

PROTECTION BALLISTIC LIMIT TEST, V₅₀ BL(P)

Chesapeake Testing

121 Bata Boulevard, Suite F
Belcamp, MD 21017

Client: Mofet Etzion
Job No.: CD01-2007-R01BLT-04132
Test Date: 10/11/2007

Test Panel	Description: LIBA composite armor for IED 20mm Fragment and above. Unique high velocity capability.		
Manufacturer: Mofet Etzion		Sample No.: 10-11-07 (5)	
Size: See remarks	Heat No.: NA	Date Received: 10/11/2007	
Thickness: See remarks	Weight: See remarks	Via: Hand Carried	
Avg. Thick: See remarks	Hardness: NA	Returned: NA	
Required BL(P): NA	Plies/Laminates: NA		

Setup			
Shot Spacing: Per Customer Request	Primary Vel. Screens: 15 ft, 35 ft	Range No.: Range 1	
Witness Panel: 0.02 in, 2024-T3 Al	Primary Vel. Location: 25 ft	Temp: 77 °F	
Obliquity: 0	Range to Target: 45 ft	BP: 29.41 inHG	
Backing Material: NA	Target to Witness: 6 in	RH: 42 %	
Condition: Ambient		Barrel/Gun: CDS-0216	
		Gunner: J. McDowell	
		Recorder: Craig Thomas	

Ammunition		
Projectile	Lot No.	Powder
(1) - 20-mm, 830-grain FSP	PTI 022007	IMR 7828

Applicable Standards or Procedures
(1) MIL-STD-662F

Shot No.	Powder/Seating	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel. 2 (ft/s)	Avg Vel. (ft/s)	Striking Vel. (ft/s)	Result	Include in V ₅₀	Footnotes
1	920	4753	4208	4755	4206	4207	4091	P	False	
2	980	4484	4460	4485	4459	4460	4338	P	False	
3	1050	4330	4619	4332	4617	4618	4492	P	False	
4	1070	4152	4817	4153	4816	4816	4685	P	True	
5	1130	4014	4983	4015	4981	4982	4847	C	True	
6	1070	4244	4713	4245	4711	4712	4584	P	False	

Remarks: Liba panel weight: 38.03 lbs. Size: 16 x 16 in., Thickness: 1.290, 1.368, 1.296, 1.321 in.; Avg. 1.319 in. 7.3mm HHA weight: 20.21 lbs, Size: 15.75 x 15.5 in., Thickness: 0.295, 0.290, 0.295, 0.301 in.; Avg. 0.292 in.	Footnotes:	V₅₀ Summary: No. Points: 1 and 1 V ₅₀ : 4766 High Partial: 4685 Low Complete: 4847 Range of Results (ROR): 162 Range of Mix Results (RMR): NA Gap: 162
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