

F1 - AR 10.5" - Harvester 220gr - 300 BLK

Test Setup	
Suppressor	F1
Host	AR 10.5"
Ammo	Harvester 220gr
Caliber	300 BLK
Dry or Wet?	Dry
Location & Weather	
Date	22-May-2022
Location	Range 1
Elevation (Feet ASL)	611
Time	11:55
Wind Low - High	5   10
Temperature F*	78
Humidity %	71%
Pressure In Hg	30.16
Speed of Sound FPS	1138

Meter #1			
Mic Position	Muzzle		
Cal Base	114		
Cal Actual	104	Adds 10 dB	
Cal Offset	10		
Weighting	A		
Octave Filter	None		
ISO Freq band	N/A		
Mic Distance (M)	1.0	Adds 0 dB	
Distance Scaling Factor	0.00		
160 dB Option	Yes		160 Max
Meter dB Range	100-160		100-160
Effective dB Range	110-170		
Meter SN	0190		
Meter   Mic   Calibrator	L-D 800B	B&K 4938	CA250
Protocol	MIL-STD-1474D		

Meter Settings			
Meter #2			
Mic Position	Left Ear		
Cal Base	114		
Cal Actual	94	Adds 20 dB	
Cal Offset	20		
Weighting	A		
Octave Filter	None		
ISO Freq band	N/A		
Mic Distance (M)	1.0	Adds 0 dB	
Distance Scaling Factor	0.00		
160 dB Option	No		140 Max
Meter dB Range	80-140		80-140
Effective dB Range	100-160		
Meter SN	0220		
Meter   Mic   Calibrator	L-D 800B	B&K 4938	CA250
Protocol	MIL-STD-1474D		

Meter #3			
Mic Position	Right Ear		
Cal Base	114		
Cal Actual	94	Adds 20 dB	
Cal Offset	20		
Weighting	A		
Octave Filter	None		
ISO Freq band	N/A		
Mic Distance (M)	1.0	Adds 0 dB	
Distance Scaling Factor	0.00		
160 dB Option	No		140 Max
Meter dB Range	80-140		80-140
Effective dB Range	100-160		
Meter SN	0125		
Meter   Mic   Calibrator	L-D 800B	B&K 4938	CA250
Protocol	MIL-STD-1474D		

Consolidated Results			
Results	Muzzle	Left Ear	Right Ear
Unsuppressed	162.2	160.5	160.5
Suppressed	129.9	127.9	138.7
NSR	32.4	32.6	21.8
FRP (#1 - Avg)	6.0	2.9	0.8
Avg w/o FRP	129.2	127.6	138.6
Min	127.5	125.6	136.0
Max	135.9	130.8	140.4
Std Dev	2.3	1.4	1.7

Calculated Results		
Calculated Results	Avg (Linear)	Avg (Log)
Unsuppressed	162.2	162.2
Suppressed	129.9	130.6
NSR	32.4	31.6
FRP (#1 - Avg)	6.0	5.3
Avg w/o FRP	129.2	129.3
Min	127.5	
Max	135.9	
Std Dev	2.3	

Calculated Results		
Calculated Results	Avg (Linear)	Avg (Log)
Unsuppressed	160.5	160.5
Suppressed	127.9	128.1
NSR	32.6	32.4
FRP (#1 - Avg)	2.9	2.7
Avg w/o FRP	127.6	127.7
Min	125.6	
Max	130.8	
Std Dev	1.4	

Calculated Results		
Calculated Results	Avg (Linear)	Avg (Log)
Unsuppressed	160.5	160.5
Suppressed	138.7	139.0
NSR	21.8	21.5
FRP (#1 - Avg)	0.8	0.5
Avg w/o FRP	138.6	138.9
Min	136.0	
Max	140.4	
Std Dev	1.7	

Unsuppressed	Muzzle	Left Ear	Right Ear
Raw 1	152.1	140.5	140.5
Raw 2	152.3	140.5	140.5
Raw 3	152.3	140.5	140.5
Suppressed	Muzzle	Left Ear	Right Ear
Raw 1	125.9	110.8	119.5
Raw 2	118.8	108.1	119.9
Raw 3	120.0	108.3	120.4
Raw 4	120.4	108.1	118.6
Raw 5	117.5	108.6	119.5
Raw 6	119.4	106.9	116.0
Raw 7	119.4	107.1	119.6
Raw 8	119.3	106.9	120.3
Raw 9	119.0	108.9	116.0
Raw 10	119.0	105.6	117.3

Unsuppressed Raw dB	Actual dB	
1	152.1	
2	152.3	
3	152.3	
Shot	Raw dB	Actual dB
1	125.9	135.9
2	118.8	128.8
3	120.0	130.0
4	120.4	130.4
5	117.5	127.5
6	119.4	129.4
7	119.4	129.4
8	119.3	129.3
9	119.0	129.0
10	119.0	129.0

Unsuppressed Raw dB	Actual dB	
1	140.5	
2	140.5	
3	140.5	
Shot	Raw dB	Actual dB
1	110.8	130.8
2	108.1	128.1
3	108.3	128.3
4	108.1	128.1
5	108.6	128.6
6	106.9	126.9
7	107.1	127.1
8	106.9	126.9
9	108.9	128.9
10	105.6	125.6

Unsuppressed Raw dB	Actual dB	
1	140.5	
2	140.5	
3	140.5	
Shot	Raw dB	Actual dB
1	119.5	139.5
2	119.9	139.9
3	120.4	140.4
4	118.6	138.6
5	119.5	139.5
6	116.0	136.0
7	119.6	139.6
8	120.3	140.3
9	116.0	136.0
10	117.3	137.3

Enter the Orange Fields
Light Gray Fields Are Calculated
Green Fields Are Info Only

Unsuppressed at both ears pegged the meters @ 160.5+ dB A.

Averaging logarithmic data  
<https://www.cirrusresearch.co.uk/blog/2013/01/noise-data-averaging-how-do-i-average-noise-measurements/>