

# Trajectory Charts for Federal .22 Long Rifle Match Ammunition - Standard Velocity

(All numbers are from Ballistic for iOS. Various muzzle velocities based on shooter input, sight height = 1.65", Zero Range = 50 yds.)

Brand & Load	Federal Ultra Match - Per low recorded MV			Federal Ultra Match - Per current Mfr. spec			Federal Ultra Match Per high recorded MV			Federal Match or Ultra Match, Per Ballistic								
Range (yards)	Drop (inch)	Drop (mrad)	Drop (MOA)	Drop (inch)	Drop (mrad)	Drop (MOA)	Drop (inch)	Drop (mrad)	Drop (MOA)	Drop (inch)	Drop (mrad)	Drop (MOA)	Drop (inch)	Drop (mrad)	Drop (MOA)	Drop (inch)	Drop (mrad)	Drop (MOA)
10	-0.6	-1.8	-6.1	-0.7	-1.9	-0.1	-0.7	-2.0	-6.8	-0.7	-2.1	-7.1						
20	0.0	0.1	0.2	0.0	0.0	-0.2	-0.1	-0.1	-0.3	-0.1	-0.2	-0.6						
30	0.4	0.3	1.2	0.3	0.3	1.0	0.3	0.3	0.9	0.2	0.2	0.7						
40	0.4	0.3	0.9	0.3	0.2	0.8	0.3	0.2	0.7	0.3	0.2	0.6						
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
60	-0.7	-0.3	-1.2	-0.7	-0.3	-1.1	-0.6	-0.3	-1.0	-0.6	-0.3	-0.9						
70	-1.8	-0.7	-2.5	-1.7	-0.7	-2.3	-1.6	-0.6	-2.2	-1.5	-0.6	-2.0						
80	-3.3	-1.2	-4.0	-3.1	-1.1	-3.7	-2.9	-1.0	-3.5	-2.7	-0.9	-3.3						
90	-5.2	-1.6	-5.5	-4.8	-1.5	-5.1	-4.6	-1.4	-4.9	-4.3	-1.3	-4.6						
100	-7.5	-2.1	-7.2	-7.0	-1.9	-6.6	-6.7	-1.9	-6.4	-6.3	-1.7	-6.0						
110	-10.2	-2.6	-8.8	-9.5	-2.4	-8.2	-9.1	-2.3	-7.9	-8.6	-2.2	-7.4						
120	-13.3	-3.1	-10.6	-12.4	-2.9	-9.9	-12.0	-2.8	-9.5	-11.2	-2.6	-8.9						
130	-16.8	-3.6	-12.4	-15.7	-3.4	-11.5	-15.2	-3.2	-11.2	-14.3	-3.1	-10.5						
140	-20.8	-4.1	-14.2	-19.4	-3.9	-13.3	-18.8	-3.7	-12.8	-17.7	-3.5	-12.1						
150	-25.2	-4.7	-16.1	-23.6	-4.4	-15.0	-22.9	-4.2	-14.6	-21.6	-4.0	-13.7						
160	-30.1	-5.2	-18.0	-28.2	-4.9	-16.8	-27.3	-4.7	-16.3	-25.8	-4.5	-15.4						
170	-35.4	-5.8	-19.9	-33.2	-5.4	-18.7	-32.2	-5.3	-18.1	-30.5	-5.0	-17.1						
180	-41.2	-6.4	-21.9	-38.7	-6.0	-20.5	-37.6	-5.8	-19.9	-35.5	-5.5	-18.9						
190	-47.5	-6.9	-23.9	-44.6	-6.5	-22.4	-43.4	-6.3	-21.8	-41.0	-6.0	-20.6						
200	-54.3	-7.5	-25.9	-51.1	-7.1	-24.4	-49.6	-6.9	-23.7	-47.0	-6.5	-22.4						
210	-61.5	-8.1	-28.0	-57.9	-7.7	-26.3	-56.3	-7.4	-25.6	-53.4	-7.1	-24.3						
220	-69.3	-8.8	-30.1	-65.3	-8.2	-28.3	-63.5	-8.0	-27.6	-60.3	-7.6	-26.2						
230	-77.6	-9.4	-32.2	-73.2	-8.8	-30.4	-71.2	-8.6	-29.5	-67.6	-8.2	-28.1						
240	-86.4	-10.0	-34.4	-81.5	-9.4	-32.4	-79.3	-9.2	-31.6	-75.4	-8.7	-30.0						
250	-95.8	-10.6	-36.6	-90.4	-10.0	-34.5	-88	-9.8	-33.6	-83.7	-9.3	-32.0						
260	-105.6	-11.3	-38.8	-99.8	-10.7	-36.6	-97.2	-10.4	-35.7	-92.4	-9.9	-33.9						
270	-116.1	-11.9	-41.1	-109.7	-11.3	-38.8	-106.8	-11.0	-37.8	-101.7	-10.5	-36.0						
280	-127.1	-12.6	-43.3	-120.2	-11.9	-41.0	-117.1	-11.6	-39.9	-111.5	-11.1	-38.0						
290	-138.7	-13.3	-45.7	-131.2	-12.6	-43.2	-127.8	-12.2	-42.1	-121.8	-11.7	-40.1						
300	-150.8	-14.0	-48.0	-142.7	-13.2	-45.4	-139.1	-12.9	-44.3	-132.6	-12.3	-42.2						
310	-163.6	-14.7	-50.4	-154.9	-13.9	-47.7	-151.0	-13.5	-46.5	-144.0	-12.9	-44.4						
320	-177.0	-15.4	-52.8	-167.6	-14.5	-50.0	-163.4	-14.2	-48.8	-156.0	-13.5	-46.5						
330	-190.9	-16.1	-55.2	-180.9	-15.2	-52.3	-176.4	-14.9	-51.1	-168.4	-14.2	-48.7						