

AEROTECH M650W

CERTIFIED VALUES

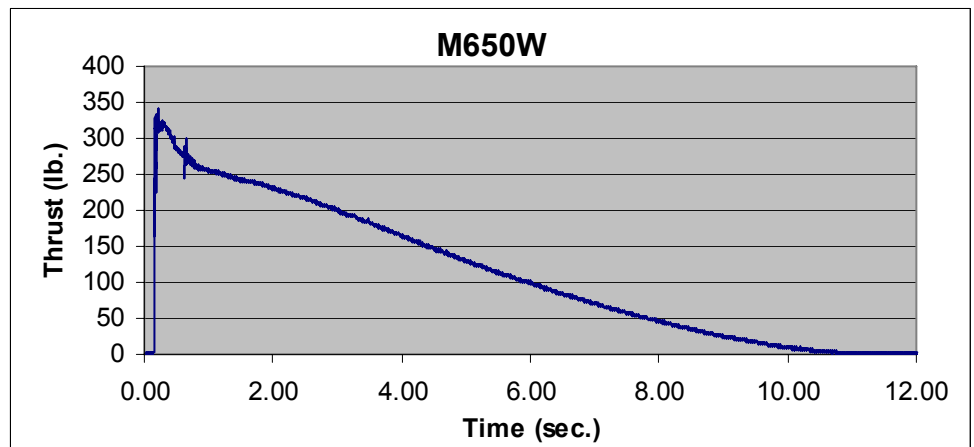
Total Impulse: 5964 Newton-seconds
Delays: Plugged
Propellant Type: White Lightning
Propellant Mass: 3351 grams
Casing Dimensions: 75mm × 801mm
Certification Date: June 28, 2007
Certification Type: High Power Rocket Motor

STATIC TEST DATA

Date Tested: June 16, 2007
Total Impulse: 5964 Newton-seconds (σ 113)
Peak Thrust: 1475 Newtons (σ 205)
Burn Time: 9.13 seconds (σ 0.85)
Average Thrust: 656 Newtons (σ 72)
Mass After Firing: 2232grams

Delay Time(sec.)	P		
Average Measured Delay(sec.)	Plugged		
Initial Mass (gm.)	5125		

TYPICAL THRUST-TIME CURVE



REMARKS

Uses 75/6400 hardware



Data File #	Engine	Total Impulse	Peak Thrust	Average Thrust	Burn Time	Delay Time	Initial Weight	Fired Weight
070616W12	M650W-P	5884.0	1330.0	605.0	9.73	P	5111.0	2231.0
070616W13	M650W-P	6044.0	1620.0	707.0	8.53	P	5138.0	2233.0
Average		5964.0	1475.0	656.0	9.13		5124.5	2232.0
Std Dev		113.137	205.061	72.125	0.849			
Std Dev %		1.9%	13.9%	11.0%	9.3%			

; @File: 75moon_combined.txt, @Pts-I: 7502, @Pts-O: 32, @Sm: 5, @CO: 5%
; @TI: 5968.55, @TIIa: 5915.18, @TIIe: 0.0%, @ThMax: 1421.296, @ThAvg: 633.469, @Tb: 9.422
; Exported using ThrustCurveTool, www.ThrustGear.com

M635 75 801 Plugged 3.351 5.125 Aerotech

0.0 3.92403
0.142 13.1382
0.146 28.6928
0.148 68.4977
0.154 362.956
0.158 592.774
0.16 728.013
0.166 973.613
0.17 1071.098
0.176 1084.655
0.186 1227.471
0.2 1355.861
0.206 1388.02
0.216 1406.383
0.31 1417.767
0.512 1264.259
0.59 1234.823
0.62 1245.343
0.63 1206.986
0.652 1222.29
0.846 1150.994
2.4679 971.123
3.1419 860.275
3.4679 827.133
4.7638 608.235
6.5457 364.284
8.2957 173.363
9.5716 70.6818
10.6296 13.70118
11.5835 0.870052
11.7255 15.53664
11.7835 0.0