

Tripoli Motor Testing Division 223 NC Highway 54 West Chapel Hill, NC 27514 (919) 357 5681 (c)

April 17, 2024

Gary Rosenfield RCS Rocket Motor Components, Inc. 2113 West 850 North Street Cedar City, UT 84721

Dear Mr. Rosenfield,

The Aerotech L2775ST-PS reload kit was tested on March 30, 2024 and complies with NFPA 1125. The motor is certified for hobby rocketry use by the members of the Tripoli Rocketry Association and all approving organizations with reciprocal certifying agreements.

Motor Manufacturer Manufacturer's Designation Propellant TMT Nomenclature	RCS Rocket Motor Compone L2775ST-PS [for the 75/384 Super Thunder 3150 L2774	
Diameter	2.966"	75.34 mm
Overall Length	21.977"	558.2 mm
Outside the MMT	1.60"	40.69 mm
Loaded Mass	7.67 lb	3479.1 g
Propellant Mass	3.126 lb*	1418 g*
Burnout Mass	4.30 lb	1950.5 g
	* = data provided by manufacturer	
Burn time	$1.135 \pm 0.017$ sec	
Total Impulse	$708.13 \pm 1.36$ lbf.s	3149.9 ± 6.1 N.s

Max Impulse  $695.90 \pm 16.75 \text{ lbf}$   $3095.6 \pm 74.5 \text{ N}$ 

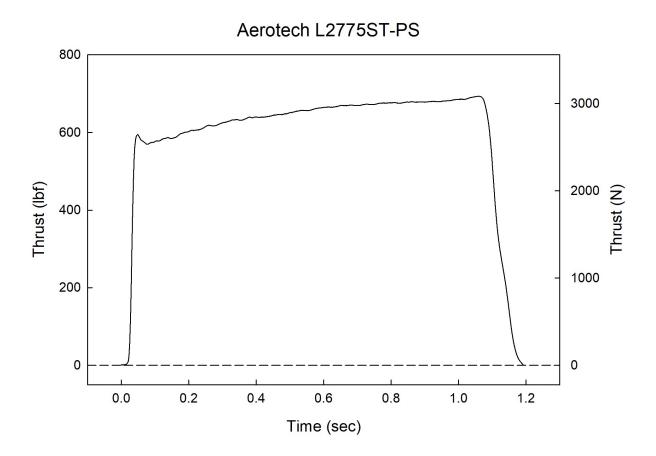
Average Impulse  $622.91 \pm 10.78 \text{ lbf}$   $2773.5 \pm 45.7 \text{ N}$ 

Number of Motors Tested 3

Nominal Measured

Delay Time Data n.a. n.a.

Casing Temp. [NFPA 1125 7.4.1] Passed



Sincerely,

Alan C. Whitmore Chair, Tripoli Motor Testing