ABRA Space Motor Testing Division
71-75 Shelton St, London
+44 7384 045249
info@abraspace.com

September 29, 2025

ABRA Space LTD.
71-75, Shelton Street, Covent Garden
London, United Kingdom, WC2H 9JQ

The KAYRA 38 rocket engine was tested on 29 September 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	1108 / G

Physical Characteristics

Diameter	1.496’’	/ 38 mm
Overall Length (Forward Closure & Nozzle Included)	9.842”	/ 250 mm
Case Length	7.874’’	/ 200 mm
Inner Diameter	1.338’’	/ 34 mm
Wall Thickness	0.078’’	/ 2,00 mm

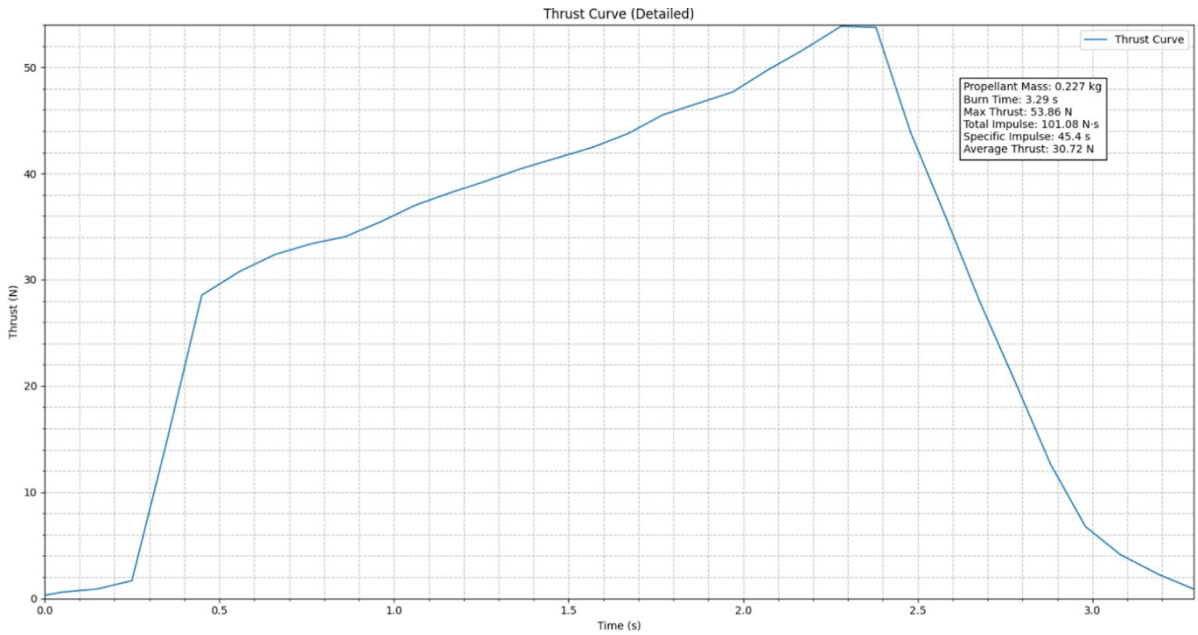
Mass Data

Loaded Mass	0.610 lb	/ 277 g (± 24g)
Propellant Mass	0.500 lb	/ 227 g*
Burnout Mass	0.110 lb	/ 50 g

Performance Data

Burn Time	3.29 sec	
Total Impulse	22.726 lbf.s	/ 101.08 N.s
Specific Impulse	45.5 sec	
Max Thrust	12.108 lbf	/ 53.86 N
Average Thrust	6.906 lbf	/ 30.72 N

(*data provided by manufacturer)



Sincerely,

ABRA Space LTD.