



The best lambda value is 13.49 which has a MSE of 1811976.57 as shown at the minimum of the graph above

Equation

$$y = 5115.65x_1 - 201.50x_2 - 207.154x_3 - 1338.3x_4 + 219.19x_5 - 66.36x_6 + 500.91x_7 + 74.31x_8 - 459.07x_9 + 3928.0$$

The predicted value for a diamond with 0.25 carat, 3 cut, 3 color, 5 clarity, 60 depth, 55 table, 4x, 3y, 2z is \$437.28