338 Lapua Magnum - Norma MRP 88gr - Nosler Part SP 250gr - Vo 882m/s - OAL 91mm

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14:51

RICARICA 338LM NormaMRP88gr - L91.00 - NoslerPartitionedSP250gr - 882m/s

WARNING: Since we have no control over equipment or data which may be used with this program, no responsibility is implied or assumed for results obtained through its use. Input data and results may be incorrect or wrong. Therefore the use of this data for loading ammunition can cause serious injury to personnell and material. The computer-results had to be checked against data available in current loading manuals.
LOT-TO-LOT VARIATIONS OF POWDERS, PRIMER SUBSTITUTION AND COMPONENT CHANGE OFTEN RAISE PRESSURES TO UNSAFE LEVELS. THE USER MUST ASSUME THE ENTIRE RISK OF USING THIS DATA FOR LOADING PURPOSES.

User Data:

Date:8-dic-2014 **Time:14:49:01** **File: 338lapuamagnum250grnoslerpartitionsp-normar**

Cartridge / Caliber	**.338 Lapua Mag.**		**Bullet**	**.338, 250, Nosler PART SP 35**	
Maximum Average Pressure, allowed	4200 bar	60916 psi. (Piezo CIP)		with flatbase	
Groove Caliber	8.59 mm	0.338 in.	Bullet Weight	16.2 gm	250.0 gr.
Case Capacity, overflow	7.012 cm³	108.0 gr. H2O	Bullet Length	34.93 mm	1.375 in.
Case Length	69.19 mm	2.724 in.	Bullet Seating Depth	13.13 mm	0.517 in.
Cartridge O.A. Length	91.0 mm	3.583 in.	Barrel/Tube Length	660.4 mm	26.0 in.
Shot Start / Init Pressure	250.0 bar	3626 psi.	Cross Section Area of Bore	0.5686 cm²	0.08813 in.²
Propellant type	**Norma MRP**				
Charge Weight	5.702 gm	88.0 gr.	Load Density	0.912 gm/cm³	230.6 gr./in.³
Heat of Explosion, Potential	4020 J/gm	260.5 J/gr.	Energy Density of Charge	3668 J/cm³	60108 J/in.³
Propellant Solid Density	1.61 gm/cm³	407.15 gr./in.³	Used Ratio of Specific Heats cp/cv	1.2285	
Burning Rate Factor Ba	0.369 1/s		Weighting Factor	0.55	
Burning Function Limit Z1	0.552		Prog.-/ Degressivity Factor a0	1.737	
Factor b	2.091		Bulk Density	0.960 gm/cm³	242.8 gr./in.³

Calculated and Estimated Data:

Bullet Shank Seating Depth	13.13 mm	0.517 in.	Capacity Displaced by Seated Bullet	0.762 cm³	0.0465 in.³
Useable Case Capacity	6.25 cm³	0.3814 in.³	Bullet Travel at Muzzle Exit	604.34 mm	23.79 in.
Loading Ratio("Density") / Filling	95.0 %		Charge Fraction Burnt at Shot Start	1.29 %	
Predicted Data:					
Maximum Chamber Pressure	4113 bar	59661 psi.	Bullet Travel at Pmax	70.9 mm	2.79 in.
at Muzzle Exit:					
Bullet Velocity	881.8 m/s	2893 fps.	Pressure at Muzzle	796 bar	11539 psi.
Bullet Energy	6300 Joule	4646 ft.lbs.	Bullet Barrel Time	1.315 ms	
Propellant Burnt	100.0 %		Ballistic Efficiency	27.5 %	

Additional Data:

Powder Lot		Primer Type and Lot	RWS 5333 LRM Sinoxid
Bullet Lot		Case Manufacturer	
Measured Muzzle Vel., StdDev.		Measured Pressure, StdDev.	

WARNING: Near Maximum Average Pressure - unknown tolerances may cause dangerous pressures !
Real maximum (peak) of pressure is reached while bullet moves within barrel.
End of combustion reached before bullet's base passes muzzle.