

**Octane 9 - AR-15 10.5" - 206gr - 300 BLK**

Test Setup	
Suppressor	Octane 9
Host	AR-15 10.5"
Ammo	206gr
Caliber	300 BLK
Dry or Wet?	Dry
Location & Weather	
Date	22-May-2022
Location	Range 1
Elevation (Feet ASL)	611
Time	10:10
Wind Low - High	0 10 5
Temperature F*	74
Humidity %	82%
Pressure In Hg	30.16
Speed of Sound FPS	1133

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	159.6	152.7	149.4
Suppressed	130.9	144.3	147.7
NSR	28.7	8.3	1.7
FRP (#1 - Avg)	-0.1	-0.4	-1.1
Avg w/o FRP	130.9	144.4	147.8
Min	129.5	143.8	146.3
Max	133.0	145.0	151.6
Std Dev	1.0	0.4	1.7

Calculated Results		
Calculated Results	Avg (Linear)	Avg (Log)
Unsuppressed	159.6	159.6
Suppressed	130.9	131.0
NSR	28.7	28.6
FRP (#1 - Avg)	-0.1	-0.2
Avg w/o FRP	130.9	131.0
Min	129.5	
Max	133.0	
Std Dev	1.0	

Calculated Results		
Calculated Results	Avg (Linear)	Avg (Log)
Unsuppressed	152.7	152.7
Suppressed	144.3	144.3
NSR	8.3	8.3
FRP (#1 - Avg)	-0.4	-0.4
Avg w/o FRP	144.4	144.4
Min	143.8	
Max	145.0	
Std Dev	0.4	

Calculated Results		
Calculated Results	Avg (Linear)	Avg (Log)
Unsuppressed	149.4	149.6
Suppressed	147.7	148.0
NSR	1.7	1.5
FRP (#1 - Avg)	-1.1	-1.4
Avg w/o FRP	147.8	148.2
Min	146.3	
Max	151.6	
Std Dev	1.7	

Unsuppressed	Muzzle	Left Ear	Right Ear
Raw 1	149.9	133.0	130.9
Raw 2	149.5	132.5	128.0
Raw 3	149.4	132.5	129.3
Suppressed	Muzzle	Left Ear	Right Ear
Raw 1	120.8	123.9	126.6
Raw 2	120.6	124.1	127.8
Raw 3	120.8	124.6	127.0
Raw 4	120.3	124.1	127.1
Raw 5	120.9	125.0	127.1
Raw 6	121.3	123.8	128.0
Raw 7	123.0	124.6	126.3
Raw 8	119.5	124.5	131.6
Raw 9			
Raw 10			

Unsuppressed Raw dB	Actual dB	
1	149.9	
2	149.5	
3	149.4	
Shot	Raw dB	Actual dB
1	120.8	130.8
2	120.6	130.6
3	120.8	130.8
4	120.3	130.3
5	120.9	130.9
6	121.3	131.3
7	123.0	133.0
8	119.5	129.5
9	0.0	
10	0.0	

Unsuppressed Raw dB	Actual dB	
1	133.0	
2	132.5	
3	132.5	
Shot	Raw dB	Actual dB
1	123.9	143.9
2	124.1	144.1
3	124.6	144.6
4	124.1	144.1
5	125.0	145.0
6	123.8	143.8
7	124.6	144.6
8	124.5	144.5
9	0.0	
10	0.0	

Unsuppressed Raw dB	Actual dB	
1	130.9	
2	128.0	
3	129.3	
Shot	Raw dB	Actual dB
1	126.6	146.6
2	127.8	147.8
3	127.0	147.0
4	127.1	147.1
5	127.1	147.1
6	128.0	148.0
7	126.3	146.3
8	131.6	151.6
9	0.0	
10	0.0	

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

Only fired 8 unsuppressed rounds.

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