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October 5, 2025

ABRA Space LTD.
71-75, Shelton Street, Covent Garden
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The ALPHA 29 rocket engine was tested on 5 October 2025 by the ABRA Space team at our test stand. This test was carried out for the purpose of evaluating data on the performance of the engine, and no definitive determination was made as to its full compliance with the NFPA 1125 standard. However, according to the test results, the engine was judged to be suitable for model rocketry use and was approved by members of the ABRA Space Engine Testing Division.

Motor Details

Motor Manufacturer	ABRA Space LTD.
Manufacturer's Designation	ARMS – Amateur Rocket Motor System, single use
Propellant	C-Slot & Standart Burn
TMT Nomenclature	5690 / F

Physical Characteristics

Diameter	0.141’’	/ 29 mm
Overall Length (Forward Closure & Nozzle Included)	8.622”	/ 219 mm
Case Length	7.086’’	/ 180 mm
Inner Diameter	1.043’’	/ 26,5 mm
Wall Thickness	0.049’’	/ 1,25 mm

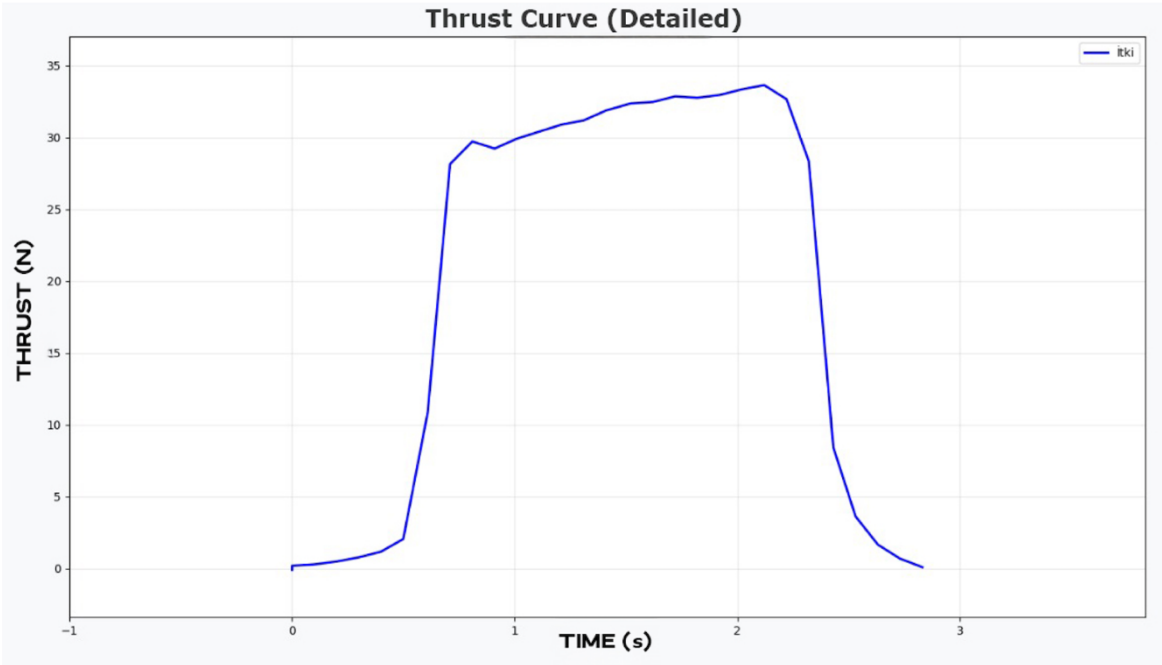
Mass Data

Loaded Mass	0.332 lb	/ 151 g (± 17g)
Propellant Mass	0.244 lb	/ 111 g*
Burnout Mass	0.088 lb	/ 40 g

Performance Data

Burn Time	2.83 sec	
Total Impulse	12.792 lbf.s	/ 56.90 N.s
Specific Impulse	52.3 sec	
Max Thrust	7.491 lbf	/ 33.32 N
Average Thrust	4.521 lbf	/ 20.11 N

(*data provided by manufacturer)



Sincerely,

ABRA Space LTD.