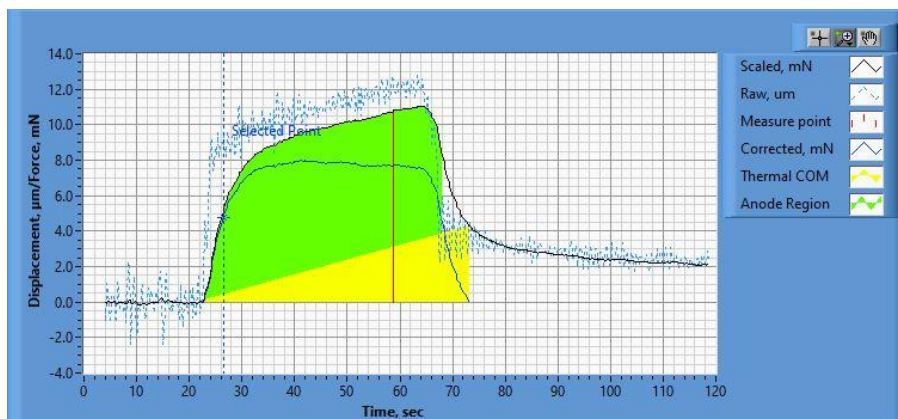


Figure 1. Thrust Plot

File Name: Philtech Data 2024.10.01\_15.15.37.csv

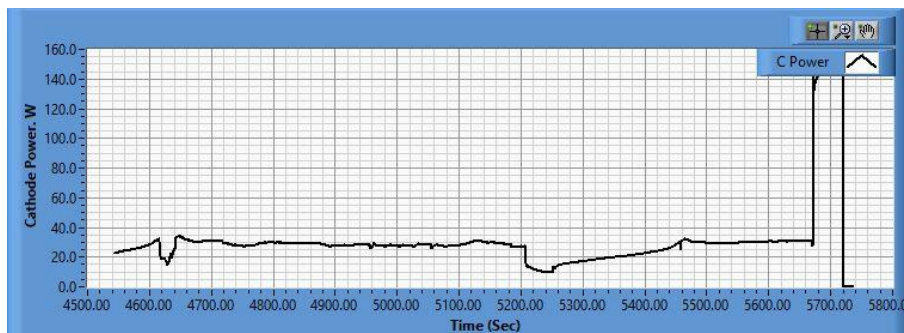
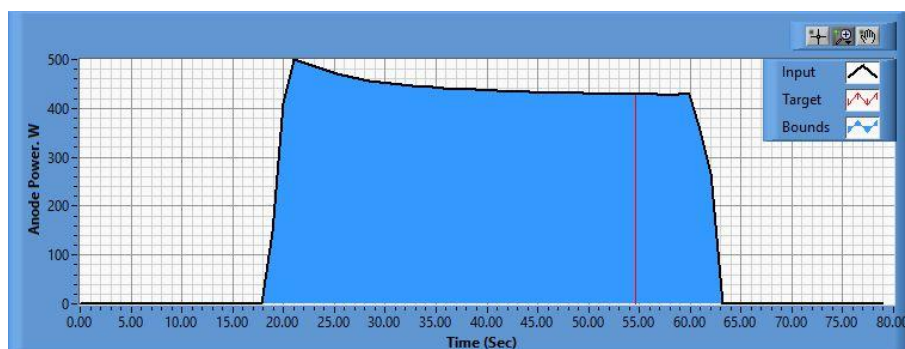


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.10.01\_13.49.12.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.10.01\_15.15.41.csv

**Pre-Cal. Information**

File Name: Philtech Data 2024.10.01\_15.15.37.csv

Start/Stop times (24 h): 15:20:15 15:23:55

Sensitivity: 1.32  $\mu\text{m}/\text{mN}$ 

Offset	Drift	Scale Factor	Scale Std.Dev
-9.832 mN	-0.007 mN/s	0.758	1.489 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
0.1 mN	37.4 mN	74.6 mN	108.7 mN	145.2 mN	184.8 mN	145.1 mN	108.7 mN	74.6 mN	35.6 mN	0.4 mN

**Post-Cal. Information**

File Name: Philtech Data 2024.10.01\_15.15.37.csv

Start/Stop times (24 h): 15:20:15 15:23:55

Sensitivity: 1.32  $\mu\text{m}/\text{mN}$ 

Offset	Drift	Scale Factor	Scale Std.Dev
-9.832 mN	-0.007 mN/s	0.758	1.489 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
0.1 mN	37.4 mN	74.6 mN	108.7 mN	145.2 mN	184.8 mN	145.1 mN	108.7 mN	74.6 mN	35.6 mN	0.4 mN

